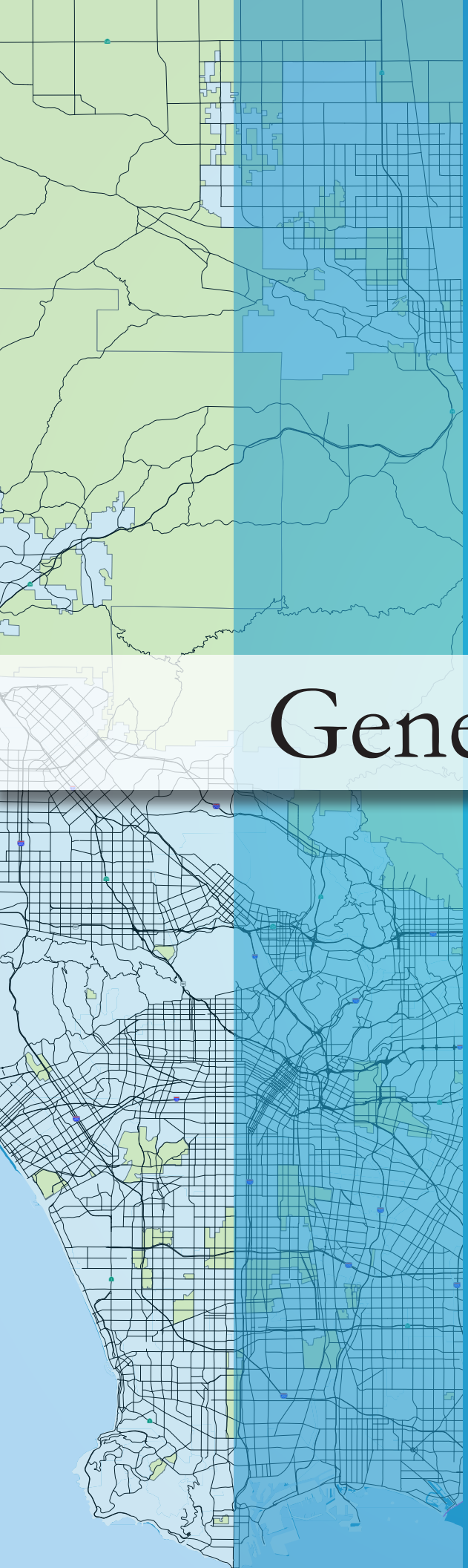

Los Angeles County

General Plan Update

Draft Environmental Impact Report

State Clearinghouse # 2011081042

June 2014

Lead Agency:
County of Los Angeles

June 2014 | Draft Environmental Impact Report

Los Angeles County General Plan Update

County of Los Angeles

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PLACEWORKS

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Abbreviations and Acronyms

List of Defined Terms and Abbreviations for The Los Angeles County General Plan Update EIR

Abbreviation, Acronym, or Name	*Term or Definition*
"AAQS"	Ambient Air Quality Standards; can be either federal (National AAQS, or NAAQs) or State (CAAQS)
"AB"	Assembly Bill
"ac"	Acre
"afy"	Acre foot per year (a water quantity measure)
"ACM"	Asbestos Containing Materials
"ACCM"	Asbestos containing construction materials
"ACOE"	Army Corps of Engineers
"ADT"	Average Daily Traffic
"AQMP"	Air Quality Management Plan
"BAU"	"Business As Usual," a phrase used by CARB in its *Climate Change Scoping Plan* to refer to the scenario without any action taken to reduce GHG emissions
"BMPs"	Best Management Practices
"BTUs"	British Thermal Units (a measure of heat)
"CAA"	Federal Clean Air Act (42 United States Code §§ 101 et seq.)
"CAAQS"	California Ambient Air Quality Standards
"CAFÉ Standards"	Federal Corporate Average Fuel Economy Standards, created by the 2007 Energy Bill, are new standards for increases in fleetwide fuel economy for passenger vehicles and light trucks
"Cal/EPA"	California Environmental Protection Agency
"CalEEMod"	California Emission Estimator Model developed by the SCAQMD used to calculate construction and operational phase emissions of mass criteria pollutants and GHGs
"Caltrans"	California Department of Transportation
"CCAP"	Community Climate Action Plan
"CAPCOA"	California Air Pollution Control Officers Association
"CARB"	California Air Resources Board
"CAT"	California Climate Action Team
"CCAA"	California Clean Air Act of 1988, AB 2595 (Sher) (Chapter 1568, Statutes of 1988)
"CCR"	California Code of Regulations (includes the CEQA Guidelines)
"CDFW"	California Department of Fish and Wildlife (formerly known as California Department of Fish and Game)
"CEC"	California Energy Commission
"CEQA Guidelines"	Title 14, Cal. Code Regs. §§ 15000 et seq.
"CEQA"	California Environmental Quality Act (Pub. Res. Code §§ 21000 et seq.)
"CERCLA"	Comprehensive Environmental Response, Compensation, and Liability Act
"CFC"	Chlorofluorocarbons, a category of greenhouse gases
"CH_4"	Methane, a greenhouse gas
"CMP"	Congestion Management Plan
"CNEL"	Community Equivalent Noise Level
"CNRA"	California Natural Resources Agency
"CO"	Carbon Monoxide (federal and State criteria air pollutant)
"CO_2e"	Carbon dioxide-equivalent greenhouse gas emissions
"Community Based Plans"	Community-based plans are components of the General Plan, and can include area plans, community plans, neighborhood plans, and coastal land use plans.

Abbreviations and Acronyms

List of Defined Terms and Abbreviations for The Los Angeles County General Plan Update EIR

Abbreviation, Acronym, or Name	*Term or Definition*
"Community Climate Action Plan"	The County of Los Angeles has prepared a Community Climate Action Plan (CCAP) to mitigate and avoid GHG emissions associated with community activities in unincorporated Los Angeles County. The CCAP address emissions from building energy, land use and transportation, water consumption, and waste generation. The measures and actions outlined in the CCAP tie together the County's existing climate change initiatives and provide a blueprint for a more sustainable future.
"County"	County of Los Angeles, an administrative body
"CPUC"	California Public Utilities Commission
"dB"	Decibel
"dBA"	A-Weighted Decibel
"DPH"	Los Angeles County Department of Public Health
"DPR"	Los Angeles County Department of Parks and Recreation
"DPW"	Los Angeles County Department of Public Works
"DRP"	Los Angeles County Department of Regional Planning
"DTSC"	California Department of Toxic Substances
"du"	Dwelling unit
"EMS"	Emergency medical services
"Existing General Plan"	The existing County of Los Angeles General Plan was originally adopted in 1973 and comprehensively updated in 1980. The adopted General Plan is composed of 10 separate elements and was adopted on November 25, 1980.
"FAA"	Federal Aviation Administration
"FHWA"	Federal Highway Administration
"FMMP"	Farmland Mapping and Monitoring Program
"FTA"	Federal Transit Administration
"GHG"	Greenhouse gas
"GMP"	Groundwater Management Plan
"GPA"	General Plan Amendment
"gpm"	Gallons per minute
"GWh"	Gigawatt-hours
"GWP"	Global Warming Potential
"H_2S"	Hydrogen Sulfide
"HCFC"	Hydrochlorofluorocarbons, a category of greenhouse gases
"HCM"	Highway Capacity Manual
"HCP"	Habitat Conservation Plan
"HFC"	Hydrofluorocarbons, a category of greenhouse gases
"HMA"	Hillside Management Area
"HMMP"	Habitat Mitigation and Monitoring Plan
"HWMU"	Hazardous Waste Management Unit
"ICU"	Intersection Capacity Utilization
"IPCC"	Intergovernmental Panel on Climate Change
"IWRP"	Integrated Water Resources Plan
"kV"	Kilovolt
"kWh"	Kilowatt-hours
"LACoFD"	Los Angeles County Fire Department
"LASD"	Los Angeles County Sheriff's Department
"LAX"	Los Angeles International Airport

Abbreviations and Acronyms

List of Defined Terms and Abbreviations for The Los Angeles County General Plan Update EIR

Abbreviation, Acronym, or Name	*Term or Definition*
"LBP"	Lead Based Paint
"lbs"	Pounds
"LCFS"	Low-Carbon Fuel Standard
"LESA"	Land Evaluation and Site Assessment Model
"LIFOC"	Lease in Furtherance of Conveyance
"LOS"	Level of Service
"Los Angeles County"	The county as a geographic location, as opposed to the "County," a governmental agency. Includes all unincorporated areas and incorporated cities.
"LST"	Localized Significance Threshold
"LUST"	Leaking Underground Storage Tank
"MEP"	Maximum Extent Practicable
"Metro"	Los Angeles County Metropolitan Transportation Authority (branded as Metro) is the California state-chartered regional transportation planning agency (RTPA) and public transportation operating agency for the County of Los Angeles formed in 1993.
"mgd"	Million gallons per day
"Mitigation Measures ("MMs")"	A measure recommended in accordance with CEQA to reduce or avoid an environmental impact that is identified as significant.
"MMTons"	Million Metric Tons
"MPO"	Metropolitan Planning Organization (in our case SCAG)
"MRZ"	Mineral Resource Zone
"MS4"	Municipal Separate Storm Sewer System
"MTons"	Metric Tons
"MWD"	Metropolitan Water District of Southern California
"MWDOC"	Municipal Water District of Orange County
"N_2O"	Nitrous Oxide, a greenhouse gas
"NAAQS"	Federal National Ambient Air Quality Standards
"NAT"	No Action Taken, a phrase used by CARB in its *Climate Change Scoping Plan* to refer to the scenario without any action taken to reduce GHG emissions
"NCCP/HCP"	Natural Communities Conservation Plan/Habitat Conservation Plan
"NEPA"	National Environmental Policy Act
"NO"	Nitric Oxide
"NO2"	Nitrogen Dioxide, a secondary air pollutant
"Notice of Availability/Notice of Completion ("NOA/NOC")"	A notice that the Draft EIR is completed and available for public review and comment
"Notice of Preparation ("NOP")"	A notice under CEQA that the lead agency has decided to prepare an EIR and is soliciting comments from responsible and other agencies
"NO_X"	Nitrogen Oxides (federal and State criteria air pollutant), an Ozone precursor
"NPDES"	National Pollution Discharge Elimination System
"NTS"	Natural Treatment System
"O_2"	Oxygen
"O_3"	Ozone, a secondary air pollutant
"Planning Area"	As part of the Planning Areas Framework, the Proposed General Plan Update divides Los Angeles County into 11 planning areas.
"Pb"	Lead (federal and State criteria air pollutant)
"PCB"	Polychlorinated Biphenyls
"PFCs"	Perfluorocarbons, a category of greenhouse gases

Abbreviations and Acronyms

List of Defined Terms and Abbreviations for The Los Angeles County General Plan Update EIR

Abbreviation, Acronym, or Name	*Term or Definition*
"PM_{10}"	Coarse Inhalable Particulate Matter (federal and State criteria air pollutant)
"$PM_{2.5}$"	Fine Inhalable Particulate Matter (federal and State criteria air pollutant)
"POTW"	Publicly Owned Treatment Works
"ppb"	Parts per billion, a measure of air pollutants
"ppm"	Parts per million, a measure of air pollutants
"Project Area"	Includes all unincorporated areas of the County of Los Angeles, which would be subject to the provisions of the Proposed General Plan Update and associated actions. The Project Area contains approximately 65 percent of the total land area in Los Angeles County.
"Proposed General Plan Update"	A component of the Proposed Project involving a comprehensive update to the Existing General Plan of the County of Los Angeles. The Proposed General Plan Update is intended to guide growth and development within the unincorporated areas of Los Angeles County.
"Proposed Project"	The whole of the action including the proposed General Plan Update, proposed amendments to the zoning code, proposed ordinances, and the proposed Community Climate Action Plan.
"RCNM"	Federal Highway Association's Roadway Construction Noise Model
"RCP"	Regional Comprehensive Plan, a major advisory plan prepared by SCAG that addresses important regional issues such as housing, traffic/transportation, water and air quality
"RCRA"	Resource Conservation and Recovery Act
"RHNA"	Regional Housing Needs Assessment
"RPS"	Renewable Portfolio Standard
"RTP"	Regional Transportation Plan, a regional transportation investment framework prepared by SCAG to address the region's transportation and related challenges
"RUWMP"	Regional Urban Water Management Plan
"RWQCB"	Regional Water Quality Control Board
"SB"	"Senate Bill"
"SCAG"	Southern California Association of Governments
"SCAQMD"	South Coast Air Quality Management District
"SCE"	Southern California Edison
"SCGC"	Southern California Gas Company
"SCRRA"	Southern California Regional Rail Authority
"SCS"	Sustainable Communities Strategy, an advisory land use plan to be adopted by MPOs pursuant to SB 375 as part of their next RTP
"SEA"	Significant Ecological Area
"SF_6"	Sulfur Hexafluoride
"SIP"	California State Implementation Plan (air quality)
"SO_2"	Sulfur Dioxide (federal and State criteria air pollutant)
"SoCAB"	Southern California Air Basin
"SO_X"	Sulfur Oxides
"SP"	Service Population, a population measure (including residents, employees and, in the SEIR, adult students) used to determine the efficiency metric used as a GHG significance threshold under the SCAQMD's draft methodology
"sq. ft."	Square feet
"SRA"	Seismic Response Area
"SWP"	State Water Project
"SWPPP"	Storm Water Pollution Prevention Plan
"SWRCB"	State Water Resources Control Board
"TAC"	Toxic Air Contaminant (as defined in the California Health and Safety Code)

Abbreviations and Acronyms

List of Defined Terms and Abbreviations for The Los Angeles County General Plan Update EIR

Abbreviation, Acronym, or Name	*Term or Definition*
"TAZs"	Traffic Analysis Zones
"TCE"	Trichloroethylene
"TMDL"	Total Maximum Daily Load
"TOD"	Transit Oriented District
"TPM"	Tentative Parcel Map
"TTM"	Tentative Tract Map
“USAR”	Urban search and rescue
"USDOE"	United States Department of Energy
"USEPA"	United States Environmental Protection Agency
"USFWS"	United States Fish and Wildlife Service
"UST"	Underground Storage Tank
"UWMP"	Urban Water Management Plan
"V/C"	Volume to Capacity
"VMT"	Vehicle miles traveled
"VOC"	Volatile Organic Compound (federal and State criteria air pollutant), an ozone precursor
"VTPM"	Vesting Tentative Parcel Map
"VTTM"	Vesting Tentative Tract Map
"WQMP"	Water Quality Management Plan
"WRMP"	Water Resources Management Plan
"WSA"	Water Supply Assessment (per SB610)

Abbreviations and Acronyms

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1. Executive Summary

1.1 INTRODUCTION

This Draft Environmental Impact Report (DEIR) addresses the environmental effects associated with the implementation of the proposed Los Angeles County General Plan Update (Proposed Project). The California Environmental Quality Act (CEQA) requires that local government agencies, prior to taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An Environmental Impact Report (EIR) is a public document designed to provide the public, and local and state governmental-agency decision makers, with an analysis of potential environmental consequences to support informed decision making.

This DEIR has been prepared pursuant to the requirements of CEQA as set forth in the Public Resources Code Section 21000 et seq., and the State CEQA Guidelines, 14 California Code of Regulations Section 15000 et seq. (CEQA Guidelines). The County of Los Angeles, as the lead agency, has reviewed and revised as necessary all submitted drafts, technical studies, and reports to reflect its own independent judgment, including reliance on applicable County technical personnel from other departments and review of all technical subconsultant reports.

Data for this DEIR was obtained from field observations, discussions with affected agencies, analysis of adopted plans and policies, review of available studies, reports, data and similar literature, and specialized environmental assessments (aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems).

1.2 ENVIRONMENTAL PROCEDURES

This DEIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the Proposed Project, as well as anticipated future discretionary actions and approvals. The six main objectives of this document as established by CEQA are listed below:

1) To disclose to decision makers and the public the significant environmental effects of proposed activities.

2) To identify ways to avoid or reduce environmental damage.

3) To prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.

4) To disclose to the public reasons for agency approval of projects with significant environmental effects.

5) To foster interagency coordination in the review of projects.

6) To enhance public participation in the planning process.

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the CEQA Guidelines and provides the information needed to assess the environmental consequences of a proposed project, to the extent feasible. EIRs are intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a proposed project that has the potential to result in significant, adverse environmental impacts.

An EIR is also one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Prior to approving a proposed project, the lead agency must consider the information contained in the EIR, determine whether the EIR was properly prepared in accordance with CEQA and the CEQA Guidelines, determine that it reflects the independent judgment of the lead agency, adopt findings concerning the project's significant environmental impacts and alternatives, and must adopt a Statement of Overriding Considerations if the proposed project would result in significant impacts that cannot be avoided.

1.2.1 EIR Organization

This DEIR has been organized as described below.

Section 1. Executive Summary: Summarizes the background and description of the Proposed Project, the format of this EIR, project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the Proposed Project.

Section 2. Introduction: Describes the purpose of this EIR, background on the Proposed Project, the Notice of Preparation, the use of incorporation by reference, and Final EIR certification.

Section 3. Project Description: A detailed description of the project, the objectives of the Proposed Project, the Project Area and location, approvals anticipated to be included as part of the project, the necessary environmental clearances for the project, and the intended uses of this EIR.

Section 4. Environmental Setting: A description of the physical environmental conditions in the vicinity of the Proposed Project as they existed at the time the Notice of Preparation was published, from both a local and regional perspective. The environmental setting provides baseline physical conditions from which the lead agency determines the significance of environmental impacts resulting from the proposed project.

Section 5. Environmental Analysis: Provides, for each environmental parameter analyzed, a description of the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts of the Proposed Project; the existing environmental setting; the potential adverse and beneficial effects of the Proposed Project; the level of impact significance before mitigation; the mitigation measures for the Proposed Project; the level of significance of the adverse impacts of the Proposed Project after mitigation is incorporated and the potential cumulative impacts associated with the Proposed Project and other existing, approved, and proposed development in the area.

Section 6. Significant Unavoidable Adverse Impacts: Describes the significant unavoidable adverse impacts of the Proposed Project.

Section 7. Alternatives to the Proposed Project: Describes the impacts of the alternatives to the Proposed Project, including the No Project Alternative, and a Reduced Intensity Alternative.

Section 8. Impacts Found Not to Be Significant: Briefly describes the potential impacts of the Proposed Project that were determined not to be significant by the Notice of Preparation and were therefore not discussed in detail in this EIR.

Section 9. Significant Irreversible Changes Due to the Proposed Project: Describes the significant irreversible environmental changes associated with the project.

Section 10. Growth-Inducing Impacts of the Proposed Project: Describes the ways in which the proposed project would cause increases in employment or population that could result in new physical or environmental impacts.

Section 11. Organizations and Persons Consulted: Lists the people and organizations that were contacted during the preparation of this EIR for the Proposed Project.

Section 12. Qualifications of Persons Preparing EIR: Lists the people who prepared this EIR for the Proposed Project.

Section 13. Bibliography: A bibliography of the technical reports and other documentation used in the preparation of this EIR for the Proposed Project.

Appendices. The appendices for this document contain the following supporting documents:

Appendix A: 2011 Notice of Preparation & Comments
Appendix B: 2013 Notice of Preparation & Comments
Appendix C: Land Use and Zoning
Appendix D: Buildout Methodology
Appendix E: Ordinance Amendments
Appendix F: Community Climate Action Plan
Appendix G: Air Quality/GHG Modeling
Appendix H: Biological Information
Appendix I: Cultural Resources Study
Appendix J: List of 303(d) Impaired Water Bodies
Appendix K: Noise Data
Appendix L: Traffic Study
Appendix M: Public Services Correspondence

1.2.2 Type and Purpose of This DEIR

This DEIR has been prepared to satisfy the requirements for a Program EIR. Although the legally required contents of a Program EIR are the same as those of a Project EIR, Program EIRs are typically more

conceptual and may contain a more general or qualitative discussion of impacts, alternatives, and mitigation measures than a Project EIR. As provided in Section 15168 of the State CEQA Guidelines, a Program EIR may be prepared on a series of actions that may be characterized as one large project. Use of a Program EIR provides the County (as lead agency) with the opportunity to consider broad policy alternatives and program-wide mitigation measures and provides the County with greater flexibility to address project-specific and cumulative environmental impacts on a comprehensive basis.

Agencies generally prepare Program EIRs for programs or a series of related actions that are linked geographically, are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program, or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways.

Once a Program EIR has been prepared, subsequent activities within the program must be evaluated to determine whether an additional CEQA document needs to be prepared. However, if the Program EIR addresses the program's effects as specifically and comprehensively as possible, many subsequent activities could be found to be within the Program EIR scope and additional environmental documents may not be required (CEQA Guidelines Section 15168[c]). When a Program EIR is relied on for a subsequent activity, the lead agency must incorporate feasible mitigation measures and alternatives developed in the Program EIR into the subsequent activities (CEQA Guidelines Section 15168[c][3]). If a subsequent activity would have effects that were not examined in the Program EIR, the lead agency must prepare a new Initial Study leading to a Negative Declaration, Mitigated Negative Declaration, or an EIR. In this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis. The CEQA Guidelines (Section 15168[b]) encourage the use of Program EIRs, citing five advantages:

- Provide a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR;
- Focus on cumulative impacts that might be slighted in a case-by-case analysis;
- Avoid continual reconsideration of recurring policy issues;
- Consider broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them; and,
- Reduce paperwork by encouraging the reuse of data (through tiering).

1.3 PROJECT LOCATION

Encompassing approximately 4,083 square miles, Los Angeles County is geographically one of the largest counties in the country. It stretches along 75 miles of the Pacific Coast of Southern California and is bordered by Orange County to the southeast, San Bernardino County to the east, Kern County to the north, and Ventura County to the west. It also includes two offshore islands, Santa Catalina Island and San Clemente Island. The regional location of Los Angeles County is shown in Figure 3-1, *Regional Vicinity*.

The area for the Proposed Project ("Project Area") includes only the unincorporated areas of Los Angeles County (unincorporated areas), approximately 65 percent of the total land area in Los Angeles County. The unincorporated areas in the northern portion of Los Angeles County are covered by large amounts of sparsely populated land and include the Angeles National Forest, part of the Los Padres National Forest, and the Mojave Desert. The unincorporated areas in the southern portion of Los Angeles County consist of noncontiguous land areas, which are often referred to as Los Angeles County's "unincorporated urban islands." These unincorporated areas are shown in Figure 3-2, *Unincorporated Areas of Los Angeles County.*

1.4 PROJECT SUMMARY

The proposed project includes the following components:

- Comprehensive General Plan Update for the unincorporated areas of Los Angeles County.
- Amendment to Title 22 of the County Code to adopt a Significant Ecological Areas (SEA) Ordinance.
- Amendment to Title 22 of the County Code to adopt a Hillside Management Area (HMA) Ordinance.
- Zone changes for consistency with the General Plan Update.
- Amendments to Title 22 of the County Code related to the industrial zones.
- Amendments to Title 22 of the County Code related to the MXD zone (including rescinding the Transit Oriented Districts Ordinance)
- Amendments to Title 22 of the County Code to add the R-5, C-MJ, C-RU, MXD-RU and ()-IP zones.
- Zone nomenclature modification of Zone R-3, R-4 and, C-3.
- Adoption of a Community Climate Action Plan (CCAP).

Each of these components is discussed below.

1.4.1 Proposed General Plan

The Proposed Project is a comprehensive update to the Existing General Plan. The Proposed General Plan Update is intended to guide growth and development within the unincorporated areas.

The Proposed Project includes revisions to elements that are required by the State of California and to optional elements. The Project includes the reorganization of the existing General Plan. Table 1-1, *Comparison between Proposed General Plan Update and Existing General Plan*, lists the nine proposed elements that will replace the adopted elements. The update to the Housing Element, which is a component of the General Plan, was adopted by the Board of Supervisors on February 4, 2014, for the 2014–2021 planning period. The Housing Element is incorporated by reference, but is not analyzed in this DEIR.

Table 1-1 Comparison between Proposed General Plan Update and Existing General Plan

Proposed Elements	Existing Elements
Land Use	Land Use
Mobility	Transportation
Air Quality	Conservation and Open Space
Conservation and Natural Resources	Conservation and Open Space
	Scenic Highway
Park and Recreation	Regional Recreation Areas Plan
Noise	Noise
Safety	Safety
Public Services and Facilities	Water and Waste Management
Economic Development	Economic Development

Policy Highlights of the Proposed General Plan

The following describe the major land use policies in the Proposed General Plan, which are supported by goals, policies, programs, and strategic changes to the land use policy maps:

Transit Oriented Districts (TODs)

TODs are areas within a half-mile radius from a major transit station, where the General Plan Update encourages safe and active transportation, infill development, high-density mixed use development along commercial corridors, and pedestrian-friendly and community-serving uses. The goal of the TODs is to encourage walking, bicycling, and transit use. TODs are located along the Metro Gold Line, Gold Line Extension, Blue Line, Green Line, and near the Silver Line. The General Plan Update will expand the existing TODs from approximately a quarter-mile radius to a half-mile radius from the transit stations. All TODs are envisioned in the future to have a TOD specific plan with standards, regulations, and capital improvement plans that are tailored to the unique characteristics and needs of each community.

Special Management Areas

Los Angeles County's Special Management Areas require additional development regulations that are necessary to prevent the loss of life and property, and to protect the natural environment and important resources. Special Management Areas include but are not limited to Agricultural Resource Areas, Airport Influence Areas, Seismic Hazard Zones, Flood Hazard Zones, Significant Ecological Areas, Hillside Management Areas, and Very High Fire Hazard Severity Zones. The Proposed Project minimizes risks to hazards and limits development in Special Management Areas through goals, policies, and programs. The Proposed Project also includes the Hazard, Environmental, and Resource Constraints Model, which is a visual representation of the Special Management Areas and serves 1) as a tool to inform land use policies for future community-based planning initiatives; 2) to inform applicants and planners of potential site constraints and regulations; and 3) to direct land use policies and the development of planning regulations and procedures to address hazard, environmental, and resource constraints.

Agricultural Resource Areas (ARAs) are areas where the Proposed Project promotes the preservation of agricultural land. These areas are protected by policies to prevent the conversion of farmland to incompatible uses.

Significant Ecological Areas (SEAs) include undisturbed or lightly disturbed habitat supporting valuable and threatened species, linkages and corridors to promote species movement, and are sized to support sustainable populations of its component species. The objective of the SEA Program is to preserve the genetic and physical diversity of the County by designing biological resource areas capable of sustaining themselves into the future. However SEAs are not wilderness preserves. Much of the land in SEAs is privately held, used for public recreation or abutting developed areas. Thus the SEA Program is intended to ensure that privately held lands within the SEAs retain the right of reasonable use, while avoiding activities and development projects that are incompatible with the long term survival of the SEAs.

Hillside Management Areas (HMAs) are areas with a natural slope gradient of 25 percent or steeper. The HMA Ordinance ensures that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character by avoiding development in HMAs to the extent feasible; locating development in the portions of HMAs with the fewest constraints; and using sensitive design techniques.

Employment Protections Districts

The Proposed General Plan Update identifies Employment Protection Districts (EPDs), which are economically viable industrial land and employment-rich lands, with policies to prevent the conversion of industrial land to nonindustrial uses.

Zoning Consistency

In order to maintain consistency between the updated General Plan Land Use Policy Map and the Zoning Map, rezoning is necessary where the proposed land use designation would no longer be consistent with zoning. In addition, the zoning consistency program also includes amendments to the Zoning Code. The General Plan Land Use Policy Map establishes the long-range vision for general intended uses. Title 22 (Planning and Zoning) of the Los Angeles County Code (Zoning Code herein) and Zoning Map implement that vision by providing details on specific allowable uses.

Proposed Zoning Map Amendments

Approximately 3,500 parcels are proposed to be rezoned. For the General Plan Update, the staff used two approaches to rezoning: 1) implementation of major policies in the Plan, and 2) "clean-up" of the Zoning Map. The Master Parcel List and map are provided in Appendix D. The Proposed Zoning Maps are provided as Appendix C3, *Proposed Zoning Maps*.

Rezoning to Implement Major Policies

The first approach to rezoning involves changes that need to be made on the Zoning Map in order to implement some of the major policies in the Plan. One major policy is to encourage high density housing and commercial-residential mixed uses along major commercial corridors within the proposed Transit Oriented

Districts (TODs). The Mixed Use (MXD) zone is proposed to be mapped onto parcels along some of these major corridors that are designated Mixed Use (MU) on the Land Use Policy Map.

Also, to implement the industrial preservation policy in the Plan, the new Industrial Preservation ( )-IP combining zone is proposed to be added onto economically viable and employment-rich industrial lands within the proposed Employment Protection Districts (EPDs).

Rezoning for "Cleanup" Purposes

The second approach to rezoning, which represents a majority of the proposed zone changes, is Zoning Map "clean-up." Parcels rezoned for "clean-up" are those where the general intended uses identified on the Land Use Policy Map are inconsistent with most uses allowed by zoning. In addition, the Zoning Map "clean-up" process eliminates spot zoning, reduces conflicts between adjacent uses, reflects land use trends, and eliminates unnecessary split-zoning.

Proposed Amendments to the Zoning Code

As discussed above, the Proposed General Plan Update introduces major new goals and policies that aim to:

- Encourage mixed use opportunities, and infill and transit-oriented development,
- Preserve employment-rich land; and
- Preserve rural character by limiting incompatible commercial activities in rural communities

In order to implement these goals and policies, and to align Title 22 to be consistent with the Plan, new residential, commercial and industrial zones and revisions to the existing mixed-use and industrial zones are proposed. Furthermore, an industrial zone, an existing rural mixed use zone and the TOD Ordinance are proposed for elimination.

The following summary describes the purpose of each amendment:

R-5 High Density Residence Zone: Zone R-5 provides detailed uses, development standards and procedures for high-density residential development. Housing types allowed in the zone include multifamily developments at densities that are permitted under General Plan Land Use Categories H100 and H150, which respectively allow up to 100 and 150 units per net acre. There are limited exceptions for the allowance of single-family and two-family residences in this zone. This zone includes language to refer certain projects to the Department of Public Works for initial application review to ensure that utility infrastructure, circulation and sightline controls are sufficiently addressed.

MXD Mixed Use Zone: Zone MXD is an existing Special Purpose zone in Title 22 that was significantly revamped. This zone will provide greater flexibility in permitting limited commercial and residential uses by-right to encourage mixed use projects. Zone MXD provides detailed uses, development standards, and procedures for mixed-use developments with residential and commercial uses, within multi-use buildings or single-purpose buildings containing a different use. This zone includes language to refer certain projects to the Department of Public Works for initial application review to ensure that utility infrastructure, circulation and sightline controls are sufficiently addressed.

C-MJ Major Commercial Zone: Zone C-MJ provides detailed uses, development standards, and procedures that accommodate regional-scale commercial and recreation uses, hotels, and high-density, multi-family residential and residential-commercial mixed uses. This zone also includes language to refer certain projects to the Department of Public Works for initial application review to ensure that utility infrastructure, circulation and sightline controls are sufficiently addressed.

C-RU Rural Commercial Zone: Zone C-RU provides detailed uses, development standards, and procedures for low-intensity commercial uses that are compatible with rural, agricultural, and low-density residential uses. The intent of the zone is to serve the diverse economic needs of rural communities, while preserving their unique characters and identities.

MXD-RU Mixed Use Rural Zone: Zone MXD-RU provides detailed uses, development standards, and procedures for a limited mix of commercial uses and very low-density multifamily residential uses on the same lot within rural town centers.

()-IP Industrial Combining Zone: Zone ( )–IP provides a list of non-industrial uses that are not permitted on industrially zoned properties within EPDs, which will preserve and promote current and future industrial uses, labor-intensive activities, wholesale sales of goods manufactured on-site, major centers of employment, and limited employee-serving commercial uses.

Modifications to the Industrial Zones

- Addition of new purpose statements for Zones M-1, M-1.5, M-2 and M-2.5 and the recoding of abbreviations for Zones M-1½ and M-2½ to M-1.5 and M-2.5, respectively.
- Reformatting of permitted use language in Zones M-1.5 and M-2 into use lists.
- Consolidation of uses related to the manufacturing of specific products into categories of product types.
- Addition or modification of uses to be consistent across all Industrial Zones. For example, airports are currently not listed in Zone M-1.5. Since it is a CUP use in Zones M-1 and M-2, it could otherwise mistakenly be interpreted to mean that it is a use prohibited in Zone M-1.5.
- Clarification of certain uses across all Industrial Zones. For example, clarification is made to specify the types of schools permitted or prohibited in the Industrial Zones.
- Establishment of a maximum FAR for each of the Industrial Zones (except MPD, B-1 and B-2) within the development standards sections.
- The relocation of the list of all prohibited uses for each Industrial Zone into a standalone section in Part 1 of Chapter 22.32, so that only one prohibited use list governs all Industrial Zones.

Elimination of Zones and Districts

- Elimination of Zone M-4, as the zone is no longer mapped.

- Elimination of Zone A-C (Arts and Crafts). This zone is not mapped and has not been for the past three decades. The main issue with this zone is that it requires a CUP for all artisan occupations within residences in certain areas. Other Title 22 regulations provide more flexibility in governing the use of a limited range of commercial or artisan activities within or close to residences.

- Elimination of the Blue Line and Green Line Transit Oriented District Ordinance. Zone MXD will be mapped in place on certain parcels around a few TODs, and all other zones within all TODs covered by that ordinance will revert back to the general development standards of the base zones. As a replacement, future tools, such as TOD Specific Plans, will be developed for each TOD.

Modification to Residential and Commercial Zones

- Zone nomenclature modification of Zone R-3, R-4 and, C-3.

Proposed Ordinances

The proposed amendments to the Zoning Code include updating the following ordinances, which are provided in Appendix E.

Hillside Management Area (HMA) Ordinance Update: The purpose of this ordinance is to ensure that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character by avoiding development in HMAs to the extent feasible; locating development in the portions of HMAs with the fewest constraints; and using sensitive design techniques.

Significant Ecological Areas (SEA) Ordinance Update: The purpose of the SEA Ordinance is to provide a process that allows balanced development within the SEAs and reconciles potential conflicts between conservation and development within the SEAs. This process would ensure that environmentally sensitive development standards and designs are applied to proposed developments within the SEAs and that the biological resources within development sites, as well as potential impacts to such resources from proposed developments, are assessed and disclosed. In addition, the purpose of the Ordinance is to ensure that development conserves Los Angeles County's biological diversity, as well as the habitat quality and the connectivity of the SEA to be developed, so that the species populations and habitats can be sustained into the future.

Community Climate Action Plan

Climate action plans include an inventory of greenhouse gas (GHG) emissions and measures for reducing future emissions to achieve a specific reduction target. The County has prepared a Community Climate Action Plan (CCAP) to mitigate and avoid GHG emissions associated with community activities in the unincorporated areas. The CCAP address emissions from building energy, land use and transportation, water consumption, and waste generation. The measures and actions outlined in the CCAP tie together the County's existing climate change initiatives and provide a blueprint for a more sustainable future. The CCAP is a sub-element of the Air Quality Element.

The CCAP identifies emissions related to community activities and established GHG reduction target consistent with AB 32 and provides a roadmap for successfully implementing GHG reduction measures

selected by the County. Importantly, the CCAP recognize the County's leadership and role in contributing to statewide GHG emissions reductions. Actions undertaken as part of the CCAP would result in important community co-benefits, including improved air quality, energy savings, and increased mobility, as well as enhance the resiliency of the community in the face of changing climatic conditions.

The CCAP is composed of state and local actions to reduce GHG emissions within the unincorporated areas. The state actions considered in the CCAP include: the Renewable Portfolio Standard, Title 24 Standards for Commercial and Residential Buildings (Energy Efficiency and CALGreen), Pavley/Advanced Clean Cars (Vehicle Efficiency), and the Low Carbon Fuel Standard. These state actions generally do not require action from the County, but will result in local GHG reductions in the unincorporated areas.

There are 26 local actions included in the CCAP. The local actions are grouped into five strategy areas: green building and energy; land use and transportation; water conservation and wastewater; waste reduction, reuse, and recycling; and land conservation and tree planting. Many of the local actions are cost effective, particularly in the green building and energy strategy area, with several energy efficiency investments that can recoup initial costs in one to five years. In addition to reducing GHG emissions, all local actions have many co-benefits, such as improved public health.

Physical Development under the Proposed General Plan Update

Pursuant to CEQA Guidelines Section 15064(d), this DEIR determines whether there are direct physical changes and reasonably foreseeable indirect physical changes in the environment that would be caused by the Proposed Project. Specifically, this DEIR focuses on impacts from changes to land use associated with buildout of the proposed land use maps (Appendix C1) and impacts from the resultant population and employment growth in the unincorporated areas. The ultimate development of unincorporated areas is not tied to a specific timeline.

The Proposed Project follows the land uses and development intensities already allowed in the Existing General Plan for adopted Community Based Plans. There are limited changes in land use and development intensity for unincorporated urban islands outside of community-based plans. See Figure 3-6, *Areas with Proposed Land Use Changes*.

Buildout projections for the Proposed Project, broken down by Planning Area, are shown in Table 3-6, *Proposed General Plan Buildout Projections* The Proposed Project's buildout would allow for up to: 659,409 residential dwelling units; 92 million square feet (2,129 acres) of commercial use; 102 million square feet (5,210 acres) of industrial use; 503 million square feet (80,896 acres) of public/semi-public; and 714,704 acres of public/open space. These buildout projections are used throughout this DEIR to estimate the magnitude of development that would likely occur within each Planning Area upon buildout of the Proposed Project. The total acreage for each land use designation is used to estimate the number of dwelling units, residents, square feet of nonresidential uses, and employees that would be generated by proposed land uses. These projections are used extensively in the analysis of potential project impacts such as increases in noise or air quality.

1. Executive Summary

It is impossible to perfectly predict the exact development that would occur under the Proposed Project, but a comparison of population, household, and employment projections between the existing land uses and the proposed land uses allowed by the Proposed General Plan allows for an analysis of the relative impacts.

Buildout projections for each Planning Area are shown in Table 1-2. As shown, buildout of the Proposed Project would result in 358,930 additional residential dwelling units compared to existing land uses Buildout of the Proposed Project would result in an 86 percent increase in commercial uses and a 40 percent increase in industrial uses. The majority of new development is expected to occur in the Antelope Valley Planning Area, which will accommodate about 70.6 percent of new residential units and 76 percent of the population growth. Many of the remaining Planning Areas—such as East San Gabriel Valley, Santa Monica Mountains, South Bay, San Fernando Valley, and Gateway Planning Areas—are already built out, so significant growth is not expected.

Table 1-2 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Antelope Valley Planning Area [2]	**1,132,744**	**278,158**	**1,070,571**	**46,870**	**51,219**
Antelope Valley Area Plan[7,8]	**1,132,744**	**278,158**	**1,070,571**	**46,870**	**51,219**
Commercial	902	0	0	19,652	38,329
Industrial	579	0	0	12,606	9,652
Infrastructure	2,649	0	0	0	100
Open Space	583,967	0	0	0	524
Public/Semi-Public	17,029	0	0	14,613	767
Residential	5,541	16,385	62,746	0	485
Rural	522,077	261,773	1,007,826	0	1,361
Coastal Islands Planning Area [2]	**82,752**	**21**	**0**	**0**	**570**
Santa Catalina Island Local Coastal Land Use Plan	**46,137**	**21**	**0**	**0**	**570**
Commercial	26	0	0	0	7
Industrial	690	0	0	0	6
Other	87	0	0	0	0
Public & Open Space	45,197	0	0	0	557
Residential	136	21	0	0	0
Outside Community-Based Plan	**36,615**	**0**	**0**	**0**	**0**
East San Gabriel Valley Planning Area [2]	**28,777**	**70,097**	**255,952**	**150,558**	**53,231**
Hacienda Heights Community Plan	**6,360**	**17,433**	**65,833**	**9,864**	**13,310**
Commercial	131	0	0	5,708	11,194
Industrial	28	0	0	609	466
Residential	3,641	17,288	65,274	0	1,315
Rural	862	145	559	0	35
Outside Community-Based Plan	**14,996**	**38,550**	**139,220**	**128,560**	**19,261**
Commercial	134	0	0	2,929	5,897

Table 1-2 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Industrial	378	0	0	8,241	6,310
Open Space	4,984	0	0	0	646
Public/Semi-Public	1,785	0	0	117,391	5,708
Residential	6,265	38,263	138,118	0	600
Rural	1,450	286	1,102	0	100
Rowland Heights Community Plan[8]	**7,422**	**14,115**	**50,900**	**12,134**	**20,661**
Commercial	192	0	0	8,378	15,764
Industrial	144	0	0	3,756	3,027
Other	793	723	2,783	0	0
Public & Open Space	1,566	0	0	0	194
Residential	4,727	13,392	48,117	0	1,676
Gateway Planning Area[2]	**9,581**	**34,446**	**120,358**	**202,768**	**36,820**
Outside Community-Based Plan	**9,581**	**34,446**	**120,358**	**202,768**	**36,820**
Commercial	142	0	0	3,100	6,067
Industrial	1,481	0	0	32,251	24,694
Open Space	1,411	0	0	0	225
Public/Semi-Public	2,562	0	0	167,417	4,584
Residential	3,985	34,446	120,358	0	1,250
Metro Planning Area[2]	**10,160**	**92,158**	**301,073**	**118,711**	**100,906**
East Los Angeles Community Plan	**3,381**	**41,608**	**128,487**	**44,199**	**42,459**
Commercial	338	0	0	21,255	26,156
Industrial	158	0	0	6,873	5,234
Mixed Use & Specific Plan	65	1,563	4,361	3,404	6,848
Other	21	0	0	0	0
Public & Open Space	582	0	0	12,667	2,753
Residential	2,218	40,045	124,127	0	1,469
Outside Community-Based Plan	**4,921**	**35,028**	**118,329**	**61,135**	**42,509**
Commercial	318	0	0	6,919	13,884
Industrial	1,186	0	0	25,832	19,779
Mixed Use & Specific Plan	45	2,695	7,521	1,468	2,873
Open Space	251	0	0	0	374
Public/Semi-Public	412	0	0	26,917	4,602
Residential	2,710	32,332	110,808	0	997
Walnut Park Neighborhood Plan	**369**	**4,338**	**13,717**	**2,558**	**5,044**
Commercial	41	0	0	2,135	4,358
Industrial	8	0	0	180	112
Other	4	26	100	0	0
Residential	305	4,312	13,617	0	100

Table 1-2 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
West Athens – Westmont Community Plan	**1,489**	**11,185**	**40,539**	**10,820**	**10,894**
Commercial	155	0	0	6,047	8,456
Public & Open Space	278	0	0	4,773	1,813
Residential	1,057	11,185	40,539	0	625
San Fernando Valley Planning Area [2,4]	**27,230**	**13,464**	**47,060**	**55,514**	**24,741**
Outside Community-Based Plan	**27,184**	**13,419**	**46,886**	**55,514**	**24,741**
Commercial	57	0	0	1,246	2,522
Industrial	148	0	0	3,225	2,469
Mixed Use & Specific Plan	301	0	0	0	18,700
Open Space	9,759	0	0	0	82
Public/Semi-Public	781	0	0	51,043	749
Residential	1,334	11,630	39,996	0	218
Rural	14,805	1,790	6,890	0	1
Twin Lakes Community Plan	**45**	**45**	**174**	**0**	**0**
Rural	45	45	174	0	0
Santa Clarita Valley Planning Area[2]	270,889	77,155	237,638	0	105,881
Santa Clarita Valley Area Plan[6]	270,889	77,155	237,638	0	105,881
Residential		77,155	237,638		
Non-Residential					81,265-107,123
Santa Monica Mountains Planning Area[2]	**71,303**	**6,788**	**26,128**	**29,667**	**28,707**
Malibu Local Coastal Land Use Plan[8]	**51,141**	**4,347**	**16,729**	**15,239**	**22,138**
Commercial	729	0	0	6,352	11,929
Mixed Use & Specific Plan	39	0	0	336	672
Public & Open Space	16,423	0	0	8,551	7,776
Residential	1,005	1,049	4,032	0	0
Rural	32,946	3,298	12,697	0	1,761
Santa Monica Mountains North Area Plan[8]	**20,162**	**2,441**	**9,399**	**14,428**	**6,569**
Commercial	166	0	0	3,215	5,959
Infrastructure	0	0	0	0	0
Public & Open Space	6,651	0	0	11,214	73
Residential	425	840	3,235	0	0
Rural	12,920	1,601	6,164	0	537
South Bay Planning Area[2]	**3,304**	**25,929**	**86,392**	**33,945**	**24,530**
Proposed General Plan	**3,304**	**25,929**	**86,392**	**33,945**	**24,530**
Commercial	154	0	0	3,362	6,703

Table 1-2 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Industrial	311	0	0	6,781	5,192
Mixed Use & Specific Plan	72	4,312	12,029	2,347	4,594
Open Space	344	0	0	0	100
Public/Semi-Public	328	0	0	21,455	7,493
Residential	2,095	21,617	74,364	0	447
West San Gabriel Valley Planning Area[2]	**12,237**	**43,877**	**156,658**	**29,641**	**26,539**
Altadena Community Plan [8]	**5,604**	**16,240**	**61,359**	**9,996**	**18,463**
Commercial	64	0	0	2,784	9,376
Industrial	38	0	0	1,004	3,075
Infrastructure	815	0	0	0	0
Mixed Use & Specific Plan	255	904	2,800	2,226	4,561
Public & Open Space	915	0	0	3,981	1,066
Residential	3,516	15,335	58,558	0	386
Proposed General Plan	**6,633**	**27,638**	**95,300**	**19,645**	**8,076**
Commercial	67	0	0	1,469	2,875
Industrial	55	0	0	1,202	920
Mixed Use & Specific Plan	42	2,495	6,960	1,358	2,658
Open Space	2,675	0	0	0	332
Public/Semi-Public	239	0	0	15,616	430
Residential	3,485	25,138	88,323	0	861
Rural	69	4	17	0	0
Westside Planning Area[2]	**4,079**	**17,316**	**55,033**	**56,661**	**14,592**
Marina del Rey Local Coastal Land Use Plan	**694**	**7,684**	**21,439**	**1,861**	**4,493**
Commercial	86	0	0	1,413	4,111
Industrial	5	0	0	112	250
Other	401	0	0	82	82
Public & Open Space	42	0	0	0	0
Residential	159	7,684	21,439	254	50
Proposed General Plan	**3,386**	**9,632**	**33,594**	**54,800**	**10,099**
Commercial	89	0	0	1,958	3,924
Open Space	1,336	0	0	0	175
Public/Semi-Public	809	0	0	52,842	5,700
Residential	1,153	9,632	33,594	0	300
GRAND TOTAL	**1,653,056**	**659,409**	**2,356,864**	**724,336**	**467,738**

Notes:
1. Historically, jurisdiction-wide buildout levels do not achieve the maximum allowable density/intensity on every parcel and are, on average, lower than allowed by the General Plan. Accordingly, the buildout projections in this General Plan do not assume buildout at the maximum density or intensity and instead are adjusted downward to account for variations in buildout intensity.
2. The Proposed General Plan has broken the county into 11 Planning Areas. These boundaries will go into effect with the adoption of the General Plan.
3. Acres are given as adjusted gross acreages, which do not include the right-of-way for roadways, flood control facilities, or railroads.
4. The Twin Lakes Community Plan is included in the San Fernando Valley Planning Area, but it does not include a separate land use legend.

Table 1-2 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]

5. Projections of population by residential designation are based on a persons-per-household factor that varies by housing type. Additionally, the projections of jobs by designation are based on an employment generation factor that varies by employment category or actual number of jobs. See Appendix D.
6. The figures for the unincorporated Santa Clarita Valley reference the figures in the 2010 Environmental Impact Report for the Santa Clarita Valley Area Plan Update (One Valley One Vision). The methodology used to derive the figures for the unincorporated Santa Clarita Valley differs from the methodology used to generate the figures for other unincorporated areas and, therefore, they cannot be broken down by Land Use Category.
7. The Antelope Valley Area Plan represents the adopted plan, with the exception of the portion that overlaps with the Proposed General Plan community of 'Kagel/Lopez Canyons. Therefore, the total acreage of the Antelope Valley represented here is less than the actual area of the adopted plan boundary.
8. For these communities, an overlay density reduction was done for Hillside Management Areas (HMA). If however, the underlying land use density is lower than this HMA density, then the land use plan density should be applied. The HMA densities are as follows: 25–50% slope (max 1 du/ 2 acres) = 0.5; Greater than 50% slope (max 1 du/20 acres) = 0.05.

1.5 SUMMARY OF PROJECT ALTERNATIVES

As described in Section 7 of this DEIR, three alternatives were considered but rejected during the project scoping/planning process:

- Project Planning Alternatives
- Existing SEA Boundaries Alternative
- No Growth/No Development Alternative

In addition, three project alternatives were identified and analyzed in detail for relative impacts as compared to the Proposed Project:

- No-Project/Existing General Plan Alternative
- Reduced Intensity Alternative
- Antelope Valley Reduced Intensity Alternative

The following presents a summary of each of the alternatives analyzed in the EIR. These alternatives were developed to avoid or substantially lessen the significant impacts of the Proposed Project. Please refer to Section 7 of this EIR for a complete discussion of how the alternatives were selected and the relative impacts associated with each alternative.

1.5.1 No-Project/Existing General Plan Alternative

This alternative, which is required by CEQA, assumes that the Existing General Plan and implementing zoning would remain unchanged. The Existing General Plan originally adopted on November 25, 1980 would remain in effect, and no update to the Existing General Plan goals and policies would occur. This alternative would also maintain the existing SEA boundaries. Other key components of the Proposed Project, including the establishment of Transit Oriented Districts (TODs) in the General Plan, amendment to the MXD Mixed Use Zone, and adoption of the Community Climate Action Plan also would not occur under this alternative. Under the No Project/Existing General Plan Alternative, a total of 602,024 dwelling units (additional 301,546

units from existing), a total population of 2,199,477 (additional 1,133,063 persons from existing), and total of 444,393 employees (additional 191,734 employees from existing) would occur at buildout.

1.5.2 Reduced Intensity Alternative

This alternative would reduce the overall additional development intensity by 30 percent within each Planning Area as compared to the Proposed Project. Under the Reduced Intensity Alternative, a comprehensive update to the Existing General Plan goals and policies would occur, similar to the Proposed Project. Updates to the existing SEA boundaries based on the latest biological information and GIS mapping data would also occur. Other key components of the Proposed Project, such as the establishment of TODs in the General Plan, amendment to the MXD Mixed Use Zone, and adoption of the Community Climate Action Plan would occur under this alternative. Under the Reduced Intensity Alternative, a total of 558,380 dwelling units (additional 257,902 units from existing), a total population of 1,988,285 (additional 921,871 persons from existing), and a total of 410,300 employees (additional 157,641 employees from existing) would occur at buildout.

1.5.3 Antelope Valley Reduced Intensity Alternative

This alternative would reduce the allowable development intensity within the Antelope Valley Planning Area. No other changes in any other Planning Area would occur. The alternative reduces allowable dwelling units, population, and employment growth within the Antelope Valley Planning Area to 81,441 dwelling units, 311,920 residents, and 102,513 employees. Under the Proposed Project, a total of 278,158 dwelling units, 1,070,571 residents, and 51,219 employees would be allowed in the Antelope Valley Planning Area at buildout. Under the Antelope Valley Reduced Intensity Alternative, a comprehensive update to the Existing General Plan goals and policies would occur, similar to the Proposed Project. Updates to the existing SEA boundaries based on the latest biological information and GIS mapping data would also occur. Other key components of the Proposed Project, such as the establishment of TODs in the General Plan, amendment to the MXD Mixed Use Zone, and adoption of the Community Climate Action Plan would occur under this alternative. Under the Antelope Valley Reduced Intensity Alternative, a total of 490,083 dwelling units (additional 189,605 units from existing), a total population of 1,655,675 (additional 589,261 persons from existing), and a total of 536,409 employees (additional 283,750 employees from existing) would occur in the Project Area at buildout.

1.6 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the proposed project, the major issues to be resolved include decisions by the lead agency as to the following:

1. Whether this DEIR adequately describes the environmental impacts of the project.

2. Whether the benefits of the project override those environmental impacts which cannot be feasibly avoided or mitigated to a level of insignificance.

3. Whether the proposed land use changes are compatible with the character of the existing area.

4. Whether the identified goals, policies, or mitigation measures should be adopted or modified.

5. Whether there are other mitigation measures that should be applied to the project besides the Mitigation Measures identified in the DEIR.

6. Whether there are any alternatives to the project that would substantially lessen any of the significant impacts of the proposed project and achieve most of the basic project objectives.

1.7 AREAS OF CONTROVERSY

The County determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) on August 1, 2011, to the State Clearinghouse, responsible agencies, and interested parties. The 30-day public review period ran from August 1, 2011 through August 31, 2011. The NOP and NOP comments are included as Appendix A.

The project description in the August 1, 2011 NOP included an update to the General Plan (excluding the Housing Element) and an update to the adopted Antelope Valley Area Plan. A second NOP was issued on June 26, 2013 to July 26, 2013 to advise interested parties and responsible agencies that the project description had been revised to eliminate the Antelope Valley Area Plan Update. An EIR for the Antelope Valley Area Plan Update will be processed separately. The second NOP and associated comments are included as Appendix B.

Prior to the preparation of the DEIR, pursuant to the California Public Resources Code Section 21803.9, the County conducted three public scoping meetings on August 18, 2011, August 23, 2011, and July 11, 2013. The purpose of these meetings was to provide a public forum for information dissemination and dialogue regarding the components of the Proposed Project, the overall process, and the DEIR. The scoping meetings were attended by various agency representatives, stakeholders, and government officials. Issues raised at the scoping meetings included proposed land use changes in the Antelope Valley Area Plan, jobs-housing balance, the proposed Community Climate Action Plan, and the Mobility Element. These and other issues are addressed in Chapter 5 of this DEIR. Table 1-3 summarizes issues identified by respondents to the NOP and attendees of the scoping meeting. The table also provides references to the sections of the DEIR in which these issues are addressed.

Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
2011 NOP (August 1, 2011 through August 31, 2011)			
Agencies			
California Department of Fish and Wildlife		• Requests that the following be included in the EIR: 1) recent and complete assessment of flora and fauna in area, 2) a discussion of direct, indirect, and cumulative impacts, 3) alternatives analysis. • Requests that all wetland and watercourses be retained	Section 5.4, *Biological Resources* and Section 7, *Alternatives to the Proposed Project*.

Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
California Department of Fish and Wildlife	Agricultural Resources	• Concerned with the practice of agricultural clearing within the Antelope Valley and the lack of County oversight.	Section 5.2, *Agricultural Resources*.
California Department of Conservation- Division of Oil, Gas & Geothermal Resources	Natural Resources	• Recommends that all future drill sites, oil production facilities and existing wells within or in close proximity to project boundaries be accurately plotted on future project maps. • Request that written approval required for any changes to wells.	Section 5.11, *Mineral Resources*.
California Water Quality Control Board, Region 6	Hydrology and Water Quality	• Requests the DEIR include the following components: 1) Beneficial Use Analysis; 2) Avoidance and Minimization Analysis; 3) Alternatives Analysis; 4) Characterization of impacts; 5) Hydrologic Analysis and 6) Habitat Connectivity Analysis. • Promotes use of Low Impact Development strategies.	Section 3, *Project Description*; Section 4, *Environmental Setting*; Section 5.4, *Biological Resources*; Section 5.9, *Hydrology and Water Quality*; and Section 5.17, *Utilities and Service Systems.*
California Public Utilities Commission	Traffic	• Requests language that any future planned development adjacent to or near railroad right-of-way is planned with safety of rail corridor in mind. Traffic studies undertaken should address traffic volumes increase impacts over rail crossings.	Not an environmental impact of the General Plan Update.
City of Brea	Aesthetics; Biological Resources; Cultural ; Hazards; Land Use and Planning; Utilities; and Traffic	• Concerned with GP changes related to lands abutting or within general proximity to Brea's jurisdictional borders. Requests EIR address potential impacts to City of Brea.	Section 5.1, *Aesthetics*; Section 5.4, *Biological Resources*; Section 5.5 *Cultural Resources*; Section 5.16, *Transportation and Traffic* ;Section 5.17, *Utilities and Service Systems*
City of Burbank	Land Use	• Concerned with whether or not the NBC Universal Evolution plan will be analyzed in the EIR	Not applicable; the Universal Studios Specific Plan was adopted in 2013.
City of Hawthorne	Land Use; Traffic	• Concerned with the South Bay Planning Area, particularly Inglewood Avenue. Fears that allowing mixed use will increase congestion.	Section 5.16, *Transportation and Traffic*
City of San Marino	Traffic	• Request the analysis of potential traffic impacts and/or potential traffic improvement measures for East Pasadena-East San Gabriel Opportunity Area.	Section 5.16, *Transportation and Traffic*
County of Los Angeles Sheriff's Department	Public Services	• No comments.	Section 5.14, *Public Services*.
County of Ventura Public Works Agency Transportation Department	Traffic	• Recommends that environmental documents include any site-specific or cumulative impact to County of Ventura's local roads and regional road network.	Section 5.16, *Transportation and Traffic*
County of Ventura Watershed Protection District	Hydrology and Water Quality	• Requests evaluation of all potential effects on Ventura County	Section 5.9, *Hydrology and Water Quality*
Desert and Mountain	General Plan	• Requests several General Plan policy revisions	Section 5.4, *Biological Resources;* See also General

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Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
Conservation Authority		and one policy addition.	Plan Chapter 7, *Mobility Element*, Policy M 7.2 and M 7.4.
Native American Heritage Commission	Cultural Resources	• Seeks to inform County that Native American cultural resources were identified within the Area of Potential Effect. • Urges LA County of consult with Native American contacts.	Section 5.5, *Cultural Resources*.
Puente Hills Habitat Preservation Authority	Biological Resources; Recreation; Land Use and Planning.	• Concerned with future development on non-conserved open space lands that are adjacent to the Puente Hills Preserve. • Requests potential impacts of any development permitted within SEAs be analyzed and include mitigation measures. Requests DEIR include a detailed analysis as to why the corridor proposed at Harbor Blvd will not significantly impact wildlife movement.	Section 5.4, *Biological Resources* and.10, *Land Use and Planning*; 5.15, *Recreation*.
Resource Conservation District of Santa Monica Mountains	Land Use; Air Quality; Conservation and Open Space; Biological; Water Quality; Agriculture; Mineral; Scenic Resources; Historically, Cultural, and Archeological Resources; Parks and Recreation, Public Services, Utilities, and Safety.	• Makes General Plan policy recommendations and requests the DEIR address various impact categories such as land use, preservation of agricultural land, hazardous sites, air quality, Significant Ecological Area boundaries, dedications of land and conservation easements, and trail dedications; water conservation; mineral resources; scenic, historically, cultural, and archeological resources; parks and recreation, public services, utilities, and safety.	Chapter 5, *Environmental Analysis*
Santa Monica Mountains Conservancy	Biological Resources; Land Use; Traffic	• Expresses concerns related to Antelope Valley Area Plan: land use goals for high desert corridor should be included in plan update; mobility element should address biological impacts of transportation infrastructure; trail dedications require funding for implementation; conservation and open space element policy addition; and renewable energy map missing key wildlife corridor.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. See Section 3, *Project Description*; Section 5.4, *Biological Resources*; Section 5.10, *Land Use and Planning*; and Section 5.16, *Transportation and Traffic*
Santa Monica Mountains Conservancy	Biological Resources; Traffic	• Requests specific revisions to Significant Ecological Areas: expansion of northern boundary of Newhall SEA; addition of Mormon Canyon to Santa Susana Mountains SEA; and expansions of Santa Susana Mountains SEA to connect with Oaks Savannah SEA. • Requests changes to County Highway Plan.	Section 3, *Project Description*; Section 5.4, *Biological Resources*; and Section 5.16, *Transportation and Traffic*

Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
South Coast AQMD	Air Quality; GHG	• Requests that County forward DEIR and all tech documents and appendices to SCAQMD. Requests that air quality emissions be calculated and compared with adopted thresholds.	Section 5.3, *Air Quality* and Section 5.7, *Greenhouse Gas Emissions*.
Southern California Association of Governments	Land Use; Traffic; Population and Housing	• Requests use of policies for guidance in considering the project within the context of SCAG's regional goals and policies. • Encourages use of SCAG List of Mitigation Measures.	Section 3, *Project Description*; Section 4, *Environmental Setting*. Section .10, *Land Use and Planning*; 5.13, *Population and Housing* Section 5.16, *Transportation and Traffic*
United States Department of Interior Fish & Wildlife Service	Biological Resources; Land Use	• Requests analysis of the plan area updates and the environment in the vicinity of these updates, from both local and regional perspectives and include all practicable alternatives considered.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 5.4, *Biological Resources.* Section 5.10, *Land Use and Planning*.
Wildlife Corridor Conservation Authority	Biological Resources; Land Use	• Requests that SEA be expanded to include Worsham and Savage Canyons in their entirety, including Savage Canyon Landfill. • Requests that Puente Hills Landfill be preemptively designated part of the SEA.	Section 5.4, *Biological Resources.* Section 5.10, *Land Use and Planning*.
Organizations			
AV Area Plan Blue Ribbon Committee	Biological Resources; Land Use; and Population and Housing	• Expresses concern with the RHNA targets and the downzoning/upzoning proposed for the Antelope Valley Area Plan Update (Town & Country). • Expresses concern about expanding SEAs without scientific studies.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. See Section 3, *Project Description*; Section 5.4, *Biological Resources;* Section 5.10, *Land Use and Planning;* and Section 7, *Alternatives to the Proposed Project.*
Building Industry Association Los Angeles Chapter	Biological Resources; Land Use; and Population and Housing	• Expresses concern with the RHNA targets and the downzoning/upzoning proposed for the Antelope Valley Area Plan Update (Town & Country). • Expresses concern about expanding SEAs without scientific studies.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning* and Section 7, *Alternatives to the Proposed Project.*
Building Industry Association Los Angeles Chapter	Biological Resources; Land Use; and Population and Housing	• Requests that the housing element be updated in conjunction with the rest of the GP. • Believes that the upzoning and downzoning effects will not be fully understood without a housing element update. • Questions plans about consistency with SB 375.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.3, *Air Quality*; Section 5.4, *Biological Resources;* Section 5.7, *Greenhouse Gas Emissions*; Section 5.10, *Land Use and Planning;* Section 5.13, *Population and Housing;* and

Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
			Section 5.17, *Utilities and Service Systems*; and Section 7, *Alternatives to the Proposed Project.*
Endangered Habitats League	Biological Resources; Land Use; and Population and Housing	• Requests that the County consider the use of urban growth boundaries, transferable development rights programs, purchases of development rights programs, and capacity-based residential caps for designated areas.	Section 3, *Project Description;* 5.4, *Biological Resources* ; Section 5.10, *Land Use and Planning;* Section 5.13, *Population and Housing*
Greater Antelope Valley Association of REALTORS	Biological Resources; Land Use; and Population and Housing; Utilities and Service Systems.	• Requests that the County consider the use of urban growth boundaries, transferable development rights programs, purchases of development rights programs, and capacity-based residential caps for designated areas.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning*; Section 5.13, *Population and Housing;* and Section 5.17, *Utilities and Service Systems*.
Hillside Open Space Education Coalition (HOSEC)	Biological Resources; Land Use; and Population and Housing; Utilities and Service Systems.	• Requests the EIR provide a comprehensive discussion and analysis of the compatibility of the proposed General Plan land use designations and goals as compared to the HOSEC goals and policies for open space education and preservation.	Section 3, *Project Description;* 5.4, *Biological Resources* ; Section 5.10, *Land Use and Planning;* Section 5.13, *Population and Housing*
Los Angeles County Farm Bureau	Agriculture; Biological Resources; Land Use; Water Resources; Utilities and Service Systems.	• Questions if there is a relationship between the proposed Antelope Valley Area Plan and the ongoing groundwater adjudication. • Questions why they were not included in all stages of the plan. • Believes restrictions concerning dwelling units are unjust and do not reflect the tradition ranch lifestyle of the area; feels the restrictions devalue farming property.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.2, Agricultural Resources; Section 5.4; *Biological Resources;* Section 5.9, *Hydrology and Water Quality;* Section 5.10, *Land Use and Planning*; *5.13, Population and Housing;* and Section 5.17, *Utilities and Service Systems*.
Three Points Liebre Mountain Town Council	Agriculture; Biological Resources; Land Use; Water Resources; Utilities and Service Systems	• Concerned with the conflicts between policies of the draft General Plan that promote open space and those that promote renewable energy. • Requests that the DEIR to include a cumulative impacts analysis for a 30 year buildout scenario for renewable energy. • Requests analysis of impacts to local services with respect to the economies created by renewable energy.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning; Section* 5.13, *Population and Housing;* and Section 5.17, *Utilities and Service Systems*.

Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
Residents and Businesses			
Burton, Steve	Air Quality; GHG; Biological Resources; Land Use	• Expresses concern with the RHNA targets and the downzoning/upzoning proposed for the Antelope Valley Area Plan Update (Town & Country). • Expresses concern about expanding SEAs without scientific studies.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.3 Air Quality; Section 5.4; *Biological Resources; Section 5.7, Greenhouse Gases* Section 5.10, *Land Use and Planning; Section* 5.13, *Population and Housing;* and Section 5.17, *Utilities and Service Systems*.
Carlton, Diane	Air Quality; GHG; Biological Resources; Land Use	• Expresses concern with the RHNA targets and the downzoning/upzoning proposed for the Antelope Valley Area Plan Update (Town & Country). • Expresses concern about expanding SEAs without scientific studies.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.3 Air Quality; Section 5.4; *Biological Resources; Section 5.7, Greenhouse Gases* Section 5.10, *Land Use and Planning; Section* 5.13, *Population and Housing;* and Section 5.17, *Utilities and Service Systems*.
DeBranch, Stefan J.	Land Use; Utilities and Service Systems.	• Expresses support for zone changes from N1 to RL20 and RL40. • Requests the County to consider the many acres used for solar power production when drafting the Renewable Energy Ordinance.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning*; Section 5.17, *Utilities and Service Systems*.
Esparza, Alana	Air Quality; GHG; Biological Resources; Land Use	• Expresses concern with the RHNA targets and the downzoning/upzoning proposed for the Antelope Valley Area Plan update (Tow & Country). • Expresses concern about expanding SEAs without scientific studies.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.3 Air Quality; Section 5.4; *Biological Resources; Section 5.7, Greenhouse Gases* Section 5.10, *Land Use and Planning; Section* 5.13, *Population and Housing;* and Section 5.17, *Utilities and Service Systems*.
Gunzel, Kurt & Susan	Land Use	• Requests 1-acre lot restrictions lifted. Believes the rule is not consistent with the zoning code or the current development pattern of the area.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description;* Section 5.10, *Land Use and Planning*.

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Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
Hunter, Steve	Land Use	• Expresses concern that changing the Gorman area's zoning from N1 to RL20 & RL40 will negatively impact a project that has been in the making for 7 years. • Requests that zoning remain N1 in order to allow for more density.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning*.
Justice, Mary	Biological Resources; Land Use	• Expresses concern about impact of undisclosed road on private property; infrastructure; biological resources.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning*; and Section 5.16, *Transportation and Traffic*
Majer, Mark	Land Use	• Expresses concern that changing the Gorman area's zoning from N1 to RL20 & RL40 will negatively impact a project that has been in the making for 7 years. • Requests that zoning remain N1 in order to allow for more density.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning*.
Mullaly, Don P.	Air Quality; Aesthetics; Traffic and Infrastructure; Recreation; Land Use and Planning.	• Expresses concern about the loss of open space on parks and recreation, access to trails, viewsheds, and air quality. • Expresses concern about the availability of roads paved roads in rural communities and suggests that any roads developed provide entry into open space have set standards for use.	Section 5.1, Aesthetics; Section 5.3, *Air Quality*; Section 5.4; *Biological Resources;* Section 5.7, *Greenhouse Gas Emissions;* Section 5.10, *Land Use and Planning*; Section 5.15, Recreation; and Section 5.16, *Transportation and Traffic.*
Rice, Steve	Land Use	• Expresses concern with the RHNA targets and the downzoning/upzoning proposed for the Antelope Valley Area Plan Update (Town & Country). • Expresses concern about expanding SEAs without scientific studies.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning*.
Trussel, Ann	Land Use	• Expresses concern with the RHNA targets and the downzoning/upzoning proposed for the Antelope Valley Area Plan Update (Town & Country). • Expresses concern about expanding SEAs without scientific studies.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning*.
Slover, Dave	Land Use	• Expresses concern with the RHNA targets and the downzoning/upzoning proposed for the Antelope Valley Area Plan Update (Town & Country). • Expresses concern about expanding SEAs without scientific studies.	The Antelope Valley Area Plan is not being amended as part of the General Plan Update. Section 3, *Project Description,* Section 5.4; *Biological Resources;* Section 5.10, *Land Use and Planning*.

Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
2013 NOP (June 26, 2013 to July 26, 2013)			
Agencies			
California Department of Fish and Wildlife	Biological Resources	• Expresses concerns about impacts on biological resources resulting from ministerial projects exempt from CEQA.	Section 5.4, *Biological Resources*
Caltrans District 7	Traffic	• Requests that traffic analysis analyze cumulative traffic impacts on State facilities. • Requests coordination between the County and Caltrans. • Requests that traffic analysis utilize thresholds and guidance adopted by Caltrans.	Section 5.16, *Transportation and Traffic*
City of Rancho Palos Verdes	Biological Resources; Geology and Soils; Hydrology and Water Quality; Land Use and Planning; Noise; Population and Housing; Public Services (schools); Traffic	• Requests that geologic hazards in the Palos Verdes Peninsula be thoroughly analyzed. • Requests that the EIR analyze noise impacts of roadway reclassification. • Requests that the EIR analyze water quality and geology impacts resulting from expansion of private sewage disposal systems. • Requests that the EIR analyze impacts on coastal sage scrub habitat. • Requests that the traffic analysis analyze the Western/Toscanini intersection. • Suggests that all schools districts in the County should be consulted. • Expresses concerns about nonconforming uses.	Section 5.4, *Biological Resources*; Section 5.6, *Geology and Soils*; Section 5.9, *Hydrology and Water Quality*; Section 5.10, *Land Use and Planning*; Section 5.12, *Noise*; Section 5.13, *Population and Housing*; Section 5.14, *Public Services*; Section 5.16, *Transportation and Traffic*
County of Los Angeles Fire Department	Biological Resources; Cultural Resources; Geology and Soils; Hazards	• Requests that the EIR analyze erosion control, watershed management, rare and endangered species, vegetation, fire hazards, cultural resources, and oak trees.	Section 5.4, *Biological Resources*; Section 5.5, *Cultural Resources*; Section 5.6, *Geology and Soils*; 5.8, *Hazards and Hazardous Materials*
County of Ventura	Hydrology and Water Quality; Traffic	• Requests that subsequent project-level CEQA review analyze potential site-specific and cumulative traffic impacts to roadways in Ventura County. • Expresses concern regarding hydrology impacts of General Plan implementation.	Section 5.9, *Hydrology and Water Quality*; Section 5.16, *Transportation and Traffic*
Los Angeles World Airports	Land Use	• Expresses concern about the impacts of proposed land use designations on the future construction of a public airport in Palmdale.	Section 5.10, *Land Use and Planning*
Native American Heritage Commission (NAHC)	Cultural Resources	• Requests that potential impacts to paleontological and cultural resources be identified. • Requests that consultation with Native American tribes be conducted pursuant to CEQA.	Section 5.5, *Cultural Resources*
Orange County Public Works (OCPW)	Administrative	• No comments on the EIR.	Not Applicable

1. Executive Summary

Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
Resource Conservation District of the Santa Monica Mountains	Project Description	• Requests changes to objectives of the General Plan Update (not a comment on the EIR) • Requests changes to content of the proposed General Plan Elements (not a comment on the EIR)	Not Applicable (comments and questions address content of the General Plan Update and not environmental analysis of the General Plan Update in the EIR)
Southern California Association of Governments (SCAG)	Land Use and Planning	• Recommends that the EIR include a review of adopted Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals • Requests that analysis in the EIR utilize SCAG's most recently adopted growth forecasts • Recommends that the lead agency review mitigation measures in the 2012-2035 RTP/SCS Final Program EIR	Section 5.10, *Land Use and Planning*
South Coast Air Quality Management District (SCAQMD)	Air Quality; Greenhouse Gas Emissions	• Requests correspondence regarding future release of environmental documents related to the General Plan Update • Recommends that the lead agency use the SCAQMD's air quality handbook, the District's preferred emissions estimating software, and the District's preferred significance thresholds • Requests that potential construction-related and operational air quality impacts be analyzed	Section 5.3, *Air Quality*; Section 5.7, *Greenhouse Gas Emissions*
Organizations			
Building Industry Association (BIA)	Land Use and Planning; Population and Housing	• Expresses concerns about downzoning of parcels in northern Los Angeles County. • Requests tables and maps indicating which parcels are planned for changes in density and/or development capacity. • Questions separation of Antelope Valley Area Plan from General Plan Update. • Objects to General Plan Update's expansion of Significant Ecological Areas (SEAs) (not a comment on the EIR). • Requests analysis of consistency between the General Plan Update and the Housing Element. • Requests that fiscal impacts of the General Plan Update be analyzed. • Poses questions about consistency between General Plan Update and local plans/zoning (not a comment on the EIR). • Questions the lack of a transit-oriented district in the northern portion of the County (not a comment on the EIR). • Requests that the proposed General Plan Update be flexible. • Requests that the EIR include analysis regarding anticipated future developments.	Chapter 3, *Project Description*; Section 5.10, *Land Use and Planning;* Section 5.13, *Population and Housing*

Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
Chatsworth Nature Preserve Coalition	Biological Resources	• Expresses concern about potential impacts to biological resources, particularly in the Santa Susana Mountains and Simi Hills.	Section 5.4, *Biological Resources*
Concerned Citizens of the Western Antelope Valley/Friends of the Antelope Valley Open Space	Biological Resources; Land Use and Planning; Utilities and Service Systems (water supply)	• Expresses concern about availability of water supplies in areas planned for growth. • Requests that environmental impacts on scenic/natural areas related to large-scale energy projects, new recreational uses, and transportation projects be analyzed.	Section 5.4, *Biological Resources;* Section 5.10, *Land Use and Planning;* Section 5.15, *Recreation;* Section 5.17, *Utilities and Service Systems*
Santa Susana Mountain Park Association	Biological Resources; Land Use and Planning	• Expresses concerns about viability of wildlife habitat corridors. • Requests that the General Plan Update identify optimal wildlife movement corridors and address land use compatibility in those areas (not a comment on the EIR). • Suggests that the County establish a moratorium on new development until protected wildlife corridors are established (not a comment on the EIR). • Recommends that the General Plan Update incorporate elements of the National Park Service Rim of the Valley Corridor Trail Study.	Section 5.4, *Biological Resources;* Section 5.10, *Land Use and Planning*
Residents and Businesses			
Bill Andro	Greenhouse Gas Emissions	• Questions premise that the EIR should analyze greenhouse gas emissions.	Section 5.7, *Greenhouse Gas Emissions*
David Bersohn	General	• Objects to premise of regional planning and land use regulations in general.	Not Applicable
Carla Bollinger	Aesthetics; Air Quality; Biological Resources; Cultural Resources; Hazards, Land Use and Planning; Recreation	• Requests that the proposed General Plan consider "smart growth" development patterns (not a comment on the EIR). • Requests that the proposed General Plan protect natural areas, natural watercourses, hillsides, scenic resources, cultural resources, recreational amenities (not a comment on the EIR). • Requests that the proposed General Plan address land use compatibility issues (not a comment on the EIR).	Section 5.1, Aesthetics Section 5.4, *Biological Resources*; Section; Section 5.5, *Cultural Resources*; 5.8, *Hazards and Hazardous Materials* Section 5.9, *Hydrology and Water Quality*; Section 5.10, *Land Use and Planning*; Section 5.15, *Recreation*
Douglas Fay	General; Project Description	• Asks questions about technical nature of the EIR and public involvement during General Plan Update process (not a comment on analysis in the EIR). • Asks questions about the content of the proposed General Plan (not a comment on the EIR). • Ask questions about other County planning documents (not a comment on the EIR). • Requests notification regarding future meetings and documents related to the General Plan Update.	Not Applicable (comments and questions address content of the General Plan Update and the public involvement component of the CEQA process; they do not comment on the environmental analysis in the EIR)

Table 1-3 Summary of NOP and Scoping Meeting Comments

Commenting Agency/Person	Comment Type	Comment Summary	Issue Addressed In:
Bolthouse Properties, LLC	Land Use	• Expresses concern regarding permitted land uses on the commenter's properties in the Antelope Valley, particularly in regard to Significant Ecological Areas (SEAs) and future renewable energy projects (not a comment on the EIR).	Not Applicable
Scoping Meeting Comments			
Scoping Meeting Comments	Land Use; Population and Housing; Air Quality; Traffic	• Antelope Valley Area Plan • Jobs-housing balance • Climate Action Plan • Mobility Element	Section 5.1, Aesthetics; Section 5.3, *Air Quality*; Section 5.4; *Biological Resources;* Section 5.7, *Greenhouse Gas Emissions;* Section 5.10, *Land Use and Planning*; and Section 5.16, *Transportation and Traffic.*

1.8 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table 1-4 summarizes the conclusions of the environmental analysis contained in this EIR. Impacts are identified as significant or less than significant and for all significant impacts mitigation measures are identified. The level of significance after imposition of the mitigation measures is also presented.

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.1 AESTHETICS			
Impact 5.1-1: Implementation of the Proposed Project could have a substantial adverse impact on scenic vistas.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.1-2: Implementation of the Proposed Project would not substantially alter scenic resources within a state or county scenic highway	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.1-3: Implementation of the Proposed Project would substantially alter the existing visual character or quality of portions of the Project Area and its surroundings.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.1-4: Implementation of the Proposed Project would generate additional sources of light and glare that would adversely affect day or nighttime views in the Project Area.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.2 AGRICULTURE AND FORESTRY RESOURCES			
Impact 5.2-1: Buildout of the Proposed Project would convert California agency-designated farmland to non-agricultural uses.	Potentially Significant	No mitigation measures are available that would reduce impacts of conversion of mapped important farmland to less than significant.	Significant and Unavoidable
Impact 5.2-2: The Proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.2-3: The Proposed Project would not conflict with zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.2-4: The Proposed Project will not result in the loss of forest land or conversion of forest land to nonforest use.		No mitigation measures are required.	Less Than Significant
Impact 5.2-5: Buildout of the Proposed Project would involve other changes in the existing environment that could result in conversion of farmland to non-agricultural use or conversion of forest land to nonforest use.	Potentially Significant	No mitigation measures are available that would reduce impacts related to conversion of farmland and/or forest land to a less than significant level.	Significant and Unavoidable
5.3 AIR QUALITY			
Impact 5.3-1: Buildout of the Proposed Project would generate more growth than the Existing General Plan; therefore, the project would be inconsistent with SCAQMD's and AVAQMD's air quality management plans.	Potentially Significant	No mitigation measures are available that would reduce impacts associated with inconsistency with the AQMP.	Significant and Unavoidable
Impact 5.3-2: Construction activities associated with the Proposed Project would generate a substantial increase in short-term criteria air pollutant emissions that exceed the threshold criteria and would cumulatively contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB.	Potentially Significant	**AQ–1** If, during subsequent project-level environmental review, construction-related criteria air pollutants are determined to have the potential to exceed the applicable Air Quality Management District (AQMD) adopted thresholds of significance, the County of Los Angeles Planning Department shall require that applicants for new development projects incorporate mitigation measures as identified in the CEQA document prepared for the project to reduce air pollutant emissions during construction activities. Mitigation measures that may be identified during the environmental review include but are not limited to: • Using construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower. • Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards. • Limiting nonessential idling of construction equipment to no more than five consecutive minutes. • Water all active construction areas at least three times daily, or as often as needed to control dust emissions. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds	Significant and Unavoidable

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		exceed 15 miles per hour. Reclaimed water should be used whenever possible. • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). • Pave, apply water three times daily or as often as necessary to control dust, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites. • Sweep daily (with water sweepers using reclaimed water if possible), or as often as needed, all paved access roads, parking areas, and staging areas at the construction site to control dust. • Sweep public streets daily (with water sweepers using reclaimed water if possible) in the vicinity of the project site, or as often as needed, to keep streets free of visible soil material. • Hydroseed or apply non-toxic soil stabilizers to inactive construction areas. • Enclose, cover, water three times daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).	
Impact 5.3-3: Long-term operation of the Proposed Project would generate a substantial increase in criteria air pollutant emissions that exceed the threshold criteria and would cumulatively contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB.	Potentially Significant	No mitigation measures are available that would reduce impacts below SCAQMD's or AVAQMD's thresholds.	Significant and Unavoidable
Impact 5.3-4: Buildout of the Proposed Project could result in new source sources of criteria air pollutant emissions and/or toxic air contaminants proximate to existing or planned sensitive receptors.	Potentially Significant	**AQ–2** New industrial or warehousing land uses that: 1) have the potential to generate 40 or more diesel trucks per day and 2) are located within 1,000 feet of a sensitive land use (e.g. residential, schools, hospitals, nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the County of Los Angeles Planning Department prior to future discretionary project approval. The HRA shall be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment and the applicable Air Quality Management District. If the HRA shows that the incremental cancer risk exceeds ten in one million (I0E-06), particulate matter concentrations would exceed 2.5 $\mu g/m^3$, or the appropriate noncancer hazard	Significant and Unavoidable

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		index exceeds 1.0, the applicant will be required to identify and demonstrate that best available control technologies for toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, restricting idling onsite or electrifying warehousing docks to reduce diesel particulate matter, or requiring use of newer equipment and/or vehicles. T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the Proposed Project.	
Impact 5.3-5: Placement of new sensitive receptors near major sources of toxic air contaminants in the unincorporated areas could expose people to substantial pollutant concentrations.	Potentially Significant	**AQ–3** Applicants for sensitive land uses within the following distances as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, from these facilities: • Industrial facilities within 1000 feet • Distribution centers (40 or more trucks per day) within 1,000 feet • Major transportation projects (50,000 or more vehicles per day) within 1,000 feet • Dry cleaners using perchloroethylene within 500 feet • Gasoline dispensing facilities within 300 feet Applicants shall submit a health risk assessment (HRA) to the County prior to future discretionary project approval. The HRA shall be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the applicable Air Quality Management District. The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children age 0 to 6 years. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06) or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to: • Air intakes located away from high volume roadways and/or truck loading zones. • Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency rating value (MERV) filters.	Less Than Significant

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Mitigation measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the Proposed Project. The air intake design and MERV filter requirements shall be noted and/or reflected on all building plans submitted to the County of Los Angeles and shall be verified by the County's Planning Department.	
Impact 5.3-6: Industrial land uses associated with the Proposed Project could create objectionable odors		**AQ–4** If it is determined during project-level environmental review that a project has the potential to emit nuisance odors beyond the property line, an odor management plan may be required, subject to County of Los Angeles. Facilities that have the potential to generate nuisance odors include but are not limited to: • Wastewater treatment plants • Composting, greenwaste, or recycling facilities • Fiberglass manufacturing facilities • Painting/coating operations • Large-capacity coffee roasters • Food-processing facilities If an odor management plan is determined to be required through CEQA review, the County shall require the project applicant to submit the plan prior to approval to ensure compliance with the applicable Air Quality Management District's Rule 402, for nuisance odors. If applicable, the Odor Management Plan shall identify the Best Available Control Technologies for Toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers (e.g., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.	Less Than Significant
5.4 BIOLOGICAL RESOURCES			
Impact 5.4-1: Development of the Proposed Project would impact, either directly or through habitat modifications, species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the CDFW or USFWS.	Potentially Significant	**BIO–1** Biological resources shall be analyzed on a project-specific level by a qualified biological consultant. A general survey shall be conducted to characterize the project site, and focused surveys should be conducted as necessary to determine the presence/absence of special-status species (e.g., focused sensitive plant or wildlife surveys). A biological resources assessment report shall be prepared to characterize the biological resources on-site, analyze project-specific impacts to biological resources, and propose appropriate mitigation measures to offset those impacts. The report shall include	Significant and Unavoidable

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		site location, literature sources, methodology, timing of surveys, vegetation map, site photographs, and descriptions of biological resources on-site (e.g., observed and detected species as well as an analysis of those species with potential to occur onsite). **BIO–2** If there is potential for direct impacts to special-status species with implementation of construction activities, the project-specific biological resources assessment report (as mentioned in Mitigation Measure BIO–1) shall include mitigation measures requiring pre-construction surveys for special-status species and/or construction monitoring to ensure avoidance, relocation, or safe escape of special-status species from the construction activities, as appropriate. If special-status species are found to be nesting, brooding, denning, etc. on-site during the pre-construction survey or monitoring, construction activity shall be halted until offspring are weaned, fledged, etc. and are able to escape the site or be safely relocated to appropriate offsite habitat areas. Relocations into areas of appropriate restored habitat would have the best chance of replacing/incrementing populations that are lost due to habitat converted to development. Relocation to restored habitat areas should be the preferred goal of this measure. A qualified biologist shall be on site to conduct surveys, to perform or oversee implementation of protective measures, and to determine when construction activity may resume.	
Impact 5.4-2: Development of the Proposed Project would result in the loss of riparian habitat or sensitive natural communities identified in local or regional plans, policies, or regulations or by the CDFW or USFWS.	Potentially Significant	See BIO–1 and 2 above.	Significant and Unavoidable
Impact 5.4-3: The Proposed Project would impact federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Potentially Significant	See BIO–1 and 2 above.	Less Than Significant
Impact 5.4-4: The Proposed Project would affect wildlife movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Potentially Significant	**BIO–3** No feasible mitigation measures are available that would reduce impacts to wildlife movement completely. However, corridors shall not be entirely closed by any development, and partial mitigation shall be mandatory for impact on wildlife corridors and wildlife nursery sites. This shall include provision of a minimum of half the corridor width. (The width shall be at least what is needed to remain connective for the top	Significant and Unavoidable

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		predators using the corridor.) Mitigation can include preservation by deed in perpetuity of other parts of the wildlife corridor connecting through the development area; it can include native landscaping to provide cover on the corridor. For nursery site impacts, mitigation shall include preservation by deed in perpetuity for another comparable nursery site of the same species.	
Impact 5.4-5: The Proposed Project would require compliance with adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state policies or ordinances protecting biological resources.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.5 CULTURAL RESOURCES			
Impact 5.5-1: Development pursuant to the Proposed Project could impact historic resources.	Potentially Significant	**CUL–1** Provide incentives through the Mills Act to encourage the restoration, renovation, or adaptive reuse of historic resources. **CUL–2** Draft a comprehensive historic preservation ordinance for the unincorporated areas. **CUL–3** Prepare an Adaptive Reuse Ordinance within the context of, and in compliance with, existing building codes that considers the conversion of older, economically distressed or historically-significant buildings into multifamily residential developments, live-and-work units, mixed use developments, or commercial uses.	Significant and Unavoidable
Impact 5.5-2: Buildout of the Proposed Project could destroy archaeological or paleontological resources or a unique geologic feature.	Potentially Significant	**CULT–4** Prior to the issuance of any grading permit, applicants shall provide written evidence to the County of Los Angles that a County-certified archaeologist has been retained to observe grading activities greater than six feet in depth and salvage and catalogue archaeological resources as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project applicant, for exploration and/or salvage. Prior to the release of the grading bond the applicant shall	Less Than Significant

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		obtain approval of the archaeologist's follow-up report from the County. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification. Applicant shall offer excavated finds for curatorial purposes to the County of Los Angeles, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County or its designee, all in a manner meeting the approval of the County. Unanticipated discoveries shall be evaluated for significance by a County-certified archaeologist. If the archaeological resources are found to be significant, then the project shall be required to perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; submit materials to the California State University Fullerton; and provide a comprehensive final report including appropriate records for the California Department of Parks and Recreation (Building, Structure, and Object Record; Archaeological Site Record; or District Record, as applicable). **CULT–5** Prior to the issuance of any grading permit, applicants shall provide written evidence to the County of Los Angles that a County-certified paleontologist has been retained to observe grading activities greater than six feet in depth and salvage and catalogue paleontological resources as necessary. The paleontologist shall be present at the pre-grade conference, shall establish procedures for paleontologist resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the paleontological resources are found to be significant, the paleontologist observer shall determine appropriate actions, in cooperation with the project applicant, for exploration and/or salvage. Prior to the release of the grading bond the applicant shall obtain approval of the paleontologist's follow-up report from the County. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification.	

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Applicant shall offer excavated finds for curatorial purposes to the County of Los Angeles, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County or its designee, all in a manner meeting the approval of the County. Unanticipated discoveries shall be evaluated for significance by a County-certified a paleontologist. If the paleontological resources are found to be significant, then the project shall be required to perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; submit materials to the California State University Fullerton; and provide a comprehensive final report including appropriate records for the California Department of Parks and Recreation.	
Impact 5.5-3: Grading activities pursuant to buildout of the Proposed Project could potentially disturb human remains.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.6 GEOLOGY AND SOILS			
Impact 5.6-1: Project Area residents, occupants, or structures could potentially be exposed to seismic-related hazards.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-2: Project implementation would result in substantial soil erosion, the loss of topsoil, or development atop unstable geologic units or soils, or expansive soils.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-3: Soil conditions would adequately support proposed septic tanks.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.7 GREENHOUSE GAS EMISSIONS			
Impact 5.7-1: Buildout of the Proposed Project would generate GHG emissions that would have a significant impact on the environment.	Potentially Significant	**GHG–1** The County shall monitor GHG emissions by updating its GHG emissions inventory every five years. Upon the next update to the CCAP, the inventory, GHG reduction measures, and GHG reductions should be forecasted to 2035 to ensure progress toward achieving an interim target that aligns with the long-term GHG reduction goals of Executive Order S 03 05. The CCAP update should take into account the	Significant and Unavoidable

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		reductions achievable due to federal and state action as well as ongoing work by the County government and the private sector. The 2035 CCAP update shall be complete by January 1, 2021 with a plan to achieve GHG reductions for 2035 or 2040 provided the state has an actual plan to achieve reductions for 2035 or 2040. New reduction programs in similar sectors as the proposed CCAP (building energy, transportation, waste, water, wastewater, agriculture and others) will likely be necessary. Future targets should be considered in alignment with state reduction targets, as feasible, but it is premature at this time to determine whether or not such targets can be feasibly met through the combination of federal, state, and local action given technical, logistical and financial constraints. Future updates to the CCAP should account for the horizon beyond 2035 as the state adopts actual plans to meet post-2035 targets.	
Impact 5.7-2: Implementation of a Community Climate Action Plan is necessary to achieve the GHG reduction targets for the unincorporated areas of Los Angeles by AB 32 target year 2020.	Potentially Significant	Adoption and implementation of the County's CCAP in its entirety would reduce GHG emissions to less than significant levels.	Significant and unavoidable, only if the CCAP is not adopted. Otherwise Less Than Significant.
5.8 HAZARDS AND HAZARDOUS MATERIALS			
Impact 5.8-1: Buildout in accordance with the Proposed Project would involve the transport, use, and/or disposal of hazardous materials.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.8-2: Some areas within the Project Area are included on a list of hazardous materials sites.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.8-3: Some areas within the Project Area are located in the vicinity of an airport or within the jurisdiction of an Airport Land Use Plan.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.8-4: The Proposed Project could affect the implementation of an emergency response or evacuation plan.	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.8-5: Portions of the Project Area are within moderate, high, and very high fire hazard zones and could expose structures and/or residences to fire danger.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.9 HYDROLOGY AND WATER QUALITY			
Impact 5.9-1: Implementation of the Proposed Project would comply with water quality standards and waste discharge requirements and would not substantially degrade water quality.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.9-2: Future development pursuant to the Proposed Project would interfere with groundwater recharge.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.9-3: Buildout of the Proposed Project would not substantially alter major drainage patterns in Los Angeles County and would not result in substantial erosion or siltation.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.9-4: Development pursuant to the Proposed Project would not substantially change drainage patterns in Los Angeles County. While such developments could substantially increase rates or volumes of surface runoff, the developments would not result in flooding.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.9-5: Implementation of the Proposed Project could place housing within 100 year flood hazard areas.	Potentially Significant	HYD-1 Prior to approval of a tentative map, future project applicants/developers shall provide proof to the Department of Public Works that all structures are located outside the 100-year floodplain.	Less Than Significant
Impact 5.9-6: Parts of the Project Area are within dam inundation areas.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.9-7: Parts of the Project Area are subject to inundation by seiche, tsunami, or mudflow.	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.10 LAND USE AND PLANNING			
Impact 5.10-1: Implementation of the Proposed Project would include construction of roads and other improvements that may divide an established community.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.10-2: Implementation of the Proposed Project would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.10-3: The Proposed Project would not conflict with adopted habitat conservation plans that apply to portions of the Antelope Valley and South Bay Planning Areas.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.11 MINERAL RESOURCES			
Impact 5.11-1: Implementation of the Proposed Project would cause the loss of availability of known mineral resources in the Antelope Valley Planning Area but not in the other 10 Planning Areas.	Potentially Significant	No mitigation measures are available to reduce the loss of availability of mineral resources in Antelope Valley Planning Area.	Significant and unavoidable within the Antelope Valley Area Plan.
Impact 5.11-2: Buildout of the Proposed Project would cause a loss of availability of mineral resources in one mineral extraction area identified in the Existing General Plan: the Little Rock Wash in the Antelope Valley Planning Area.	Potentially Significant	No mitigation measures are available to reduce the loss of availability of mineral resources in Antelope Valley Planning Area.	Significant and unavoidable within the Antelope Valley Area Plan.
5.12 NOISE			
Impact 5.12-1: Construction activities would result in temporary noise increases in the vicinity of the Proposed Project.	Potentially Significant	**N–1** Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Mitigation measures such as installation of temporary sound barriers for construction activities that occur adjacent to occupied noise-sensitive structures, equipping construction equipment with mufflers, and reducing non-essential idling of construction equipment to no more than	Significant and Unavoidable

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		five minutes shall be incorporated into the construction operations to reduce construction-related noise to the extent feasible**.**	
Impact 5.12-2: Buildout of the Proposed Project would result in an increase in traffic on local roadways in Los Angeles County, which would substantially increase the existing ambient noise environment.	Potentially Significant	Implementation of the Proposed Project policies would reduce traffic noise impacts to existing noise sensitive uses to the extent feasible. These policies include N 1.1, N 1.4, N 1.6 and N 1.7. However, no additional feasible mitigation measures are available to further reduce impacts. Residential land uses comprise the majority of existing sensitive uses within Los Angeles County that would be impacted by the increase in traffic generated noise levels. Construction of sound barriers would be inappropriate for residential land uses that face the roadway as it would create aesthetic and access concerns. Furthermore, for individual development projects, the cost to mitigate off-site traffic noise impacts to existing uses (such as through the construction of sound walls and/or berms) may often be out of proportion with the level of impact.	Significant and Unavoidable
Impact 5.12-3: New noise-sensitive land uses associated with Proposed Project could be exposed to elevated noise levels from mobile sources along roadways.	Potentially Significant	**N–2** Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour (i.e., areas in or above 65 dBA CNEL) along major roadways and freeways the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features (e.g., setbacks, berms, or sound walls), and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling) to ensure compliance with the County's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Title 24 of the California Code of Regulations).	Significant and Unavoidable
Impact 5.12-4: The Proposed Project could create elevated levels of groundborne vibration and groundborne noise; both in the short-term (construction) and the long-term (operations).	Potentially Significant	**N–3** New development that occurs within 200 feet of a railroad track (according to the FTA's vibration screening distances) shall be evaluated for potential vibration impacts. The project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features and/or required building construction improvements to ensure that vibration impacts would remain below acceptable levels of 0.08 RMS in/sec for residential uses. **N–4** Individual projects that use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors shall be evaluated for potential vibration impacts. If construction-related vibration is determined to be perceptible at vibration-sensitive uses (i.e., exceed the Federal Transit Administrations vibration annoyance criterion of 78 VdB at sensitive receptor locations), additional requirements, such as use of less-vibration-intensive equipment or	Significant and Unavoidable

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		construction techniques, shall be implemented during construction (e.g., drilled piles to eliminate use of vibration-intensive pile driver). **N–5** Prior to the issuance of building permits, proposed heavy industrial projects are required to provide evidence that vibration due to the operation of machinery would not adversely affect nearby vibration sensitive uses such as commercial, hotel, institutional, and residential uses. The project property owner/developers shall retain an acoustical engineer to conduct a vibration analysis and identify, where appropriate, project design features and/or required building/ equipment improvements to ensure that vibration impacts would remain below acceptable levels of 78 VdB at sensitive receptor locations. This vibration level is considered to be significant at vibration-sensitive uses. This can be accomplished with vibration-reducing measures such as, but not limited to, equipment placement, equipment selection, vibration dampers, and/or changes to operation modes (speed, power, frequency).	
Impact 5.12-5: The proximity of future County developments to an airport or airstrip would not result in exposure of future resident and/or workers to airport-related noise.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.13 POPULATION AND HOUSING			
Impact 5.13-1: The Proposed Project would directly result in population growth in the Project Area	Potentially Significant	**PH–1** Prior to adoption of the Antelope Valley Area Plan Update, the County shall identify land use changes to achieve a minimum jobs-housing ratio of 1.3 for the Antelope Valley Planning Area.	Less Than Significant
Impact 5.13-2: Project implementation would not result in the displacement of people and/or housing.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.14 PUBLIC SERVICES			
FIRE PROTECTION AND EMERGENCY SERVICES			
Impact 5.14-1: Buildout of the Proposed Project would introduce new structures, residents and employees into the Los Angeles County Fire Department service boundaries, thereby increasing the requirement for fire	Potentially Significant	**PS–1** Prior to issuance of building permits, future project applicants/developers shall pay the Los Angeles County Fire Department Developer Fee in effect at that time. **PS–2** Each subdivision map shall comply with the applicable County Fire Code requirements for fire apparatus access roads, fire flows, and fire hydrants. Final fire flows shall be determined by LACoFD in accordance with Appendix B of the County Fire Code.	Less Than Significant

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
protection facilities and personnel.		The required fire apparatus road and water requirements shall be in place prior to construction. **PS–3** Prior to approval of a tentative map, a Fuel Modification Plan shall be prepared for each subdivision map in which urban uses would permanently adjoin a natural area, as required by Section 1117.2.1 of the County Fire Code and approved by LACoFD prior to building permit issuance.	
LAW ENFORCEMENT			
Impact 5.14-2: Buildout of the Proposed Project would introduce new structures, residents and employees into the LASD service boundaries, thereby increasing the requirement for law enforcement facilities and personnel.	Potentially Significant	**PS–4** Prior to adoption of the Antelope Valley Area Plan, the County shall identify an implementation program to ensure adequate funding is available to provide law enforcement services within the Antelope Valley Planning Area. The funding mechanism must provide sufficient revenue to pay for land acquisition, engineering, construction, installation, purchasing, or any other direct costs for capital law enforcement facilities and equipment needed to serve the new development in the Antelope Valley Planning Area.	Less Than Significant
SCHOOL SERVICES			
Impact 5.14-3: Buildout of the Proposed Project would generate new students who would impact the school enrollment capacities of area schools.	Less Than Significant	No mitigation measures are required.	Less Than Significant
LIBRARY SERVICES			
Impact 5.14-4: Buildout of the Proposed Project would generate additional population increasing the service needs for the local libraries.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.15 RECREATION			
Impact 5.15-1: The Proposed Project would generate additional residents that would increase the use of existing parks and recreational facilities such that substantial physical deterioration may occur or be accelerated.	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.15-2: Implementation of the Proposed Project would result in the construction or expansion of recreational facilities.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.16 TRANSPORTATION/TRAFFIC			
Impact 5.16-1: Buildout in accordance with the Proposed Project would impact levels of service on the existing roadway system.	Potentially Significant	**T–1** The County shall continue to monitor potential impacts on roadway segments and intersections on a project by project basis as buildout occurs by requiring traffic studies for all projects that could significantly impact traffic and circulation patterns. Future projects shall be evaluated and traffic improvements shall be identified to maintain minimum levels of service in accordance with the County's Traffic Impact Analysis Guidelines, where feasible mitigation is available. **T–2** The County shall implement over time objectives and policies contained within the General Plan Mobility Element. Implementation of those policies will help mitigate any potential impacts of Project growth and/or highway amendments on the transportation system. **T–3** The County shall participate with Metro, the Congestion Management Program (CMP) Agency in Los Angeles County, on a potential Congestion Mitigation Fee program that would replace the current CMP Debit/Credit approach. Under a countywide fee program, each jurisdiction, including the County, will select and build capital transportation projects, adopt a fee ordinance, collect fees and control revenues. A fee program will require a nexus analysis, apply only to net new construction on commercial and industrial space and additional residential units and needs to be approved by Metro and the local jurisdictions. A countywide fee, if adopted, will allow the County to mitigate the impacts of development via the payment of the transportation impact fee in lieu of asking each development project for individual mitigation measures, or asking for fair share payments of mitigation. The fee program would itself constitute a "fair share" program that would apply to all development (of a certain size) within the unincorporated areas. **T–4** The County shall work with Caltrans as they prepare plans to add additional lanes or complete other improvements to various freeways within and adjacent unincorporated areas. This includes adding or extending mixed flow general purpose lanes, adding or extending existing HOV lanes, adding Express Lanes (high occupancy toll lanes), incorporating truck climbing lanes, improving interchanges and other freeway related improvements.\	Significant and Unavoidable

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		T–5 The County shall require traffic engineering firms retained to prepare traffic impact studies for future development projects to consult with Caltrans, when a development proposal meets the requirements of Statewide, regional, or area wide significance per CEQA Guidelines §15206(b). Proposed developments meeting the criteria of Statewide, regional or area wide include: • Proposed residential developments of more than 500 dwelling units • Proposed shopping centers or business establishments employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space. • Proposed commercial office buildings employing more than 1,000 persons or encompassing more than 250,000 square feet of floor space • Proposed hotel/motel developments of more than 500 rooms • When the CEQA criteria of regional significance is not met, Caltrans recommends transportation engineers and/or city representatives consult Caltrans when a proposed development includes the following characteristics: • All proposed developments that have the potential to cause a significant impact to state facilities (right of way, intersections, interchanges, etc.) and when required mitigation improvements are proposed in the initial study. Mitigation concurrence should be obtained from Caltrans as early as possible. • Any development which assigns 50 or more trips during peak hours to a state highway (freeways). • Any development located adjacent to or within 100 feet of a State highway facility and may require a Caltrans Encroachment Permit. (Exceptions: additions to single family homes or 10 residential units of less). • When it cannot be determined whether or not Caltrans will expect a traffic impact analysis pursuant to CEQA.	
Impact 5.16-2: Implementation of the Proposed Project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.16-3: Implementation of the Proposed Project would not substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment).	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.16-4: Implementation of the Proposed Project would not result in inadequate emergency access.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.16-5: Implementation of the Proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks).	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.17 UTILITIES AND SERVICE SYSTEMS			
Impact 5.17-1: Wastewater generated by buildout of the Proposed General Plan would not exceed wastewater treatment requirements of any of the four Regional Water Quality Control Boards having jurisdiction in Los Angeles County.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.17-2: Sanitary wastewater generated by buildout of the Proposed Project could be adequately treated by the wastewater treatment providers serving the unincorporated areas.	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.17-3: Water supply and delivery systems are not adequate to meet Proposed Project's requirements in the Antelope Valley and Santa Clarita Valley Planning Areas beyond 2035.	Potentially Significant	*Antelope Valley and Santa Clarita Valley Planning Areas* *Development Site Plans, Building Plans, and Landscaping Plans* **USS–1** Require the use of drought tolerant landscaping, native California plant materials, and evapotranspiration (smart) irrigation systems. **USS–2** Require the use of low-flow fixtures in all non-residential development and residential development with five or more dwelling units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate. **USS–3** Require low water use landscaping in new residential subdivisions and other private development projects, including a reduction in the amount of turf-grass. **USS–4** Promote the use of low-flow and/or waterless plumbing fixtures and appliances in all new non-residential development and residential development of five or more dwelling units. **USS–5** Support amendments to the County Building Code that would promote upgrades to water and energy efficiency when issuing permits for renovations or additions to existing buildings. **USS–6** Apply water conservation policies to all pending development projects, including approved tentative subdivision maps to the extent permitted by law. Where precluded from adding requirements by vested entitlements, encourage water conservation in construction and landscape design. **USS–7** Require new development to provide the infrastructure needed for delivery of recycled water to the property for use in irrigation, even if the recycled water main delivery lines have not yet reached the site, where deemed appropriate by the reviewing authority. **USS–8** Promote the installation of rainwater capture and gray water systems in new development for irrigation, where feasible and practicable. **USS–9** Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions. **USS–10** Promote the use of permeable paving materials to allow infiltration of surface water into the water table. **USS–11** Maintain stormwater runoff on site by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas, and use of drainage areas as design elements, where feasible and reasonable. **USS–12** Seek methods to decrease impermeable site area where reasonable and	Significant and Unavoidable

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means, as appropriate. **USS–13** On previously developed sites proposed for major alteration, provide stormwater management improvements to restore natural infiltration, as required by the reviewing authority. **USS–14** Encourage and promote the use of new materials and technology for improved stormwater management, such as pervious paving, green roofs, rain gardens, and vegetated swales. **USS–15** Where detention and retention basins or ponds are required, seek methods to integrate these areas into the landscaping design of the site as amenity areas, such as a network of small ephemeral swales treated with attractive planting. **USS–16** Evaluate development proposals for consistency with the County Green Building Standards Code. **USS–17** Promote Low Impact Development standards on development sites, including but not limited to minimizing impervious surface area and promoting infiltration, in order to reduce the flow and velocity of stormwater runoff throughout the watershed. *Water Supply Planning and Water Conservation* **USS–18** Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval. **USS–19** Monitor growth, and coordinate with water districts as needed to ensure that long-range needs for potable and reclaimed water will be met. **USS–20** If water supplies are reduced from projected levels due to drought, emergency, or other unanticipated events, take appropriate steps to limit, reduce, or otherwise modify growth permitted by the General Plan in consultation with water districts to ensure adequate long-term supply for existing businesses and residents. **USS–21** Upon the availability of non-potable water, discourage and consider restrictions on the use of potable water for washing outdoor surfaces. **USS–22** In cooperation with the Sanitation Districts and other affected agencies, expand opportunities for use of recycled water for the purposes of landscape maintenance, construction, water recharge, and other uses as appropriate. **USS–23** In coordination with applicable water suppliers, adopt and implement a water conservation strategy for public and private development.	

Table 1-4 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.17-4: Existing and/or proposed facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.17-5: Existing and/or proposed facilities would be able to accommodate project-generated utility demands.	Less Than Significant	No mitigation measures are required.	Less Than Significant

1. Executive Summary

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2. Introduction

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act (CEQA) requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority prior to taking action on those projects. This Draft Environmental Impact Report (DEIR) has been prepared to satisfy CEQA, as set forth in the Public Resources Code Section 21000, et seq., and the State CEQA Guidelines, 14 California Code of Regulations, Section 15000, et seq. The Environmental Impact Report (EIR) is the public document designed to provide decision makers and the public with an analysis of the environmental effects of the Proposed Project, to indicate possible ways to reduce or avoid environmental damage and to identify alternatives to the project. The EIR must also disclose significant environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present and reasonably foreseeable future projects.

Pursuant to CEQA Section 21067, the Lead Agency means "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment." The County of Los Angeles (County) has the principal responsibility for approval of the General Plan Update ("Proposed Project"). For this reason, the County is the CEQA Lead Agency for the Proposed Project.

The intent of the DEIR is to provide sufficient information on the potential environmental impacts of the Proposed Project to allow the County to make an informed decision regarding approval of the Proposed Project. Specific discretionary actions to be reviewed by the County are described later in Section 3.4, *Intended Uses of the EIR*.

This DEIR has been prepared in accordance with requirements of the:

- California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code Section 21000 et seq.)

- State Guidelines for the Implementation of the CEQA of 1970 (herein referenced as CEQA Guidelines), as amended (California Code of Regulations Section 15000 et seq.)

The overall purpose of this DEIR is to inform the lead agency, responsible agencies, decision makers and the general public of the environmental effects of implementation of the Proposed Project. This DEIR addresses the potential environmental effects of the Proposed Project, including effects that may be significant and adverse, evaluates a number of alternatives to the Proposed Project, and identifies mitigation measures to reduce or avoid adverse effects.

2.2 NOTICE OF PREPARATION

The County determined that an EIR would be required for the Proposed Project and issued a Notice of Preparation (NOP) on August 15, 2011 to the State Clearinghouse, responsible agencies, and interested parties. The 30-day public review period ran from August 15, 2011 through September 14, 2011. The NOP and NOP responses are included as Appendix A.

The project description in the August 15, 2011 NOP included an update to the General Plan (excluding the Housing Element) and an update to the adopted Antelope Valley Area Plan. A second NOP was issued on June 26, 2013 to July 26, 2013 to advise interested parties and responsible agencies that the project description had been revised to not consider the Antelope Valley Area Plan Update. An EIR for the Antelope Valley Area Plan Update will be processed separately. The second NOP and associated responses are included as Appendix B.

The NOP process is used to help determine the scope of the environmental issues to be addressed in the DEIR. Based on this process, all environmental categories included in the CEQA Guidelines Appendix G checklist were identified as having the potential to result in significant impacts. Since "full-scope" EIR was determined to be necessary, no Initial Study was prepared. All issues considered Potentially Significant are addressed in this DEIR.

2.3 DEIR SCOPING MEETINGS

Pursuant to the California Public Resources Code Section 21803.9, the County conducted three public scoping meetings on September 6, 2011, September 8, 2011, and July 11, 2013. The purpose of these meetings was to provide a public forum for information dissemination and dialogue regarding the components of the Proposed Project, the overall process, and the DEIR. The scoping meetings were attended by various agency representatives, stakeholders, and government officials. Issues raised at the scoping meetings included proposed land use changes in the Antelope Valley Area Plan, jobs/housing balance, the proposed Community Climate Action Plan, and the Mobility Element.

2.4 SCOPE OF THIS DEIR

The scope of the DEIR was determined based upon review of the Proposed Project by County staff, comments received in response to the NOP, and comments received at the scoping meetings conducted by the County. Pursuant to Section 15126.2 and 15126.4 of the State CEQA Guidelines, the DEIR should identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to levels of insignificance.

The information contained in Chapter 3, *Project Description*, establishes the basis for analyzing future Proposed Project-related environmental impacts. However, further environmental review by the County will be required as applications for individual discretionary projects are submitted.

2.4.1 Impacts Considered Less Than Significant

No environmental impact categories are identified here as not being significantly affected by, or affecting, the Proposed Project.

2.4.2 Potentially Significant Adverse Impacts

Seventeen environmental factors have been identified as potentially significant impacts if the Proposed Project is implemented. Therefore these impacts are analyzed in this DEIR:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems

2.4.3 Unavoidable Significant Adverse Impacts

This DEIR identifies significant and unavoidable adverse impacts, as defined by CEQA, which would result from implementation of the Proposed Project. Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant. If the County, as the Lead Agency, determines that unavoidable significant adverse impacts will result from the Proposed Project, the County must prepare a "Statement of Overriding Considerations" before it can approve the Project. A Statement of Overriding Considerations states that the decision-making body has balanced the benefits of the Project against its unavoidable significant environmental effects and has determined that the benefits of the Project outweigh the adverse effects. Therefore, the adverse effects are considered to be acceptable. The impacts that were found in the DEIR to be significant and unavoidable are:

- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Mineral Resources
- Noise
- Transportation/Traffic
- Utilities and Service Systems

2.5 INCORPORATION BY REFERENCE

All documents cited or referenced are incorporated into the DEIR in accordance with CEQA Guidelines Sections 15148 and 15150, including but not limited to the following:

- 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, SCAG (2012)
- Altadena Community Plan, County of Los Angeles, Department of Regional Planning (1986)
- Antelope Valley Area Plan, County of Los Angeles, Department of Regional Planning (1986)
- County of Los Angeles General Plan, County of Los Angeles, Department of Regional Planning (1980)
- Countywide Siting Element, County of Los Angeles, Department of Public Works Environmental Programs Division (1997)
- East Los Angeles Community Plan, County of Los Angeles, Department of Regional Planning (1988)
- Fuel Modification Guidelines, County of Los Angeles, Fire Department Forestry Division (2011)
- Hacienda Heights Community Plan, Count of Los Angeles, Department of Regional Planning (2011)
- La Vina Specific Plan, County of Los Angeles, Department of Regional Planning (1989)
- Los Angeles County Congestion Management Program, Metro (2010)
- Los Angeles County All Hazard Mitigation Plan, County of Los Angeles, Chief Executive Office, Office of Emergency Management (2013)
- Los Angeles County Housing Element, County of Los Angeles, Department of Regional Planning (2014)

- Los Angeles County Oak Woodlands Conservation Management Plan, County of Los Angeles (2011)
- Los Angeles County Oak Woodlands Conservation Management Plan Guide, County of Los Angeles, Department of Regional Planning (2014)
- Los Angeles County Traffic Impact Analysis Guidelines, Department of Public Works
- Low Impact Development Standards Manual, County of Los Angeles, Department of Public Works (2014)
- Malibu Local Coastal Program Land Use Plan, County of Los Angeles, Department of Regional Planning (1986)
- Marina del Rey Local Coastal Program Land Use Plan, County of Los Angeles, Department of Regional Planning (2012)
- Marina del Rey Specific Plan, Part 3 of Title 22, Los Angeles County Code (2012)
- Newhall Ranch Specific Plan, County of Los Angeles, Department of Regional Planning (2003)
- Noise Ordinance, Title 12, Los Angeles County Code (2001)
- Northlake Specific Plan, County of Los Angeles, Department of Regional Planning (1992)
- Rowland Heights Community Plan, County of Los Angeles, Department of Regional Planning (1981)
- Santa Catalina Island Local Coastal Program Land Use Plan, County of Los Angeles, Department of Regional Planning (1983)
- Santa Catalina Island Specific Plan, Part 2 of Title 22 Los Angeles County Code (1989)
- Santa Clarita Valley Area Plan, County of Los Angeles, Department of Regional Planning (2012)
- Santa Clarita Valley Area Plan Final EIR, County of Los Angeles, Department of Regional Planning (2012)
- Santa Monica Mountains North Area Plan, County of Los Angeles, Department of Regional Planning (2000)
- Strategic Fire Plan, County of Los Angeles, Fire Department (2013)
- Sewer System Management Plan, County of Los Angeles, Department of Public Works (2013)

- Twin Lakes Community Plan, County of Los Angeles, Department of Regional Planning (1991)
- Universal Studios Specific Plan, Part 4 of Title 22 Los Angeles County Code (2013)
- Walnut Park Neighborhood Plan, County of Los Angeles, Department of Regional Planning (1987)
- West Athens/Westmont Community Plan, County of Los Angeles, Department of Regional Planning (1989)

In each instance where a document is incorporated by reference for purposes of this DEIR, the DEIR shall briefly summarize the incorporated document, or briefly summarize the incorporated data if the document cannot be summarized. In addition, the DEIR shall explain the relationship between the incorporated part of the referenced document and the DEIR.

This DEIR relies upon previously adopted regional and statewide plans and programs, agency standards, and background studies in its analyses. Chapter 13, *Bibliography*, provides a complete list of references utilized in preparing this DEIR. All of the documents listed in Chapter 13, as well as the aforementioned documents that are incorporated by reference, are available for review at:

Los Angeles County
Department of Regional Planning
320 West Temple Street, Room 1356
Los Angeles, CA 90012

2.6 FINAL EIR CERTIFICATION

This DEIR is being circulated for public review for a period of 45 days. Interested agencies and members of the public are invited to provide written comments on the DEIR to the address shown below. Upon completion of the 45-day review period, the County will review all written comments received and prepare written responses for each comment. A Final EIR (FEIR) will then be prepared incorporating all of the comments received, responses to the comments, and any changes to the DEIR that result from the comments received. This FEIR will then be presented to the County Regional Planning Commission and the County Board of Supervisors at public hearings for potential certification as the environmental document for the Proposed Project. All persons who commented on the DEIR will be notified of the availability of the FEIR.

All comments received from agencies and individuals on the DEIR will be accepted during the 45-day public review period. All comments on the DEIR should be sent to:

Connie Chung, AICP
Supervising Regional Planner
Los Angeles County
Department of Regional Planning
320 W Temple Street, Room 1356

Los Angeles, CA 90012
E-mail: genplan@planning.lacounty.gov

The DEIR will also be posted online on the County's website: http://planning.lacounty.gov/generalplan. Copies will be available at the Department's main office at the address listed above; field office locations listed at the following link: http://planning.lacounty.gov/locations; all County libraries; Calabasas Library located at 200 Civic Center Way, Calabasas, CA 91302; and Altadena Library (Main Library) located at 600 East Mariposa Street, Altadena, CA 91001.

2.7 MITIGATION MONITORING

Public Resources Code Section 21081.6 requires that agencies adopt a monitoring or reporting program for any project for which it has made findings pursuant to Public Resources Code 21081 or adopted a Negative Declaration pursuant to 21080(c). Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of an EIR or Negative Declaration.

The Mitigation Monitoring and Reporting Program for the Proposed Project will be completed as part of the FEIR and will be completed prior to consideration of the Proposed Project by the County Regional Planning Commission and County Board of Supervisors.

2. Introduction

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3. Project Description

3.1 PROJECT LOCATION

Encompassing approximately 4,083 square miles, Los Angeles County is geographically one of the largest counties in the country. It stretches along 75 miles of the Pacific Coast of Southern California and is bordered by Orange County to the southeast, San Bernardino County to the east, Kern County to the north, and Ventura County to the west. It also includes two offshore islands, Santa Catalina Island and San Clemente Island. The regional location of Los Angeles County is shown in Figure 3-1, *Regional Vicinity*.

The area for the project (Project Area) includes only the unincorporated areas of Los Angeles County (unincorporated areas), which is approximately 65 percent of the total land area in Los Angeles County. The unincorporated areas in the northern portion of Los Angeles County are covered by large amounts of sparsely populated land and include the Angeles National Forest, part of the Los Padres National Forest, and part of the Mojave Desert. The unincorporated areas in the southern portion of Los Angeles County consist of noncontiguous land areas, which are often referred to as the "unincorporated urban islands." These unincorporated areas are shown in Figure 3-2, *Unincorporated Areas of Los Angeles County*.

3.2 STATEMENT OF OBJECTIVES

The following objectives have been established for the Proposed General Plan Update (Proposed Project) and will aid decision makers in their review of the project and associated environmental impacts:

- Provide a comprehensive update to the General Plan that establishes the goals and policies to create a built environment that fosters the enjoyment, financial stability, and well-being of the unincorporated areas and Los Angeles County.
- Improve the job-housing balance and fiscal sustainability by planning for a diversified employment base, providing a variety of commercial, industrial, and mixed-use land uses.
- Promote sustainability by locating new development near existing infrastructure, services, and jobs.
- Maintain environmentally sustainable communities and reduce greenhouse gas (GHG) emissions that contribute to climate change.
- Support a reasonable share of projected regional population growth.
- Reinforce the vitality, local economy, and individual character of existing communities while balancing housing, employment, and recreational opportunities.

- Promote environmental stewardship that protects the range of natural resources and habitats that uniquely define the character and ecological importance of the unincorporated areas.
- Provide policy guidance to protect and conserve natural resources and to improve the quality of air, water, and biological resources.
- Coordinate equitable sharing of public and private costs associated with providing appropriate community services and infrastructure, and in a context-sensitive manner that addresses community character.
- Ensure that development accounts for physical constraints and the natural hazards of the land.
- Recognize community and stakeholder interests while striving for consensus.
- Protect and enhance recreational opportunities and public access to open space and natural resources.

3.3 PROJECT CHARACTERISTICS

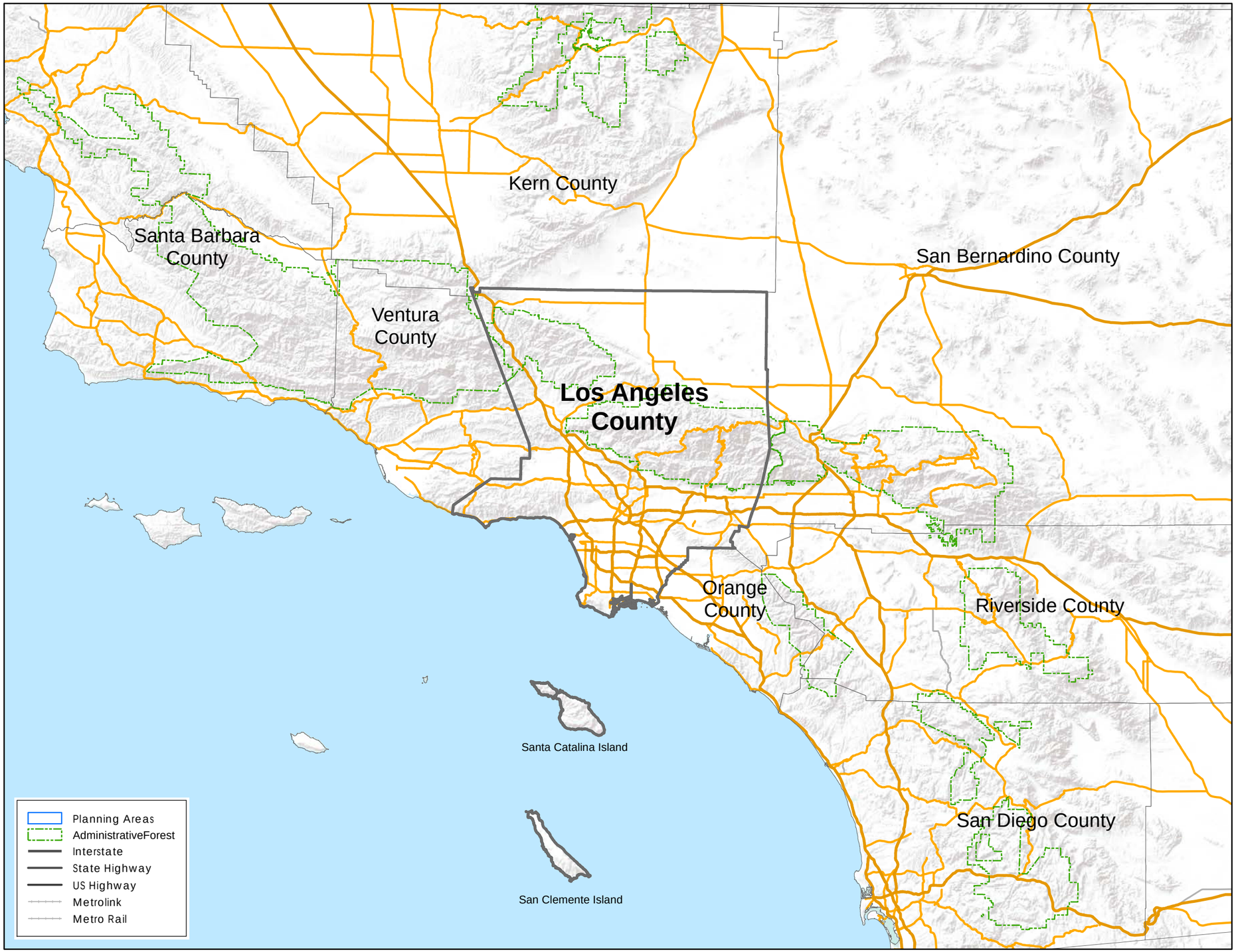
"Project," as defined by the CEQA Guidelines, means "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1)…enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700" (14 Cal. Code of Reg. 15378[a]).

3.3.1 Project Background

The General Plan of the County of Los Angeles (County) is a state-required legal document (Government Code Section 65300) that provides guidance to decision ` makers regarding the conservation of resources and the future physical form and character of development for the unincorporated areas. It is the official statement of the County regarding the extent and types of development of land and infrastructure that will achieve the County's physical, economic, social, and environmental goals. The General Plan expresses the County's goals and articulates the County's intentions with respect to the rights and expectations of the general public, property owners, community interest groups, prospective investors, and business interests. Although the General Plan consists of individual sections, or "elements," which address specific areas of concern, it also embodies a comprehensive and integrated planning approach for its jurisdiction.

FIGURE 3-1

REGIONAL VICINITY MAP



Source: PlaceWorks, 2014; ESRI, 2014

LOS ANGELES COUNTY
GENERAL PLAN UPDATE
EIR

PLACEWORKS

3. Project Description

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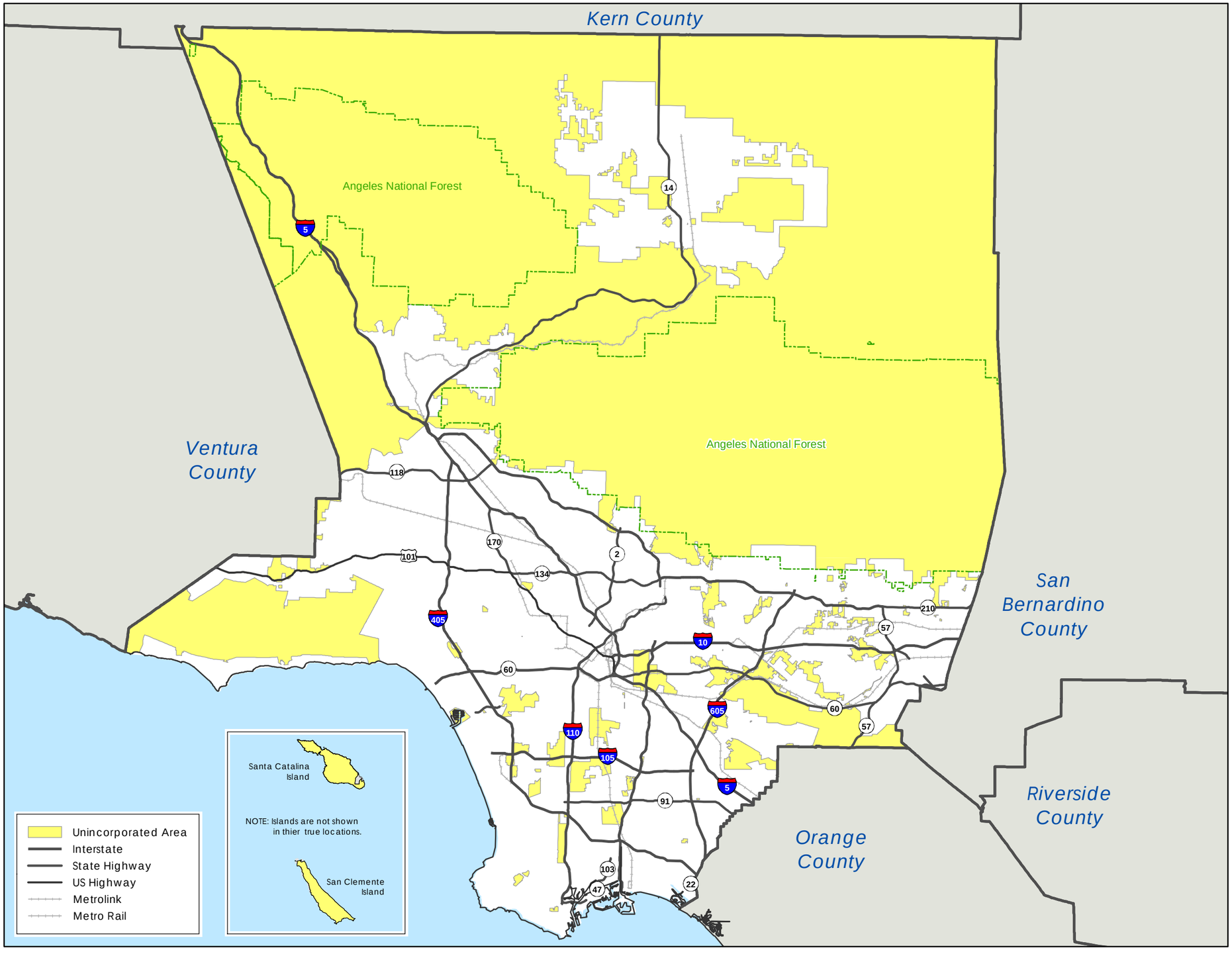
FIGURE 3-2

UNINCORPORATED AREAS
OF LOS ANGELES COUNTY



Source: DRP,2013

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GENERAL PLAN UPDATE
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PLACEWORKS

3. Project Description

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Under state law, each general plan must contain seven elements:

- Land Use
- Circulation
- Housing
- Conservation
- Open Space
- Noise
- Safety

3.3.1.1 EXISTING GENERAL PLAN FRAMEWORK

The County's General Plan was originally adopted in 1973 and comprehensively updated and adopted on November 25, 1980. The current version of the General Plan (Existing General Plan) is composed of 11 separate elements.

Table 3-1 includes a list of current elements of the General Plan and when they were last revised.

Table 3-1 Existing General Plan Elements

Existing Elements	Date of Adoption/Update
Land Use	November 25, 1980
Transportation	November 25, 1980
Conservation and Open Space	November 25, 1980
Scenic Highway	October 11, 1974
Regional Recreation Areas Plan	July 29, 1965
Noise	January 30, 1975
Safety	December 6, 1990
Water and Waste Management	November 25, 1980
Economic Development	July 21, 1987
Housing	May 1, 2014

Community-Based Plans

The Existing General Plan defines policy for all unincorporated areas. Due to the size and complexity of the unincorporated areas, a single plan cannot adequately meet the needs of all communities. The Existing General Plan includes community-based plans that allow communities to build off of the General Plan to address the issues that are unique to their areas. The following is a list of existing adopted/updated community-based plans:

Area Plans

- Antelope Valley Area Plan
- Santa Clarita Valley Area Plan

- Santa Monica Mountains North Area Plan

Community and Neighborhood Plans

- Altadena Community Plan
- East Los Angeles Community Plan
- Hacienda Heights Community Plan
- Rowland Heights Community Plan
- Twin Lakes Community Plan
- Walnut Park Neighborhood Plan
- West Athens – Westmont Community Plan

Local Coastal Land Use Plans

- Marina del Rey Local Coastal Land Use Plan
- Malibu Local Coastal Land Use Plan
- Santa Catalina Island Local Coastal Land Use Plan

In addition to zoning, the Existing General Plan is implemented by the following existing implementation tools:

- La Viña Specific Plan
- Marina del Rey Specific Plan
- Newhall Ranch Specific Plan
- Northlake Specific Plan
- Santa Catalina Island Specific Plan
- Universal Studios Specific Plan

3.3.1.2 EXISTING GENERAL PLAN LAND USE DESIGNATIONS

The land use legend and land use policy map, as defined by the existing General Plan Land Use Element, specify both the location and intensities of land uses within the unincorporated areas. Table 3-2, *Existing Land Use Summary,* shows the breakdown of the unincorporated areas by major land use category. Distribution of land use designations are shown in Figure 3-3, *Existing Land Use Policy Map.* The land use legend is provided as part of Appendix C1 of this DEIR.

Table 3-2 Existing General Plan (by Planning Area) [1]

	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Antelope Valley Planning Area [2]	**1,137,968**	**278,249**	**1,070,924**	**46,870**	**51,319**
Antelope Valley [7]	**1,137,968**	**278,249**	**1,070,924**	**46,870**	**51,319**
Commercial	902	0	0	19,652	38,329
Industrial	579	0	0	12,606	9,652
Infrastructure	2,649	0	0	0	100
Open Space	589,080	0	0	0	624
Public / Semi-Public	17,029	0	0	14,613	767
Residential	5,541	16,385	62,746	0	485
Rural	522,188	261,864	1,008,178	0	1,361
Coastal Islands Planning Area [2]	**82,752**	**21**	**0**	**0**	**570**
Outside of Community-Based Plan	**36,615**	**0**	**0**	**0**	**0**
Open Space	36,615	0	0	0	0
Santa Catalina Island	**46,137**	**21**	**0**	**0**	**570**
Commercial	26	0	0	0	7
Other	87	0	0	0	0
Public & Open Space	45,197	0	0	0	557
Residential	136	21	0	0	0
East San Gabriel Valley Planning Area [2]	**28,790**	**59,621**	**224,816**	**56,310**	**48,749**
Outside of Community-Based Plan [7]	**15,009**	**28,074**	**108,083**	**34,312**	**14,778**
Commercial	35	0	0	757	1,482
Industrial	368	0	0	8,022	6,142
Infrastructure	11	0	0	0	0
Open Space	4,886	0	0	0	700
Public / Semi-Public	1,172	0	0	25,533	5,601
Residential	5,511	26,343	101,419	0	753
Rural	3,025	1,731	6,664	0	100
Hacienda Heights	**6,360**	**17,433**	**65,833**	**9,864**	**13,310**
Commercial	131	0	0	5,708	11,194
Industrial	28	0	0	609	466
Public & Open Space	1,698	0	0	3,547	300
Residential	3,641	17,288	65,274	0	1,315
Rural	862	145	559	0	35
Rowland Heights Community Plan[7]	**7,422**	**14,115**	**50,900**	**12,134**	**20,661**
Commercial	192	0	0	8,378	15,764
Industrial	144	0	0	3,756	3,027
Other	793	723	2,783	0	0
Public & Open Space	1,566	0	0	0	194
Residential	4,727	13,392	48,117	0	1,676

Table 3-2 Existing General Plan (by Planning Area) [1]

	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Gateway Planning Area [2]	**9,581**	**19,469**	**74,955**	**57,898**	**32,696**
Adopted General Plan[7]	**9,581**	**19,469**	**74,955**	**57,898**	**32,696**
Commercial	17	0	0	370	723
Industrial	1,554	0	0	33,856	26,013
Infrastructure	77	0	0	0	0
Open Space	2,698	0	0	0	442
Public / Semi-Public	1,087	0	0	23,673	4,330
Residential	4,133	19,461	74,924	0	1,186
Rural	15	8	31	0	0
Metro Planning Area [2]	**10,159**	**85,210**	**285,413**	**96,981**	**95,424**
East Los Angeles	**3,381**	**41,608**	**128,487**	**44,199**	**42,459**
Commercial	338	0	0	21,255	26,156
Industrial	158	0	0	6,873	5,234
Other	21	0	0	0	0
Residential	2,218	40,045	124,127	0	1,469
Outside of Community-Based Plan [7]	**4,920**	**28,079**	**102,670**	**39,405**	**37,027**
Commercial	220	0	0	4,797	9,653
Industrial	1,309	0	0	28,520	22,018
Infrastructure	63	0	0	0	0
Open Space	231	0	0	0	374
Public / Semi-Public	280	0	0	6,089	3,513
Residential	2,817	28,079	102,670	0	1,469
Walnut Park	**369**	**4,338**	**13,717**	**2,558**	**5,044**
Commercial	41	0	0	2,135	4,358
Industrial	8	0	0	180	112
Other	4	26	100	0	0
West Athens - Westmont	**1,489**	**11,185**	**40,539**	**10,820**	**10,894**
Commercial	155	0	0	6,047	8,456
Public & Open Space	278	0	0	4,773	1,813
Residential	1,057	11,185	40,539	0	625
San Fernando Valley Planning Area [2,4]	**22,056**	**14,032**	**53,286**	**34,340**	**25,049**
Outside of Community-Based Plan [7]	**22,056**	**14,032**	**53,286**	**34,340**	**25,049**
Commercial	150	0	0	3,266	7,840
Industrial	341	0	0	7,436	16,359
Infrastructure	0	0	0	0	0
Open Space	4,739	0	0	0	82
Public / Semi-Public	1,085	0	0	23,639	550
Residential	1,389	7,971	29,952	0	218
Rural	14,350	6,061	23,334	0	0

Table 3-2 Existing General Plan (by Planning Area) [1]

	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Santa Clarita Valley Planning Area [2]	**270,889**	**77,155**	**237,638**	**0**	**105,881**
Santa Clarita Valley[6]	**270,889**	**77,155**	**237,638**	**0**	**105,881**
Residential		77,155	237,638		
Non-Residential					81,265–107,123
Santa Monica Mountains Planning Area [2]	**71,303**	**6,788**	**26,128**	**29,667**	**28,707**
Malibu Local Coastal Land Use Plan[7]	**51,141**	**4,347**	**16,729**	**15,239**	**22,138**
Commercial	729	0	0	6,352	11,929
Mixed Use & Specific Plan	39	0	0	336	672
Public & Open Space	16,423	0	0	8,551	7,776
Residential	1,005	1,049	4,032	0	0
Rural	32,945	3,298	12,697	0	1,761
Santa Monica Mountains North Area Plan[7]	**20,162**	**2,441**	**9,399**	**14,428**	**6,569**
Commercial	166	0	0	3,215	5,959
Infrastructure	0	0	0	0	0
Public & Open Space	6,651	0	0	11,214	73
Residential	425	840	3,235	0	0
Rural	12,920	1,601	6,164	0	537
South Bay Planning Area [2]	**3,304**	**14,136**	**53,897**	**16,576**	**17,504**
Outside of Community-Based Plan [7]	**3,304**	**14,136**	**53,897**	**16,576**	**17,504**
Commercial	90	0	0	1,969	3,825
Industrial	332	0	0	7,234	5,539
Infrastructure	9	0	0	0	0
Open Space	352	0	0	0	141
Public / Semi-Public	339	0	0	7,373	6,882
Residential	2,182	14,136	53,897	0	1,117
West San Gabriel Valley Planning Area [2]	**12,219**	**33,634**	**127,953**	**16,228**	**23,587**
Altadena	**5,604**	**16,240**	**61,359**	**9,996**	**18,463**
Commercial	64	0	0	2,784	9,376
Industrial	38	0	0	1,004	3,075
Infrastructure	815	0	0	0	0
Mixed Use & Specific Plan	255	904	2,800	2,226	4,561
Public & Open Space	915	0	0	3,981	1,066
Residential	3,516	15,335	58,558	0	386
Outside of Community-Based Plan [7]	**6,615**	**17,394**	**66,594**	**6,232**	**5,124**
Commercial	52	0	0	1,126	2,204
Industrial	87	0	0	1,884	1,334
Infrastructure	14	0	0	0	0

Table 3-2 Existing General Plan (by Planning Area) [1]

	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Open Space	2,414	0	0	0	281
Public / Semi-Public	148	0	0	3,222	598
Rural	364	76	293	0	0
Westside Planning Area [2]	**4,079**	**13,709**	**44,466**	**9,809**	**14,906**
Adopted General Plan[7]	**3,386**	**6,025**	**23,027**	**7,948**	**10,413**
Commercial	96	0	0	2,083	4,238
Infrastructure	0	0	0	0	3
Open Space	1,844	0	0	0	3,420
Public / Semi-Public	269	0	0	5,865	2,452
Residential	1,177	6,025	23,027	0	300
Marina del Rey	**694**	**7,684**	**21,439**	**1,861**	**4,493**
Commercial	86	0	0	1,413	4,111
Industrial	5	0	0	112	250
Other	401	0	0	82	82
Public & Open Space	42	0	0	0	0
Residential	159	7,684	21,439	254	50
GRAND TOTAL	**1,653,100**	**602,024**	**2,199,477**	**364,681**	**444,393**

Notes:

1 Historically, jurisdiction-wide buildout levels do not achieve the maximum allowable density/intensity on every parcel and are, on average, lower than allowed by the General Plan. Accordingly, the buildout projections in this General Plan do not assume buildout at the maximum density or intensity and instead are adjusted downward to account for variations in buildout intensity.

2. The Proposed General Plan has broken Los Angeles County into 11 Planning Areas. These boundaries will go into effect with the adoption of the General Plan.

3. Acres are given as adjusted gross acreages, which do not include the right-of-way for roadways, flood control facilities, or railroads.

4. The Twin Lakes Community Plan is included in the San Fernando Valley Planning Area, but it does not include a separate land use legend.

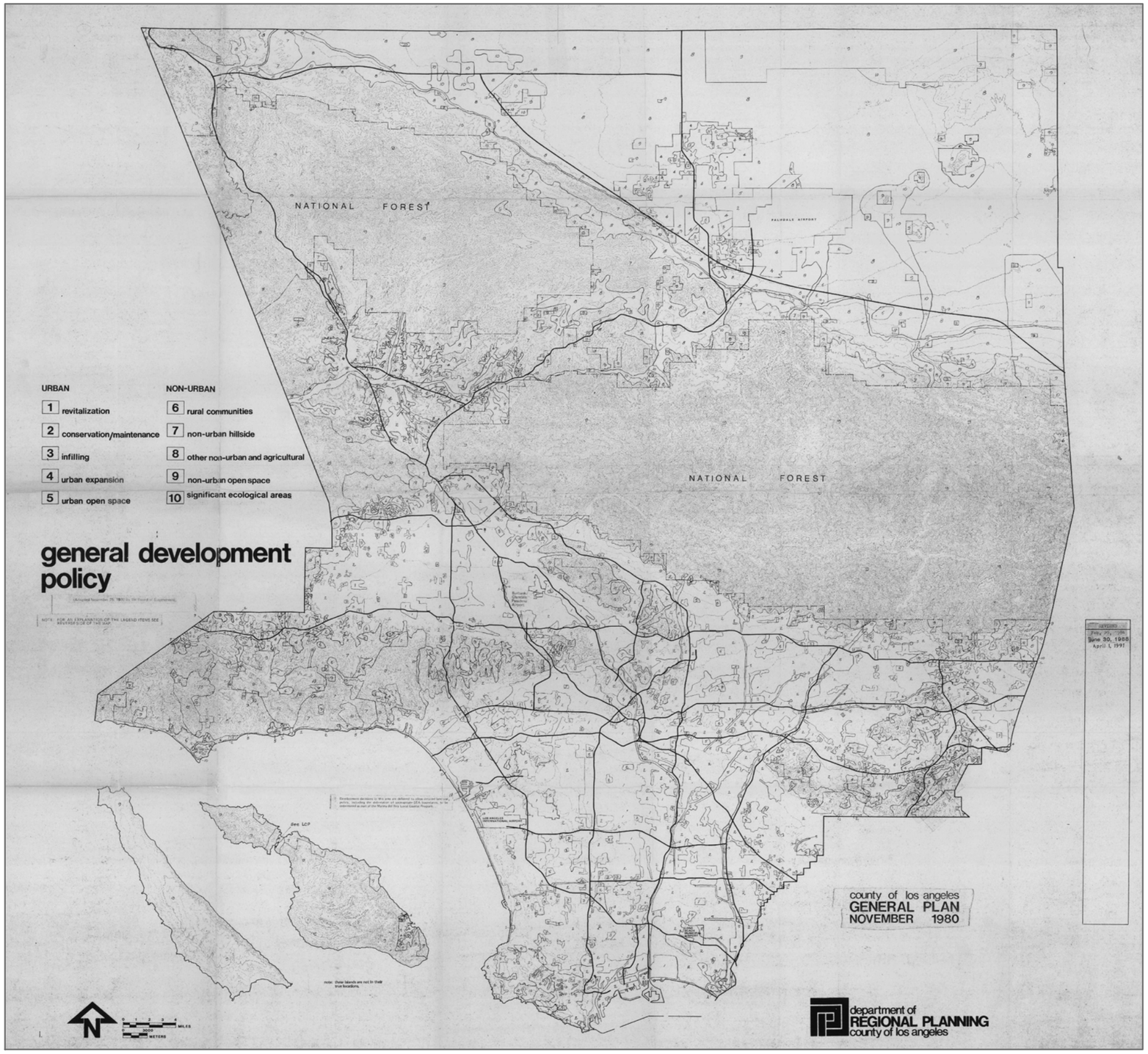
5. Projections of population by residential designation are based on a persons-per-household factor that varies by housing type. Additionally, the projections of jobs by designation are based on an employment generation factor that varies by employment category, or actual number of jobs. See DEIR Appendix D.

6. The figures for the unincorporated Santa Clarita Valley reference the figures in the OVOV Environmental Impact Report for the Santa Clarita Valley Area Plan Update (One Valley One Vision). The methodology used to derive the figures for the unincorporated Santa Clarita Valley differs from the methodology used to generate the figures for other unincorporated areas, and, therefore they cannot be broken down by Land Use Category.

7. For these communities, an overlay density reduction was done for Hillside Management Areas (HMA). If however, the underlying land use density is lower than this HMA density, then the land use plan density should be applied. The HMA densities are as follows: 25–50% slope (max 1 du/ 2 acres) = 0.5; greater than 50% slope (max 1 du/20 acres) = 0.05.

FIGURE 3.3

EXISTING GENERAL PLAN LAND USE POILCY MAP



Source: Department of Regional Planning, 1980

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PLACEWORKS

3. Project Description

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3.3.2 Project Description

The Proposed Project is a comprehensive update to the Existing General Plan, including proposed amendments to the Zoning Code, proposed new ordinances, and the proposed Community Climate Action Plan. The Proposed Project is intended to guide growth and development within the unincorporated areas. The Proposed General Plan includes five Guiding Principles created to promote sustainability:

- Employ Smart Growth: Shape new communities to align housing with jobs and services and protect and conserve the county's natural and cultural resources, including the character of rural communities.

- Ensure community services and infrastructure are sufficient to accommodate growth: Coordinate an equitable sharing of public and private costs associated with providing appropriate community services and infrastructure to meet growth needs.

- Provide the foundation for a strong and diverse economy: Protect areas that generate employment and promote programs that support a stable and well-educated workforce. This will provide a foundation for a jobs-housing balance and a vital and competitive economy in the unincorporated areas.

- Excellence in environmental resource management: Carefully manage the County's natural resources, such as air, water, wildlife habitats, mineral resources, agricultural land, forests, and open space in an integrated way that is both feasible and sustainable.

- Provide healthy, livable and equitable communities: Design communities that incorporate their cultural and historic surroundings, are not overburdened by nuisance and negative environmental factors, and provide reasonable access to food systems. These factors have a measureable effect on public well-being.

3.3.2.1 PLANNING AREAS FRAMEWORK AND COMMUNITY-BASED PLANS

The unincorporated areas represent an extremely large and diverse planning context. The Proposed General Plan establishes the Planning Areas Framework to account for this diversity by addressing planning issues at a subregional level. Under the Planning Areas Framework, the Proposed General Plan serves as the basis for all community-based plans and provides goals and policies to achieve countywide planning objectives.

Planning Areas

As part of the Planning Areas Framework, the Proposed General Plan Update divides Los Angeles County into 11 Planning Areas, as shown in Figure 3-4, *Planning Areas*. The setting and unique planning issues for each Planning Area is described in greater detail in Chapter 4, *Environmental Setting*.

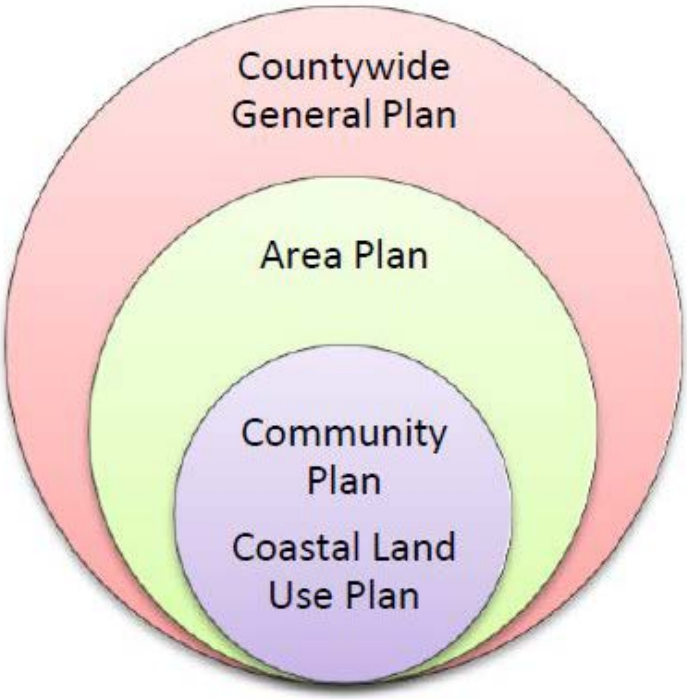
- Antelope Valley Planning Area
- Coastal Islands Planning Area
- East San Gabriel Valley Planning Area
- Gateway Planning Area

- Metro Planning Area
- San Fernando Valley Planning Area
- Santa Clarita Valley Planning Area
- Santa Monica Mountains Planning Area
- South Bay Planning Area
- West San Gabriel Valley Planning Area
- Westside Planning Area

Community-Based Plans

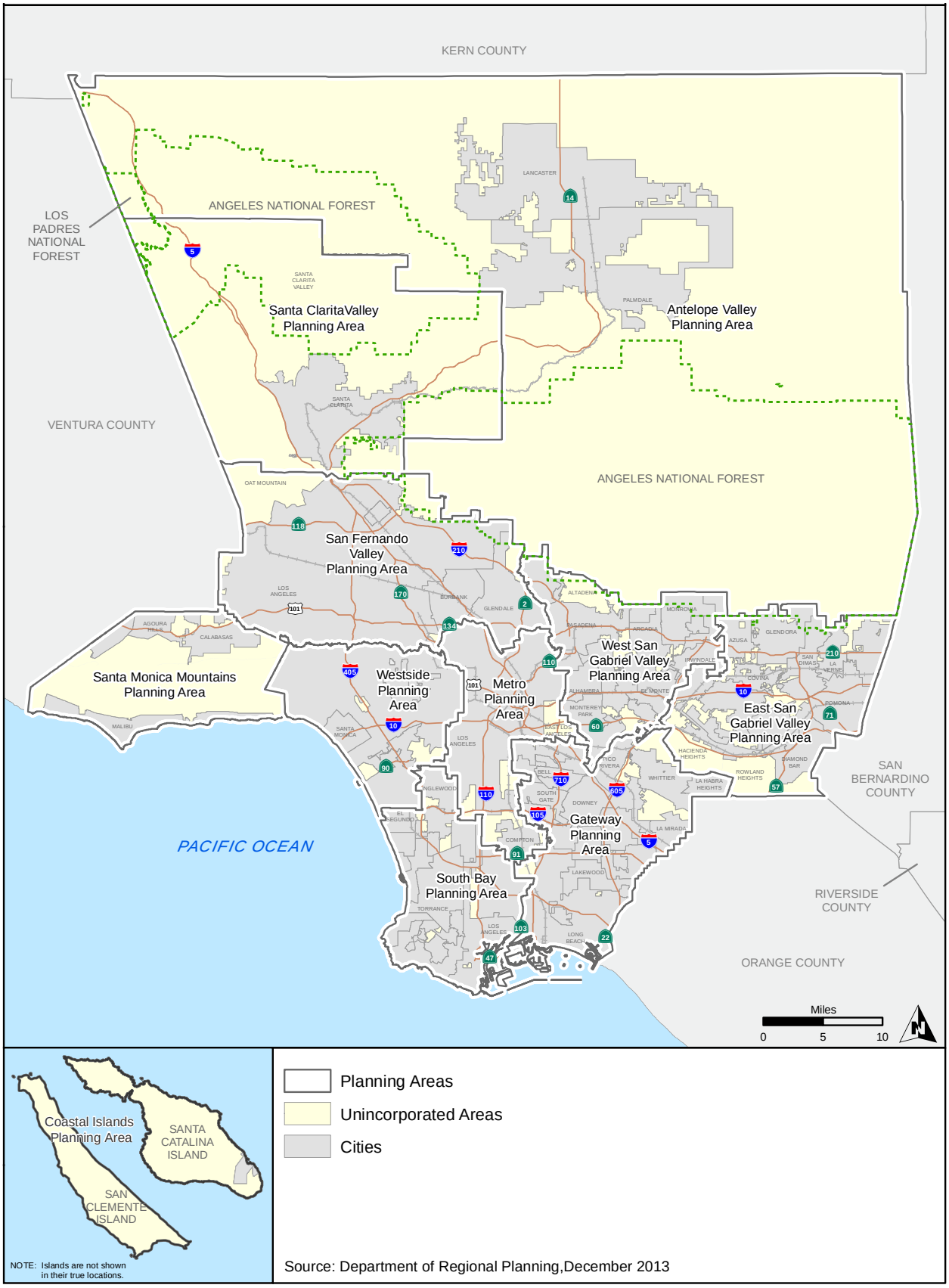
After implementation of the Proposed Project, an area plan will be created or updated for each Planning Area, focusing on land use and policy issues unique to its location. The geographic, demographic, and social diversity of the unincorporated areas will guide the development of each area plan, and its goals and policies will represent the long-term planning objectives for each Planning Area. The Planning Areas Framework also provides for smaller community and coastal land use plans within each Planning Area. These community-based plans are components of the General Plan and must be consistent with General Plan goals and policies. Community plans cover smaller geographic areas within a Planning Area and address neighborhood and/or community-level policy issues. Coastal land use plans are components of local coastal programs and regulate land use and establish policies to guide development in the coastal zone.

The relationship of the different components of the Planning Areas Framework is shown below:



PLANNING AREAS

FIGURE 3-4



PLACEWORKS

3. Project Description

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3.3.2.2 COMPONENTS OF THE PROJECT

Proposed General Plan Elements

The Proposed General Plan Update includes revisions to elements that are required by the State of California, and to optional elements. The Proposed Project includes the reorganization of the Existing General Plan. Table 3-3, *Comparison between Proposed General Plan and Existing General Plan*, lists the nine proposed elements that will replace the adopted elements. The update to the Housing Element, which is a component of the General Plan, was adopted by the County Board of Supervisors on February 4, 2014, for the 2014–2021 planning period. The Housing Element is not analyzed in this DEIR.

Table 3-3 Comparison between Proposed General Plan and Existing General Plan

Proposed Elements	Existing Elements
Land Use	Land Use
Mobility	Transportation
Air Quality	Conservation and Open Space
Conservation and Natural Resources	Conservation and Open Space
	Scenic Highway
Park and Recreation	Regional Recreation Areas Plan
Noise	Noise
Safety	Safety
Public Services and Facilities	Water and Waste Management
Economic Development	Economic Development
N/A	Housing

The content of each of these elements is briefly described below.

Land Use Element

The Land Use Element provides strategies and planning tools to facilitate and guide future development and revitalization efforts. In accordance with the California Government Code, the Land Use Element designates the proposed general distribution and general location and extent of uses. The General Plan Land Use Policy Map and Land Use Legend serve as the "blueprint" for how land will be used to accommodate growth and change in the unincorporated areas.

Maps depicting the distribution of land use designations are shown in Appendix C2. The General Plan Land Use Legend, provided in Table 3-4, describes the proposed land use designations, which include purpose statements and allowable densities and/or intensities.

Table 3-4 Proposed General Plan Land Use Legend

Land Use	Code	Permitted Density or FAR	Purpose
RURAL			
Rural Land	RL1	Residential: Maximum 1 du/1 gross ac Non-Residential: Maximum FAR 0.5	Purpose: Single family residences; equestrian and limited animal uses; and limited agricultural and related activities.
	RL2	Residential: Maximum 1 du/2 gross ac Non-Residential: Maximum FAR 0.5	
	RL5	Residential: Maximum 1 du/5 gross ac Non-Residential: Maximum FAR 0.5	
	RL10	Residential: Maximum 1 du/10 gross ac Non-Residential: Maximum FAR 0.5	Purpose: Single family residences; equestrian and animal uses; and agricultural and related activities.
	RL20	Residential: Maximum 1 du/20 gross ac Non-Residential: Maximum FAR 0.5	
	RL40	Residential: Maximum 1 du/40 gross ac Non-Residential: Maximum FAR 0.5	
RESIDENTIAL			
Residential 2	H2	Residential: 0–2 du/net ac	Purpose: Single family residences.
Residential 5	H5	Residential: 0–5 du/net ac	
Residential 9	H9	Residential: 0–9 du/net ac	
Residential 18	H18	Residential: 0–18 du/net ac	Purpose: Single family residences, two family residences.
Residential 30	H30	Residential: 0–30 du/net ac	Purpose: Single family residences, two family residences, multifamily residences.
Residential 50	H50	Residential: 0–50 du/net ac	
Residential 100	H100	Residential: 50-100 du/net ac	Purpose: Multifamily residences.
Residential 150	H150	Residential: 100-150 du/net ac	
COMMERCIAL			
Rural Commercial	CR	Residential: 0-5 du net/ac Non-Residential: Maximum FAR 0.5	Purpose: Limited, low intensity commercial uses that are compatible with rural and agricultural activities, including retail, restaurants, and personal and professional services.

Table 3-4 Proposed General Plan Land Use Legend

Land Use	Code	Permitted Density or FAR	Purpose
General Commercial	CG	Residential: 0-50 du/net ac Non-Residential: Maximum FAR 1.0 Mixed Use: 0-50 du/net ac and FAR 1.0	Purpose: Local-serving commercial uses, including retail, restaurants, and personal and professional services; single family and multifamily residences; and residential and commercial mixed uses.
Major Commercial	CM	Residential: 30-150 du/net ac Non-Residential: Maximum FAR 3.0 Mixed Use: 30-150 du/net ac and FAR 3.0	Purpose: Large and intense commercial uses, such as regional and destination shopping centers, tourist and recreation related commercial services; multifamily residences; and residential and commercial mixed uses.
MIXED USE			
Mixed Use	MU	Residential: 0-150 du/net ac Non-Residential: Maximum FAR 3.0 Mixed Use: 0-150 du/net ac and FAR 3.0	Purpose: Pedestrian-friendly and community-serving commercial uses that encourage walking, bicycling, and transit use; residential and commercial mixed uses; and multifamily residences.
Mixed Use – Rural	MU-R	Residential: 0-5 du/net ac Non-Residential: Maximum FAR 0.5 Mixed Use: 0-5 du/net ac and FAR 0.5	Purpose: Limited, low intensity commercial uses that are compatible with rural and agricultural activities, including retail, restaurants, and personal and professional services; residential and commercial mixed uses.
INDUSTRIAL			
Light Industrial	IL	Non-Residential: Maximum FAR 1.0	Purpose: Light industrial uses, including light manufacturing, assembly, warehousing and distribution.
Heavy Industrial	IH	Non-Residential: Maximum FAR 1.0	Purpose: Heavy industrial uses, including heavy manufacturing, refineries, and other labor and capital intensive industrial activities.
Industrial Office	IO	Non-Residential: Maximum FAR 2.0	Purpose: Employment centers with major office and business uses, such as technology and research centers, corporate headquarters, clean tech, and clean industry hubs.
PUBLIC AND SEMI-PUBLIC			
Public and Semi-Public	P	Residential: Density Varies* Non-Residential: Maximum FAR 3.0	Purpose: Public and semi-public facilities and community-serving uses, including public buildings and campuses, schools, hospitals, cemeteries, and fairgrounds; airports and other major transportation facilities. Other major public facilities, including planned facilities that may be public-serving but may not be publicly accessible, such as landfills, solid and liquid waste disposal sites, multiple use stormwater treatment facilities, and major utilities. *In the event that the public or semi-public use of mapped facilities is terminated, alternative uses that are compatible with the surrounding development, in keeping with community character, are permitted.

Table 3-4 Proposed General Plan Land Use Legend

Land Use	Code	Permitted Density or FAR	Purpose
NATURAL RESOURCES			
Conservation	OS-C	N/A	Purpose: The preservation of open space areas and scenic resource preservation in perpetuity. Applies to land that is legally dedicated for open space and conservation efforts.
Parks and Recreation	OS-PR	N/A	Purpose: Open space recreational uses, such as regional and local parks, trails, athletic fields, community gardens, and golf courses.
National Forest	OS-NF	N/A	Purpose: Areas within the national forest and managed by the National Forest Service.
Bureau of Land Management	OS-BLM	N/A	Purpose: Areas that are managed by the Federal Bureau of Land Management.
Water	W	N/A	Purpose: Bodies of water, such as lakes, reservoirs, natural waterways, and man-made infrastructure, such as drainage channels, floodways, and spillways. Includes active trail networks within or along drainage channels.
Mineral Resources	MR	N/A	Purpose: Areas appropriate for mineral extraction and processing as well as activities related to the drilling for and production of oil and gas.
Military Land	ML	N/A	Purpose: Military installations and land controlled by U.S. Department of Defense.
OVERLAYS			
Transit Oriented District	TOD	Determined by the station area plan for each TOD	Purpose: Pedestrian-friendly and community-serving uses near transit stops that encourage walking, bicycling, and transit use.
Special Management Areas	SMA	N/A	Purpose: Special Management Areas require additional development regulations due to the presence of natural resources, scenic resources, or identified hazards. Development regulations are necessary to prevent loss of life and property, and to protect the natural environment. Special Management Areas include: Significant Ecological Areas; Hillside Management Areas; National Forests; Coastal Zone; Agricultural Resource Areas; Mineral Resource Zones; Scenic Resources; Historic, Cultural and Paleontological Resources; Seismic Hazard Zones; Flood Hazard Zones; Very High Fire Hazard Severity Zones; and Airport Influence Areas.
Specific Plan	SP	N/A	Purpose: Specific plans contain precise guidance for land development, infrastructure, amenities and resource conservation. Specific plans must be consistent with the General Plan. Detailed policy and/or regulatory requirements are contained within each specific plan document.
Employment Protection District	EPD	N/A	Purpose: Economically viable industrial and employment-rich lands with policies to protect these areas from conversion to non-industrial uses.

In the future, as part of the area plan process, the land use legends for existing community-based plans and existing specific plans shall be updated to reflect the new General Plan Land Use Legend. An exception to this is for the coastal land use plans, which are subject to the California Coastal Act and subject to change based on review of the California Coastal Commission.

Mobility Element

The California Complete Streets Act of 2008 requires the General Plan to demonstrate how the County will provide for the routine accommodation of all users of a road or street, including pedestrians, bicyclists, users

of public transit, motorists, children, seniors, and the disabled. The Mobility Element addresses this requirement with policies and programs that consider all modes of travel, with the goal of making streets safer, accessible and more convenient to walk, ride a bicycle, or take transit.

The Mobility Element provides an overview of the transportation infrastructure and strategies for developing an efficient and multimodal transportation network. The Element assesses the challenges and constraints of the Los Angeles County transportation system, and offers policy guidance to reach the County's long-term mobility goals. Two sub-elements—the Highway Plan and Bicycle Master Plan—supplement the Mobility Element. These plans establish policies for the roadway and bikeway systems in the unincorporated areas, which are coordinated with the networks in the 88 cities in Los Angeles County. The General Plan also establishes a program to prepare community pedestrian plans, with guidelines and standards to promote walkability and connectivity throughout the unincorporated areas.

Air Quality Element

The South Coast Air Basin, which includes the majority of Los Angeles County, continues to have among the worst air quality ratings in the country. Additionally, climate change, which is primarily caused by an increase in greenhouse gas (GHG) emissions, is one of the most pressing environmental issues faced by all levels of government. Air pollution and climate change pose serious threats to the environment, economy, and public health.

The Air Quality Element summarizes air quality issues and outlines the goals and policies in the General Plan that will improve air quality and reduce greenhouse gas emissions. One sub element—the Community Climate Action Plan—supplements the Air Quality Element. This plan establishes actions for reaching the County's goals to reduce greenhouse gas emissions in the unincorporated areas.

Conservation and Natural Resources Element

The Conservation and Natural Resources Element guides the long-term conservation of natural resources and preservation of available open space areas. The Conservation and Natural Resources Element addresses the following conservation areas: Open Space Resources; Biological Resources; Local Water Resources; Agricultural Resources; Mineral and Energy Resources; Scenic Resources; and Historic, Cultural and Paleontological Resources.

Parks and Recreation Element

The Parks and Recreation Element provides policy direction for the maintenance and expansion of the County's parks and recreation system. The purpose of the Parks and Recreation Element is to plan and provide for an integrated parks and recreation system that meets the needs of residents. The goals and policies set forth in this Element address the growing and diverse recreation needs of the communities served by the County.

Noise Element

Noise levels can have a significant impact on quality of life. Excessive levels of noise result in increased neighborhood annoyance, dissatisfaction, and in some cases, health and safety hazards. Due to Los Angeles County's geographic, environmental, and cultural diversity, the levels and types of noise issues vary significantly. The purpose of the Noise Element is to reduce and limit the exposure of the general public to excessive noise levels. The Noise Element sets the goals and policy direction for the management of noise in the unincorporated areas.

Safety Element

The purpose of the Safety Element is to reduce the potential risk of death, injuries, and economic damage resulting from natural and man-made hazards. The California Government Code requires the General Plan to address "the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards...; flooding; and wildland and urban fires." The Safety Element addresses only limited aspects of man-made disasters, such as hazardous waste and materials management, in particular, those aspects related to seismic events, fires, and floods. In general, hazardous materials management is addressed in the Los Angeles County Integrated Waste Management Plan (California Code of Regulations (CCR) Section 18755.5).

The Safety Element works in conjunction with the All-Hazard Mitigation Plan prepared by the Chief Executive Office-Office of Emergency Management (CEO OEM), which sets strategies for natural and man-made hazards in Los Angeles County. The All-Hazard Mitigation Plan, which has been approved by the Federal Emergency Management Agency (FEMA) and the California Emergency Management Agency (Cal EMA), includes a compilation of known and projected hazards in Los Angeles County. The All-Hazard Mitigation Plan also includes information on historical disasters in Los Angeles County. For more information on the County All-Hazard Mitigation Plan, please visit the CEO web site at http://lacoa.org/hazmit.htm.

Public Services and Facilities Element

The Public Services and Facilities Element promotes the orderly and efficient planning of public facilities and infrastructure in conjunction with land use development and growth. This Element focuses on services and facilities that are affected the most by growth and development: Drinking Water; Sanitary Sewers; Solid Waste; Utilities; Early Care and Education; and Libraries. The Element also discusses the key role of collaboration among County agencies in efficient and effective service provision and facilities planning.

This Element works in conjunction with the Los Angeles County Department of Public Works (DPW) Strategic Plan, which outlines service delivery goals for sanitary sewer, water supply, flood protection, water quality, garbage disposal, and traffic lighting; Integrated Waste Management Plan; Sewer System Management Plan; Library Strategic Plan; and other plans to address the provision of public services and facilities to the unincorporated areas.

Economic Development Element

The Economic Development Element outlines the County's economic development goals, and provides strategies that contribute to the economic well-being of Los Angeles County. The overall performance of the economy and economic development efforts strongly impact land use and development patterns. Through the implementation of this Element, the County is planning for the economic health and prosperity of its physical and social environments, and planning strategically for the future economy.

Policy Highlights of the Proposed Project

The following describe the major land use policies in the Proposed Project, which are supported by goals, policies, programs, and strategic changes to the Land Use Policy Maps:

Transit Oriented Districts (TODs)

TODs are areas within a half-mile radius from a major transit station, where the General Plan Update encourages safe and active transportation, infill development, high-density mixed use development along commercial corridors, and pedestrian-friendly and community-serving uses. The goal of the TODs is to encourage walking, bicycling, and transit use. TODs are located along the Metro Gold Line, Gold Line Extension, Blue Line, Green Line, and near the Silver Line. The General Plan Update will expand the existing TODs from approximately a quarter-mile radius to a half-mile radius from the transit stations. All TODs are envisioned in the future to have a TOD specific plan with standards, regulations, and capital improvement plans that are tailored to the unique characteristics and needs of each community.

Special Management Areas

The county's Special Management Areas require additional development regulations that are necessary to prevent the loss of life and property, and to protect the natural environment and important resources. Special Management Areas include but are not limited to Agricultural Resource Areas, Airport Influence Areas, Seismic Hazard Zones, Flood Hazard Zones, Significant Ecological Areas, Hillside Management Areas, and Very High Fire Hazard Severity Zones. The Proposed Project minimizes risks to hazards and limits development in Special Management Areas through goals, policies, and programs. The Proposed Project also includes the Hazard, Environmental, and Resource Constraints Model, which is a visual representation of the Special Management Areas and serves 1) as a tool to inform land use policies for future community-based planning initiatives; 2) to inform applicants and planners of potential site constraints and regulations; and 3) to direct land use policies and the development of planning regulations and procedures to address hazard, environmental, and resource constraints.

Agricultural Resource Areas (ARAs) are areas where the Proposed Project promotes the preservation of agricultural land. These areas are protected by policies to prevent the conversion of farmland to incompatible uses.

Significant Ecological Areas (SEAs) include undisturbed or lightly disturbed habitat supporting valuable and threatened species, linkages and corridors to promote species movement, and are sized to support sustainable populations of its component species. The objective of the SEA Program is to preserve the

genetic and physical diversity of the County by designing biological resource areas capable of sustaining themselves into the future. However SEAs are not wilderness preserves. Much of the land in SEAs is privately held, used for public recreation or abutting developed areas. Thus the SEA Program is intended to ensure that privately held lands within the SEAs retain the right of reasonable use, while avoiding activities and development projects that are incompatible with the long term survival of the SEAs.

Hillside Management Areas (HMAs) are areas with a natural slope gradient of 25 percent or steeper. The HMA Ordinance ensures that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character by avoiding development in HMAs to the extent feasible; locating development in the portions of HMAs with the fewest constraints; and using sensitive design techniques.

Employment Protections Districts

The Proposed General Plan identifies Employment Protection Districts (EPDs), which are economically viable industrial land and employment-rich lands, with policies to prevent the conversion of industrial land to nonindustrial uses.

Zoning Consistency

In order to maintain consistency between the updated General Plan Land Use Policy Map and the Zoning Map, rezoning is necessary where the proposed land use designation would no longer be consistent with zoning. In addition, the zoning consistency program also includes amendments to the Zoning Code. The General Plan Land Use Policy Map establishes the long-range vision for general intended uses. Title 22 (Planning and Zoning) of the Los Angeles County Code (Zoning Code herein) and Zoning Map implement that vision by providing details on specific allowable uses.

Proposed Zoning Map Amendments

Approximately 4,500 parcels are proposed to be rezoned. For the Proposed Project, the staff used two approaches to rezoning: 1) implementation of major policies in the Proposed General Plan, and 2) "clean-up" of the Zoning Maps.. The Proposed Zoning Maps are provided as Appendix C3, *Proposed Zoning Maps*. The Master Parcel List is provided in Appendix C4.

1. Rezoning to Implement Major Policies

The first approach to rezoning involves changes that need to be made on the Zoning Map in order to implement some of the major policies in the Proposed General Plan. One major policy is to encourage high density housing and commercial-residential mixed uses along major commercial corridors within the proposed Transit Oriented Districts (TODs). The Mixed Use (MXD) zone is proposed to be mapped onto parcels along some of these major corridors that are designated Mixed Use (MU) on the Proposed Land Use Policy Map. Also, to implement the industrial preservation policy in the Proposed General Plan, the new Industrial Preservation ( )-IP combining zone is proposed to be added onto economically viable and employment-rich industrial lands within the proposed Employment Protection Districts (EPDs).

Appendix C4 contains a table of these parcels.

2. Rezoning for "Cleanup" Purposes

The second approach to rezoning, which represents a majority of the proposed zone changes, is Zoning Map "clean-up." Parcels rezoned for "clean-up" are those where the general intended uses identified on the Land Use Policy Map are inconsistent with most uses allowed by zoning. In addition, the Zoning Map "clean-up" process eliminates spot zoning, reduces conflicts between adjacent uses, reflects land use trends, and eliminates unnecessary split-zoning. Appendix C4 contains a table and map of these parcels.

Proposed Amendments to the Zoning Code

As discussed above, the Proposed Project introduces major new goals and policies that aim to:

- Encourage mixed use opportunities, and infill and transit-oriented development,
- Preserve employment-rich land; and
- Preserve rural character by limiting incompatible commercial activities in rural communities.

In order to implement these goals and policies and to align the Zoning Code to be consistent with the Proposed General Plan Update, new residential and commercial zones, revisions to the existing industrial and mixed use zones, and other non-substantive "clean-up" amendments are proposed.

The following summary describes the purpose of each amendment:

R-5 High Density Residence Zone: Zone R-5 provides detailed uses and development standards and procedures for high-density residential development. Housing types allowed in the zone include multifamily developments at densities that are permitted in General Plan categories, such as H100 or H150, which allow up to 100 or 150 units per net acre. There are limited exceptions for the allowance of single- and two-family residences in this zone. There are limited exceptions for the allowance of single-family and two-family residences in this zone. This zone includes language to refer certain projects to the Department of Public Works for initial application review to ensure that utility infrastructure, circulation and sightline controls are sufficiently addressed. The Project does not add zone R-5 to the Zoning Map.

MXD Mixed Use Zone: Zone MXD is an existing Special Purpose zone in Title 22 that is proposed to be significantly revamped as part of the Proposed Project. This zone will provide greater flexibility in permitting limited commercial and residential uses by-right to encourage mixed use projects. Zone MXD provides detailed uses, development standards, and procedures for mixed-use developments with residential and commercial uses, within multi-use buildings or single-purpose buildings containing a different use. This zone includes language to refer certain projects to the Department of Public Works for initial application review to ensure that utility infrastructure, circulation and sightline controls are sufficiently addressed.

C-MJ Major Commercial Zone: Zone C-MJ provides detailed uses, development standards, and procedures that accommodate regional-scale commercial and recreation uses, hotels, and high-density, multi-family residential and residential-commercial mixed uses. This zone also includes language to refer certain projects to

the Department of Public Works for initial application review to ensure that utility infrastructure, circulation and sightline controls are sufficiently addressed.

C-RU Rural Commercial Zone: Zone C-RU provides detailed uses, development standards, and procedures for low-intensity commercial uses that are compatible with rural, agricultural, and low-density residential uses. The intent of the zone is to serve the diverse economic needs of rural communities, while preserving their unique characters and identities. The Project does not add zone C-RU to the Zoning Map.

MXD-RU Mixed Use Rural Zone: Zone MXD-RU provides detailed uses, development standards, and procedures for a limited mix of commercial uses and very low-density multifamily residential uses on the same lot within rural town centers. The Project does not add zone MXD-RU to the Zoning Map.

()-IP Industrial Combining Zone: Zone ( )–IP provides a list of non-industrial uses that are not permitted on industrially zoned properties within EPDs, which will preserve and promote current and future industrial uses, labor-intensive activities, wholesale sales of goods manufactured on-site, major centers of employment, and limited employee-serving commercial uses.

Other: Amendments to Title 22 also include the following for consistency with the Proposed Project:

Modifications to the Industrial Zones

- Addition of new purpose statements for Zones M-1, M-1.5, M-2 and M-2.5 and the recoding of abbreviations for Zones M-1½ and M-2½ to M-1.5 and M-2.5, respectively.
- Reformatting of permitted use language in Zones M-1.5 and M-2 into use lists.
- Consolidation of uses related to the manufacturing of specific products into categories of product types.
- Addition or modification of uses to be consistent across all Industrial Zones. For example, airports are currently not listed in Zone M-1.5. Since the use requires a Conditional Use Permit (CUP) in Zones M-1 and M-2, it could otherwise mistakenly be interpreted as a prohibited use in Zone M-1.5.
- Clarification of certain uses across all Industrial Zones. For example, clarification is made to specify the types of schools permitted or prohibited in the Industrial Zones.
- Establishment of a maximum FAR for each of the Industrial Zones (except MPD, B-1 and B-2) within the development standards sections.
- The relocation of the list of all prohibited uses for each Industrial Zone into a standalone section in Part 1 of Chapter 22.32, so that only one prohibited use list governs all Industrial Zones.

Elimination of Zones and Districts

- Elimination of Zone M-4, as the zone is no longer mapped.

- Elimination of Zone A-C (Arts and Crafts). This zone is not mapped. The main issue with this zone is that it requires a CUP for all artisan occupations within residences in certain areas. Other Title 22 regulations provide more flexibility in governing the use of a limited range of commercial or artisan activities within or close to residences.

- Elimination of the Blue Line and Green Line Transit Oriented District Ordinance. Zone MXD will be mapped in place on certain parcels around a few TODs, and all other zones within all TODs covered by that ordinance will revert back to the general development standards of the base zones. As a replacement, future tools, such as TOD specific plans, will be developed for each TOD.

Modification to Residential and Commercial Zones

- Zone nomenclature modification of Zone R-3, R-4 and, C-3.

Table 3-5, *Summary of New and Significantly Amended Zones*, summarizes each zone and some of their proposed development standards.

Table 3-5 Summary of New and Significantly Amended Zones

Zone	Proposed Development Standards
R-5	• Private and common recreation space • Height limit 65 feet • Building articulation
MXD	• Private and common recreation space for residences • Parking placement and reductions • Height limit 65 feet • Pedestrian character standards • Performance standards • Lot consolidation incentives
C-MJ	• Minimum lot area of 2 acres • Height limit 65, 75 feet with CUP • Mixed uses allowed with CUP • Shared parking and sign programs • Private and common recreation space for residences • Performance standards
C-RU	• Parking standards for Recreational Vehicles, semi and dually trucks, with incentives • Expanded outdoor display provisions • Cargo storage provisions • Allows Single Family Residence on parcels greater than 1 acre
MXD-RU	• Parking standards for Recreational Vehicles, semi and dually trucks, with incentives • Expanded outdoor display provisions • Cargo storage provisions • Allows mixed use development on the same lot
()-IP	• Combined with an industrial base zone (M-1, M-1.5, M-2, M 2.5) • Only mapped on selected industrial parcels that are considered employment-rich/valuable industrial land in communities not covered by a community-based plan. • Prohibit some non-industrial uses that are otherwise allowed in the industrial base zones

Proposed Ordinances

The proposed amendments to the Zoning Code include updating the following ordinances, which are provided in Appendix E.

Hillside Management Area Ordinance Update: The purpose of this ordinance is to ensure that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character by avoiding development in HMAs to the extent feasible; locating development in the portions of HMAs with the fewest constraints; and using sensitive design techniques.

Significant Ecological Areas Ordinance Update: The purpose of the SEA ordinance is to provide a process that allows balanced development within the SEAs and reconciles potential conflicts between conservation and development within the SEAs. This process would ensure that environmentally sensitive development standards and designs are applied to proposed developments within the SEAs and that the biological resources within development sites, as well as potential impacts to such resources from proposed developments, are assessed and disclosed. In addition, the purpose of the ordinance is to ensure that development conserves the county's biological diversity, as well as the habitat quality and the connectivity of the SEA to be developed, so that the species populations and habitats can be sustained into the future.

Community Climate Action Plan

Climate action plans include an inventory of greenhouse gas (GHG) emissions and measures for reducing future emissions to achieve a specific reduction target. The County has prepared a Community Climate Action Plan (CCAP) to mitigate and avoid GHG emissions associated with community activities in the unincorporated areas. The CCAP address emissions from building energy, land use and transportation, water consumption, and waste generation. The measures and actions outlined in the CCAP tie together the County's existing climate change initiatives and provide a blueprint for a more sustainable future. The CCAP is a sub-element of the Air Quality Element.

The CCAP identifies emissions related to community activities and established GHG reduction target consistent with AB 32 and provides a roadmap for successfully implementing GHG reduction measures selected by the County. Importantly, the CCAP recognize the County's leadership and role in contributing to statewide GHG emissions reductions. Actions undertaken as part of the CCAP would result in important community co-benefits, including improved air quality, energy savings, and increased mobility, as well as enhance the resiliency of the community in the face of changing climatic conditions.

The CCAP is composed of state and local actions to reduce GHG emissions within the unincorporated areas. The state actions considered in the CCAP include: the Renewable Portfolio Standard, Title 24 Standards for Commercial and Residential Buildings (Energy Efficiency and CALGreen), Pavley/Advanced Clean Cars (Vehicle Efficiency), and the Low Carbon Fuel Standard. These state actions generally do not require action from the County, but will result in local GHG reductions in the unincorporated areas.

The local actions in the CCAP are grouped into five strategy areas: green building and energy; land use and transportation; water conservation and wastewater; waste reduction, reuse, and recycling; and land conservation and tree planting. Many of the local actions are cost effective, particularly in the green building

and energy strategy area, with several energy efficiency investments that can recoup initial costs in one to five years. In addition to reducing GHG emissions, all local actions have many co-benefits, such as improved public health. The CCAP is included as Appendix F

3.3.2.3 PHYSICAL DEVELOPMENT UNDER THE PROPOSED PROJECT

Pursuant to CEQA Guidelines Section 15064(d), this DEIR determines whether there are direct physical changes and reasonably foreseeable indirect physical changes in the environment that would be caused by the Proposed Project. Specifically, this DEIR focuses on impacts from changes to land use associated with buildout of the proposed land use maps (see Appendix C2) and impacts from the resultant population and employment growth in the unincorporated areas. The ultimate development of unincorporated areas is not tied to a specific timeline.

The Proposed Project follows the land uses and development intensities already allowed in the Existing General Plan for adopted Community -Based Plans. There are limited changes in land use and development intensity for unincorporated urban islands outside of Community-Based Plans. See Figure 3-5, *Areas with Proposed Land Use Changes*.

Buildout projections for the Proposed Project, broken down by Planning Area, are shown in Table 3-6, *Proposed Project Buildout Projections*. The Proposed Project's buildout would allow for up to: 659,409 residential dwelling units; 92 million square feet (2,129 acres) of commercial use; 102 million square feet (5,210 acres) of industrial use; 503 million square feet (80,896 acres) of public/semi-public; and 714,704 acres of public/open space. These buildout projections are used throughout this DEIR to estimate the magnitude of development that would likely occur within each Planning Area upon buildout of the Proposed Project. The total acreage for each land use designation is used to estimate the number of dwelling units, residents, square feet of nonresidential uses, and employees that would be generated by proposed land uses. These projections are used extensively in the analysis of potential project impacts such as increases in noise or air quality.

It is impossible to perfectly predict the exact development that would occur under the Proposed Project, but a comparison of population, household, and employment projections between the existing land uses and the proposed land uses allowed by the Proposed Project allows for an analysis of the relative impacts.

Table 3-6 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Antelope Valley Planning Area [2]	**1,132,744**	**278,158**	**1,070,571**	**46,870**	**51,219**
Antelope Valley Area Plan[7,8]	**1,132,744**	**278,158**	**1,070,571**	**46,870**	**51,219**
Commercial	902	0	0	19,652	38,329
Industrial	579	0	0	12,606	9,652
Infrastructure	2,649	0	0	0	100
Open Space	583,967	0	0	0	524
Public/Semi-Public	17,029	0	0	14,613	767
Residential	5,541	16,385	62,746	0	485

Table 3-6 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Rural	522,077	261,773	1,007,826	0	1,361
Coastal Islands Planning Area [2]	**82,752**	**21**	**0**	**0**	**570**
Santa Catalina Island Local Coastal Land Use Plan	**46,137**	**21**	**0**	**0**	**570**
Commercial	26	0	0	0	7
Industrial	690	0	0	0	6
Other	87	0	0	0	0
Public & Open Space	45,197	0	0	0	557
Residential	136	21	0	0	0
Outside Community-Based Plan	**36,615**	**0**	**0**	**0**	**0**
East San Gabriel Valley Planning Area [2]	**28,777**	**70,097**	**255,952**	**150,558**	**53,231**
Hacienda Heights Community Plan	**6,360**	**17,433**	**65,833**	**9,864**	**13,310**
Commercial	131	0	0	5,708	11,194
Industrial	28	0	0	609	466
Residential	3,641	17,288	65,274	0	1,315
Rural	862	145	559	0	35
Outside Community-Based Plan	**14,996**	**38,550**	**139,220**	**128,560**	**19,261**
Commercial	134	0	0	2,929	5,897
Industrial	378	0	0	8,241	6,310
Open Space	4,984	0	0	0	646
Public/Semi-Public	1,785	0	0	117,391	5,708
Residential	6,265	38,263	138,118	0	600
Rural	1,450	286	1,102	0	100
Rowland Heights Community Plan[8]	**7,422**	**14,115**	**50,900**	**12,134**	**20,661**
Commercial	192	0	0	8,378	15,764
Industrial	144	0	0	3,756	3,027
Other	793	723	2,783	0	0
Public & Open Space	1,566	0	0	0	194
Residential	4,727	13,392	48,117	0	1,676
Gateway Planning Area[2]	**9,581**	**34,446**	**120,358**	**202,768**	**36,820**
Outside Community-Based Plan	**9,581**	**34,446**	**120,358**	**202,768**	**36,820**
Commercial	142	0	0	3,100	6,067
Industrial	1,481	0	0	32,251	24,694
Open Space	1,411	0	0	0	225
Public/Semi-Public	2,562	0	0	167,417	4,584
Residential	3,985	34,446	120,358	0	1,250
Metro Planning Area[2]	**10,160**	**92,158**	**301,073**	**118,711**	**100,906**
East Los Angeles Community Plan	**3,381**	**41,608**	**128,487**	**44,199**	**42,459**
Commercial	338	0	0	21,255	26,156

Table 3-6 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Industrial	158	0	0	6,873	5,234
Mixed Use & Specific Plan	65	1,563	4,361	3,404	6,848
Other	21	0	0	0	0
Public & Open Space	582	0	0	12,667	2,753
Residential	2,218	40,045	124,127	0	1,469
Outside Community-Based Plan	**4,921**	**35,028**	**118,329**	**61,135**	**42,509**
Commercial	318	0	0	6,919	13,884
Industrial	1,186	0	0	25,832	19,779
Mixed Use & Specific Plan	45	2,695	7,521	1,468	2,873
Open Space	251	0	0	0	374
Public/Semi-Public	412	0	0	26,917	4,602
Residential	2,710	32,332	110,808	0	997
Walnut Park Neighborhood Plan	**369**	**4,338**	**13,717**	**2,558**	**5,044**
Commercial	41	0	0	2,135	4,358
Industrial	8	0	0	180	112
Other	4	26	100	0	0
Residential	305	4,312	13,617	0	100
West Athens – Westmont Community Plan	**1,489**	**11,185**	**40,539**	**10,820**	**10,894**
Commercial	155	0	0	6,047	8,456
Public & Open Space	278	0	0	4,773	1,813
Residential	1,057	11,185	40,539	0	625
San Fernando Valley Planning Area [2,4]	**27,230**	**13,464**	**47,060**	**55,514**	**24,741**
Outside Community-Based Plan	**27,184**	**13,419**	**46,886**	**55,514**	**24,741**
Commercial	57	0	0	1,246	2,522
Industrial	148	0	0	3,225	2,469
Mixed Use & Specific Plan	301	0	0	0	18,700
Open Space	9,759	0	0	0	82
Public/Semi-Public	781	0	0	51,043	749
Residential	1,334	11,630	39,996	0	218
Rural	14,805	1,790	6,890	0	1
Twin Lakes Community Plan	**45**	**45**	**174**	**0**	**0**
Rural	45	45	174	0	0
Santa Clarita Valley Planning Area[2]	270,889	77,155	237,638	0	105,881
Santa Clarita Valley Area Plan[6]	270,889	77,155	237,638	0	105,881
Residential		77,155	237,638		
Non-Residential					81,265-107,123

Table 3-6 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Santa Monica Mountains Planning Area[2]	**71,303**	**6,788**	**26,128**	**29,667**	**28,707**
Malibu Local Coastal Land Use Plan[8]	**51,141**	**4,347**	**16,729**	**15,239**	**22,138**
Commercial	729	0	0	6,352	11,929
Mixed Use & Specific Plan	39	0	0	336	672
Public & Open Space	16,423	0	0	8,551	7,776
Residential	1,005	1,049	4,032	0	0
Rural	32,946	3,298	12,697	0	1,761
Santa Monica Mountains North Area Plan[8]	**20,162**	**2,441**	**9,399**	**14,428**	**6,569**
Commercial	166	0	0	3,215	5,959
Infrastructure	0	0	0	0	0
Public & Open Space	6,651	0	0	11,214	73
Residential	425	840	3,235	0	0
Rural	12,920	1,601	6,164	0	537
South Bay Planning Area[2]	**3,304**	**25,929**	**86,392**	**33,945**	**24,530**
Proposed General Plan	**3,304**	**25,929**	**86,392**	**33,945**	**24,530**
Commercial	154	0	0	3,362	6,703
Industrial	311	0	0	6,781	5,192
Mixed Use & Specific Plan	72	4,312	12,029	2,347	4,594
Open Space	344	0	0	0	100
Public/Semi-Public	328	0	0	21,455	7,493
Residential	2,095	21,617	74,364	0	447
West San Gabriel Valley Planning Area[2]	**12,237**	**43,877**	**156,658**	**29,641**	**26,539**
Altadena Community Plan 8	**5,604**	**16,240**	**61,359**	**9,996**	**18,463**
Commercial	64	0	0	2,784	9,376
Industrial	38	0	0	1,004	3,075
Infrastructure	815	0	0	0	0
Mixed Use & Specific Plan	255	904	2,800	2,226	4,561
Public & Open Space	915	0	0	3,981	1,066
Residential	3,516	15,335	58,558	0	386
Proposed General Plan	**6,633**	**27,638**	**95,300**	**19,645**	**8,076**
Commercial	67	0	0	1,469	2,875
Industrial	55	0	0	1,202	920
Mixed Use & Specific Plan	42	2,495	6,960	1,358	2,658
Open Space	2,675	0	0	0	332
Public/Semi-Public	239	0	0	15,616	430
Residential	3,485	25,138	88,323	0	861
Rural	69	4	17	0	0

Table 3-6 Proposed Project Buildout Projections (by Planning Area)

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[5]
Westside Planning Area[2]	**4,079**	**17,316**	**55,033**	**56,661**	**14,592**
Marina Del Rey Local Coastal Land Use Plan	**694**	**7,684**	**21,439**	**1,861**	**4,493**
Commercial	86	0	0	1,413	4,111
Industrial	5	0	0	112	250
Other	401	0	0	82	82
Public & Open Space	42	0	0	0	0
Residential	159	7,684	21,439	254	50
Proposed General Plan	**3,386**	**9,632**	**33,594**	**54,800**	**10,099**
Commercial	89	0	0	1,958	3,924
Open Space	1,336	0	0	0	175
Public/Semi-Public	809	0	0	52,842	5,700
Residential	1,153	9,632	33,594	0	300
GRAND TOTAL	**1,653,056**	**659,409**	**2,356,864**	**724,336**	**467,738**

Notes:
1. Historically, jurisdiction-wide buildout levels do not achieve the maximum allowable density/intensity on every parcel and are, on average, lower than allowed by the General Plan. Accordingly, the buildout projections in this General Plan do not assume buildout at the maximum density or intensity and instead are adjusted downward to account for variations in buildout intensity.
2. The Proposed General Plan has broken the county into 11 Planning Areas. These boundaries will go into effect with the adoption of the General Plan.
3. Acres are given as adjusted gross acreages, which do not include the right-of-way for roadways, flood control facilities, or railroads.
4. The Twin Lakes Community Plan is included in the San Fernando Valley Planning Area, but it does not include a separate land use legend.
5. Projections of population by residential designation are based on a persons-per-household factor that varies by housing type. Additionally, the projections of jobs by designation are based on an employment generation factor that varies by employment category or actual number of jobs. See Appendix D.
6. The figures for the unincorporated Santa Clarita Valley reference the figures in the 2010 Environmental Impact Report for the Santa Clarita Valley Area Plan Update (One Valley One Vision). The methodology used to derive the figures for the unincorporated Santa Clarita Valley differs from the methodology used to generate the figures for other unincorporated areas and, therefore, they cannot be broken down by Land Use Category.
7. The Antelope Valley Area Plan represents the adopted plan, with the exception of the portion that overlaps with the Proposed General Plan community of 'Kagel/Lopez Canyons. Therefore, the total acreage of the Antelope Valley represented here is less than the actual area of the adopted plan boundary.
8. For these communities, an overlay density reduction was done for Hillside Management Areas (HMA). If however, the underlying land use density is lower than this HMA density, then the land use plan density should be applied. The HMA densities are as follows: 25–50% slope (max 1 du/ 2 acres) = 0.5; Greater than 50% slope (max 1 du/20 acres) = 0.05.

As shown in Table 3-7, *Summary of Existing and Projected Units, Population, Employment and Jobs-Housing Ratios by Planning Area* , buildout of the Proposed Project would result in 358,930 additional residential dwelling units compared to existing land uses. Buildout of the Proposed Project would result in an 86 percent increase in commercial uses and a 40 percent increase in industrial uses. The majority of new development is expected to occur in the Antelope Valley Planning Area based on the existing Antelope Valley Area Plan, which would accommodate approximately 70.6 percent of new residential units and 76 percent of the population growth. Many of the remaining Planning Areas—such as East San Gabriel, Santa Monica Mountains, South Bay, San Fernando Valley, and Gateway Planning Areas—are already built out, so significant growth is not expected.

Table 3-7 Summary of Existing and Projected Units, Population, Employment and Jobs-Housing Ratios by Planning Area

	Existing (2013)				Proposed Project Buildout (Post 2035)			
Planning Area	Units	Population	Employment	Jobs-Housing Ratio	Units	Population	Employment	Jobs-Housing Ratio
Antelope Valley	24,739	93,490	31,838	1.29	278,158	1,070,571	51,219	0.18
Coastal Islands	44	158	870	19.77	21	0	570	27.14
East San Gabriel Valley	63,825	239,218	29,205	0.46	70,097	255,952	53,231	0.76
Gateway	28,743	104,061	30,328	1.06	34,446	120,358	36,820	1.07
Metro	73,068	235,990	59,359	0.81	92,158	301,073	100,906	1.09
San Fernando Valley	9,039	32,488	20,314	2.25	13,464	47,060	24,741	1.84
Santa Clarita Valley	28,501	104,116	21,470	0.75	77,155	237,638	105,881	1.37
Santa Monica Mountains	5,703	21,757	14,326	2.51	6,788	26,128	28,707	4.23
South Bay	19,952	69,474	17,984	0.90	25,929	86,392	24,530	0.95
West San Gabriel Valley	34,765	125,736	12,713	0.36	43,877	156,685	26,539	0.60
Westside	12,099	39,926	14,252	1.18	17,316	55,033	14,592	0.84
Total	**300,478**	**1,066,414**	**252,659**	**0.84**	**659,409**	**2,356,890**	**467,736**	**0.71**
Increase Over Existing					**358,931**	**1,290,476**	**215,077**	

Source: County of Los Angeles Department of Regional Planning 2014.

3.4 INTENDED USES OF THIS DEIR

This is a Program EIR which examines the potential environmental impacts of the Proposed Project. This EIR is also being prepared to address various actions by the County and others to adopt and implement the General Plan. It is the intent of the EIR to enable the County, other responsible agencies, and interested parties to evaluate the environmental impacts of the Proposed Project, thereby enabling them to make informed decisions with respect to the requested entitlements. The anticipated approvals required for this Project are as follows:

Lead Agency	Action
Los Angeles County Board of Supervisors	• Certify comprehensive General Plan Update for the unincorporated areas of Los Angeles County. • Adopt amendment to Title 22 of the County Code to update the SEA Ordinance. • Adopt amendment to Title 22 of the County Code to update the HMA Ordinance. • Adopt zone changes for consistency with General Plan Update. • Adopt amendments to Title 22 of the County Code related to the industrial zones. • Adopt amendments to Title 22 of the County Code related to the MXD zone (including rescinding the TOD ordinance) • Adopt amendments to Title 22 of the County Code to add the R-5, C-MJ, C-RU, MXD-RU and ()-IP zones. • Adopt Community Climate Action Plan as part of the Air Quality Element

Trustee Agencies	Responsibility
CA Dept of Fish And Wildlife	• CDFW has jurisdiction over the conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations. As a trustee for these resources, CDFW provides the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities, as those terms are used in CEQA. (Fish and Game Code Section 1802).
CA Dept of Parks And Recreation	• California Department of Parks and Recreation manages 280 park units, which contain the finest and most diverse collection of natural, cultural, and recreational resources to be found within California. Their mission is to provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation.
CA State Lands Commission	• The California State Lands Commission serves the people of California by providing stewardship of the lands, waterways, and resources entrusted to its care through economic development, protection, preservation, and restoration.
UC Natural Reserve System	• The mission of the University of California Natural Reserve System is to contribute to the understanding and wise stewardship of the Earth and its natural systems by supporting university-level teaching, research, and public service at protected natural areas throughout California

3. Project Description

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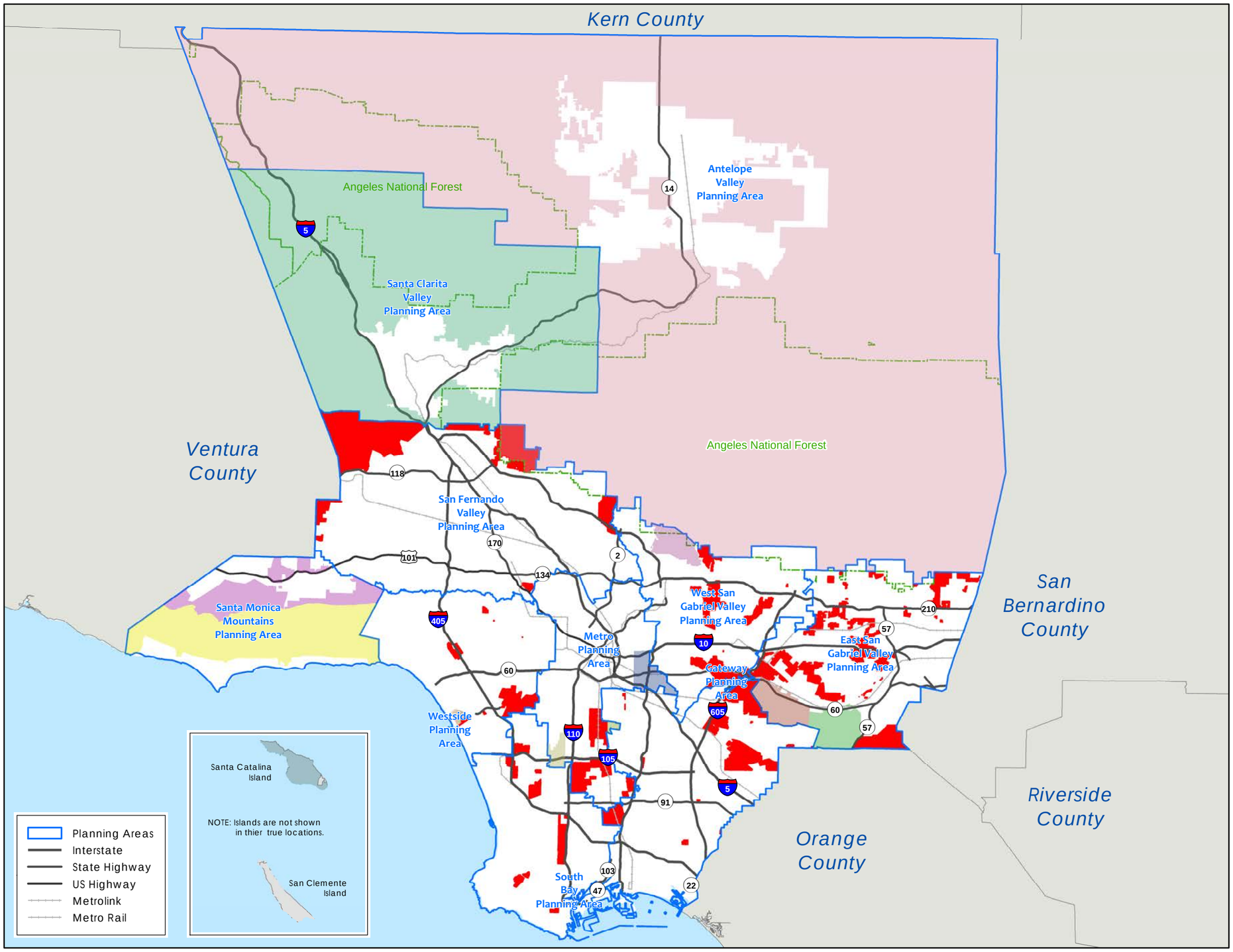
FIGURE 3-5

AREAS AFFECTED BY PROPOSED GENERAL PLAN



- Affected by General Plan Update

Community Plan Areas

- Altadena Community Plan
- Antelope Valley Area Plan
- East Los Angeles Community Plan
- Hacienda Heights Community Plan
- Santa Monica Mountains Coastal Land Use Plan
- Marina Del Rey Coastal Land Use Plan
- Rowland Heights Community Plan
- Santa Catalina Island Coastal Land Use Plan
- Santa Clarita Valley Area Plan
- Santa Monica Mountains North Area Plan
- Walnut Park Neighborhood Plan
- West Athens-Westmont Community Plan

LOS ANGELES COUNTY GENERAL PLAN UPDATE EIR

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PLACEWORKS

Source: DRP,2013

3. Project Description

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4. Environmental Setting

4.1 INTRODUCTION

The purpose of this section is to provide, pursuant to provisions of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, a "description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and a regional perspective." The environmental setting will provide a set of baseline physical conditions that will serve as a tool from which the lead agency will determine the significance of environmental impacts resulting from the General Plan Update (Proposed Project). In addition, subsections of Chapter 5, *Environmental Analysis*, provide a more detailed description of the local environment setting for the environmental topical areas.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

With approximately 4,083 square miles, Los Angeles County is geographically one of the largest counties in the country. Los Angeles County stretches along 75 miles of the Pacific Coast of Southern California, and is bordered to the southeast by Orange County and San Bernardino County, to the north by Kern County, and to the west by Ventura County. Los Angeles County also includes two offshore islands, Santa Catalina Island and San Clemente Island. Los Angeles County includes 88 cities and unincorporated areas. The unincorporated areas of Los Angeles County (unincorporated areas) are comprised of approximately 2,656 square miles, and over one million people. See Figure 3-1, *Regional Vicinity Map* in Chapter 3, *Project Description.*

4.2.1.1 REGIONAL PLANNING CONSIDERATIONS

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a federally recognized Metropolitan Planning Organization (MPO) that represents the counties of Los Angeles, Orange, Ventura, Imperial, San Bernardino, and Riverside, and 190 cities, and encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the Southern California region's MPO, SCAG cooperates with the South Coast Air Quality Management District (SCAQMD), Antelope Valley Air Quality Management District (AVAQMD), Mojave Desert Air Quality Management District (MDAQMD) the California Department of Transportation (Caltrans), and other agencies in preparing regional planning documents.

4. Environmental Setting

Los Angeles County is further divided into nine SCAG subregions:

- North Los Angeles County
- San Fernando Valley Council of Governments
- Las Virgenes Malibu Conejo Council of Governments
- Arroyo Verdugo
- Westside Cities Council of Governments
- South Bay Cities Council of Governments
- City of Los Angeles
- San Gabriel Valley Council of Governments
- Gateway Cities Council of Governments

Regional Transportation Plan/Sustainable Communities Strategy

On April 4, 2012, SCAG adopted the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to help coordinate the development of the region's transportation improvements. The RTP is a long-range transportation plan that is developed and updated by SCAG every four years. The RTP provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, and identifies regional transportation strategies to address the region's mobility needs. The Proposed Project's consistency with the applicable 2012 RTP policies is analyzed in detail in Section 5.10, *Land Use and Planning*, of this Draft Environmental Impact Report (DEIR).

SCAG's Compass Blueprint

In 2004, SCAG adopted a regional growth strategy known as the Compass Blueprint Strategy. The program is the part of the 2004 regional growth forecast policy that attempts to reduce emissions and increase mobility through strategic land use changes. Compass Blueprint, through extensive public participation, land use, and transportation modeling and analysis, has resulted in a plan that identifies strategic growth opportunity areas where the program will help cities and counties reap the maximum benefits from regional planning implemented in cooperation and partnership with the local community. Compass Blueprint tools support visioning efforts, infill analyses, economic and policy analyses, and marketing and communication programs. The Compass Blueprint Growth Vision contains a set of land use strategies that SCAG encourages local governments to implement, many of which are applicable to Los Angeles County. Applicable strategies focus growth in existing and emerging centers and along major transportation corridors; create significant areas of mixed-use development and walkable "people scaled" communities; provide new housing opportunities that respond to the region's changing demographics; target growth in housing, employment, and commercial development within walking distance of existing and planned transit stations; inject new life into under-used areas by creating vibrant new business districts, redeveloping old buildings, and building new businesses and housing on vacant lots; preserve existing, stable, single family neighborhoods; and protect important open space, environmentally sensitive areas and agricultural lands from development.

South Coast Air Quality Management District (SCAQMD), Antelope Valley Air Quality Management District (AVAQMD), and Mojave Desert Air Quality Management District (MDAQMD)

The SCAQMD, AVAQMD and MDAQMD are responsible for monitoring air quality as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the region. The majority of Los Angeles County is in the South Coast Air Basin (Basin), which is

managed by SCAQMD. The SCAQMD jurisdiction is approximately 10,743 square miles and includes the Los Angeles County except for the Antelope Valley, which is covered by the AVAQMD, and the MDAQMD. The SCAQMD implements a wide range of programs and regulations that address point source pollution and mobile source emissions, and enforces air quality through inspections, fines, and educational training.

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These regulated air pollutants are known as criteria air pollutants and are: carbon monoxide, volatile organic compounds (VOC), nitrogen oxides (NO_X), sulfur dioxide, coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead. VOC and NO_X are criteria pollutant precursors and go on to form secondary criteria pollutants, such as ozone (O_3), through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards (AAQS) for that pollutant. The levels of ozone, particulate matter, and carbon monoxide in Los Angeles County continually exceed federal and state ambient air quality standards. The purpose of the 2012 Air Quality Management Plan (AQMP or Plan) for the Basin is to set forth a comprehensive and integrated program that will lead the Basin into compliance with the federal 24-hour PM2.5 air quality standard, and to provide an update to the Basin's commitments towards meeting the federal 8-hour ozone standards. It will also serve to satisfy recent Environmental Protection Agency (USEPA) requirements for a new attainment demonstration of the revoked 1-hour ozone standard, as well as a vehicle miles traveled (VMT) emissions offset demonstration.

Under the Porter-Cologne Water Quality Act, California's water quality control law, the State Water Resources Control Board (SWRCB) has ultimate control over water quality policy and allocation of state water resources. The SWRCB, through its nine Regional Water Quality Control Boards (RWQCBs), carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a water quality control plan or basin plan. In 1972, the SWRCB adopted the California Ocean Plan for ocean waters of California. Over the years, the Ocean Plan has been amended numerous times, with the most recent amendment in 2012. The Ocean Plan helps to protect the water quality of California's coastal ocean through the control of the discharge of waste into the ocean. The Ocean Plan identifies beneficial uses of ocean waters and establishes water quality objectives and implementation programs to protect those beneficial uses. In 1975, the Los Angeles Regional Board adopted two basin plans: one for the Santa Clara Basin and another for the Los Angeles Basin Los Angeles County is in the Los Angeles Water Quality Control Board Region, Region 4 and the Lahontan Water Quality Control Board Region, Region 6. A small part of the northwest corner of Los Angeles County is in the Central Valley Region, Region 5. The Water Quality Control Plan for Region 4 was adopted in 1994; for Region 6 in 1995. These Basin Plans give direction on the beneficial uses of the state waters within the two regions, describe the water quality that must be maintained to support such uses, and provide programs, projects, and other actions necessary to achieve the standards established in the Basin Plans. Waste discharge requirements for discharges to municipal storm drain systems in the Los Angeles Water Board Region are set forth in Order No. R4-2012-0175 ("MS4 Permit") issued by the Los Angeles Regional Water Quality Control Board in 2012.[1]

[1] Order No. R4-2012-0175 applies to the part of Los Angeles County in the Los Angeles RWQCB.

4. Environmental Setting

In addition to basin plans mentioned above, Integrated Regional Water Management Plans (IRWMP's) define a clear vision and strategy for the sustainable management of water resources within a specific region delineated by one or more watersheds. IRWMP's generally contain an assessment of current and future water demand, water supply, water quality, and environmental needs. They address the challenges for delivering a stable and clean supply of water for the public, addressing stormwater and urban runoff water quality, providing flood protection, meeting water infrastructure needs, maximizing the use of reclaimed water, enhancing water conservation, and promoting environmental stewardship. Since water related issues are addressed on a regional, watershed basis, these plans are instrumental in building consensus amongst the various stakeholders in the development and prioritization of an action plan that is complementary and leverages inter-jurisdictional cooperation, resources, and available funding. There are four IRWMP regions in Los Angeles County: Antelope Valley IRWMP; Upper Santa Clara River IRWMP; Greater Los Angeles County IRWMP; and Los Angeles Gateway Region IRWMP.

California Air Resources Board (CARB)

Assembly Bill 32 (AB 32), the Global Warming Solutions Act, was passed by the California state legislature on August 31, 2006, to place the State on a course toward reducing its contribution of greenhouse gas (GHG) emissions. AB 32 follows the first tier of emissions reduction targets established in Executive Order S-3-05, signed on June 1, 2005, which requires the State's global warming emissions to be reduced to 1990 levels by the year 2020. Pursuant to the requirements of AB 32, the State's reduction in global warming emissions will be accomplished through an enforceable statewide cap on global warming emissions. In order to effectively implement the cap, the California Air Resources Board (CARB) adopted the Scoping Plan in December 2008 that identified the GHG emissions reduction targets and reduction strategies for the various emission sectors within the State. Projected GHG emissions in California identified in the 2008 Scoping Plan are estimated at 596 million metric tons of CO_2-equivalent (CO_{2e}) pollutants. CARB approved a 2020 emissions limit of 427 million metric tons (MMT) of CO_{2e} for the State (CARB, 2008). Since the release of the 2008 Scoping Plan, CARB has updated the statewide GHG emissions inventory to reflect GHG emissions in light of the economic downturn and measures that had not been previously considered within the 2008 Scoping Plan baseline inventory. The updated forecast predicts emissions to be 507 MMT by 2020. The new inventory identifies that an estimated 80 MMT of reductions are necessary to achieve the statewide emissions reduction of AB 32 by 2020, or 15.7 percent of the projected emissions compared to business as usual in year 2020 (i.e., 15.7 percent of 507 MMT) (CARB, 2012).

California Coastal Commission

There are five unincorporated areas in the state-designated coastal zone: Santa Catalina Island, Marina del Rey, a portion of the Santa Monica Mountains, Ballona Wetlands, and San Clemente Island. In accordance with the California Coastal Act, all development within the coastal zone must first obtain a Coastal Development Permit (CDP), which is issued by the California Coastal Commission. Local Coastal Programs (LCPs) establish detailed land use policy and development standards within their respective coastal zone segments. The County of Los Angeles (County) has certified LCPs for Santa Catalina Island and, Marina del Rey.

California Department of Transportation

The California Department of Transportation (Caltrans) is the state agency responsible for the maintenance of freeways and highways. Caltrans estimates that on average there are more than 100 million vehicle miles traveled per day in Los Angeles County via the State Highway System. The County coordinates with Caltrans on mobility and land use decisions that may affect state transportation facilities.

U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW)

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, and/or rare. This is due to the species' declining or limited population sizes, which usually results from habitat loss. Watch lists of such resources are maintained by the California Department of Fish and Wildlife (CDFW), the United States Fish and Wildlife Service (USFWS), and special groups, such as the California Native Plant Society (CNPS). Los Angeles County contains multiple habitats as well as plant and animal species, which have been accorded special recognition.

United States Forest Service

The Angeles National Forest and a small portion of the Los Padres National Forest encompass nearly 650,000 acres of land within the unincorporated areas. The Angeles National Forest stretches across Los Angeles County in two sections encompassing the San Gabriel Mountain Range, and is 1,018 square miles, or 25 percent of the land area of Los Angeles County. The U.S. Forest Service is responsible for managing public forest lands. Its mission is the stewardship of forest lands and resources through programs that provide recreation and multiple uses of natural resources, wilderness areas, and significant habitat areas. The U.S. Forest Service prepares and periodically updates the Land and Resource Management Plan as a policy guide for the use of lands in the national forests. Within the boundaries of the national forests, nearly 40,000 acres are privately-owned. For these parcels, commonly referred to as in-holdings, the County retains responsibility for land use regulation.

National Park Service

The Santa Monica Mountains National Recreation Area is a part of the National Park System and is managed by the National Park Service. The Recreation Area preserves natural habitats, historical and cultural sites, offers recreational opportunities, and improves the air quality for the Los Angeles basin. Covered by chaparral, oak woodlands, and coastal sage scrub, it is home to many species that are listed as rare, threatened, or endangered.

Federal Bureau of Land Management

The U.S. Bureau of Land Management (BLM) owns thousands of acres of open space land. These primarily desert lands serve to preserve federally-listed endangered and threatened species, and where compatible, provide recreational, agricultural, energy, and mining activities.

4. Environmental Setting

U.S. Department of Defense

The U.S. Department of Defense is responsible for thousands of acres within Los Angeles County, including installations and facilities. Coordination between the County and U.S. Department of Defense is important to ensure compatibility between military installations and operation areas, and adjacent land uses. Military Operation Areas (MOAs) are a three-dimensional airspace designated for military training and transport activities that have a defined floor (minimum altitude) and ceiling (maximum altitude). Within Los Angeles County, there are several MOAs used by military aircraft to practice high and low altitude training exercises and travel routes between military installations. Additionally, in and around MOAs, testing is conducted to maintain military readiness. In guiding growth and development in the unincorporated areas, it is important to consider the critical role of MOAs in support of national defense.

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 Location and Land Use

The unincorporated areas account for approximately 65 percent of the total land area, or 2,656 square miles of unincorporated land, mostly in the northern portion of Los Angeles County, as shown in Table 4-1 and Figure 3.2, *Unincorporated Areas of Los Angeles County*. The unincorporated areas in the northern portion of Los Angeles County are covered by large amounts of sparsely populated land and include the Angeles National Forest, part of the Los Padres National Forest, and the Mojave Desert. The unincorporated areas in the southern portion of the Los Angeles County consist of 58 noncontiguous land areas, which are often referred to as "unincorporated urban islands."

The County's governmental structure comprises of five Supervisorial Districts with the County Board of Supervisors as the governing body responsible for making all legislative land use decisions for the unincorporated areas. Figure 4-1, *Los Angeles County Supervisorial Districts* is a map of the Supervisorial Districts and unincorporated areas.

Table 4-1 Los Angeles County Distribution of Land Area

County Land Components	Cities (sq. miles)	Unincorporated (sq. miles)	Total (sq. miles)
Mainland	1,423.7	2,528.3	3,952
San Clemente Island	0	56.4	56.4
Santa Catalina Island	2.9	71.9	74.8
Total	**1,426.6**	**2,656.6**	**4,083.2**

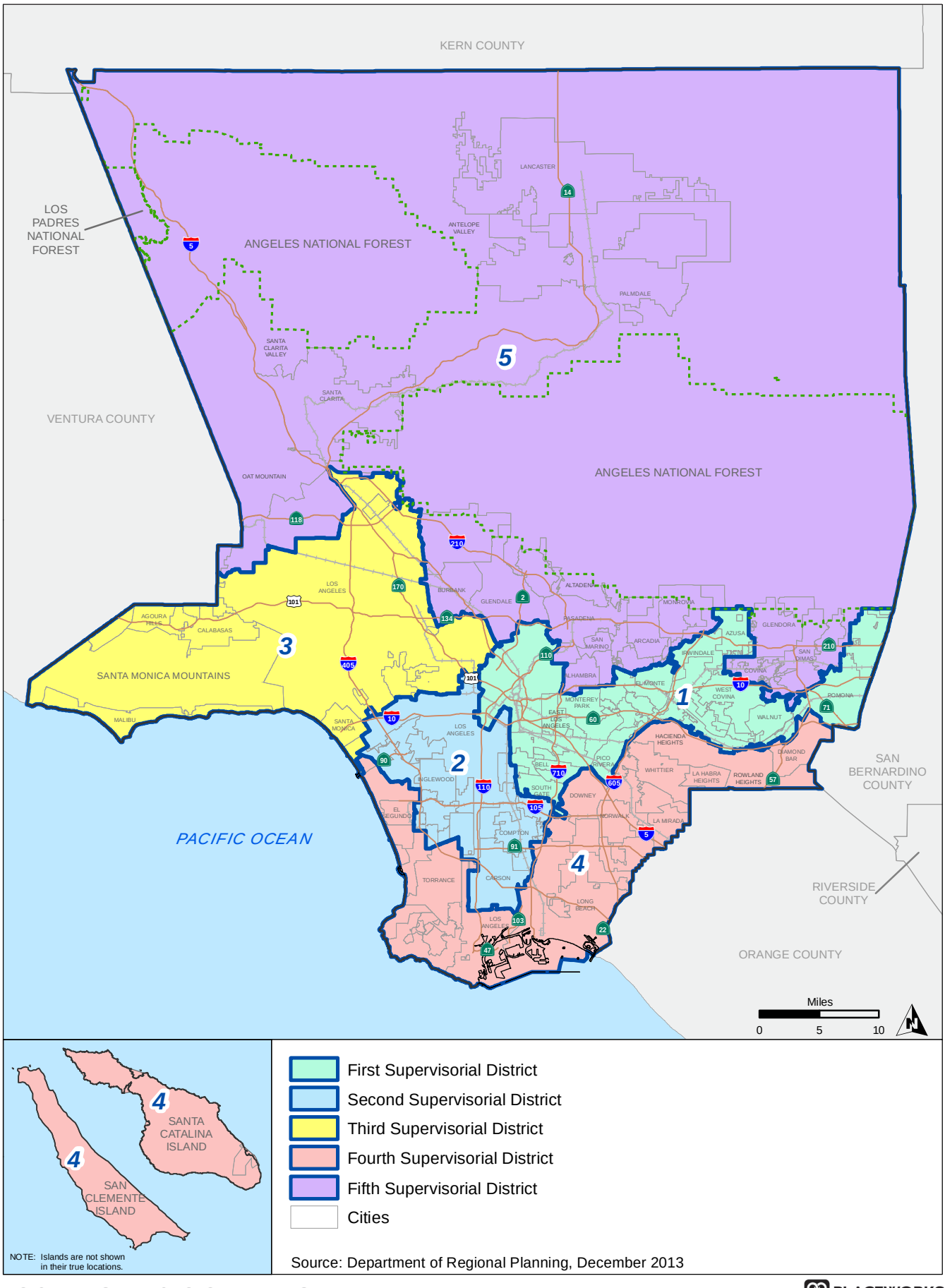
Source: Los Angeles County Department of Public Works

Planning Areas

As shown in Figure 3-5, *Los Angeles County Planning Areas,* the Proposed Project divides Los Angeles County into 11 Planning Areas. The setting and unique planning issues for each Planning Area are summarized below and described in greater detail in Section 5.10, *Land Use and Planning*, of this DEIR:

LOS ANGELES COUNTY SUPERVISORIAL DISTRICTS

FIGURE 4.1



4. Environmental Setting

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Antelope Valley Planning Area

The Antelope Valley is located approximately 60 miles north of Downtown Los Angeles. The unincorporated areas of the Antelope Valley Planning Area covers 1,800 square miles, or 44 percent of the 4,083 square miles in Los Angeles County. The unincorporated Antelope Valley surrounds the City of Palmdale and City of Lancaster, and borders San Bernardino County to the east, Ventura County to the west, and Kern County to the north. The existing Antelope Valley Area Plan was adopted on December 4, 1986.

Coastal Island Planning Area

This Planning Area consists of two islands. San Clemente Island lies approximately 63 miles south of the City of Long Beach and 78 miles west of the City of San Diego. San Clemente Island is approximately 24 miles long and 5 miles across at its widest point. It has a land area of approximately 57 square miles. Since 1934, San Clemente Island has been owned and operated by the U.S. Navy.

Santa Catalina Island is the only significantly inhabited island near the California coast. It is located approximately 22 miles south of the Palos Verdes Peninsula and 27 miles southwest of the Orange County shoreline. Santa Catalina Island is approximately 21 miles long and 8 miles wide. It has a land area of approximately 74 square miles.

East San Gabriel Valley Planning Area

This Planning Area includes the eastern San Gabriel Valley, along with adjacent areas to the south in the Puente Hills and to the north at the southern edge of the San Gabriel Mountains. It borders San Bernardino County to the east and Orange County to the south. Most of the Planning Area is located within cities; however it also includes large unincorporated island areas. The largest of these is the area adjacent to Orange County that includes the communities of Hacienda Heights and Rowland Heights. Other major County urban islands include those that surround the City of Covina. These are surrounded in all directions by cities.

Gateway Planning Area

The Gateway Planning Area is located in the southeastern portion of Los Angeles County. The eastern border of the Planning Area is the Orange County line. The Planning Area contains a number of cities, including the City of Long Beach, as well as a large corridor of industrial areas that lead out of the Ports of Los Angeles and Long Beach into downtown Los Angeles.

Metro Planning Area

The Metro Planning Area is located in the geographic center of Los Angeles County. The Planning Area also includes Downtown Los Angeles, which includes major corporations and professional firms, tourist and convention hotels, restaurants, retail, and the largest concentration of government offices outside of Washington D.C.

San Fernando Valley Planning Area

The San Fernando Valley Planning Area is bordered by the Santa Clarita Valley Planning Area and the Angeles National Forest to the north, and the Santa Monica Mountains Planning Area and Westside Planning

Area to the south. The Ventura County line is the western border of the Planning Area, and the San Gabriel Valley and Downtown Los Angeles make up the eastern border.

Santa Clarita Valley Planning Area

The Santa Clarita Valley Planning Area is bordered to the west by the Ventura County line, to the north by the Los Padres National Forest and Angeles National Forest, to the east by the Angeles National Forest, and to the south by a major ridgeline that separates the Santa Clarita Valley from the San Fernando Valley. The Planning Area includes over 480 square miles, of which about 195 square miles are unincorporated. The Planning Area is located approximately 30 to 40 miles northwest of downtown Los Angeles. A comprehensive update to the existing Santa Clarita Valley Area Plan was adopted on November 27th, 2012.

Santa Monica Mountains Planning Area

The Santa Monica Mountains Planning Area covers the scenic Santa Monica Mountains and the shoreline along the Pacific Coast to the Ventura County border to the north and west, and up to the San Fernando Valley to the north. The eastern border is the Westside Planning Area and the City of Los Angeles. The existing Santa Monica Mountains North Area Plan was adopted on October 24, 2000.

South Bay Planning Area

The South Bay Planning Area is located in the southwest corner of Los Angeles County and includes the Port of Los Angeles. The Pacific Ocean provides the western boundary and the Gateway Planning Area and Metro Planning Area provide the eastern and northern borders. The South Bay Planning Area is located south of the Westside Planning Area.

West San Gabriel Valley Planning Area

The Angeles National Forest is the northern border of the West San Gabriel Planning Area, while Downtown Los Angeles and the Gateway Planning Area comprise the southern border. The eastern border of the Planning Area is roughly the Interstate-605.

Westside Planning Area

The Westside Planning Area covers the coastal communities along the Pacific Ocean, including Marina del Rey, as well as the westside of the City of Los Angeles and other cities, such as the City of Santa Monica and City of Beverly Hills.

4.3.2 General Plan and Zoning

Existing General Plan Framework

The County's efforts to prepare a General Plan for the unincorporated areas began in the 1970's with the creation of the Environmental Development Guide. In 1973, the County adopted its first General Plan, followed by a comprehensive update in 1980. The existing General Plan defines policy for all unincorporated areas. Due to the size and complexity of the county, a single plan cannot adequately meet the needs of all the county's communities. As a result, the Existing General Plan consists of two major components: (1)

countywide chapters and elements that set the countywide policy framework; and (2) areawide and community plans that deal with local issues of unincorporated communities. These community-based plans include area plans, community plans, neighborhood plans, and local coastal land use plans, which address neighborhood and/or community-level policy issues. All community-based plans are components of the General Plan and must be consistent with General Plan goals and policies

The County's adopted General Plan and community-based plans can be found online at http://planning.lacounty.gov/plans/adopted.

Community-Based Plans

Area Plans

- Antelope Valley Area Plan
- Santa Clarita Valley Area Plan
- Santa Monica Mountains North Area Plan

Community and Neighborhood Plans

- Altadena Community Plan
- East Los Angeles Community Plan
- Hacienda Heights Community Plan
- Rowland Heights Community Plan
- Twin Lakes Community Plan
- Walnut Park Neighborhood Plan
- West Athens – Westmont Community Plan

Local Coastal Land Use Plans

- Marina del Rey Local Coastal Land Use Plan
- Malibu Local Coastal Land Use Plan
- Santa Catalina Island Local Coastal Land Use Plan

Existing Land Use

Table 4-2 below provides a summary of existing land uses within each Planning Area, and existing community-based plan, respectively, including total acres, density, units, population, and employment.

Table 4-2 Existing Land Uses By Planning Area

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[4]
Antelope Valley Planning Area [2]	**1,136,609**	**24,739**	**93,490**	**93,125**	**31,838**
Antelope Valley Area Plan	**1,136,609**	**24,739**	**93,490**	**93,125**	**31,838**
Commercial	2,070	0	0	2,148	4,076
Industrial	3,512	0	0	1,273	1,609
Open Space	15,484	0	0	99	300
Other	1,010,848	0	0	7,050	21,903
Public / Semi-Public	856	0	0	1,956	3,950
Residential	103,839	24,739	93,490	80,600	0
Coastal Islands Planning Area [2]	**81,846**	**44**	**158**	**646**	**870**
Catalina Island Coastal Land Use Plan	**45,237**	**44**	**158**	**646**	**570**
Industrial	1,295	0	0	49	0
Other	43,373	0	0	574	564
Public / Semi-Public	568	0	0	24	6
Residential	1	44	158	0	0
Outside of Community-Based Plan	**36,609**	**0**	**0**	**0**	**300**
Other	36,609	0	0	0	300
East San Gabriel Valley Planning Area [2]	**28,754**	**63,825**	**239,218**	**173,404**	**29,205**
Hacienda Heights Community Plan	**6,338**	**16,420**	**62,339**	**45,696**	**5,953**
Commercial	155	0	0	1,661	2,101
Industrial	193	0	0	463	1,052
Open Space	59	0	0	41	244
Other	1,289	0	0	486	357
Public / Semi-Public	263	0	0	1,536	2,200
Residential	4,379	16,420	62,339	41,508	0
Outside of Community/Area Plan	**14,996**	**32,625**	**123,422**	**88,151**	**15,999**
Commercial	234	0	0	2,144	3,887
Industrial	344	0	0	4,991	4,373
Open Space	75	0	0	136	250
Other	4,796	0	0	1,199	779
Public / Semi-Public	1,340	0	0	6,625	6,709
Residential	8,207	32,625	123,422	73,056	0
Rowland Heights Community Plan	**7,419**	**14,780**	**53,457**	**39,558**	**7,252**
Commercial	195	0	0	2,463	3,118
Industrial	962	0	0	1,337	1,221
Open Space	375	0	0	50	200
Other	353	0	0	887	664
Public / Semi-Public	287	0	0	1,534	2,050
Residential	5,247	14,780	53,457	33,287	0
Gateway Planning Area [2]	**9,584**	**28,743**	**104,061**	**91,153**	**30,328**
Outside of Community-Based Plan	**9,584**	**28,743**	**104,061**	**91,153**	**30,328**
Commercial	621	0	0	1,886	3,609

Table 4-2 Existing Land Uses By Planning Area

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[4]
Industrial	1,296	0	0	22,856	18,670
Open Space	41	0	0	60	175
Other	2,166	0	0	2,643	1,993
Public / Semi-Public	1,299	0	0	4,296	5,881
Residential	4,161	28,743	104,061	59,413	0
Metro Planning Area [2]	**10,206**	**73,068**	**235,990**	**147,245**	**59,359**
East Los Angeles Community Plan	**3,392**	**29,021**	**90,506**	**51,397**	**21,978**
Commercial	249	0	0	4,665	9,046
Industrial	229	0	0	4,771	5,739
Open Space	88	0	0	219	225
Other	218	0	0	1,360	1,282
Public / Semi-Public	348	0	0	2,464	5,686
Residential	2,260	29,021	90,506	37,919	0
Outside of Community-Based Plan	**4,927**	**28,139**	**94,229**	**69,653**	**29,599**
Commercial	292	0	0	3,964	6,956
Industrial	1,133	0	0	19,935	16,435
Open Space	178	0	0	266	375
Other	312	0	0	997	560
Public / Semi-Public	240	0	0	2,630	5,274
Residential	2,772	28,139	94,229	41,861	0
Walnut Park Neighborhood Plan	**369**	**3,403**	**11,592**	**6,291**	**1,456**
Commercial	23	0	0	471	907
Industrial	8	0	0	89	294
Other	6	0	0	41	31
Public / Semi-Public	9	0	0	89	200
Public Elementary Schools	9	0	0	89	200
Residential	322	3,403	11,592	5,598	0
West Athens - Westmont Community Plan	**1,519**	**12,505**	**39,663**	**19,903**	**6,325**
Commercial	75	0	0	1,151	1,962
Industrial	25	0	0	488	1,197
Open Space	7	0	0	10	50
Other	104	0	0	379	216
Public / Semi-Public	265	0	0	1,170	2,900
Residential	1,043	12,505	39,663	16,705	0
San Fernando Valley Planning Area [2]	**27,383**	**9,039**	**32,488**	**24,591**	**20,314**
Outside of Community-Based Plan	**27,344**	**8,912**	**31,999**	**24,402**	**20,314**
Commercial	444	0	0	3,588	17,955
Industrial	185	0	0	290	622
Open Space	90	0	0	31	100
Other	23,259	0	0	854	588
Public / Semi-Public	145	0	0	542	1,050

Table 4-2 Existing Land Uses By Planning Area

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[4]
Residential	3,220	8,912	31,999	19,097	0
Twin Lakes Community Plan	**39**	**127**	**489**	**189**	**0**
Other	15	0	0	4	0
Residential	24	127	489	186	0
Santa Clarita Valley Planning Area [2]	**265,564**	**28,501**	**104,116**	**79,702**	**21,470**
Santa Clarita Valley Area Plan	**265,564**	**28,501**	**104,116**	**79,702**	**21,470**
Commercial	797	0	0	3,700	6,932
Industrial	1,844	0	0	7,889	7,077
Open Space	596	0	0	121	456
Other	242,973	0	0	5,417	5,154
Public / Semi-Public	638	0	0	1,523	1,850
Residential	18,717	28,501	104,116	61,053	0
Santa Monica Mountains Planning Area [2]	**71,162**	**5,703**	**21,757**	**24,017**	**14,326**
Malibu Coastal Land Use Plan	**51,063**	**3,296**	**12,528**	**11,804**	**9,091**
Commercial	16	0	0	87	171
Industrial	19	0	0	37	42
Open Space	8,439	0	0	77	250
Other	35,066	0	0	1,178	878
Public / Semi-Public	979	0	0	990	7,750
Residential	6,543	3,296	12,528	9,434	0
Santa Monica Mountains North Area Plan	**20,099**	**2,407**	**9,229**	**12,213**	**5,235**
Commercial	78	0	0	156	305
Industrial	104	0	0	1,305	3,400
Open Space	1,953	0	0	92	130
Other	13,360	0	0	834	800
Public / Semi-Public	86	0	0	170	600
Residential	4,517	2,407	9,229	9,655	0
South Bay Planning Area [2]	**3,305**	**19,952**	**69,474**	**44,222**	**17,984**
Outside of Community-Based Plan	**3,305**	**19,952**	**69,474**	**44,222**	**17,984**
Commercial	157	0	0	2,022	3,394
Industrial	288	0	0	5,110	6,422
Open Space	32	0	0	133	100
Other	247	0	0	693	511
Public / Semi-Public	526	0	0	3,320	7,556
Residential	2,055	19,952	69,474	32,945	0
West San Gabriel Valley Planning Area [2]	**11,372**	**34,765**	**125,736**	**83,465**	**12,713**
Altadena Community Plan	**4,735**	**15,276**	**55,588**	**37,573**	**6,092**
Commercial	76	0	0	1,005	1,860
Industrial	75	0	0	530	1,322
Open Space	48	0	0	46	177

Table 4-2 Existing Land Uses By Planning Area

Land Use Designation	Acres[3]	Units	Population[5]	Bldg. Sq. Footage (in thousands)	Jobs[4]
Other	572	0	0	711	433
Public / Semi-Public	205	0	0	1,004	2,300
Residential	3,761	15,276	55,588	34,277	0
Outside of Community-Based Plan	**6,637**	**19,489**	**70,148**	**45,892**	**6,621**
Commercial	113	0	0	1,533	2,889
Industrial	82	0	0	1,182	1,249
Open Space	736	0	0	117	223
Other	1,826	0	0	1,165	861
Public / Semi-Public	280	0	0	526	1,400
Residential	3,599	19,489	70,148	41,369	0
Westside Planning Area [2]	**4,107**	**12,099**	**39,926**	**22,623**	**14,252**
Marina del Rey Land Use Plan	**712**	**4,489**	**12,524**	**754**	**4,368**
Commercial	0	0	0	0	4,343
Open Space	5	0	0	18	25
Residential	706	4,489	12,524	735	0
Outside of Community-Based Plan	**3,395**	**7,610**	**27,402**	**21,870**	**9,884**
Commercial	54	0	0	808	1,132
Industrial	149	0	0	765	2,229
Open Space	239	0	0	29	175
Other	1,084	0	0	312	148
Public / Semi-Public	685	0	0	663	6,200
Residential	1,182	7,610	27,402	19,293	0
GRAND TOTAL	**1,649,889**	**300,478**	**1,066,415**	**784,195**	**252,660**

Notes:
1. Historically, jurisdiction-wide buildout levels do not achieve the maximum allowable density/intensity on every parcel and are, on average, lower than allowed by the General Plan. Accordingly, the buildout projections in this General Plan do not assume buildout at the maximum density or intensity and instead are adjusted downward to account for variations in buildout intensity.
2. The Proposed General Plan has broken the county into 11 Planning Areas. These boundaries will go into effect with the adoption of the General Plan
3. Acres are given as adjusted gross acreages, which do not include the right-of-way for roadways, flood control facilities, or railroads.
4. Projections of population by residential designation are based on a persons-per-household factor that varies by housing type. Additionally, the projections of jobs by designation are based on an employment generation factor that varies by employment category, or actual number of jobs.

Existing Zoning

The Los Angeles County Code, including Title 21, Subdivisions and Title 22, Planning and Zoning, provide the basis for current zoning in the unincorporated areas. For each zone, the County Code provides development standards that govern such things as permitted land uses, minimum lot area, maximum height limit, required parking, yard requirements, and other standards as appropriate.

Existing Specific Plans

Some unincorporated areas are also regulated by specific plans, some of which have been incorporated into Title 22 of the County Code. The following is a list of existing specific plans:

- La Vina Specific Plan
- Marina del Rey Specific Plan
- Universal Studios Specific Plan
- Newhall Ranch Specific Plan
- Northlake Specific Plan
- Santa Catalina Island Specific Plan

4.3.3 Descriptions of the Environmental Setting

Agriculture

Agricultural land is an important resource in California and in Los Angeles County. Much of the agricultural land in Los Angeles County has been developed. Therefore, agricultural land is viewed as a non-renewable resource that needs to be protected from conversion and encroachment of incompatible uses. According to the Los Angeles County Crop Report, Los Angeles County produced over $173 million in agriculture products in 2011.

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service classifies soils into eight categories based on agricultural potential. From this classification, prime soils (Class I and II soils) are identified for agricultural production. Based on this system, the California Department of Conservation Farmland Mapping and Monitoring Program identifies farmland that is ideally suited for agricultural use. The program does not affect local land use decisions, but is an identification tool that can be used for policy purposes by local governments. Major issues associated with agricultural resources in the unincorporated areas involve 1) the conversion of agricultural lands to non-agricultural, and associated land use conflicts, due to population growth and accompanying development; and 2) major pollution to air and water associated with agricultural production.

Biological Resources

The physical environment of the unincorporated areas is extremely diverse: elevations range from sea level to 10,000 feet; soils vary due to prehistoric volcanic activity, marine sedimentation and river deposition; and climates that are mild and moist near the coast and transition to severe temperature extremes in the high mountains and desert. The unincorporated areas boast a treasury of natural features, including coastlines, islands, dunes, marshes, tidal flats, sea cliffs, hills, mountain ranges, freshwater ponds, rivers, streams, wetlands, woodlands, deserts, chaparral, grasslands, valleys, and plains. As a result, the unincorporated areas contain a unique and varied collection of biological resources, including habitats and species—some of which may not be found anywhere else in the world.

The unincorporated areas have six main types of biological resources: regional habitat linkages; forests; coastal zone; riparian habitats, streambeds and wetlands; woodlands; and Significant Ecological Areas (SEAs). In addition, there are two sites in the unincorporated areas that are controlled by the U.S. Department of Defense and that contain important biological resources, including the Edwards Air Force Base in the Antelope Valley and San Clemente Island.

Regional habitat linkages. The regional habitat linkages are part of a greater habitat linkage that extends beyond the Los Angeles County boundaries, and these connections are important to ensure greater regional biodiversity, and connectivity for species and habitat. Many of these linkages connect habitats in the SEAs with those in adjacent county watersheds, mountains and deserts.

Forests. Two National Forests, Los Padres National Forest and Angeles National Forest, contain extensive biological resources. The Angeles National Forest contains the largest area of dedicated open space in Los Angeles County, and a vast number of wildlife species depend on it for protection, foraging, and breeding. There are 240 miles of perennial rivers and streams, as well as 19 lakes and reservoirs in the national forest. The County is responsible for the land use regulation of the nearly 40,000 acres of privately-owned in-holdings within the national forest boundaries. Regulation of the forests is coordinated closely with the U.S. Forest Service.

Coastal Zone. Biological resources in the coastal zone, including San Clemente Island, Santa Catalina Island, Marina del Rey, Ballona Wetlands and part of the Santa Monica Mountains, are identified through Sensitive Environmental Resource Areas (SERAs), which contain terrestrial or marine resources that, because of their characteristics and/or vulnerability, require special protection. Land use disturbance in coastal zones is regulated through coastal land use plans and local coastal programs, in conjunction with the California Coastal Commission and other entities with management and jurisdictional authority. For example, resources within San Clemente Island and the Ballona Wetlands are managed by the U.S. Navy and California Department of Parks and Recreation, respectively.

Riparian habitats and streambeds are of inherent value to local and regional ecosystems. They serve as important connectors to up- and downstream ecosystems or adjacent habitats; provide critical value to migratory birds; contribute to the quality of habitat linkages and wildlife corridors; and play a crucial role in maintaining surface and subsurface water quality.

Wetlands, including swamps, marshes, bogs, vernal pools, and playa lake areas support vegetation and contribute to water quality and the overall health of watersheds in several ways. They slow water flow, decrease erosion, filter water runoff, and provide habitat for many endangered plant and animal species.

The Emergency Wetlands Resources Act establishes a national wetlands conservation program, which requires states to include wetlands in their Comprehensive Outdoor Recreation Plans for management and preservation. Los Angeles County has lost 95 percent of its original wetland areas.

Woodlands. Various types of woodlands are found in the unincorporated areas, including riparian woodlands; California walnut woodlands in the San Gabriel Valley and Puente Hills; juniper and Joshua tree woodlands in the Antelope Valley; and oak woodlands countywide. The oak woodlands are an important resource that provides an abundance of aesthetic, ecological, and economic benefits to residents.

SEAs. The County's existing 62 SEAs contain irreplaceable biological resources, representing the wide-ranging biodiversity of Los Angeles County. Each individual SEA is sized to support sustainable populations of its component species, and includes undisturbed or lightly disturbed habitat along with linkages and corridors that promote species movement. The Proposed Project includes an update to the SEAs and the SEA Ordinance, which is analyzed in Section 5.4, Biological Resources of this DEIR.

4. Environmental Setting

Detailed information for each biological resource in Los Angeles County is provided in Section 5.3, *Biological Resources*, of this DEIR. Main issues associated with biological resources include 1) preserving biotic diversity, which is continually threatened by development; 2) periodically monitoring and reporting on the status of SEAs, which continually evolve overtime; and 3) balancing private property rights against impacts to irreplaceable biological resources.

Air Quality and Greenhouse Gas Emissions

Los Angeles County has a large coastal basin with the Pacific Ocean to the west, a bordering mountain range on the north, the San Gabriel Mountains, with a high point of 10,064 feet, and a large desert basin, the Antelope Valley, on the northern side of the San Gabriel Mountains. Several smaller mountain ranges also trend the east-west border the Los Angeles Basin and San Fernando Valley. The San Jose Hills border the coastal basin on the east side. The majority of Los Angeles County is in the South Coast Air Basin, with the area north of the San Gabriel Mountains located in the Mojave Desert Air Basin. Frequent sunny days and low rainfall contribute to ozone formation, as well as high levels of fine particles and dust. The Clean Air Act requires the USEPA to set national ambient air quality standards for six common air pollutants. The levels of ozone, particulate matter, and carbon monoxide in Los Angeles County continually exceed federal and state ambient air quality standards. In addition, Los Angeles County is home to many diverse industries and the largest goods movement hub on the West Coast. In spite of emission controls that are among the most stringent in the country, power generation and petroleum refining continue to be among the largest stationary sources of air pollution in Los Angeles County.

The Global Warming Solutions Act of 2006 (AB 32) manages and reduces greenhouse gas emissions in California. The Sustainable Communities and Climate Protection Act of 2008 (SB 375), is one of many bills that implement AB 32, and requires MPOs such as SCAG to coordinate land use, transportation and housing strategies and prepare a Sustainable Communities Strategy (SCS) to reduce greenhouse gas emissions to 1990 levels by the year 2020. SCAG adopted its SCS as part of its 2012 Regional Transportation Plan. The Los Angeles County Community Climate Action Plan (CCAP), analyzed in Section 5.3, *Air Quality* of this DEIR, provides further policy guidance for reducing GHG emissions generated within the unincorporated areas, to ensure that the County will be able to reduce its emissions to the equivalent of 1990 levels by 2020.

Additional information regarding air quality and climate change regulation affecting Los Angeles County is provided in Section 4.2.1.1, *Regional Planning Considerations*, above. Existing climate and air quality conditions in Los Angeles County are also analyzed in Sections 5.3, *Air Quality*, and 5.7, *Greenhouse Gas Emissions*, of this DEIR. Main issues associated with air quality and climate change in the unincorporated areas involve 1) coordinating land use, transportation and air quality planning, particularly with respect to protecting sensitive receptors (i.e., residences, schools, daycare centers, etc.) to the impacts of air pollution and reducing transportation-related emissions; and 2) responding to climate change, with an emphasis on reducing fossil fuel emissions related to transportation uses.

Geology and Landform

Since 1800, over 90 significant earthquakes have jolted the Los Angeles region. There are over 50 active and potentially active fault segments, an undetermined number of buried faults, and at least four blind thrust faults capable of producing damaging earthquakes in Los Angeles County. The California Alquist-Priolo Earthquake Fault Zoning Act of 1972 and Section 113 of the County Building Code prohibits the location

of most structures for human occupancy across the traces of active faults, and lessens the impacts of fault rupture. In addition, the California Seismic Hazards Mapping Act of 1990 regulates developments as defined by the Act. Seismic Hazard Zone Maps depict areas where earthquake induced liquefaction or landslides have historically occurred, or where there is a high potential for such occurrences.

Additional information describing the existing geologic setting for the unincorporated areas, including a description of each of the active faults, is found in Section 5.6, *Geology and Soils,* of this DEIR. The main issues in the unincorporated areas associated with geology and landform include 1) seismic hazards and the associated effects and damage caused by earthquakes; and 2) geotechnical, or hillside, hazards, as more than 50 percent of the unincorporated areas are comprised of hilly or mountainous terrain. The vast majority of hillside hazards include mud and debris flows, active deep seated landslides, hillside erosion, and man-induced slope instability. The County's Hillside Management Area Ordinance regulates development in hillsides that have natural slope gradients of 25 percent or steeper to address these potential hazards. The Proposed Project includes an update to the Hillside Management Ordinance, which is analyzed in Section 5.4, Biological Resources of this DEIR.

Hazards and Hazardous Materials

Hazardous materials refer generally to hazardous substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (e.g., household cleaners, industrial solvents, paint, pesticides, etc.) and in the manufacturing of products (e.g., electronics, newspapers, plastic products, etc.). Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; and households. Accidental releases of hazardous materials have a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents. Additional information describing the environmental setting for existing hazards and hazardous materials including wildfire hazards, emergency response plans, airport hazards and the regulatory framework for the unincorporated areas is found in Section 5.8, *Hazards and Hazardous Materials*, of this DEIR.

Historic and Cultural

Historic, cultural, and paleontological resources include historic buildings, structures, artifacts, sites, and districts of historic, architectural, archaeological, or paleontological significance. Los Angeles County has many historical landmarks and points of historical interest in its jurisdiction, including the remnants of vast ranchos, routes of early explorers, historic railroad lines, and the homes of prominent people who shaped local history. The State Historical Resources Commission administers the California Register, which lists 506 historic resources throughout Los Angeles County. While the great majority of these resources are located in cities, 30 are located in the unincorporated areas. Numerous places countywide have also yielded fossils, especially in the hills and in the vicinity of Rancho La Brea. The County promotes cooperative efforts between public and private organizations to identify, restore, and conserve these resources. The County is guided in development decisions by federal, state, and local programs that officially recognize these resources, including programs administered and protected by the Los Angeles County Historical Landmarks and Records Commission, the California State Parks Department's Office of Historic Preservation, and the National Park Service; as well as multiple legislative actions and codes including CEQA, the State Historical

4. Environmental Setting

Building Code, the Archaeological Resources Protection Act of 1979, the Native American Heritage Act of 1992, and the National Historic Preservation Act of 1966. These agencies and measures coordinate and support public and private efforts to identify, evaluate, and protect the County's historic and archeological resources. Major issues associated with historic and cultural resources include 1) incompatible land uses and development on or adjacent to resources, 2) a lack of a local registry, and 3) the limitations of state and federal programs to protect resources. See DEIR Section 5.5, *Cultural Resources*.

Hydrology and Water Quality

In Los Angeles County, there are six major watershed areas with over 900 miles of major river systems, 3600 miles of smaller streams, and 25 square miles of pond, lake, and reservoir surface. Also located within Los Angeles County are a number of regional groundwater recharge areas called spreading grounds, which capture close to 80 percent of the runoff that flows from the mountains. Most spreading grounds are owned by the Los Angeles County Flood Control District. The total area of regional spreading grounds countywide is 3,361 acres. Los Angeles County also contains 21 groundwater basins in the coastal plain and valleys. Except during times of drought, groundwater extraction accounts for nearly 1/3 of the water usage in the unincorporated areas. In rural areas, hundreds of households depend solely on private wells that tap into local groundwater sources.

The County works with other stakeholders, including the Los Angeles County Flood Control District, in various ways to manage the function and health of its watersheds. In 1975, the Los Angeles Regional Water Quality Control Board (Los Angeles Regional Board) adopted two basin plans: one for the Santa Clara Basin and another for the Los Angeles Basin. The Basin Plans designate beneficial uses for inland and coastal surface waters, establish water quality objectives and implementation programs and policies to protect those uses.

The National Pollutant Discharge Elimination System (NPDES) is a permitting program that establishes a framework for regulating municipal, industrial, and construction stormwater discharges into surface water bodies, including stormwater channels. The Los Angeles Regional Board, Central Valley Regional Water Quality Control Board, and Lahontan Regional Water Quality Control Board are responsible for implementing the federally-mandated NPDES program in Los Angeles County. Consequently, the County has a Stormwater Ordinance that requires that the discharge, deposit, or disposal of any stormwater and/or runoff to storm drains must be covered by an NPDES Stormwater Permit. As part of its NPDES Program, the Los Angeles Regional Board adopted a new Municipal Separate Storm Sewer Permit (MS4 Permit) in 2012. The MS4 Permit imposes a number of basic programs in order to maintain a level of acceptable runoff conditions through the implementation of Best Management Practices (BMPs) that mitigate stormwater quality problems.

Ocean areas requiring the protection of marine species or biological communities from an undesirable alteration in natural water quality are designated by the California Water Resources Control Board as Areas of Special Biological Significance (ASBSs). There are 34 areas designated as ASBS. Of those, six are located within the jurisdiction of the County. Five ASBSs are located off the coasts of the Channel Islands (one along the coastline of the San Clemente Island and four along the coastlines of Santa Catalina Island). The sixth ASBS (designated as "ASBS-24") is located along the coast of Ventura County and Los Angeles County, extending from Laguna Point to Latigo Point. About two-thirds of ASBS-24 lies along the coastline of Los

Angeles County. Federal and state policies prohibit the discharge of pollutants into areas identified as ASBS. The County, the Los Angeles County Flood Control District, cities and other public jurisdictions, and private property owners own and maintain dozens of storm drains that discharge into ASBS-24.

Additional information describing the existing hydrology for the unincorporated areas is found in Section 5.9, *Hydrology and Water Quality*, of this DEIR.

Minerals Resources

Mineral resources include existing surface mining activities and known deposits of commercially-viable minerals and aggregate resources, as well as areas suitable for the drilling for and production of energy resources, including crude oil and natural gas. Oil production still occurs in many parts of the unincorporated areas, including the Baldwin Hills and the Santa Clarita Valley and is regulated by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR). The Los Angeles metropolitan area produces and consumes more construction aggregate than any other metropolitan area in the country. The County depends on the California Geological Survey to identify deposits of regionally-significant aggregate resources. These clusters or belts of mineral deposits are designated as Mineral Resource Zones (MRZ-2s). Four major MRZ-2s are identified in, or partially within the unincorporated areas: Little Rock Creek Fan, Soledad Production Area, Sun Valley Production Area, and Irwindale Production Area. The California Department of Conservation protects mineral resources to ensure adequate supplies for future production. The California Surface Mining and Reclamation Act of 1975 (SMARA) was adopted to encourage the production and conservation of mineral resources, prevent or minimize adverse effects to the environment, and protect public health and safety. In a joint regulatory effort, SMARA authorizes local governments to assist the State in issuing mining permits and monitoring site reclamation efforts. Title 22 of the County Code (Part 9 of Chapter 22.56) requires that applicants of surface mining projects submit a Reclamation Plan prior to receiving a permit to mine, which must describe how the excavated site will ultimately be reclaimed and transformed into another use. Major issues associated with mineral resources in the County relate to the incompatible development of land near mineral resource extraction and production activities. See DEIR Section 5.11, *Mineral Resources*.

Noise

The typical community noise environment is made up of background or "ambient noise," and higher, "intrusive" levels of noise. In the unincorporated areas, the major sources of noise come from transportation systems, such as commercial and private airports, rail and bus networks, and the regional freeway and highway system. Other major sources of noise have historically been identified with industrial uses, such as manufacturing plants.

A host of federal and regional agencies are tasked with addressing noise control and abatement in various capacities, depending on their jurisdiction, primarily related to transportation. These include the Occupational Safety and Health Administration (OSHA), the U.S. Department of Transportation (DOT), the Federal Aviation Administration (FAA), the Federal Transit Administration (FTA), Federal Railroad Administration (FRA), the Federal Highway Administration (FHWA), and the County Airport Land Use Commission (ALUC).

4. Environmental Setting

Additional state and regional regulatory codes that relate to noise abatement include Title 24 of the Uniform Building Code, the Vehicle Code, the California Code of Regulations, and the County Noise Control Ordinance. Reducing noise impacts through coordinated land use and transportation planning is the primary issue associated with noise in Los Angeles County. See DEIR Section 5.12, *Noise*.

Population and Housing

The County estimates that the 2013 population in the Project Area is 1,066,415 persons, representing approximately 10.9 percent of Los Angeles County's total population. According to the California Department of Finance (DOF), there were 1,057,194 residents in the Project Area in 2010, representing 10.8 percent of Los Angeles County's total population. Based on DOF estimates, this is a population increase of 7.2 percent from 2000 to 2010. This period significantly outpaced growth in the previous decade–only 1.6 percent growth between 1990 and 2000. The rapid increase in residents between 2000 and 2010 is the result of the housing construction boom and increasing household sizes experienced throughout Southern California in the early 2000s. Since the softening of the housing market, beginning in 2006, the pace of population growth and residential development has slowed.

There were 300,478 housing units within the Project Area in 2013, comprising approximately 8.7 percent of all housing units within Los Angeles County. The DOF estimates that there were 316,888 units in 2010. The discrepancy in numbers of housing units reflects differences in data collection and analysis, not demolition permits. According to the DOF, the majority of homes in the Project Area are single-family detached units; however, there are housing opportunities in mobile homes, apartments of varying scales, and single-family attached units, such as townhomes. The high percentage of single-family detached and attached housing units reflects the current suburban nature of several unincorporated areas. See DEIR Section 5.13, *Population and Housing*.

Public Services and Utilities

Public services and facilities in Los Angeles County provide for drinking water, sanitary sewers, solid waste, utilities, early care and education, and libraries. Major issues identified with respect to the planning and maintenance of services and utilities in the unincorporated areas include 1) the adequate collection of development fees; and 2) the need for a comprehensive system to effectively track planned development and corresponding infrastructure and service needs.

Drinking Water

The County provides a continuous supply of clean water for everyday uses through a complex water management system, which consists of numerous water providers, water control boards and other agencies. A combination of local and imported water supplies is delivered through an intricate system of aqueducts, reservoirs, and groundwater basins. Water is imported into the County from three sources: the Colorado River, the Bay Delta in Northern California via the State Water Project, and the Owens Valley via the Los Angeles Aqueduct.

Water services are provided by a complex network of water districts, water wholesalers and private companies that specialize in developing and improving water service for their customers. Most of the imported water utilized in the unincorporated areas is provided by the Metropolitan Water District, Castaic Lake Water

Agency, Antelope Valley/East Kern Water Agency, Littlerock Creek Irrigation District and the Palmdale Water District. In accordance with the California Urban Water Management Planning Act of 1983, every urban water supplier that annually serves 3,000 or more customers, or provides more than 3,000 acre feet of water, must prepare and adopt an Urban Water Management Plan (UWMP), which evaluates and addresses water supplies, reclamation programs, and conservation activities.

The overall demand for water is projected to increase dramatically to 2035, and the cost, quality and availability of water will affect future development patterns. Major issues associated with drinking water include 1) the need for the unincorporated areas to reduce its reliance on imported water sources (e.g., two thirds of residential water use is attributed to landscape maintenance); and 2) the need to increase the water supply through recycling and desalination.

Sanitary Sewers

The Los Angeles County Sanitation Districts (LACSD), the Consolidated Sewer Maintenance District (CSMD), and municipal septic or wastewater systems all contribute to ensuring that the sanitary sewage system operates properly to protect public health. The LACSD, which are a confederation of 24 independent districts, serve the wastewater and solid waste management needs of approximately 5.2 million people, cover over 800 square miles and service 78 cities and the unincorporated areas. As of 2005, the LACSD owned, operated and maintained 1,340 miles of sewers that conveyed 510 million gallons per day (gpd) of wastewater, 200 million gpd of which is recycled, to 11 wastewater treatment plants. The service areas for the County's sewer systems include the Joint Outfall System, which is a partnership of 17 of the 24 independent sanitation districts, the Santa Clarita Valley and the Antelope Valley.

The County Department of Public Works (DPW), on behalf of the CSMD, maintains 4,600 miles of main line sewers, 155 pumping stations, and four sewage treatment plants. The DPW Environmental Programs Division also permits and inspects industrial waste discharge into local sewers. The Sewer System Management Plan (SSMP) controls and mitigates sewer sanitary overflows. Major issues associated with the County's sewer systems in the unincorporated areas are their age and need for upgrades.

Solid Waste

The County has the largest solid waste management system in the country. There are seven major solid waste landfills, four minor solid waste landfills and two waste-to-energy facilities. In 2012, the County's service area generated, on average, 58,987 tons per day (tbd) of solid waste. Assembly Bill 939, also known as the California Integrated Waste Management Act of 1989, mandates local jurisdictions to meet a diversion goal of 50 percent by 2000 and thereafter. Major issues identified with respect to solid waste include 1) the growing amounts of waste being generated and disposed of; 2) a shortage of solid waste processing facilities; 3) strong public opposition for new solid waste management facilities; 4) promoting alternative technologies; and 5) trash hauling.

Utilities

The County's utility infrastructure, information and communication networks are layered with utility rights of way and properties that contain tower structures, substations, generating plants, pipelines, storage fields, valve stations, wells, radio and television studios and other equipment facilities. In the unincorporated areas, most

electric, natural gas, or telecommunication services are delivered by private service providers. Major issues associated with utility services in the unincorporated areas include 1) the need to upgrade the power grid and service capabilities and educate the public on energy conservation; 2) problems associated with the region's substantial population growth outpacing the development of new natural gas supplies, much of which is imported from out of state; and 3) land use compatibility in siting infrastructure facilities that are necessary for the delivery of energy and information resources, especially finding locations with specific geologic conditions to ensure efficiency and reliability.

Education

The County's role in developing and managing educational facilities and programs is limited. However, the Los Angeles County Office of Education (COE), which is the country's largest regional education agency, serves as an intermediary between the local school districts and the California Department of Education. The COE is guided by a seven member County Board of Education, which is appointed by the Board of Supervisors. The COE provides a vision statement and strategic opportunities for educational facility development to coordinate the assessment of facility needs and the construction of schools that fall to individual school districts. Another role that the County plays in coordinating in public school facilities is through the County subdivision approval process, in which developers are required to assess the need for, and in some cases provide, land for the construction of public schools within their development. Development impact fees, based on the size of a development, are distributed to the appropriate school district for the construction of school facilities before the County issues any building permits. Issues associated with educational facilities involve 1) the effective coordination between land use planning and school facilities planning—providing the benefit of joint-use agreements to benefit communities and create operational and economic efficiencies; and 2) the shortage of early care and education facilities in the unincorporated areas.

Libraries

The County of Los Angeles Public Library is one of the largest public library systems in the country. In fiscal year 2011-2012, the Library staff circulated 16.5 million items to 3.1 million cardholders; answered over 8 million reference questions; provided 18,000 programs to 500,000 children, teens, and adults; and assisted the public with three million internet sessions on the Library's public access computers. The Library system is a special fund County department operating under the direction of the Board of Supervisors. The County applies a library facilities mitigation fee to new residential developments in the unincorporated areas. This fee is intended to mitigate the significant adverse impacts of increased residential development on the Library system.

The majority of the County's 86 libraries are undersized and understocked to meet the service needs of current and projected populations served by the Library system. A study conducted by the Library in April 2001 determined that many of the County's libraries do not meet basic facility and service planning guidelines. In addition, the study determined that by 2020, 77 percent of existing libraries will not meet the Library's current service level planning guideline of 2.75 items (books and other library materials) per capita. Many existing County libraries are located in areas with little or no new residential development, and therefore, there are no mitigation fees or other reliable sources of capital funding available to replace or expand them.

Sheriff

The Los Angeles County Sheriff's Department (LASD) is the largest sheriff's department in the country. In addition to specialized services, the LASD is divided into 10 divisions, including the Office of Homeland Security, which focuses on potential threats related to local homeland security issues, such as terrorism or bioterrorism. The LASD provides law enforcement services to more than one million people living within 90 unincorporated communities, as well as to more than four million residents living within 40 contract cities. In addition, LASD provides law enforcement services to nine community colleges, Metro, and 48 Superior Courts. In addition to proactive enforcement of criminal laws, the LASD also provides investigative, traffic enforcement, accident investigation, and community education functions. The Field Operation Regions are centered on 25 patrol stations that are dispersed throughout Los Angeles County. Los Angeles also maintains mutual aid agreements across jurisdictional boundaries for emergency response needs that exceed local resources

Fire

The Fire Department provides fire, safety, and emergency medical services to the unincorporated areas. Additionally, many cities within Los Angeles County utilize Fire Department services. There are three major geographic regions in the Fire Department service area, which are divided into nine divisions and 22 battalions. The Fire Department operates multiple divisions including Air and Wildland, Fire Prevention, Forestry, and Health Hazardous Materials. The Fire Department is a special district and receives most of its revenue from the unincorporated areas from a portion of the ad valorem property tax paid by the owners of all taxable properties. Major issues associated with fire hazards include 1) the increase in the frequency and duration of wild fires and the increasing cost and danger to residents, property, and the environment; and 2) urban fire considerations due to the intensity of development, the number of potentially affected populations, and the difficulties of containment.

Parks

The County owns and operates parks and recreational facilities in both unincorporated areas and cities in Los Angeles County. The County's park system, including facilities that are owned, operated, and maintained by the County totals nearly 70,000 acres. The system includes local parks (i.e., community parks, neighborhood parks, pocket parks, and park nodes), regional parks (i.e., community regional parks, regional parks, and special use facilities), trails, as well as other facilities such as multi-benefit parks, school sites, city parks and facilities, private recreational facilities, and greenways. These facilities serve the local needs of communities in the unincorporated areas, as well as regional needs countywide. The County Department of Parks and Recreation (DPR) offers a wide variety of recreation programs to meet the diverse needs of residents, ranging from organized sports, tournaments, scheduled classes, and special events, to more individualized, casual leisure activities such as family picnics and walking. The County pays for its parks and recreational resources through the collection of fees through the California Quimby Act, Proposition A, the California Landscaping and Lighting District assessments, and Mello-Roos Districts. Major issues associated with parks include the need to 1) plan for a diversity of needs and users; 2) acquire and develop additional parkland in underserved areas; 3) improve and expand the multi-use trail system; protect important historical and natural resources; 4) design and implement sustainable practices.

4. Environmental Setting

Flood Control

Federal, state, and local agencies share and coordinate responsibilities for flood protection in Los Angeles County. The two main federal agencies include the U.S. Army Corps of Engineers, which implements federal flood protection policies, and the Federal Emergency Management Agency (FEMA). The California Department of Water Resources is responsible for managing the state's waterways. Locally, the DPW and the Los Angeles County Flood Control District work to reduce flood risk in Los Angeles County. Since 1980, the County has been a voluntary participant in the FEMA National Flood Insurance Program (NFIP). As a participant, the County is responsible for regulating development in Flood Hazard Zones and planning for floodplain management activities that promote and encourage the preservation and restoration of the natural state of the floodplain. Major issues related to flood control include 1) flood hazards and the impacts of climate change; and 2) the effects of climate change, is expected to produce longer and more severe droughts due to higher average temperatures, as well as greater and more frequent floods.

Additional information describing the existing provision of services and utilities in Los Angeles County is found in Sections 5.14, *Public Services*, and 5.17, *Utilities and Service Systems,* of this DEIR.

Scenic Features

Scenic resources in the unincorporated areas consist of designated scenic highways and corridors (or routes), hillsides, viewsheds and ridgelines. The unincorporated areas contain three designated scenic highways that are protected by the Existing General Plan. Scenic hillsides include the San Gabriel Mountains, Verdugo Hills, Santa Susana Mountains, Simi Hills, Santa Monica Mountains and Puente Hills. Hillsides play a major role in physically defining the diverse communities in the unincorporated areas. They not only create dramatic backdrops against densely developed suburbs and communities, but also provide extensive environmental and public benefits to residents. The vast majority of the native plant and animal species reside within the hilly and mountainous terrain. Scenic viewsheds vary by location and community and can include ridgelines, unique rock outcroppings, waterfalls, ocean views or various other unusual or scenic landforms. Finally, there are numerous ridgelines that provide dramatic views for the unincorporated areas. Major issues associated with scenic resources involve 1) their protection from human activities; and 2) regulation of hillsides and hillside development. The County Hillside Management Area (HMA) Ordinance applies to all unincorporated areas that contain terrain with a natural slope of 25 percent or greater. The goal of the ordinance is to ensure that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character.

Traffic and Circulation

Los Angeles County has one of the largest transportation systems in the world, providing rail, bus, paratransit, roadway, bikeway, and pedestrian mobility systems throughout Los Angeles County. Local agencies responsible for transportation services in Los Angeles County coordinate their activities to comply with the goals and policies of the SCAG RTP/SCS, and Los Angeles County Metropolitan Transportation Authority (Metro). Metro is the county-level transportation planning agency responsible for the preparation of the Long Range Transportation Plan (LRTP). The County, the 88 cities in Los Angeles County, and other transportation agencies engage in transportation planning activities by participating in the development and implementation of the RTP and LRTP. Metro is also the Congestion Management Agency for Los Angeles County and is responsible for implementing the Congestion Management Program (CMP).

Los Angeles County is served by a large public transit system that includes rail systems and various bus service options, such as transitways and bus rapid transit systems. Metro operates the Metro rail system, which is exclusively within Los Angeles County. Two additional rail service operators are Metrolink and Amtrak. The Southern California Regional Rail Authority (SCRRA) operates the 416-mile Metrolink commuter rail system, which has its hub in Downtown Los Angeles at Union Station and extends to Ventura, San Bernardino, Riverside, Orange, and San Diego counties, and serves some of the unincorporated areas. Amtrak provides interstate service from points around the country to Union Station, as well as regional service between major cities throughout California.

The California Department of Transportation (Caltrans) is the state agency responsible for the maintenance of freeways and highways. The County is responsible for the design, construction, operation, maintenance, and repair of roads in the unincorporated areas, as well as in a number of local jurisdictions that contract with the County for these services.

There are 15 public-use airports located in Los Angeles County and one military airport located on San Clemente Island. Los Angeles County also has an extensive rail network that is focused on the efficient and safe movement of goods throughout the region. Other supportive facilities include the ports of Los Angeles and Long Beach. The Ports are key links in the global economy and handle a variety of cargo. Combined the ports represent one of the largest and most efficient international shipping ports in the country, and the fifth busiest container port in the world.

Major issues associated with circulation and mobility include the need to 1) provide streets that accommodate all users; 2) create a multimodal transportation system; 3) coordinate transportation and land use planning; 4) ensure a safe and efficient movement of goods; and 5) reduce impacts of transportation on natural and community resources. See DEIR Section 5.16, *Transportation and Traffic*.

4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15355 of the CEQA Guidelines defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts are the change caused by the incremental impact of an individual project compounded with the incremental impacts from closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed when the project's incremental effect is considerable. It further states that this discussion of cumulative impacts shall reflect the severity of the impacts and the likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources:

1) A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or

2) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified,

> which described or evaluated regional or areawide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

The cumulative impact analysis contained in this DEIR uses method No. 2, as described above. The Proposed Project consists of the Los Angeles County General Plan Update, amendment to Title 22 (Planning and Zoning) of the Los Angeles County Code for zoning consistency (including updates to the SEA and HMA ordinances), and a Community Climate Action Plan. Consistent with Section 15130(b)(1)(B) of the CEQA Guidelines, this DEIR analyzes the environmental impacts of development in accordance with the proposed Land Use Policy Map. As a result, this DEIR addresses the cumulative impacts of development within the unincorporated areas and the larger Los Angeles County region surrounding it.

On April 4, 2012, SCAG adopted the 2012 RTP/RTP/SCS to help coordinate development of the region's transportation improvements. The RTP is a long-range transportation plan that is developed and updated by SCAG every four years. The RTP provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs. Cumulative growth assumptions for the incorporated cities utilize the growth projections contained in SCAG's RTP/SCS. Projected growth related to the Proposed Project was provided by the County Department of Regional Planning. Cumulative growth projections for cities and unincorporated areas are shown on Table 4-3.

Table 4-3 Cumulative Growth Projections 2013, 2035, and Post 2035

	Baseline 2013	2035[3]	2013–2035 Change	Post 2035[2]
Project Area (Unincorporated Areas)				
Housing Units	300,478[2]	405,500	35.0%	668,910
Population	1,066,415[2]	1,399,500	31.2%	2,383,372
Employment	252,660[2]	318,100	25.9%	477,860
Cities				
Housing Units	3,153,787[1]	3,446,500	9.3%	N/A
Population	8,917,701[1]	9,953,500	11.6%	N/A
Employment	4,212,240[1]	4,508,900	7.0%	N/A
Los Angeles County				
Housing Units	3,463,382[1]	3,852,000	11.2%	N/A
Population	9,958,091[1]	11,353,000	14.0%	N/A
Employment	4,464,900[1]	4,827,000	8.1%	N/A

Sources:
[1] California Department of Finance.
[2] County of Los Angeles 2013.
[3] SCAG 2012–2035 RTP/SCS.
Notes:
The numbers shown here for 2035 are SCAG projections. The Los Angeles County General Plan will not be built out within the SCAG RTP/SCS horizon of 2035.
N/A = Data not available.

Potential cumulative impacts related to traffic, air quality, greenhouse gas emissions and noise, which have the potential for impacts beyond the boundaries of the unincorporated areas, have been addressed through use

of a traffic model. To assess the effects of potential land use changes on the transportation system, the regional travel demand model of SCAG) has been applied. The SCAG model covers the six county areas (Los Angeles plus Orange, Ventura, Riverside, San Bernardino and Imperial counties). Within Los Angeles County, the model includes both city land area and unincorporated areas. Thus, the model is the appropriate tool to test changes in land uses with the Proposed Project, and to also take into account changes and growth in the surrounding cities. The SCAG model includes a 2008 base year and a 2035 future horizon year. Both models were used for this analysis. The 2008 model is used for the "Existing plus Project" analysis for purposes of CEQA review, and the future 2035 model was also reviewed to understand future buildout of land uses at 2035.

Regional growth outside of Los Angeles County has accounted for traffic, air quality, and noise impacts through use of this model, which is a socioeconomic traffic model that uses regional growth projections to calculate future traffic volumes. The growth projections developed by the County, along with growth for the surrounding area, are used for the cumulative impact analyses of this DEIR. Please refer to Chapter 5 of this DEIR for a discussion of the cumulative impacts associated with development and growth within the unincorporated areas and of the Los Angeles region.

4. Environmental Setting

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5. Environmental Analysis

5.1 AESTHETICS

This section of the Draft Environmental Impact Report (DEIR) evaluates potential impacts to the visual appearance and character of the Project Area from implementation of the Proposed Project, which includes an update to the Los Angeles County General Plan (Proposed General Plan Update), and changes to the Los Angeles County Zoning Ordinance. This section includes a discussion of the qualitative aesthetic characteristics of the existing environment that would be potentially degraded by implementation of the Proposed Project. The following evaluation assesses the potential impacts related to visual character, scenic vistas, scenic highways, and light and glare.

5.1.1 Environmental Setting

5.1.1.1 REGULATORY SETTING

State and local laws, regulations, plans, or guidelines that are potentially applicable to the Proposed Project are summarized below. There are no federal regulations related to aesthetics that would apply to the Proposed Project.

State Regulations

California Scenic Highway Program

The California Scenic Highway Program, which is maintained by the California Department of Transportation (Caltrans), protects scenic state highway corridors from changes that would diminish the aesthetic value of lands adjacent to these highways. The roadways in the Project Area that are designated as state scenic highways are discussed below under the Scenic Highways subsection of Section 5.1.1.2, *Existing Conditions*.

California Building Code

The California Building Code, Part 2 of Title 24 in the California Code of Regulations (CCR), is based on the International Building Code and combines three types of building standards from three different origins:

- Building standards that have been adopted by State agencies without change from building standards contained in the International Building Code.
- Building standards that have been adopted and adapted from the International Building Code to meet California conditions.

- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the International Building Code that have been adopted to address particular California concerns.

The California Building Code includes standards for outdoor lighting that are intended to improve energy efficiency, and to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls.

Local Regulations

Los Angeles County Code

Several sections of the Los Angeles County Code affect visual resources in the Project Area. The following sections provide a brief overview of the applicable sections.

Title 21 – Subdivisions

Title 21 would apply in the event that new subdivisions are proposed in accordance with the Proposed Project. Chapter 21.24 (Design Standards) of Title 21 contains provisions pertaining to the regulation of the design of highways, local streets, lots; special requirements that regulate aspects of potential development including landscaping.

Title 22 – Planning and Zoning

Title 22 (Zoning Ordinance) describes the development standards that apply to each zone (e.g., height limits, setbacks, etc.). Chapter 22.20 (Residential Zones) contains provisions that regulate the uses that are permitted in residential zones, as well as the development standards that apply in those zones. Chapter 22.48 (Yards, Highway Lines and Highways) contains provisions that pertain to the regulation of, and development standards for highways and parkways. Part 9 (Rural Outdoor Lighting District) of Chapter 22.44 (Supplemental Districts) allows for the establishment of rural outdoor lighting districts, which promote and maintain dark skies for the health and enjoyment of individuals and wildlife. The regulations in Chapter 22.44 are in addition to other provisions in the Zoning Ordinance that regulate light and glare. Part 2 (Community Standards Districts) of Chapter 22.44 contains development regulations for a list of communities that form districts for this purpose. The development standards outlined in Part 2, which apply to these districts, supersede the countywide standards in the Zoning Ordinance. Finally, Chapter 22.52 (General Regulations) contains a number of general regulations, including Part 10 (Signs), which regulates the design and siting of all signs in the Project Area. Part 10 is discussed further below.

Hillside Management Areas (HMAs) Ordinance

With related provisions contained in Section 22.56.215 (Hillside Management and Significant Ecological Areas—Additional Regulations) of the Zoning Ordinance, Hillside Management Areas (HMAs) were established to ensure that development preserves the physical character and scenic value of areas of the Project Area with a natural slope of greater than 25 percent. In order to accomplish this, provisions relating to HMAs encourage protecting scenic hillside views and conserving natural hillside character. The Proposed Project includes a revised draft of the HMA Ordinance, as discussed in detail in Chapter 3, *Project Description*.

Mills Act Program

Part 26 (Los Angeles County Mills Act Program) of Chapter 22.52 (General Regulations) of the Zoning Ordinance is commonly referred to as the Los Angeles County Mills Act Program. The purpose of the program is to provide an incentive for owners of qualified historical properties within the unincorporated areas of the Project Area to preserve, restore, and rehabilitate the historic character of such properties, thereby providing a historical, architectural, social, artistic, and cultural benefit to the citizens of the Project Area, as authorized by the provisions of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code, the provisions of which are commonly known as the "Mills Act." Further information on the Mills Act is provided in Chapter 5.5, *Cultural Resources*.

Oak Tree Ordinance

Contained in Part 16 (Oak Tree Permits) of Section 22.56 (Conditional Use Permits, Variances, Nonconforming Uses, Temporary Uses and Director's Review) of the Zoning Ordinance, the Oak Tree Ordinance was established to recognize oak trees as significant aesthetic, historical and ecological resources. The ordinance establishes permitting requirements for removal of protected oak trees.

Signs

Part 10 (Signs) of Chapter 22.52 (General Provisions) of the Los Angeles County Code regulates the design, siting, and maintenance of signs in the Project Area. These regulations are intended to provide standards for the protection of property values, visual aesthetics, and the public health, safety and general welfare of citizens, while still providing ample opportunities for businesses and the visual advertising industry to operate successfully and effectively.

Conditional Use Permits

Where other portions of the County Code have established standards that would trigger the necessity of a Conditional Use Permit (CUP), Section 22.56 (Conditional Use Permits, Variances, Nonconforming Uses, Temporary Uses and Director's Review), Part 1 (Conditional Use Permits), contains regulations that pertain to the County's review of such permits. This section establishes that the purpose of CUPs is to allow for special consideration where particular project characteristics exist relating to the project's size, technological process or type of equipment, or because of its location with reference to surroundings, street or highway width, traffic generation or other demands on public services. Provisions in Section 22.56 ensure that development projects subject to review associated with a CUP are consistent with applicable development standards and thereby, consistency with other developments held to those same standards.

Healthy Design Ordinance (Ordinance 2013-0001)

The 2013 Healthy Design Ordinance amended portions of Titles 21 (Subdivisions) and 22 (Planning and Zoning), to establish certain uses, permit requirements, and development standards that encourage healthy lifestyles in the Project Area by promoting walking, biking, and other exercise, and by creating better access to healthy foods. The aspects of this ordinance, which would most impact visual resources, are the changes to the minimum width of sidewalks, requirements for bike parking, as well as altered permit requirements that

require more detailed street section designs on tentative plans in order to depict healthy design features such as landscaping, lighting, and street furniture.

Significant Ecological Areas (SEAs) Ordinance

The SEA Ordinance regulates SEAs, which have been identified representing a wide range of biotic communities. Their complex ecological relationships are the subject of both aesthetic enjoyment as well as scientific study. The Proposed Project includes a revised draft of the SEA Ordinance, which is discussed in detail in Chapter 3, *Project Description*.

Existing Community-Based Plans and Existing Specific Plans

While the Planning Areas Framework of the Proposed Project is intended to aid in the update of existing community plans and creation of additional community plans, community-based plans and implementation tools, specific plans currently exist and contain policies and standards that regulate visual resources in their respective Planning Areas. Some examples of these existing plans include the Altadena Community Plan, and the Walnut Park Neighborhood Plan. An example of how these plans regulate visual resources in their respective jurisdictions is Issue 2 in the Altadena Community Plan, which calls for the preservation of existing single-family character in Altadena.

5.1.1.2 EXISTING CONDITIONS

Los Angeles County is a vast and visually diverse area. The visual setting of Los Angeles County is comprised of both the built and natural environments, as well as the interface between the two. Built environments include commercial, office, residential, industrial, institutional, and public uses. Natural environments include coastlines, beaches, foothills, mountains and ridgelines, forests, as well as desert environments. Because the Proposed Project uses the Planning Areas Framework, existing aesthetic conditions are described using this framework. Figure 3-5, *Los Angeles County Planning Areas*, shows the boundaries of the various Planning Areas established under the Planning Areas Framework of the Proposed General Plan Update.

Scenic Vistas and Corridors

The San Gabriel Mountains, Verdugo Hills, Santa Susana Mountains, Simi Hills, Santa Monica Mountains and Puente Hills play a major role in physically defining the topographically and aesthetically diverse communities in the Project Area. These landforms not only create dramatic backdrops against developed communities, but also provide extensive environmental and public benefits to residents. While the Existing General Plan recognizes the importance of scenic resources in the Project Area, there are no specific views or corridors that are identified for conservation purposes. Nonetheless, the varied topography of Los Angeles County allows for an assortment of long range views from the Los Angeles Basin to the foothills and mountains, as well as long range views from the foothills and mountains to the Los Angeles Basin and coast. The impact of the Proposed Project with respect to these scenic resources is addressed below in Section 5.1.4, *Environmental Impacts*.

Scenic Highways

The State Scenic Highway Program was created in 1963 to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. Through the California Scenic Highway Mapping Program, Caltrans designates routes that are eligible to become state or county scenic highways, as well as historic parkways. These determinations are based on the scenic value of the lands surrounding these roadways, as well as how readily visible these resources are to those driving on the roadway. The adopted 1974 Los Angeles County Scenic Highway Plan was created to conform to the State Scenic Highway Program. According to state guidelines, a highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

Within the Project Area and as shown in Figure 5.1-1, *Scenic Highways*, there are three adopted state scenic highways: Angeles Crest Highway Route-2, from 2.7 miles north of I-210 to the San Bernardino County line; Mulholland Highway (two sections), from SR-1 to Kanan Dume Road, and from west of Cornell Road to east of Las Virgenes Road; and Malibu Canyon–Las Virgenes Highway, from SR-1 to Lost Hills Road. As shown in Figure 5.1-1, there are also eight highways in the Project Area identified with an "Eligible for State Scenic Highway" designation:

- SR-1 from the Orange County line to SR-19 (Lakewood Boulevard) in the City of Long Beach
- SR-1 from SR-187 (Venice Boulevard) in the City of Los Angeles to the Ventura County line
- SR-27 (Topanga Canyon Boulevard) from SR-1 to the City of Los Angeles city limit
- SR-67 from the Orange County line to SR-60 in the City of Diamond Bar
- SR-118 from the western City of Los Angeles boundary to the Ventura County line
- SR-210/I-5 from SR-134 in the City of Pasadena, through the City of Santa Clarita to the Ventura County line
- U.S. Route 101 from Topanga Canyon Boulevard to the Ventura County line
  (Caltrans 2014)

Visual Character

Overall, the visual character of Los Angeles County is highly varied and therefore best addressed in parts. This overview of the visual character of the Project Area is discussed using the Planning Areas Framework established as a part the Proposed Project. This framework divides Los Angeles County into 11 Planning Areas, as shown in Figure 3-5, *Los Angeles County Planning Areas*. The setting and visual character for each Planning Area is described below.

5. Environmental Analysis
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Antelope Valley Planning Area

Located approximately 60 miles north of Downtown Los Angeles, the unincorporated areas of the Antelope Valley Planning Area cover approximately 1,800 square miles, or 44 percent of the land area of Los Angeles County. This Planning Area contains many diverse vegetative communities, geologic forms and climatic conditions. The Angeles National Forest, and the Liebre and Sierra Pelona mountain ranges are located in this Planning Area. The visual character of northern portion of the Planning Area is characteristic of the high deserts of Southern California, with elevations between 2,300 and 2,400 feet above sea level. There is an abundance of open space with sparse vegetation and several areas with significant rock formations, including the Vasquez Rocks Natural Area Park. This Planning Area also contains the majority of active agricultural land uses in Los Angeles County. The visual appearance of the Planning Area has been influenced in recent decades growth in the City of Lancaster, the City of Palmdale, and surrounding portions of the Project Area.

Coastal Islands Planning Area

Two of the eight California Channel Islands, Santa Catalina Island and San Clemente Island, make up the Coastal Islands Planning Area.

Since 1934, San Clemente Island has been owned and operated by the U.S. Navy. More than a dozen range and operational areas are clustered within a 60 mile radius of San Clemente Island. The Commander-in-Chief U.S. Pacific Fleet is the major claimant for San Clemente Island, and the Naval Air Station North Island is responsible for its administration. As a result, the San Clement Island is uninhabited, with the exception of military personnel. The character of the Island is largely made up of a combination of relatively pristine natural habitat and military uses.

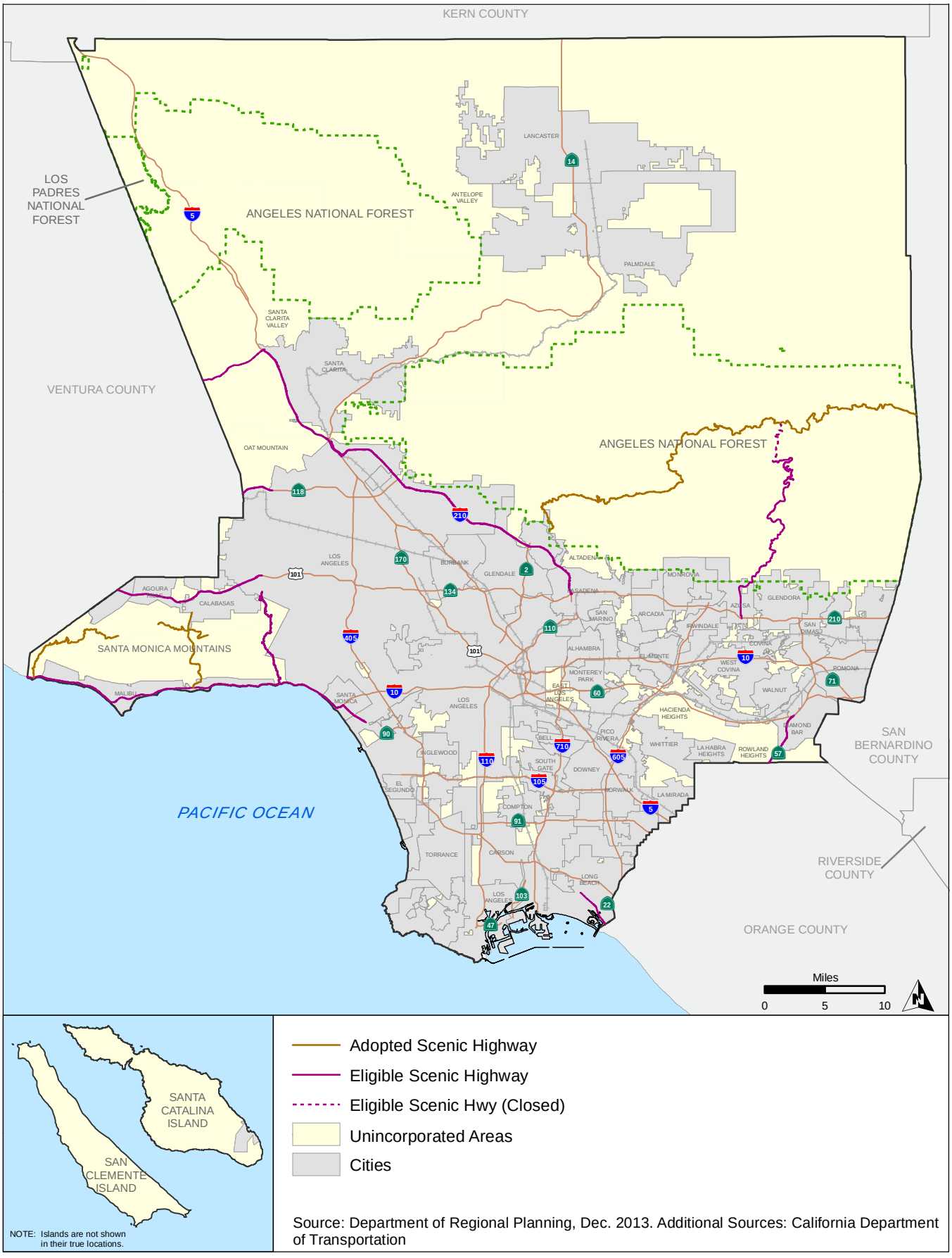
Santa Catalina Island is the only island near the California coast that is inhabited year-round by a civilian population. It is located approximately 22 miles south of the Palos Verdes Peninsula and 27 miles southwest of the Orange County shoreline. The Island does contain the City of Avalon, but the remainder of the island, with the exception of a few residencies, is largely in its natural state. Additionally, there are several camp facilities used by groups. The interior of the Island is largely chaparral. The Island is surrounded by several bays and cliffed shorelines, which allow for long range views and significant coastal and tideland habitats. The highest peak on the Island reaches an elevation of 2,069 feet.

East San Gabriel Valley Planning Area

The East San Gabriel Valley Planning Area contains the easternmost areas of Los Angeles County, and is located south of the Angeles National Forest, north of the Orange County border, and east of I-605. The visual character of this region is largely that of a typical suburban community with predominantly single-family residential uses, particularly in the areas closer to the foothills on the northern border of this Planning Area. There are a variety of recreational options and open space resources in the unincorporated portions of this Planning Area, including the Marshall Canyon Golf Course and the Puente Hills.

SCENIC HIGHWAYS

FIGURE 5.1-1



Source: Department of Regional Planning, Dec. 2013. Additional Sources: California Department of Transportation

5. Environmental Analysis
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Gateway Planning Area

The Gateway Planning Area is located in the southeastern portion of Los Angeles County. This Planning Area contains a number of cities, including the City of Long Beach, as well as a large corridor of industrial areas that lead out of the ports of Los Angeles and Long Beach into Downtown Los Angeles. Unincorporated Rancho Dominguez consists primarily of industrially-designated land. While the character of this Planning Area is dominated by the urban form, there are several areas of open space that allow for some variety in the visual setting, including Turnbull Canyon, which is located in the northeastern portion of this Planning Area, as well as portions of the Los Angeles and San Gabriel Rivers, which flow through this Planning Area.

Metro Planning Area

The Metro Planning Area is located in the geographic center of Los Angeles County. This Planning Area is home to and heavily defined by its proximity to Downtown Los Angeles, which includes major corporations and professional firms, tourist and convention hotels, restaurants, retail, and the largest concentration of government offices outside of Washington D.C. The majority of this Planning Area is built out and relatively flat. There are no large areas of natural open space. All open space areas are contained with parks and recreational areas. The Los Angeles River and the Compton Creek tributary flow through this Planning Area; however, they are largely channelized.

San Fernando Valley Planning Area

The San Fernando Valley Planning Area is bordered by the Santa Clarita Valley and the Angeles National Forest to the north, and the Santa Monica Mountains Planning Area and Westside Planning Area to the south. This Planning Area has many distinguishing geographic characteristics. Almost the entire Planning Area is ringed with distinct hillsides and mountain ranges, including the Santa Susana Mountains to the northwest; the Simi Hills to the west; the Santa Monica Mountains and Chalk Hills to the south; the Verdugo Mountains to the east; and the San Gabriel Mountains to the northeast. Looking southeast, high-rises from Downtown Los Angeles can be seen from some neighborhoods, passes, and parks in the San Fernando Valley.

Santa Clarita Valley Planning Area

The Santa Clarita Valley Planning Area is bordered to the west by the Ventura County line; to the north by the Los Padres National Forest and Angeles National Forest; to the east by the Angeles National Forest; and to the south by a major ridgeline that separates the Santa Clarita Valley from the San Fernando Valley. This Planning Area is framed by the San Gabriel, Santa Susana, and Sierra Pelona mountain ranges, and the Angeles National Forest. As the fastest growing Planning Area, in terms of population; new suburban communities, construction as well as increasing traffic all contribute to the visual character of the region.

Santa Monica Mountains Planning Area

The Santa Monica Mountains Planning Area covers the scenic Santa Monica Mountains and the shoreline along the Pacific Coast to the Ventura County line to the north and west, and up to the San Fernando Valley

to the north. The eastern border of this Planning Area is the Westside Planning Area and the City of Los Angeles. While large portions are held in private ownership, this Planning Area contains a considerable amount of dedicated open space, recreation opportunities, and environmentally sensitive areas. High land values, an abundance of natural scenic resources, and steep coastal mountains contribute to the character of this region.

South Bay Planning Area

The South Bay Planning Area is located in the southwest corner of Los Angeles County. The Pacific Ocean provides the western border and the Gateway Planning Area and Metro Planning Area provide the eastern and northern borders. The majority of this Planning Area is comprised of low-level areas of the Los Angeles basin. The Palos Verde Peninsula consists of hills, open spaces and communities that abut cliffs and rocky shorelines along the Pacific Coast.

West San Gabriel Valley Planning Area

The Angeles National Forest is the northern border of the West San Gabriel Planning Area, while Downtown Los Angeles and the Gateway Planning Area make up its southern border. Similar to the East San Gabriel Valley Planning Area, much of the West San Gabriel Valley Planning Area is comprised of suburban land uses, however the communities in the West San Gabriel Valley Planning Area are significantly older than most of the communities in the East San Gabriel Valley Planning Area and this is reflected in the visual character of the area. The San Gabriel Mountains and Angeles National Forest provide a large range of open space and recreational opportunities and visual resources for area residents.

Westside Planning Area

The Westside Planning Area covers coastal communities including Marina del Rey, the westside of the City of Los Angeles, and other small cities, such as the cities of Santa Monica, Beverly Hills, and West Hollywood. This Planning Area contains several scenic beaches as well as one of the few remaining wetlands in Ballona Creek. The eastern portion of this Planning Area includes the Baldwin Hills and Kenneth Hahn State Park, which provide natural areas and recreational opportunities for area residents. Marina del Rey is the largest man-made small boat harbors in the country and is bounded by the City of Los Angeles. This Planning Area is highly varied, gradually transitioning from an intensely urban character in the northeastern portion of the Planning Area to more natural scenic areas along the coast.

Landforms

Natural landform features that are located throughout Los Angeles County include important geologic and scenic landform features, hillsides and ridgelines, canyons, creeks, prominent trees, and watershed areas.

Mountain Ranges

Los Angeles County contains portions of several mountain ranges, including the San Gabriel Mountains, Santa Monica Mountains, Santa Susana Mountains, and Verdugo Mountains (LAA 2014). The largest of these ranges, the San Gabriel Mountains contains Mount San Antonio, commonly referred to as Mount Baldy. Mount San Antonio tops out at just over ten thousand feet and can be seen from much of the southeastern

portion of Los Angeles County (USGS 2014). Los Angeles County also contains portions of the Chino Hills and Puente Hills, and all of the Palos Verdes Hills.

Los Angeles Basin

The Los Angeles Basin has been described as a bowl of sediment surrounded by the mountain ranges of Los Angeles County. The geologic forces that formed the basin have not only resulted in impacts related to hazards in the form of earthquake risk, but have also affected visual resources in that the large plain that was created contributes to the City of Los Angeles being the commercial, governmental and visual focal point of the region.

Watersheds

These features are shown in Figure 5.9-2, *Watersheds*, and a detailed discussion of the watersheds within Los Angeles County is provided in Chapter 5.9, *Hydrology and Water Quality*.

Coastline

The iconic coastline of Los Angeles County is one of the most distinctive aspects of the Project Area's visual landscape. Moreover, there is a significant amount of variety with respect to the landforms and character of landscapes along the coastline, ranging from open sandy beaches to rugged, cliffed portions that include offshore rocks. While the majority of Los Angeles County's coast is in cities, Marina del Rey, which is in the Westside Planning Area, is an important recreational and aesthetic resource in the Project Area.

5.1.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment with respect to aesthetics if the project would:

AE-1 Have a substantial adverse effect on a scenic vista.

AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

AE-3 Substantially degrade the existing visual character or quality of the site and its surroundings.

AE-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

5.1.3 Relevant General Plan Goals and Policies

The following are goals and policies contained in the Proposed General Plan Update that would reduce adverse effects related to aesthetics.

Land Use Element

Goal LU 1: A General Plan that serves as the constitution for development, and a Land Use Policy Map that implements the General Plan's Goals, Policies and Guiding Principles.

- **Policy LU 1.2:** Discourage project-specific amendments to the text of the General Plan, including but not limited to the Guiding Principles, Goals, and Policies.

- **Policy LU 1.5:** In the review of a project-specific amendment(s) to convert OS-C designated lands to other land use designations, ensure that the project-specific amendment(s) does not contribute to the overall loss of open space that protects water quality, provides natural habitats, and contributes to improved air quality.

- **Policy LU 1.11:** Require a General Plan amendment for any deviation from the intensities, densities, and uses allowed by the General Plan (to apply the appropriate designation from the General Plan Land Use Legend), unless allowances for flexibility are specified in the specific plan.

- **Policy LU 1.12:** Require development regulations and zoning for new specific plans to be consistent with their corresponding General Plan land use designation.

Goal LU 2: Community-based planning efforts that implement the General Plan and incorporate public input, and regional and community level collaboration.

- **Policy LU 2.2:** Ensure broad outreach, public participation, and opportunities for community input in community-based planning efforts.

- **Policy LU 2.6:** Consider the role of arts and culture in community-based planning efforts to celebrate and enhance community character.

Goal LU 3: A development pattern that discourages sprawl, and protects and conserves areas with natural resources and SEAs.

- **Policy LU 3.1:** Encourage the protection and conservation of areas with natural resources, and SEAs.

- **Policy LU 3.2:** Discourage development in areas with high environmental resources and/or severe safety hazards.

- **Policy LU 3.3:** Discourage development in undeveloped areas where infrastructure and public services do not exist, or where no major infrastructure projects are planned, such as state and/or federal highways.

Goal LU 6: Protected rural communities characterized by living in a non-urban or agricultural environment at low densities without typical urban services.

- **Policy LU 6.7:** Protect rural communities from the encroachment of incompatible development that conflict with existing land use patterns and service standards.

- **Policy LU 6.8:** Encourage land uses and developments that are compatible with the natural environment and landscape.

- **Policy LU 6.9:** Encourage low density and low intensity development in rural areas that is compatible with rural community character, preserves open space, and conserves agricultural land.

Goal LU 7: Compatible land uses that complement neighborhood character and the natural environment.

- **Policy LU 7.1:** Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.

- **Policy LU 7.2:** Protect industrial parks and districts from incompatible uses.

- **Policy LU 7.3:** Protect public and semi-public facilities, including but not limited to major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.

Goal LU 8: Land uses that are compatible with military operations and military readiness, and enhance safety for military personnel and persons on the ground.

- **Policy LU 8.2:** Evaluate the potential impact of new structures within MOAs to ensure the safety of the residents on the ground and continued viability of military operations within the MOAs. In the review of development within MOAs, consider the following:

    - Uses that produce electromagnetic and frequency spectrum interference, which could impact military operations;

    - Uses that release into the air any substance such as steam, dust and smoke, which impair pilot visibility;

    - Uses that produce light emissions, glare or distracting lights, which could interfere with pilot vision or be mistaken for airfield lighting; and

    - Uses that physically obstruct any portion of the MOA due to relative height above ground level.

Goal LU 10: Well-designed and healthy places that support a diversity of built environments.

- **Policy LU 10.2:** Design development adjacent to natural features in a sensitive manner to complement the natural environment.

- **Policy LU 10.3:** Consider the built environment of the surrounding area and location in the design and scale of new or remodeled buildings, architectural styles, and reflect appropriate features such as massing, materials, color, detailing or ornament.

- **Policy LU 10.5:** Encourage the use of distinctive landscaping, signage and other features to define the unique character of districts, neighborhoods or communities, and engender community identity, pride and community interaction.

- **Policy LU 10.8:** Promote public art and cultural amenities that support community values and enhance community context.

- **Policy LU 10.10:** Promote architecturally distinctive buildings and focal points at prominent locations, such as major commercial intersections and near transit stations or open spaces.

Goal LU 11: Development that utilize sustainable design techniques.

- **Policy LU 11.7:** Encourage the use of design techniques to conserve natural resource areas.

Conservation and Natural Resources Element

Goal C/NR 1: Open space areas that meet the diverse needs of Los Angeles County.

- **Policy C/NR 1.1:** Implement programs and policies that enforce the responsible stewardship and preservation of dedicated open space areas.

- **Policy C/NR 1.2:** Protect and conserve natural resources, natural areas, and available open spaces.

- **Policy C/NR 1.3:** Support the acquisition of new available open space areas. Augment this strategy by leveraging County resources in concert with the compatible open space stewardship actions of other agencies, as feasible and appropriate.

- **Policy C/NR 1.6:** Prioritize open space acquisitions for available lands that contain unique ecological features, streams, watersheds, habitat types, and/or offer linkages that enhance wildlife movements and genetic diversity.

Goal C/NR 4: Conserved and sustainably managed woodlands.

- **Policy C/NR 4.1:** Preserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with no net loss of existing woodlands.

Goal C/NR 13: Protected visual and scenic resources.

- **Policy C/NR 13.1:** Protect scenic resources through land use regulations that mitigate development impacts.

- **Policy C/NR 13.2:** Protect ridgelines from incompatible development that diminishes their scenic value.

- **Policy C/NR 13.3:** Reduce light trespass, light pollution and other threats to scenic resources.

- **Policy C/NR 13.4:** Encourage developments to be designed to create a consistent visual relationship with the natural terrain and vegetation.

- **Policy C/NR 13.6:** Prohibit outdoor advertising and billboards along scenic routes, corridors, waterways, and other scenic areas.

- **Policy C/NR 13.7:** Encourage the incorporation of roadside rest stops, vista points, and interpretive displays into projects in scenic areas.

- **Policy C/NR 13.8:** Manage development in HMAs to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion, and landslides.

- **Policy C/NR 13.9:** Consider the following in the design of a project that is located within an HMA, to the greatest extent feasible:

    - Public safety and the protection of hillside resources through the application of safety and conservation design standards;

    - Maintenance of large contiguous open areas that limit exposure to landslide, liquefaction and fire hazards and protect natural features, such as significant ridgelines, watercourses and SEAs.

- **Policy C/NR 13.10:** To identify significant ridgelines, the following criteria must be considered:

    - Topographic complexity;
    - Uniqueness of character and location;
    - Presence of cultural or historical landmarks;
    - Visual dominance on the skyline or viewshed, such as the height and elevation of a ridgeline; and
    - Environmental significance to natural ecosystems, parks, and trail systems.

Goal C/NR 14: Protected historic, cultural, and paleontological resources.

- **Policy C/NR 14.1:** Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.

- **Policy C/NR 14.3:** Support the preservation and rehabilitation of historic buildings.

- **Policy C/NR 14.5:** Promote public awareness of historic, cultural, and paleontological resources.

- **Policy C/NR 14.6:** Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

In addition to the policies listed above, the following Implementation Programs would serve to ensure that the goals and policies in the Proposed General Plan Update are implemented and thereby, would lessen the potential impacts of the Proposed Project with respect to substantial adverse impacts to scenic vistas.

- **LU-3 – Airport Land Use Compatibility Plans:** Develop the County's airport land use compatibility plans.

- **LU-5 – Civic Art Program:** The County Civic Art Policy requires certain capital development projects, either wholly or partially funded by the County, to dedicate one percent of the design and construction cost to public art projects on the site. Explore the expansion of this policy, including the cost implications to County capital projects, and support the management of the County's art collection.

- **LU-4 – Growth Management Program:** Develop a growth management program for the unincorporated areas that does the following:

  - Explore the feasibility of implementing a program that uses infrastructure and service levels as a threshold for development and permitting; and

  - Explore the feasibility of establishing greenbelts or other growth management strategies in urbanized areas.

- **LU-6 – Transfer of Development Rights Program**

  - Explore the feasibility of a Transfer of Development Rights (TDR) Program in order to direct growth and development away from valuable open space areas to identified infill areas.

  - Identify natural resource, rural and agricultural areas, including Agricultural Resource Areas (ARAs), and portions of the Significant Ecological Areas (SEAs) with high priority resources as sending areas.

  - Identify potential receiving areas, such as TODs and vacant and underutilized sites, in urban areas.

  - Consider partnering with other local jurisdictions to expand the scope of the TDR Program. Consider establishing a pilot program with the City of Santa Clarita.

  - Prepare an ordinance that outlines applicability and procedures for the TDR Program.

  - Establish or identify a County entity to coordinate the sales and transactions of TDR.

- **LU-9 – Community Design Guidelines:** Create design guidelines to preserve and enhance the character-defining features of all unincorporated communities.

- **C/NR-1 – SEA Preservation Program:** Coordinate with programs for the preservation of natural resources, especially programs that identify financial incentives for the acquisition of SEA lands. Focus on targeting the following implementation actions to ensure that SEAs are specifically included:

  - Transfer of Development Rights Program
  - Habitat Conservation Plan
  - Mitigation Land Banking Program

- Open Space Land Acquisition Strategy

- **C/NR-2 – Mitigation Land Banking Program:** Study the feasibility of creating a Mitigation Land Banking Program with appropriate standards and criteria to allow eligible projects to purchase land within SEAs or other biologically sensitive areas as a mitigation measure for development in areas outside of SEAs. Encourage mitigation banking across watershed and jurisdictional boundaries to provide more opportunities for mitigation, and avoid the creation of "orphan mitigation banks."

- **C/NR-3 – Oak Woodlands Conservation Management Plan Implementation:** Implement the County's Oak Woodlands Conservation Management Plan through the following actions:

  - Create a guidance document that outlines how development projects affecting oak woodlands will be processed, mitigated, and monitored, and provide this document to staff, applicants, and the general public;

  - Develop a process for documenting oaks that are added by a property owner ("volunteer oaks") as part of the Zoning Ordinance Update Program; and

  - Work with the Los Angeles Region Imagery Acquisition Consortium to lobby for the inclusion of infrared imagery acquisition that will help document existing oak woodlands.

- **C/NR-4 – Native Woodlands Conservation Management Plan:**

  - Develop a conservation management plan, guidance document, and implementation ordinance for woodlands (other than oak) in Los Angeles County that are rare. Woodland types in need of conservation include but are not limited to: juniper woodlands; walnut woodlands; cherry woodlands; bay tree woodlands; willow woodlands; mixed riparian woodlands with willow, cottonwood, and sycamore components; California buckeye woodlands, and Joshua tree woodlands.

  - Work with the Los Angeles Region Imagery Acquisition Consortium to lobby for the inclusion of infrared imagery acquisition that will help document existing woodlands (other than oaks).

- **C/NR-5 – Scenic Resources Ordinance**

  - Prepare a Scenic Resources Ordinance that creates a scenic corridor, scenic viewshed, and significant ridgeline program and/or ordinance to protect remaining scenic resources.

  - Develop countywide ridgeline protection regulations and a countywide ridgeline map.

- **C/NR-6 – Agricultural Resource Areas Ordinance**

  - Prepare an Agricultural Resource Areas Ordinance in order to encourage the retention and sustainable utilization of agricultural land for agricultural uses.

- Analyze the feasibility of offering incentives, such as density bonuses and/or conservation subdivisions, that deed-restrict a certain percentage of the project site for open space and agricultural uses only.

- Ensure compatibility between agricultural and non-agricultural land uses through buffering, development standards, and design requirements.

- **C/NR-8 – Habitat Conservation Plan** – Prepare a Habitat Conservation Plan to identify and preserve biologically sensitive land and natural resources, including SEAs. The Habitat Conservation Plan shall include the following:

  - A review of best practices in Habitat Conservation Plans in other local jurisdictions; and

  - A dedicated permanent source of funding for natural area conservation and preservation related efforts, including the routine study of biological resources.

- **C/NR-12 – Open Space Land Acquisition Strategy** – Develop an open space land acquisition strategy that incorporates collaborative partners; identifies multi-use sites; explores all means of open space acquisition and preservation, such as inter-jurisdictional land swaps, mitigation banking, and other partnerships; and implements legal protections, such as deed-restrictions and easements.

  - Develop programs to improve education, awareness, and stewardship of open spaces, natural areas and SEAs, recognizing and prioritizing opportunities to leverage County resources with those of other jurisdictions (such as when environmental improvements cross jurisdictions, but result in amplified improvements consistent with natural landscape boundaries/characteristics).

5.1.4 Environmental Impacts

This section discusses the potential aesthetic impacts to the Project Area that could potentially result from implementation of the Proposed Project.

The evaluation of aesthetics and aesthetic impacts is highly subjective by nature. It requires the application of a process that objectively identifies the visual features of the environment and their importance. Aesthetic description involves identifying existing visual character, including visual resources and scenic vistas unique to Los Angeles County. Visual resources are determined by identifying landforms (e.g., topography and graded areas), views (e.g., scenic resources such as natural features or urban characteristics), viewpoints/locations, and existing light and glare (e.g., nighttime illumination). Changes to aesthetic resources due to implementation of the Proposed Project are identified and evaluated based on the proposed modifications to the existing setting and the viewer's sensitivity. Project-related impacts are determined using the threshold criteria listed above in Section 5.1.2, *Thresholds of Significance*. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.1-1: Implementation of the Proposed Project could have a substantial adverse impact on scenic vistas. [Threshold AE-1]

Impact Analysis: As discussed in Section 5.1.1, *Environmental Setting*, Los Angeles County contains a variety of unique and significant visual resources. The discussion provided herein focuses on scenic vistas and corridors, excluding the Proposed Project's impacts on state and county scenic highways, which are addressed below in Impact 5.1-2.

The Proposed Project recognizes scenic highways and corridors (or routes), and hillsides and ridgelines as valuable scenic resources. Figure 5.1-2, *Hillside Management Area and Ridgeline Management Map*, shows the locations of the significant ridgelines and HMAs identified in the Proposed Project. In addition to this map of designated significant ridgelines and HMAs, the Proposed Project provides a definition of a scenic viewshed as a scenic vista from a given location, such as a highway, a park, a hiking trail, river/waterway, or even from a particular neighborhood. Additionally, the Proposed Project explains that scenic viewsheds vary by location and community and can include ridgelines, unique rock outcroppings, waterfalls, ocean views or various other unusual or scenic landforms. This broad definition means that many of the aspects of the Proposed Project would have the potential to impact scenic viewsheds or vistas.

The Proposed Project includes land use designations, new zones, and new zoning that have the potential to result in new development with greater intensities than previously permitted. This is especially true for areas within Transit Oriented Districts (TODs) where more intense infill is being encouraged to complement planned improvements to Los Angeles County's transportation system. As shown in Table 3-7, *Summary of Existing and Projected Units, Population, Employment and Jobs/Housing Ratios by Planning Area*, buildout of the Proposed General Plan Update is anticipated to increase the number of units in the Project Area by 358,931 and the number of nonresidential square feet by 7.2 million, compared to existing conditions. With this growth, viewsheds or scenic vistas would have the potential to be interrupted by new buildings and structures, which could detract from the quality of those vistas. Additionally, other new development that would be accommodated by the Proposed General Plan Update, including potential improvements to the transportation system, could have the potential to impact scenic vistas. For these reasons, the Proposed Project would have the potential to impact scenic vistas in Los Angeles County. However, there are a variety of existing and proposed regulatory processes, such as the update to the HMA Ordinance, which would serve to minimize these potential impacts.

As described above in Section 5.1.1.1, *Regulatory Setting*, several sections of the County Code regulate physical development by controlling not only the appearance of new development, but also by controlling the placement of new development with consideration for surrounding uses. Requirements relating to CUPs would ensure that development projects that would be accommodated by the Proposed Project would be held to appropriate development standards of the County Code. Regulations outlined in the County Code relating to HMAs would ensure that the physical character and scenic value of areas of the County with a natural slope gradient of steeper than 25 percent are preserved. Since hillsides and ridgelines are some of the primary resources related to scenic vistas in Los Angeles County, the provisions of the County Code would significantly reduce impacts to these areas. Additionally, regulations in the County Code that limit the size of and control the siting of signs, particularly outdoor signs including billboards, would also limit the impact of

the Proposed Project on scenic vistas. Compliance with these provisions would be ensured through the County's development review and building permit process.

Another important aspect of the regulatory framework that would lessen potential impacts to scenic vistas is the fact that the Proposed Project is programmatic in nature, which means that subsequent projects accommodated by the Proposed Project—projects requiring discretionary approval—would be subject to separate project-level environmental review in accordance with CEQA. The individual project's contribution to the degradation of scenic vistas would be assessed at the time formal development plans/applications are submitted to the County for review and approval.

In addition to aspects of the existing regulatory framework that would lessen potential impacts to scenic vistas, a number of goals and policies of the Proposed General Plan Update, listed under Section 5.1.3, *Relevant Goals and Policies*, would also serve to minimize potential impacts by preventing degradation of existing vistas and promoting actions that would make existing scenic vistas more accessible to people. Implementation of Policies C/NR 13.1 through C/NR 13.7, in particular, would ensure that scenic vistas in the Project Area are protected.

In summary, the Proposed Project provides a map of designated ridgelines and HMAs, and provides a definition of a scenic viewshed. Due to both the broad definition of scenic viewsheds and the substantial amount of new development that would be accommodated by the Proposed Project and associated changes to the Zoning Ordinance, the potential for a substantial adverse impact to a scenic vista could exist. The existing regulatory setting, as well as the goals and policies contained in the Proposed General Plan Update, would serve to lessen potential impacts to scenic vistas associated with implementation of the Proposed Project. Additionally, approval of the Proposed Project itself does not authorize construction of development that would affect scenic vistas. Therefore, impacts would be less than significant.

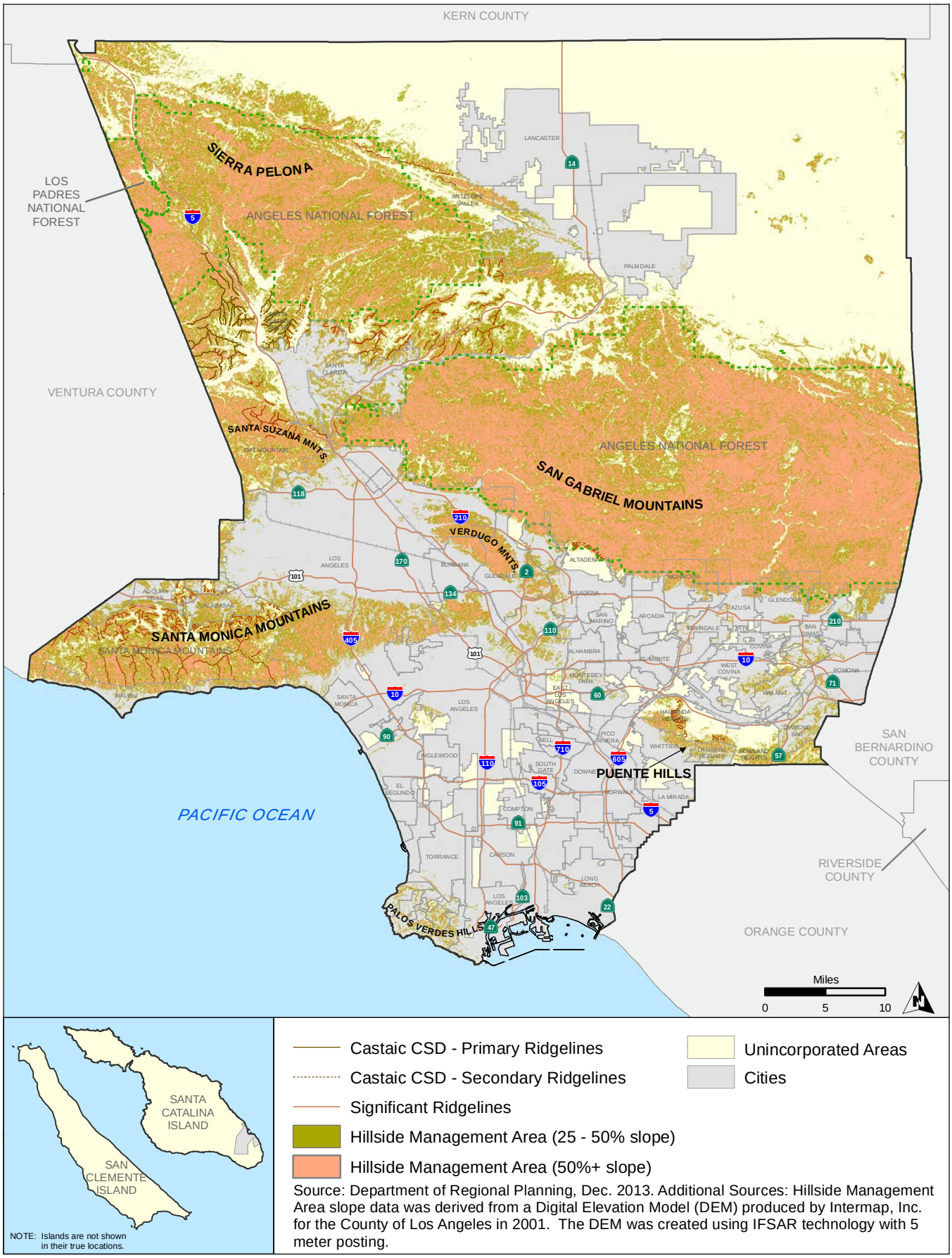
Impact 5.1-2: Implementation of the Proposed Project would not substantially alter scenic resources within a state or county scenic highway. [Threshold AE-2]

Impact Analysis: As shown in Figure 5.1-1, *Scenic Highways*, and described above in Section 5.1.2, *Environmental Setting*, there are three adopted state scenic highways in Los Angeles County: Angeles Crest Highway (SR-2), from 2.7 miles north of I-210 to the San Bernardino County line; Mulholland Highway (two sections), from SR-1 to Kanan Dume Road, and from west of Cornell Road to east of Las Virgenes Road; and Malibu Canyon–Las Virgenes Highway, from SR-1 to Lost Hills Road. All three highways traverse the Project Area. As shown in Figure 5.1-1, there are also eight eligible scenic highways in the Project Area.

Figure 3-6, *Areas Affected by the Proposed Project*, shows the areas within the Project Area that would be affected by the Proposed Project. As shown in Figures 3-5 and 5.1-1, no development or changes would occur under the Proposed Project along or near any of the three adopted state scenic highways. None of the areas surrounding the adopted scenic highways would be affected by the Proposed Project. While some development or changes could occur near all three of the eligible scenic highways, the development or changes that would occur would be minimal and would only occur near small stretches of the eligible scenic highways.

HILLSIDE MANAGEMENT AREAS AND RIDGELINE MANAGEMENT MAP

FIGURE 5.1-2



Source: Department of Regional Planning, Dec. 2013. Additional Sources: Hillside Management Area slope data was derived from a Digital Elevation Model (DEM) produced by Intermap, Inc. for the County of Los Angeles in 2001. The DEM was created using IFSAR technology with 5 meter posting.

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Additionally, future discretionary projects accommodated by the Proposed Project would be subject to a separate project-level environmental review in accordance with CEQA, wherein the individual project's contribution to the degradation of scenic highways would be assessed at the time formal development plans/applications are submitted to the County for review and approval. Furthermore, a number of goals and policies of the Proposed General Plan Update listed above under Section 5.1.3, *Relevant Goals and Policies*, would also serve to minimize potential impacts to scenic highways by preventing degradation of existing vistas, as well as by promoting actions that would make existing scenic vistas more accessible to individuals. Therefore, no significant impact would result from implementation of the Proposed Project with respect to the substantial alteration of scenic resources within a designated scenic highway.

Impact 5.1-3: Implementation of the Proposed Project would substantially alter the existing visual character or quality of portions of the Project Area and its surroundings. [Threshold AE-3]

Impact Analysis: As discussed in Section 5.1.1, *Environmental Setting*, visual character within Los Angeles County is greatly varied. Los Angeles County's mountain ranges, foothills, valleys, basins, beaches, coastal islands, deserts, as well as the built environment and the variety within this category all contribute to the visual character of the Project Area. As described in Chapter 3 of this DEIR, the Planning Areas Framework would contribute to the creation of community-based plans, while at the same time providing goals and policies necessary to achieve countywide planning objectives.

While these community-based plans are not a part of the Proposed Project, the framework of the Proposed Project, which calls for these community-based plans to be created, would lead to more area-specific planning for each of the communities in the Project Area. This in turn would serve to allow for more attention to be paid to the unique visual qualities of each community, not only because of the decreased size of the Project Area, but also because of the increased input from members of the community who are more likely to provide more meaningful input on issues that are more local in nature. For example, one of the principle objectives of the Walnut Park Neighborhood Plan is to preserve the single-family residential character of the neighborhood.

Growth anticipated during the planning period of the Proposed General Plan Update would have the potential to affect the visual character and quality of the Project Area and its surroundings. As shown in Table 3-7, *Summary of Existing and Projected Units, Population, Employment and Jobs/Housing Ratios by Planning Area*, buildout of the Proposed Project is anticipated to increase the number of units in the Project Area from 300,478 to 668,910, an increase of 368,432 units at buildout. Additionally, some of the guiding principles of the Proposed Project advocate the use of Smart Growth development strategies—which aim to create compact, walkable, and transit-oriented communities—as well as excellence in environmental resource management. Part of the way that the Proposed Project seeks to adhere to these principles is by encouraging more compact development patterns, including infill development in areas with existing infrastructure and access to transit, rather than continuing historical sprawling land use patterns. To complement this key goal, the Proposed Project would create TODs. Figure 5.1-3, *Transit Oriented Districts Policy Map*, shows the location of the TODs established in the Proposed Project.

In order to implement the goals and policies contained in the Proposed General Plan Update, the Proposed Project includes amendments to the County's Zoning Ordinance, allowing for increased development

potential. One of these ordinances would amend the standards for the existing MXD zone, as discussed in Chapter 3, *Project Description*. The proposed amendments would provide standards and procedures to implement the Mixed Use (MU) category in the General Plan Land Use Legend, which allows for a 3.0 FAR and a maximum density of 150 dwelling units per acre for residential and mixed-use projects. The amendments also include regulations related to the provision of private and common recreational space, building heights, and building articulation. Existing major commercial corridors within four proposed TODs in the unincorporated communities of Willowbrook in the Metro Planning Area, East Pasadena-East San Gabriel in the West San Gabriel Valley Planning Area, and West Carson and Del Aire in the South Bay Planning Area are proposed to be designated MU and MXD zoning. To supplement the MU-designated commercial corridors within the TODs in Willowbrook, East Pasadena-East San Gabriel, West Carson and Del Aire, all TODs established under the Proposed Project would require the preparation of future specific plans (or similar tools) for each TOD. These specific plans would be required to undergo separate CEQA review, which would require disclosure of potential impacts to the visual character of those individual specific plan areas. Additionally, the development standards and design guidelines established in each specific plan would ensure that individual development projects are designed and constructed in a manner that would not be detrimental to the areas surrounding the individual development sites.

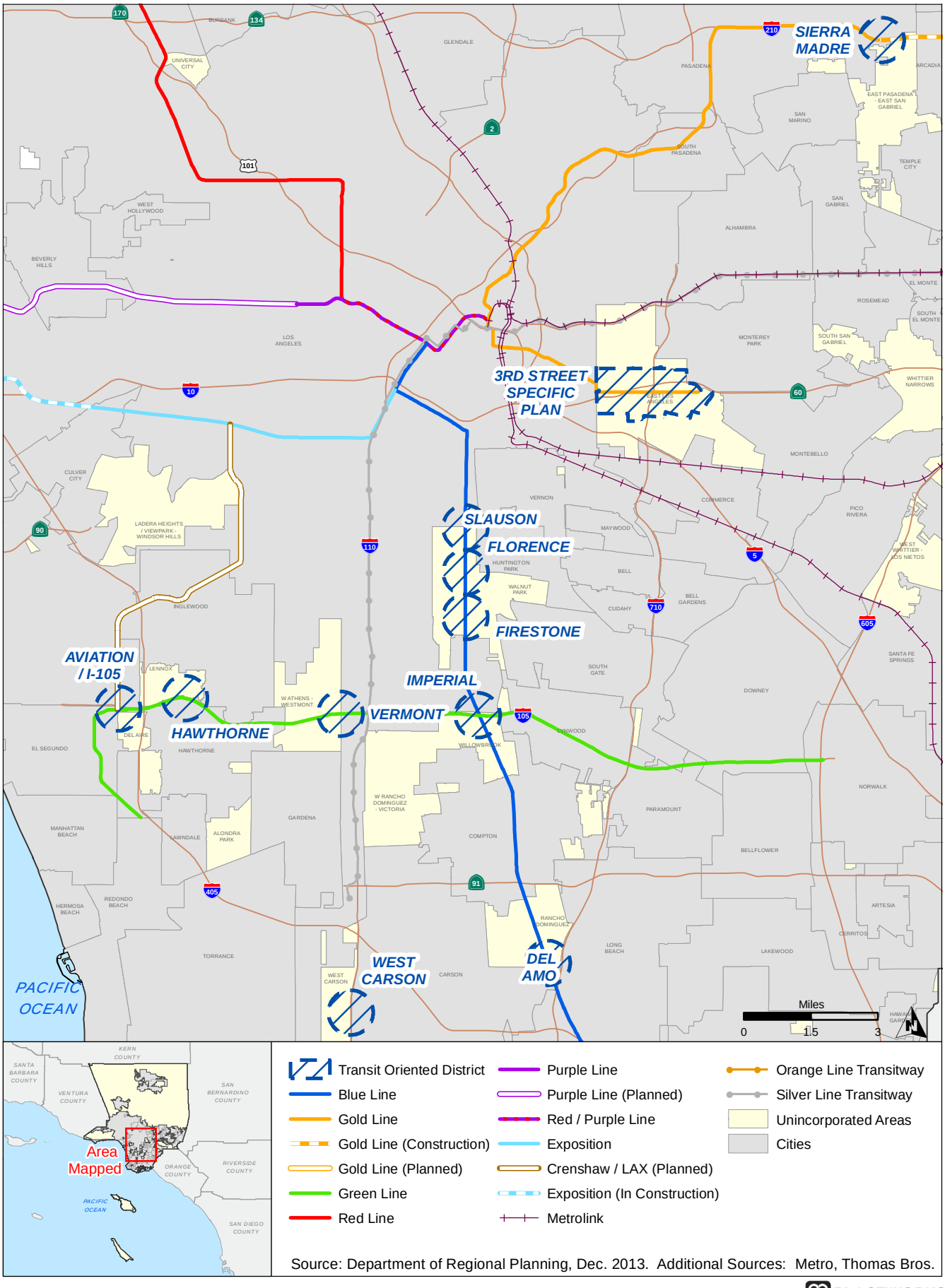
Additionally, as discussed in Chapter 3, the Proposed Project includes the introduction of proposed zones to implement the proposed Land Use Legend in the Proposed General Plan Update. These proposed zones are not mapped,[1] but provide tools for future application that could not only have implications on growth, but could also play a role in regulating visual character. The proposed High Density Residence Zone (R-5) and the proposed Major Commercial Zone (C-MJ) would be established as a part of the Proposed Project. The R-5 zone would allow high-density residential development of up to 100 or 150 units per net acre. The C-MJ zone would allow high density residential and mixed uses with densities of up to 150 du/ac and FAR 3.0. Additionally, the Proposed Project includes the Rural Mixed Use (MXD-RU) and Rural Commercial (C-RU) zones. The intent of the zone is to serve the diverse economic needs of rural communities, while preserving their unique characteristics and identities. The Rural Commercial Zone (C-RU) provides detailed uses, for low-intensity commercial uses that are compatible with rural, agricultural, and low-density residential uses. The Rural Mixed Use Development Zone (MXD-RU) provides for a limited mixed of commercial uses with very low density multifamily uses on the same lot within rural town centers. Both zones allow densities of five dwelling units per acre and a 0.5 FAR.

In general, there are several factors to consider when determining whether these proposed changes to the Zoning Ordinance would constitute a substantial degradation of the visual character. Moving toward a more compact development style in certain areas, as opposed to suburban-style sprawl on the urban fringes, would result in less modification to the visual character of Los Angeles County as a whole by concentrating development (where appropriate) and visual impacts of development within the existing urban footprint. Adding new development capacity in the relatively small TODs could relieve pressure to develop outside the urban footprint.

[1] One exception to this is one parcel located in unincorporated Gilmore Island that is zoned C-MJ. The parcel is part of an existing parking lot, and surrounded by the City of Los Angeles.

FIGURE 5.1-3

TRANSIT ORIENTED DISTRICTS POLICY MAP



Source: Department of Regional Planning, Dec. 2013. Additional Sources: Metro, Thomas Bros.

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The majority of the Planning Areas (including the East San Gabriel Valley, Gateway, Metro, San Fernando Valley, South Bay, West San Gabriel Valley, and Westside Planning Areas) are already built out. As a result, infill and redevelopment of existing developed parcels is not expected to have a significant visual effect. However, a substantial amount of growth is planned in the Santa Clarita Valley and Antelope Valley Planning Areas. A Program EIR was recently prepared for the Santa Clarita Valley Area Plan, which concluded that aesthetic impacts associated with development in accordance with the Area Plan would not be significant. The Proposed Project does not change any land use designations within the Santa Clarita Valley Planning Area.

Existing regulations, including provisions contained in the County's Zoning Ordinance relating to the regulation of building form, massing, subdivisions, signs, architectural features, CUPs, design, and oak tree preservation would serve to lessen the impact of the Proposed Project on the visual character of the Project Area. For example, future development that would be accommodated by the Proposed Project would continue to be subject to Part 1 (General Design Requirements) of Chapter 22.52 (General Regulations) of the County's Zoning Ordinance. The continued application of such regulations would serve to reduce potential impacts related to changes to the visual character associated with implementation of the Proposed Project. Compliance with these provisions would be ensured through the County's development review and building permit process.

In addition to the guiding principles of the Proposed Project and the existing regulatory setting, a number of goals and policies of the Proposed Project listed above under Section 5.1.3, *Relevant Goals and Policies*, would serve to minimize potential impacts related to the degradation of the existing visual character or quality of the Project Areas affected by the Proposed Project. Implementation of Policies C/NR 13-1 through C/NR 13-6, in particular, would ensure that new developments are designed to be compatible with the local aesthetic environment.

Additionally, aside from the goals and policies listed above, as required by state law, the Proposed Project sets forth a variety of implementation programs. Some of these, including the Planning Areas Framework, which requires the creation of an Area Plan for each of the 11 Planning Areas in the Proposed Project, and the TOD Program, which requires the creation of a specific plan for each TOD, are discussed above and would eventually become part of the regulatory framework. In addition to these implementation programs, the Proposed Project contains numerous implementation programs which would serve to lessen potential impacts to the visual character of Los Angeles County that could result from future development that would be accommodated by the Proposed Project.

In summary, implementation of the Proposed Project would have the potential to result in substantial changes to the visual character of Los Angeles County, primarily related to the overall magnitude of growth anticipated. The continuation of guidelines and development standards existing in the regulatory framework would serve to lessen the potential impacts of the Proposed Project by providing consistency from past to future development. Additionally, several of the guiding principles, goals, policies, and implementation programs contained in the Proposed Project would serve to lessen or mitigate potential impacts of the Proposed Project by providing direction for future decision making, as well as by requiring additional future review of potential impacts of individual development projects that would be accommodated by the Proposed Project.

Antelope Valley Planning Area

Implementation of the Proposed Project would increase the number of homes in the Antelope Valley Planning Area by approximately 250,000. At buildout, these new homes and other new land uses constructed in the Antelope Valley would represent an alteration to the existing rural character of the region. Aspects of this character, including agrarian architecture and wide vistas of the high desert, could be impacted by new development. However, there are existing regulations in Title 22 in some Community Standards Districts that provide protections for rural character. In addition, the implementation of policies of the Proposed General Plan Update, such as those related to Goal LU 6, would ensure protections for rural communities characterized by "living in a non-urban or agricultural environment at low densities without typical urban services." Furthermore, while not mapped as part of the Proposed Project, future application of the proposed MXD-RU and C-RU zones would ensure the preservation of rural character through limited and appropriate commercial uses.

Shade and Shadow Analysis

The issue of shade and shadow pertains to whether onsite buildings or structures block direct sunlight from adjacent properties. Shading is an important environmental issue because the users or occupants of certain land uses have expectations for direct sunlight and warmth from the sun for function, physical comfort, or conduct of commerce. Factors that influence the extent or range of shading include: season; time of day; weather (i.e., sunny vs. cloudy day); building height, bulk, and scale; topography; spacing between buildings; sensitivity of adjacent land uses; and tree cover. Shadows cast by buildings and structures vary in length and direction throughout the day and from season to season. The longest shadows are cast during the winter months, when the sun is lowest on the horizon, and the shortest shadows are cast during the summer months. Shadows are longer in the early morning and late afternoon. Consequences of shadows upon land uses may be positive, including cooling effects during warm weather, or negative, such as the loss of natural light necessary for solar energy purposes or the loss of warming influences during cool weather. The relative effects of shading from structures are site specific.

Below is a discussion of the potential shade and shadow impacts that could occur as a result of future development that would be accommodated by the Proposed Project. Specifically, the analysis focuses on development that would occur in the designated TODs, where more intense infill is being encouraged to complement planned improvements to Los Angeles County's transportation system and employ Smart Growth strategies. Development that would occur in the other areas of the Project Area (areas outside the TODs) is anticipated to have minimal impacts with regards to shade and shadow. Shadows that would be cast as a result of future development in these other areas would be relatively minimal due to the low density and low-rise nature of development that would occur in these areas.

The TODs are the areas that are anticipated to see an increase in building heights due to higher-density development, which in turn has the potential to cast shadows on surrounding land uses. As noted above, the MXD zone, which applies to areas within the TODs, would allow for a 3.0 FAR and a maximum density of 150 dwelling units per acre for residential and mixed-use projects. Figure 5.1-3, *Transit Oriented Districts Policy Map*, shows the location of the TODs established in the Proposed Project.

With regards to high-density development that would occur in the MXD zone of the TODs along existing commercial corridors, individual development projects would be required to adhere to the provisions of the MXD zone. For example, as outlined in the proposed zone, permanent shadows are prohibited from being cast on adjacent properties. Development within the MXD zone would also be required to comply with the provisions outlined in the proposed zone, which outlines requirements for calculating shadow setbacks and thereby, reducing potential impacts related to shade and shadows. Compliance with these provisions would be ensured through the County's development review and building permit process. As previously noted, the Proposed Project maps the MXD zone on existing commercial corridors within the following unincorporated communities: Willowbrook in the Metro Planning Area, East Pasadena-East San Gabriel in the West San Gabriel Valley Planning Area, and West Carson and Del Aire in the South Bay.

As previously noted, all TODs established under the Proposed Project would require the preparation of future specific plans (or similar tools) for each TOD. These specific plans would be required to undergo separate CEQA review, which would require disclosure of potential impacts to the visual character of those individual specific plan areas. Additionally, the development standards and design guidelines established in each specific plan, which would include shade and shadow standards and guidelines (as applicable), would ensure that individual development projects would be designed and constructed in a manner that would not create significant shade and shadow impacts on the areas surrounding the individual development sites.

Furthermore, CEQA requires that development projects (projects requiring discretionary approval, including specific plans) that would be accommodated by the Proposed Project, be required to undergo separate project-level environmental review, wherein the individual project's contribution to additional shade and shadow would be assessed at the time formal development plans/applications are submitted to the County for review and approval. Therefore, impacts regarding shade and shadow are not anticipated to be significant.

Conclusion

Changes in land use included in the Proposed Project are generally limited to portions of the Project Area that feature existing urban development. The introduction of higher density development and mixed uses in these areas would result in small adjustments to the community character and visual appearance of the applicable Planning Areas. Although land use changes are not proposed for the Antelope Valley Planning Area and Santa Clarita Valley Planning Area, these areas are anticipated to experience substantial growth prior to buildout of the Proposed Project. These areas would likely experience the most substantial changes in visual character and appearance during that period. However, applicable portions of the County Code, and relevant goals and policies of the General Plan Update—as discussed above—would reduce these impacts to a less than significant level. Impacts related to changes in visual character and appearance would be less than significant.

Impact 5.1-4: Implementation of the Proposed Project would generate additional sources of light and glare that would adversely affect day and nighttime views in the Project Area. [Threshold AE-4]

Impact Analysis: Being one of the largest metropolitan areas in the country, Los Angeles County is located in an urbanized context. This means that the existing levels of lighting and light pollution are already

relatively high, especially in highly urbanized areas. Some rural and open space areas, including the higher elevations of the Santa Monica Mountains and San Gabriel Mountains, do not have existing high levels of light and light pollution. However, these areas are not planned for growth in the Proposed Project. Implementation of the Proposed Project would allow for additional development throughout the Project Area, which would introduce new or additional sources of light into the Project Area and its surroundings, with the potential to affect day and nighttime views. However, due to the existing high levels of light and glare in the Project Area, and with implementation of aspects of the existing regulatory framework and the Proposed Project goals and policies associated with light and glare, the Proposed Project's impact would not be significant in this respect.

Antelope Valley Planning Area

Light and glare impacts in the Antelope Valley Planning Area would be unique in that development is anticipated to occur in areas that are not already urbanized. This Planning Area contains many of Los Angeles County's most rural, undeveloped, and remote areas. Such areas include the higher elevations of the San Gabriel Mountains and large sections of the Antelope Valley. Although no land use changes are proposed for the Antelope Valley Planning Area under the Proposed Project, the Planning Area is anticipated to experience substantial growth prior to buildout of the Proposed Project under the existing Antelope Valley Area Plan. Growth is anticipated to be especially high in portions of the Project Area near the City of Lancaster and the City of Palmdale. Some of these areas currently provide nighttime views of stars that would be diminished by light generated from new land uses, including residential, commercial, and institutional uses. However, such impacts would be reduced upon implementation existing regulations and Proposed General Plan Update Policies, as described below.

The County's Zoning Ordinance (Title 22 of the County Code) contains provisions intended to limit adverse light and glare impacts. For example, Section 22.52.820 (General Regulations) of Part 10 (Signs) requires that no lighted signs be placed or directed so as to permit illumination to be directed or beamed upon a public street, highway, sidewalk or adjacent premise. Part 9 (Rural Outdoor Lighting District) of Chapter 22.44 (Supplemental Districts) establishes rural outdoor lighting districts. These districts were established as a supplementary district for the rural areas of the Project Area to promote and maintain dark skies for the health and enjoyment of individuals and wildlife. These provisions are particularly important to mitigating this impact because they protect dark sky resources in the portions of Project Area where additional light pollution would be particularly pronounced, such as flat, undeveloped areas of the Antelope Valley Planning Area that are anticipated to experience substantial growth. Implementation of the County's Rural Outdoor Lighting District standards would minimize such impacts by requiring outdoor lighting to be scaled appropriately and to be designed in a context-sensitive manner. Compliance with these and other applicable provisions of the County's Zoning Ordinance would be enforced through the County's development review and building permit process.

Other Planning Areas

As described in Chapter 3, *Project Description,* substantial growth would occur throughout the Project Area prior to buildout based on utilization of existing development capacity. For example, buildout of the Santa Clarita Valley Planning Area would result in the construction of approximately 50,000 additional housing

units compared to existing conditions. However, this new development would largely occur within highly developed areas that have high existing levels of light and glare.

In addition to applicable provisions of the County Code mentioned above (including the Rural Outdoor Lighting Ordinance, which applies to rural areas throughout Los Angeles County), CEQA requires that development projects requiring discretionary approval be required to undergo separate project-level environmental review, wherein the individual project's contribution to additional sources of light and glare would be assessed at the time formal development plans/applications are submitted to the County for review and approval. Additionally, the California Building Code contains standards for outdoor lighting that are intended to reduce light pollution and glare by regulation light power and brightness, shielding, and sensor controls. These regulations would serve to mitigate potential impacts of new land uses.

Transit Oriented Districts

The higher-intensity uses and mixed uses allowed in TODs under the Proposed Project could result in new sources of light and glare in those areas. However, the TODs are located in areas with existing high levels of light and glare. As specified in the Proposed Project, specific plans would be prepared for each TOD. These specific plans would be required to undergo separate CEQA review, which would disclose potential impacts related to light and glare resulting from new development in the specific plan areas. Lastly, development standards and design guidelines established in each specific plan would address aesthetic impacts related to light and glare.

Implementation of Proposed General Plan Update Goals and Policies

Goals and policies of the Proposed General Plan Update listed above under Section 5.1.3, *Relevant Goals and Policies*, would serve to minimize potential impacts related to additional sources of light and glare. In particular, implementation of Policy C/NR 13.3 would ensure that light trespass and light pollution is minimized.

Policy P/R 1.9 of the Proposed General Plan Update, which calls for the County to encourage the provision of more lighted playing fields, could serve to add additional major sources of light and glare in the Project Area. However, that same policy states that areas adjacent to open space or natural areas that can be negatively impacts by spillover lighting are inappropriate locations for such playing fields. Also, aspects of the regulatory framework, including those established under the rural outdoor lighting districts, as well as the requirement for subsequent project-level CEQA review, would serve to minimize the impact of this policy.

Conclusion

Because buildout of the Proposed Project would result in the construction of additional development throughout Los Angeles County, its implementation would generate additional sources of light and glare that could adversely affect day or nighttime views in the Project Area. However, because development would generally occur in an urbanized context where existing levels of lighting and light pollution are already high, anticipated increases in light and glare would not be substantial. Although growth in the Antelope Valley Planning Area (and other rural areas) could potentially diminish existing nighttime views and/or dark skies, these impacts would be minimized by applicable regulations. Upon implementation of applicable sections of

the County Code, provisions of the California Building Code, and goals and policies in the Proposed Project, impacts related to light and glare would be less than significant.

5.1.5 Cumulative Impacts

Cumulative projects located in the Los Angeles County region would have the potential to result in a cumulative impact to aesthetic resources if in combination they would result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of a neighborhood, community, state scenic highway, or localized area, such as a landmark (designated), historic resource, trees, or rock outcropping. During the planning period of the Proposed Project, cities in Los Angeles County are anticipated to grow by approximately 300,000 housing units and 1 million residents compared to existing conditions. This growth is in addition to development that would occur in the Project Area.

Scenic Vistas and Scenic Resources

During the planning period of the Proposed Project, growth in Los Angeles County, as mentioned above (and described in Section 5.13 of is DEIR) would be substantial. This growth could affect scenic vistas and specific scenic resources. However, because development allowed under the Proposed Project would be subject to goals, policies, and regulations that reduce impacts of the Proposed Project on scenic resources to a less than significant level, the Proposed Project's contribution to County-wide impacts would not be cumulatively considerable. Cumulative impacts of the Proposed Project related to scenic vistas and scenic resources are therefore considered less than significant.

Visual Character and Quality

Growth anticipated for cities in Los Angeles County would fundamentally alter visual character and quality in some neighborhoods and other areas of Los Angeles County. However, because development allowed under the Proposed Project would be subject to goals, policies, and regulations that reduce impacts of the Proposed Project on visual and character to a less than significant level, the Proposed Project's contribution to County-wide impacts would not be cumulatively considerable. Cumulative impacts of the Proposed Project related to visual character and quality are therefore considered less than significant.

Light and Glare

The construction and operation of cumulative projects located in the Los Angeles County region would have the potential to result in a new source of light and glare from new development or redevelopment that requires night lighting, such as security lighting in commercial areas, or is constructed with materials that would result in glare, such as expanses of glass on office buildings. Impacts from glare are generally localized and not cumulative in nature; therefore, a significant cumulative impact related to glare would not occur.

5.1.6 Existing Regulations

State

- California Scenic Highway Program
- California Building Code 2013

Local

- Los Angeles County Code
- Los Angeles County CEQA Guidelines
- Existing Specific Plans
- Existing Community-Based Plans, including Area Plans, Community Plans, and Neighborhood Plans

5.1.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, Impacts 5.1-1 through 5.1-5 would be less than significant.

5.1.8 Mitigation Measures

No mitigation measures are required.

5.1.9 Level of Significance After Mitigation

No significant unavoidable adverse impacts related to aesthetics have been identified. Aesthetic impacts would be less than significant.

5.1.10 References

California Department of Transportation (Caltrans). 2014. List of Eligible and Officially Designated State Scenic Routes. http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm

Los Angles Almanac (LAA). 2014. Mountain Ranges & Hills in Los Angeles County. http://www.laalmanac.com/geography/ge06.htm.

United States Geological Survey, Geographic Names Information System (USGS). 20141. Feature Detail Report for: Mount San Antonio. http://geonames.usgs.gov/apex/f?p=gnispq:3:0::NO::P3_FID:273439.

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5.2 AGRICULTURE AND FORESTRY RESOURCES

This section of the DEIR describes the impacts of the Proposed Project on existing farmland and forestry resources. The information in this section is based on the Existing General Plan, the Proposed Project, review of aerial photographs, and review of state farmland maps.

5.2.1 Environmental Setting

5.2.1.1 REGULATORY SETTING

Regulations and plans applicable to the Proposed Project are summarized below.

State

Farmland Mapping and Monitoring Program

The goal of the state Farmland Mapping and Monitoring Program (FMMP) is to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. FMMP produces *Important Farmland Maps*, which are a hybrid of resource quality (soils) and land use information. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. Data is also released in statistical formats—principally the biennial *California Farmland Conversion Report*.

California Land Conservation Act (Williamson Act)

The Williamson Act provides tax incentives to retain prime agricultural land and open space in agricultural use, which subsequently slows its conversion to urban development. The Williamson Act requires a 10-year contract between the County of Los Angeles (County) and landowners who enter into contracts with local government for long-term use restrictions on qualifying agricultural and open space land. In accordance with the contract, the land must be taxed based on its agricultural use rather than its full market value. The overall purpose of the Williamson Act is to protect agricultural lands and open space.

California Land Evaluation Site Assessment Model (LESA)

The California Land Evaluation Site Assessment Model (LESA) was developed by the federal Natural Resources Conservation Service to assist state and local officials with making sound decisions regarding land use. LESA was subsequently adapted by the California Department of Conservation (CDC) for use in California. LESA analyzes soil resource quality, project size, water resource availability, surrounding protected resource lands, and surrounding agricultural lands; the model output is a numerical rating. LESA includes a numeric threshold for determining significance under CEQA of impacts on conversion of mapped farmland to non-agricultural uses.

Farmland Classifications

The California Department of Conservation, through the Farmland Mapping and Monitoring Program (FMMP), classifies agricultural lands as follows:

Prime Farmland: Prime Farmland consists of land that has the best combination of physical and chemical features capable of sustaining long-term production of agricultural crops. This land possesses optimal soil quality, growing season, and moisture supply required to produce sustained high yields. Land must have been used for irrigated crop production four years prior to the mapping date.

Farmland of Statewide Importance: Similar to Prime Farmland, this land has a good combination of physical and chemical features capable of sustaining long-term production of agricultural crops. This land has minor shortcomings, such as a decreased ability to store soil moisture and greater slopes in comparison to Prime Farmland. Land must have been used for irrigated crop production four years prior to the mapping date.

Unique Farmland: This land tends to have decreased quality soils used for production of the state's leading agricultural crops. It is generally irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. This land is used for specific, high-economic-value crop production, such as oranges, olives, avocadoes, rice, grapes, or cut flowers. Land must have been used for crop production four years prior to the mapping date.

Farmland of Local Importance: Each county's board of supervisors, with additional assistance from a local advisory committee, determines important land to the local agricultural economy. The County Board of Supervisors has designated producing lands that would meet the standard criteria for Prime Farmland or Farmland of Statewide Importance, but are not irrigated, as being of "Local Importance."

Grazing Land: This land consists of existing vegetation that is suitable for livestock grazing. This particular category was developed in cooperation with the California Cattlemen's Association, the University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

Urban and Built-Up Land: The land is generally occupied by structures consisting of a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, and sewage treatment and water control structures.

Other Land: This category includes land that is excluded from other mapping categories. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas unsuitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines or borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land greater than 40 acres and surrounded on all sides by urban development is mapped as Other Land.

Land Committed to Non-Agricultural Use: This optional designation is an overlay to the standard farmland categories described above. It represents existing farmland and grazing land, and vacant areas with a permanent commitment for development. Examples of this category include an area undergoing permanent infrastructure installation or for which bonds or assessments have been issued for public utilities. Such lands represent planning areas where there are commitments for future nonagricultural development that are not reversible by a city council or board of supervisors' majority vote.

Local

Los Angeles County Code Title 22

Chapter 22.24 Agricultural Zones of Title 22 outlines the purpose, use restrictions, and general regulation of agricultural uses.

5.2.1.2 EXISTING CONDITIONS

Mapped Important Farmland

FMMP maps for Los Angeles County cover approximately half of its land area. This is due to the fact that large swaths of Los Angeles County do not contain any farmland. Land within areas of the Los Angeles County that are mapped by FMMP falls into five agricultural land use designations, as shown in Table 5.2-1, *Farmland Mapping and Monitoring Program Categories and Acreages in Los Angeles County*. The locations of these land classifications are identified in Figure 5.2-1, *State Important Farmland Map*. Note that the Los Angeles Basin (roughly coterminous with the Gateway, Metro, South Bay, and Westside Planning Areas), the San Gabriel Valley, and most of the eastern San Fernando Valley are not mapped by the FMMP.

Table 5.2-1 Farmland Mapping and Monitoring Program Categories and Acreages in Los Angeles County

Designation	Acres
Agricultural Land	
Prime Farmland	36,126
Farmland of Statewide Importance	1,364
Unique Farmland	1,372
Farmland of Local Importance	10,180
Grazing Land	282,415
Subtotal	**331,457**
Non-Agricultural Land	
Urban and Built-Up Land	45,302
Other Land	827,966
Water	4,152
Subtotal	**877,420**
Total	**1,208,877**

Source: FMMP 2011
Note: The Los Angeles Basin, the San Gabriel Valley, and most of the eastern San Fernando Valley are not mapped by the FMMP.

Mapped Farmland by Planning Area

Important Farmland is mapped in only four Planning Areas: Antelope Valley, Santa Clarita Valley, Santa Monica Mountains, and San Fernando Valley. Acreages of farmland mapping categories by Planning Area are shown in Table 5.2-2. Note that more than 90 percent of the total of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland in Los Angeles County are in the Antelope Valley Planning Area.[1] Also note that the San Fernando Valley Planning Area only contains grazing land and does not contain Important Farmland in the aforementioned categories.

Table 5.2-2 Planning Area Farmland Acreages: Unincorporated Areas Only

Planning Area	Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Subtotal: Prime, Statewide, Unique	Farmland of Local Importance	Grazing Land	Subtotal: Local Importance, Grazing	Total
Antelope Valley	23,231	749	463	24,443	6,723	135,342	142,065	166,508
Santa Clarita Valley	1,039	181	264	1,484	130	55,222	55,352	56,836
Santa Monica Mountains	104	-	204[1]	308[1]	-	-	308	616
San Fernando Valley	-	-	-	-	-	14,629	14,629	0
Coastal Islands, East San Gabriel Valley, West San Gabriel Valley, Gateway, Metro, South Bay, and Westside								
Total	**24,374**	**930**	**931**	**26,235**	**6,853**	**205,193**	**212,046**	**238,281**

Source: FMMP 2010

[1] 89 of the 204 acres of Unique Farmland in unincorporated parts of the Santa Monica Mountains Planning Area are in the Santa Monica Mountains North Area Plan area; the remaining 115 acres of Unique Farmland is in the Malibu Coastal Zone.

In each of the four Planning Areas, Prime Farmland, Farmland of Statewide Importance, and Unique Farmland is generally scattered in pieces ranging up to a few thousand acres each (and reaching that size in the Antelope Valley Planning Area only).

Antelope Valley Planning Area

Mapped Important Farmland in unincorporated areas is scattered east, north, and west of the City of Palmdale and City of Lancaster; in addition, much of the unincorporated island in the Palmdale Regional Airport site is Prime Farmland.

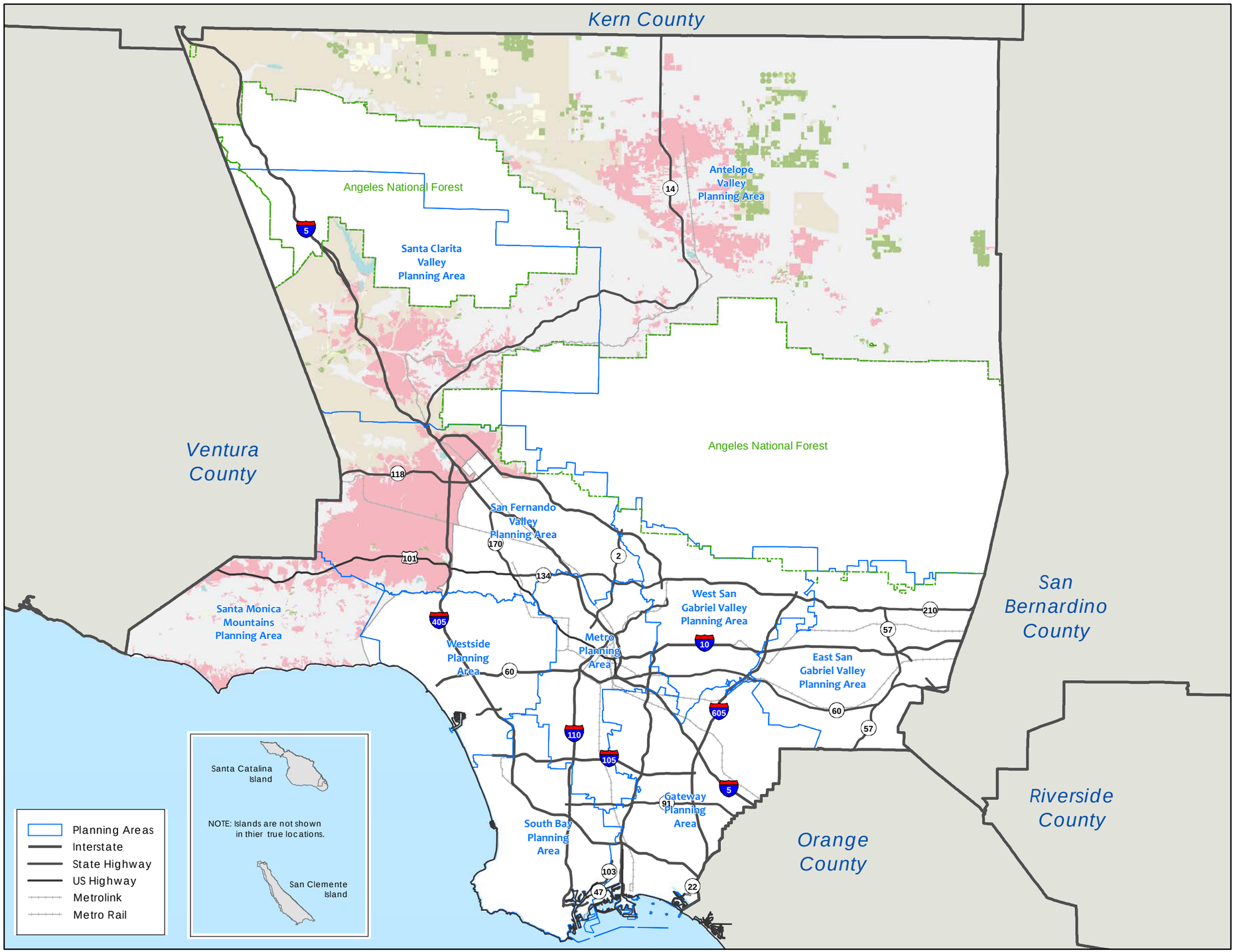
Santa Clarita Valley Planning Area

The majority of the mapped Important Farmland in unincorporated areas is west of the City of Santa Clarita in and near the flood plains of the Santa Clara River and Castaic Creek; some Important Farmland is scattered east of the City of Santa Clarita.

[1] The three specified farmland mapping categories are those for which impacts are analyzed under CEQA.

FIGURE 5.2-1

STATE IMPORTANT FARMLAND MAP



Farm Use Designations

- P - Prime Farmland
- F - Farmland of Statewide Importance
- U - Unique Farmland
- G - Grazing Land
- L - Farmland of Local Importance
- LP - Farmland of Local Potential
- X - Other Land
- CI - Confined Animal Agriculture
- nv - Nonagricultural or Natural Vegetation
- V - Vacant or Disturbed Land
- R - Rural Residential Land
- sAC - Semi-agricultural and Rural Commercial Land
- D - Urban and Built-Up Land
- W - Water Area
- I - Irrigated Farmland
- N - Nonirrigated Farmland
- Z - Out of Survey Area

Source: California Department of Conservation, 2010

LOS ANGELES COUNTY
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PLACEWORKS

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San Fernando Valley Planning Area

Only the western half of the San Fernando Valley Planning Area is mapped by FMMP. This area is almost entirely built out with "urban and built-up land." The Planning Area contains only six small areas of Farmland of Statewide Importance, which are located in the City of Los Angeles and not in the Plan Area.

Santa Monica Mountains Planning Area

Important Farmland is scattered in several small areas.

Existing Conditions on Mapped Important Farmland

Existing conditions on Prime Farmland, Farmland of Statewide Importance, and Unique Farmland were observed using satellite photography taken in 2013. At a scale of about 1:1500, orchards, row crops, and grass crops can be identified; fallow row crop fields can be distinguished from active fields; and vacant land can be distinguished from active farmland and from fallow row crop fields.

Antelope Valley Planning Area

Nine areas of Prime Farmland, two areas of Farmland of Statewide Importance, and two areas of Unique Farmland were reviewed. Vacant land was identified in two of the nine areas of Prime Farmland. Both areas of Unique Farmland, and one of the areas of Farmland of Statewide Importance, consisted entirely of active farmland. The remaining farmland areas each consisted of a mixture of active and fallow farmland (see Figure 5.2-2, *Existing Conditions, Important Mapped Farmland, Antelope Valley and Santa Clarita Valley Area Plan Areas)*. To allow greater detail, Figures 5.2-2 through 5.2-6 focus on areas with mapped Important Farmland and do not show plan areas or Planning Areas in their entirety.

Santa Clarita Valley Planning Area

Six areas of Prime Farmland, three areas of Farmland of Statewide Importance, and two areas of Unique Farmland were reviewed. Both areas of Unique Farmland and three of the areas of Prime Farmland were entirely active farmland; most of the remaining areas were a mix of fallow agricultural land and vacant land (see Figure 5.2-2).

Santa Monica Mountains Planning Area

One area of Prime Farmland and four areas of Unique Farmland were reviewed. The Prime Farmland area was a mix of fallow agricultural land and vacant land; the Unique Farmland areas were a mix of active agricultural land and vacant land (see Figure 5.2-3, *Existing Conditions, Important Mapped Farmland, Santa Monica Mountains Planning Area*).

Existing Land Use Designations on Mapped Important Farmland

Mapped Important Farmland only exist in three of Los Angeles County's eleven Planning Areas. For that reason, the following description of existing farmland conditions only discusses the Antelope Valley, Santa Clarita Valley, and Santa Monica Mountains Planning Areas.

Antelope Valley Planning Area

Land use designations from the existing Antelope Valley Area Plan for areas identified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are shown below in Table 5.2-3 and in Figure 5.2-4, *Existing Land Use Designations on Mapped Important Farmland, Antelope Valley Area Plan*.

Table 5.2-3 Existing Land Use Designations for Mapped Important Farmland, Antelope Valley Area Plan (in acres)

Designation	Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Total
Airport	3,657	0	13	3,670
C - Commercial	36	0	0	36
N1 - Nonurban 1 (0.5 du/ac)	18,973	749	389	20,111
N2 - Nonurban 2 (1.0 du/ac)	552	0	56	608
O - Open Space	5	0	5	10
P - Public Service Facilities	5	0	0	5
TC - Transportation Corridor	2	0	0	2
U1 – Urban 1 (1.1 to 3.3 du/ac)	1	0	0	1
Total	**23,231**	**749**	**463**	**24,443**

Santa Clarita Valley Planning Area

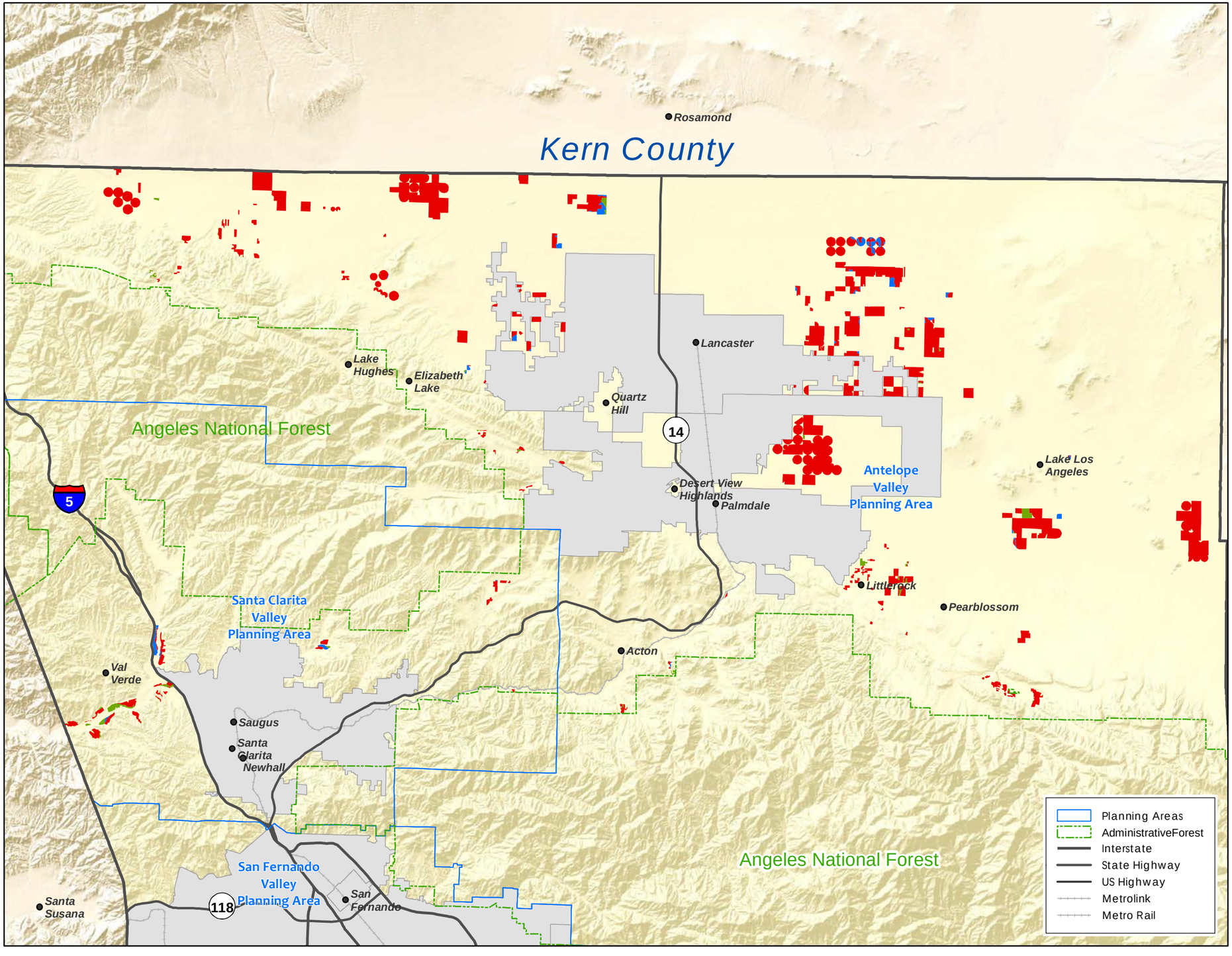
Land use designations from the existing Santa Clarita Area Plan for areas identified as Prime Farmland, Farmland of Statewide importance, and Unique Farmland are shown below in Table 5.2-4 and on Figure 5.2-5, *Existing Land Use Designations on Mapped Important Farmland, Santa Clarita Valley Area Plan.*

Table 5.2-4 Existing Land Use Designations for Mapped Important Farmland, Santa Clarita Valley Area Plan (in acres)

Designation	Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Total
CG - General Commercial	8	0	0	8
CM - Major Commercial	67	0	34	101
Freeway Right-of-Way	0	9	0	9
IL - Light Industrial	0	6	0	6
OS-NF - National Forest	0	0	0	0
P - Public and Semi-Public	200	106	0	306
RL1 - Rural Land 1	75	44	10	129
RL2 - Rural Land 2	116	2	0	118
RL20 - Rural Land 20	11	0	0	11
SP - Specific Plan	562	14	220	796
Total	**1,039**	**181**	**264**	**1,484**

FIGURE 5.2-2

EXISTING CONDITIONS, IMPORTANT MAPPED FARMLAND, ANTELOPE VALLEY PLANNING AREA AND SANTA CLARITA VALLEY PLANNING AREA



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Source: DRP, 2013; California Department of Conservation, 2010.

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AGRICULTURE AND FORESTRY RESOURCES

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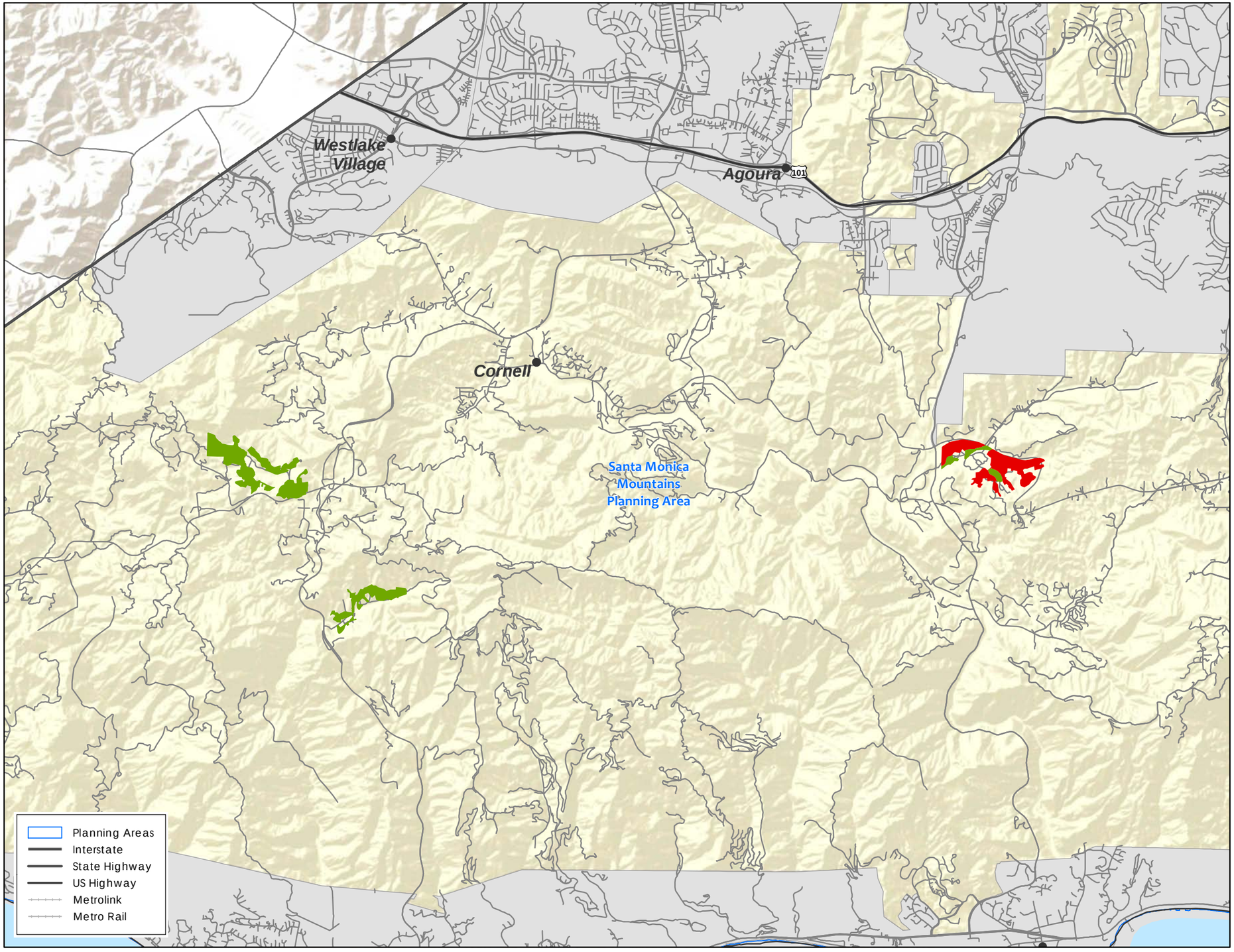
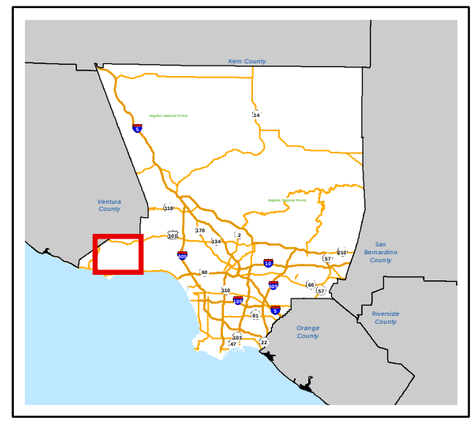
FIGURE 5.2-3

EXISTING CONDITIONS, IMPORTANT MAPPED FARMLAND, SANTA MONICA MOUNTAINS PLANNING AREA



Prime Farmland
Unique Farmland
City Boundaries
Unincorporated County



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Source: DRP, 2013; California Department of Conservation, 2010.

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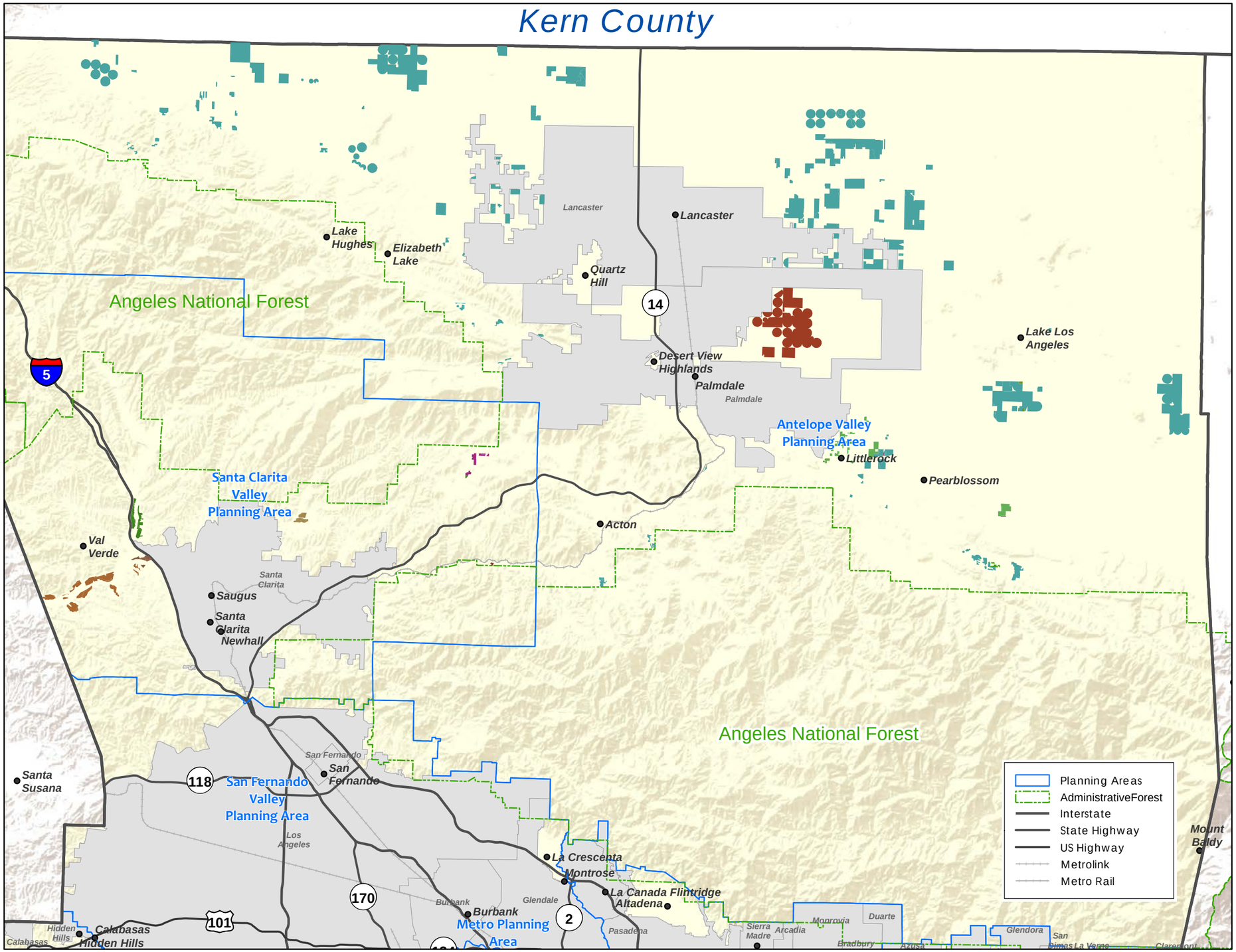
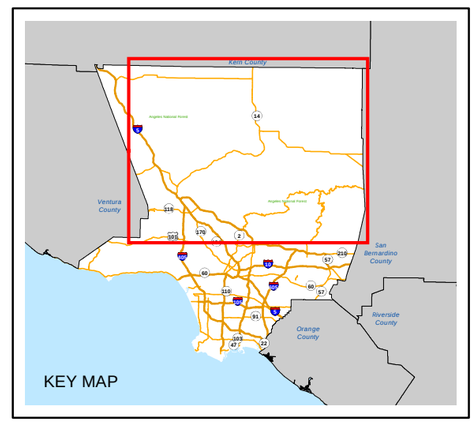
FIGURE 5.2-4

EXISTING LAND USE DESIGNATIONS ON MAPPED IMPORTANT FARMLAND, ANTELOPE VALLEY PLANNING AREA



- Airport
- C - Commercial
- CG - General Commercial
- CM - Major Commercial
- IL - Light Industrial
- N1 - Non-Urban 1 (0.5 du/ac)
- N2 - Non-Urban 2 (1.0 du/ac)
- O - Open Space
- O-NF - National Forest
- OS-NF - National Forest
- P - Public Service Facilities
- P - Public and Semi-Public
- RL1 - Rural Land 1
- RL2 - Rural Land 2
- RL20 - Rural Land 20
- SP - Specific Plan
- TC - Transportation Corridor
- U1 - Urban 1 (1.1 to 3.3 du/ac)
- City Boundaries
- Unincorporated County



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Source: DRP, 2013; California Department of Conservation, 2010.

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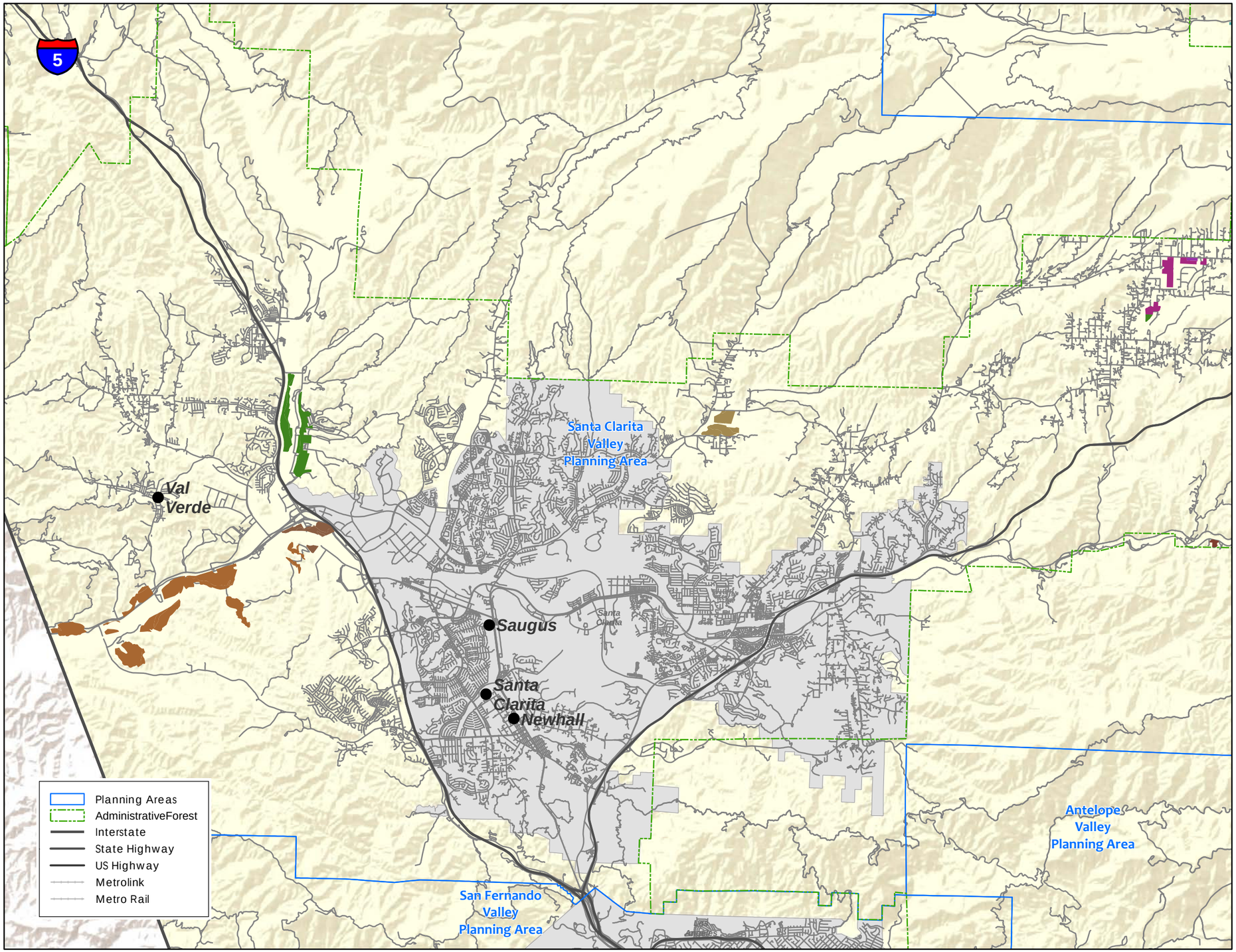
FIGURE 5.2-5

EXISTING LAND USE DESIGNATIONS ON MAPPED IMPORTANT FARMLAND, SANTA CLARITA VALLEY PLANNING AREA



CG - General Commercial
CM - Major Commercial
IL - Light Industrial
N1 - Non-Urban 1 (0.5 du/ac)
OS-NF - National Forest
P - Public and Semi-Public
RL1 - Rural Land 1
RL2 - Rural Land 2
RL20 - Rural Land 20
SP - Specific Plan
City Boundaries
Unincorporated County

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Source: DRP, 2013; California Department of Conservation, 2010.

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Santa Monica Mountains Planning Area

Land use designations for areas identified as Prime Farmland and Unique Farmland in the Santa Monica Mountains Planning Area are shown below in Table 5.2-5 and on Figure 5.2-6, *Existing Land Use Designations on Mapped Important Farmland, Santa Monica Mountains Planning Area.*

Table 5.2-5 Existing Land Use Designations for Mapped Important Farmland, Santa Monica Mountains Planning Area (in acres)

Designation	Prime Farmland	Unique Farmland	Total
Malibu Coastal Land Use Plan Area			
3 - Rural Land I (1 du/10 ac)	0	21	21
4 – Rural Land II (1 du/5 ac)	0	40	40
5 - Rural Land III (1 du/2 ac)	46	11	57
6 - Residential I (1 du/ac)	24	0	24
11 - Institution and Public Facilities	3	1	4
16 - Low-Intensity Visitor-Serving Commercial Recreation	28	12	40
18 – Parks	3	0	3
M2 - Mountain Land (1 du/20 ac)	0	30	30
Santa Monica Mountains North Area Plan Area			
N5 - Mountain Lands 5 (1 du/5 ac max)	0	73	73
N10 - Mountain Lands 10 (1 du/10 ac max)	0	16	16
Total	**104**	**204**	**308**

Conversion of Farmland to Non-Agricultural Uses

Between 1984 and 2010, the amount of Prime Farmland in Los Angeles County decreased by about 9,200 acres, or 23 percent; and the amount of Farmland of Local Importance decreased by about 12,500 acres, or 65 percent, of the 1984 acreage (see Table 5.2-6, *Conversion of Farmland to Non-Agricultural Uses: 1984 to 2010*). During the same period, Farmland of Statewide Importance decreased by 6.4 percent and Unique Farmland increased by 165 percent. The total acreage of Unique Farmland increased incrementally as other land use types were re-designated by the CDC. Overall, Los Angeles County experienced a 6.7 percent decrease in farmland between 1984 and 2010.

Table 5.2-6 Conversion of Farmland to Non-Agricultural Uses between 1984 and 2010 in Los Angeles County (in acres)[1]

	1984	2010	Change, 1984–2010	Percent Change, 1984–2010
Prime Farmland	40,059	30,876	-9,183	-22.9%
Farmland of Statewide Importance	1,017	952	-65	-6.4%
Unique Farmland	426	1,129	703	165.0%
Subtotal	*41,502*	*32,957*	*-8,545*	*-20.6%*
Farmland of Local Importance	19,375	6,855	-12,520	-64.6%
Grazing Land	229,763	231,475	1,712	0.7%
Subtotal	*249,138*	*238,330*	*-10,808*	*-4.3%*
Total	**290,640**	**271,287**	**-19,353**	**-6.7%**

Source: FMMP 2014
[1] Includes all of Los Angeles County, including the Project Area and incorporated cities.

Agricultural Production

The total dollar value of agricultural production in Los Angeles County in 2012 was $189.9 million. The top five agricultural commodities by dollar value in 2012 were nursery production, vegetable crops, field crops, fruit and nut crops, and livestock production. The total acreage in agricultural production was 21,563 acres, or about 33.7 square miles (ACMW 2013). Los Angeles County produced the greatest agricultural production of any country in the United States from 1910 to about 1955 (Surls 2011).

Antelope Valley Planning Area

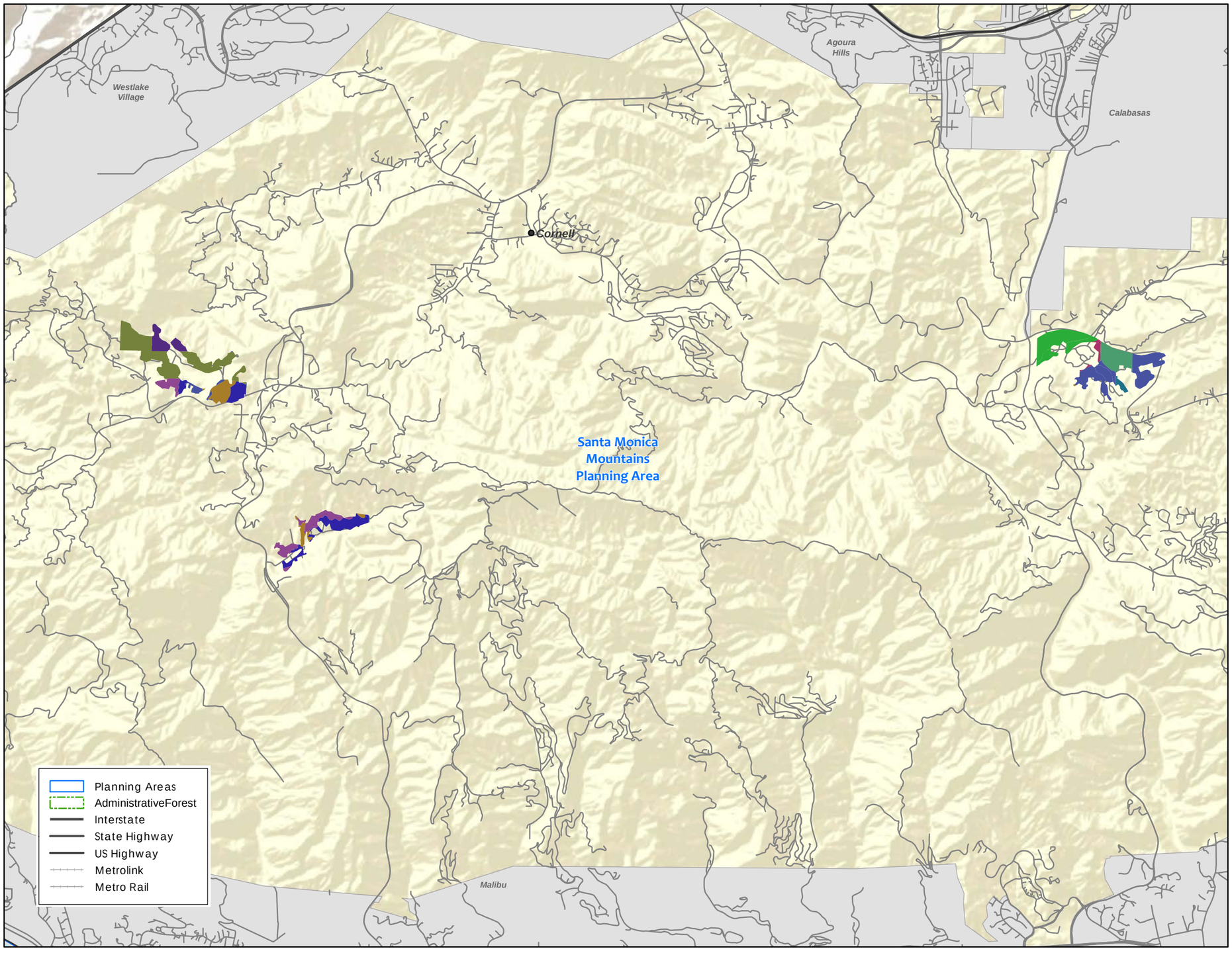
Overall, agricultural production has increased in the Antelope Valley since the mid-1990s due to the increase in production of vegetable crops (mainly onions and carrots) and fruit crops (mainly peaches)—28 percent and 15 percent, respectively. Agricultural acreage of vegetable crops has increased from 9,090 acres in 1999 to 11,670 in 2000, primarily due to increased carrot cultivation (UCCE 2014b).

Constraints on Agricultural Production

Constraints on agricultural production in Los Angeles County include conversion of farmland to non-agricultural uses; high land values making some agricultural commodities economically infeasible; and incompatibility with surrounding urban land uses.

FIGURE 5.2-6

EXISTING LAND USE DESIGNATIONS ON MAPPED IMPORTANT FARMLAND, SANTA MONICA MOUNTAINS PLANNING AREA



- 11 - Institution and Public Facilities
- 16 - Low-Intensity Visitor-Serving Commercial Recreation
- 18 - Parks
- 3 - Rural Land I (1 du/10 ac)
- 4 - Rural Land II (1 du/5 ac)
- 5 - Rural Land III (1 du/2 ac)
- 6 - Residential I (1 du/ac)
- M2 - Mountain Land (1 du/20 ac)
- N10 - Mountain Lands 10 (1 du/10 ac max)
- N5 - Mountain Lands 5 (1 du/5 ac max)
- OS-P - Open Space Parks
- City Boundaries
- Unincorporated County

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PLACEWORKS

Source: DRP, 2013; California Department of Conservation, 2010.

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Forests

Forests are distinguished from woodlands in that the crowns of forest trees generally overlap; woodlands consist of open stands of trees, usually with 25 to 60 percent tree cover (The Nature Conservancy 1998).

Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits" (California Public Resources Code Section 12220[g]). Timberland is defined as "land…which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees" (California Public Resources Code Section 4526).

Forests in Los Angeles County

A number of forest plant communities in Los Angeles County are described in the Section 5.4, *Biological Resources*, of this DEIR, with emphasis on: oak riparian forest, coast live oak riparian forest, southern cottonwood willow riparian forest, and mainland cherry forest.

The Angeles National Forest and a small portion of the Los Padres National Forest encompass nearly 650,000 acres of land within the Project Area. The Angeles National Forest stretches across Los Angeles County in two sections encompassing the San Gabriel Mountain Range, and is 1,018 square miles, or 25 percent of the land area of Los Angeles County. The U.S. Forest Service is responsible for managing public forest lands. Its mission is the stewardship of forest lands and resources through programs that provide recreation and multiple uses of natural resources, wilderness areas, and significant habitat areas. Within the boundaries of the National Forests, nearly 40,000 acres are privately owned. For these parcels, commonly referred to as in-holdings, the County retains responsibility for land use regulation. Los Angeles County also includes small areas of forest outside of National Forests. These consist primarily of small areas in the Santa Monica Mountains, Sierra Pelona Mountains, and areas of the San Gabriel Mountains adjacent to the Angeles National Forest.

Despite the large extent of the Angeles National Forest in Los Angeles County, very little of its area contains forests or woodlands as defined above. Most of the land area in the Angeles National Forest is chaparral. Forests in Los Angeles County are limited to narrow formations along creeks and other watercourses and the highest elevations of the San Gabriel Mountains. Because there are no substantial areas of privately-owned forest in Los Angeles County, there is no land used for commercial logging (timberland).

5.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

AG-1 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use.

AG-2 Conflict with existing zoning for agricultural use, or a Williamson Act contract.

AG-3 Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).

AG-4 Result in the loss of forest land or conversion of forest land to nonforest use.

AG-5 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to nonforest use.

5.2.3 Relevant General Plan Goals and Policies

The following measures are Proposed General Plan Update goals and policies that will assist in alleviating or avoiding potential impacts related to agricultural and forestry resources.

Land Use Element

Goal LU 1: A General Plan that serves as the constitution for development, and a Land Use Policy Map that implements the General Plan's Goals, Policies and Guiding Principles.

- **Policy LU 1.7:** In the review of a project-specific amendment(s) to convert lands within the ARAs, ensure that the project-specific amendment(s):
  - Is located on a parcel that adjoins another parcel with a comparable use, at a comparable scale and intensity; and
  - Will not negatively impact the productivity of neighboring agricultural activities.

Conservation and Natural Resources Element

Goal C/NR-8: Productive farmland that is protected for local food production, open space, public health, and the local economy.

- **Policy C/NR 8.1:** Protect ARAs, and other land identified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance by the California Department of Conservation, from encroaching development and discourage incompatible adjacent land uses.
- **Policy C/NR 8.2:** Discourage land uses in the ARAs, and other land identified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance by the California Department of Conservation, that are incompatible with agricultural activities.
- **Policy C/NR 8.3:** Encourage agricultural activities within ARAs.

Goal C/NR-9: Sustainable agricultural practices.

- **Policy C/NR 9.1:** Support agricultural practices that minimize and reduce soil loss and prevent water runoff from affecting water quality.

- **Policy C/NR 9.2:** Support innovative agricultural practices that conserve resources and promote sustainability, such as drip irrigation, hydroponics, and organic farming.

- **Policy C/NR 9.3:** Support farmers' markets throughout the county.

- **Policy C/NR 9.4:** Support countywide community garden and urban farming programs.

- **Policy C/NR 9.5:** Discourage the conversion of native vegetation to agricultural uses.

In addition to the policies listed above, the following Implementation Programs would ensure that the goals and policies in the Proposed General Plan Update are implemented and thereby, would lessen the potential impacts of the Proposed Project with respect to agricultural resources.

- **C/NR-6 – Agricultural Resource Areas Ordinance.**

  - Prepare an Agricultural Resource Areas Ordinance in order to encourage the retention and sustainable utilization of agricultural land for agricultural uses.

  - Analyze the feasibility of offering incentives, such as density bonuses and/or conservation subdivisions, that deed-restrict a certain percentage of the project site for open space and agricultural uses only.

  - Ensure compatibility between agricultural and non-agricultural land uses through buffering, development standards, and design requirements.

- **PS/F-3 – Agricultural Water Conservation Program.** Study the feasibility of creating an agricultural water conservation program, which will increase crop water use efficiency, and reduce water use through conservation and technological advancement in water management.

5.2.4 Environmental Impacts

The following impact analysis addresses thresholds of significance according to Appendix G of the CEQA Guidelines. The applicable thresholds are identified in brackets after the impact statement. In order to provide context for the analysis, the text immediately below identifies components of the Proposed Project that directly relate to agricultural resources and explains the relevance of these components to analysis of Impacts 5.1-1 through 5.1-5.

Proposed Project

The Proposed Project devotes special attention to preservation of agricultural resources. Its primary tool for conservation of such resources is the establishment of Agricultural Resource Areas (ARAs).

Agricultural Resource Areas

ARAs are areas where the Proposed Project promotes the preservation of agricultural land. These areas are protected by policies to prevent the conversion of farmland to incompatible uses. ARAs consist of farmland identified by the California Department of Conservation and farms that have received permits from the Los Angeles County Agricultural Commissioner/Weights and Measures. The County encourages the preservation and sustainable utilization of agricultural land, agricultural activities and compatible uses within these areas.

ARAs include:

- Prime Farmland
- Farmland of Statewide Importance
- Farmland of Local Importance
- Unique Farmland
- Lands that received permits from the Los Angeles County Agricultural Commissioner/Weights and Measures

The ARAs exclude:

- Proposed Significant Ecological Areas (SEA)
- Approved specific plans
- Approved large-scale renewable energy facilities
- Lands outside of the Santa Clarita Valley and Antelope Valley Planning Areas
- Lands designated Public and Semi-Public (P)

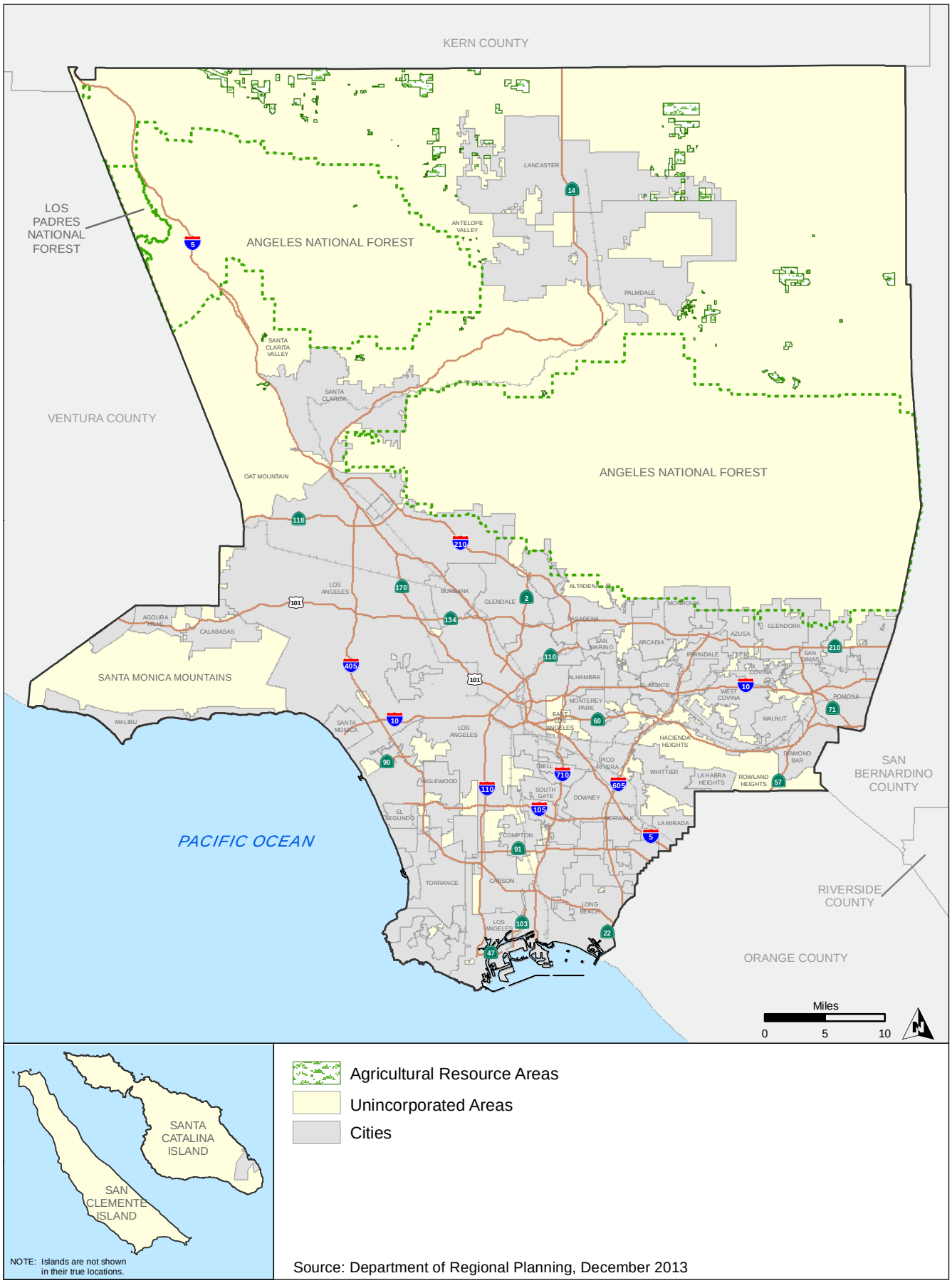
ARAs are designated within the Antelope Valley and Santa Clarita Valley Planning Areas only; about 98 percent of the ARAs is in the Antelope Valley Planning Area (see Figure 5.2-7, *Proposed Agricultural Resource Areas*; and Table 52-7, *Proposed Agricultural Resource Areas*).

Table 5.2-7 Summary of Proposed Agricultural Resource Areas (in acres)

	Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Farmland of Local Importance	Total
Antelope Valley Planning Area	26,917	611	380	6,254	34,162
Santa Clarita Valley Planning Area	477	157	44	62	740
Total	**27,395**	**769**	**423**	**6,316**	**34,902**

PROPOSED AGRICULTURAL RESOURCE AREAS

FIGURE 5.2-7



Source: Department of Regional Planning, December 2013

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Methodology of Analysis

Consistent with Appendix G of the CEQA Guidelines, the analysis in this section of the DEIR focuses on the potential loss of agricultural or forests.

Approach to Impact Analysis Related to ARAs

Implementation of County ARA policies would reduce direct and indirect impacts of conversion of mapped Important Farmland to non-agricultural uses. However, ARAs would not be agricultural preserves, and some conversion of Important Farmland to non-agricultural uses would be permitted in ARAs. Thus, the following impact analysis focuses on buildout of existing land use designations in the Antelope Valley, Santa Clarita Valley, and Santa Monica Mountains Planning Areas.

Feasibility of Agriculture Related to Permitted Density

Agricultural uses are allowed in existing land use designations for rural land, nonurban uses, and mountain land in the Antelope Valley, Santa Clarita Valley, and Santa Monica Mountains Planning Areas with permitted residential densities of up to one residential unit per acre. This means that agricultural activities are allowed in many areas of Los Angeles County, including on parcels that primarily feature a nonagricultural use. Analysis of impacts to mapped farmland under CEQA focuses on "intensive commercial agriculture" (CDC 1997), which generally involves agricultural operations that produce crops intended for widespread consumption. Especially at the scale of a Proposed General Plan Update, it is not feasible (and not required under CEQA) to analyze localized impacts to individual subsistence agriculture operations. Therefore, the analysis below focuses on commercial-scale agriculture and assumes that buildout of land use designations with permitted densities greater than one residential unit per five acres would not be compatible with—or likely to be used for—continued agricultural production. Although parcels with designations allowing higher residential units might feature agricultural operations in the short term, buildout of the Proposed Project would feature residential uses on such parcels.

Note that in the analysis below, farmland data is sometimes presented for adopted community-based plans in the Antelope Valley and Santa Clarita Planning Areas. The plan areas of the Antelope Valley Area Plan and Santa Clarita Valley Area Plan are coterminous with the applicable Planning Area boundaries. Because the Proposed Project would not change land use designations in the three Planning Areas discussed, land use designations and other information identified for these Area Plans are relevant.

Impact 5.2-1: Buildout of the Proposed Project would convert California resource agency–designated farmland to non-agricultural land uses. [Threshold AG-1]

Impact Analysis: As discussed above in Section 5.2.1.2, Important Farmland in Los Angeles County is limited to the Antelope Valley, Santa Clarita Valley, and Santa Monica Mountains Planning Areas. No land use changes are proposed for these Planning Areas in the Proposed Project. However, the land use designations in these areas do allow for additional development capacity beyond that utilized under existing conditions. Such development capacity could be utilized during the planning period of the Proposed Project. Therefore, the following analysis evaluates the indirect effects of the Proposed Project related to buildout of existing land use designations.

Buildout of Existing Land Use Designations on Mapped Important Farmland

Antelope Valley Planning Area

Existing land use designations on Important Farmland under the Antelope Valley Area Plan are classified into designations compatible or incompatible with continued agricultural use in Table 5.2-8 below. As shown, about 85 percent of the total acreage of the three categories of farmland evaluated–Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, is in land use designations incompatible with intense commercial agriculture. This DEIR assumes that buildout of the Proposed General Plan Update would consist of development of parcels with the most intense permitted land uses, and/or the permitted land uses with the highest economic return. The Airport designation permits a wide range of uses–airport, commercial, industrial, agricultural, recreational, and public and semipublic uses. Considering the size of the Palmdale Regional Airport site–17,000 acres–it is assumed here that at buildout of the Proposed Project, agriculture would remain practicable on part of the Airport site even if much of the site were developed with more intense uses permitted under the Airport designation.

Table 5.2-8 Existing Land Use Designations for Mapped Important Farmland, Antelope Valley Area Plan (in acres)

Designation	Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Total
Designations for Land Uses Compatible with Continued Agricultural Use				
Airport	3,657	0	13	3,670
Designations for Land Uses Incompatible with Continued Agricultural Use				
N1 - Nonurban 1 (0.5 du/ac)[1]	18,973	749	389	20,111
N2 - Nonurban 2 (1.0 du/ac)[1]	552	0	56	608
C – Commercial	36	0	0	36
O - Open Space	5	0	5	10
P - Public Service Facilities	5	0	0	5
TC - Transportation Corridor	2	0	0	2
U1 – Urban 1 (1.1 to 3.3 du/ac)	1	0	0	1
Subtotal	**19,574**	**749**	**450**	**20,773**
Total	**23,231**	**749**	**463**	**24,443**

[1] This land use designation permits agricultural use; however, the permitted residential density is incompatible with intensive commercial agriculture.

Buildout of the Proposed Project is not likely to result in the construction of urban development on all of the mapped Important Farmland in the Antelope Valley Planning Area, especially where continued operation of agricultural activities remains permitted and economically viable. However, CEQA requires that analysis evaluate the effects of all development capacity allowed on applicable parcels. Table 5.2-8 indicates that if development capacity were fully utilized, 20,773 acres of Important Farmland would be developed with nonagricultural uses. This would represent a substantial conversion of resource agency–designated farmland to non-agricultural land uses. Conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to buildout of the Proposed Project would be a significant impact in the Antelope Valley Planning Area.

Santa Clarita Valley Planning Area

Important Farmland would be converted to non-agricultural land uses by buildout of the Santa Clarita Valley Area Plan, which is coterminous with the Santa Clarita Valley Planning Area.

Adopted Area Plan Policies

The following policies relevant to agricultural resources are set forth in the Santa Clarita Valley Area Plan.

- **Policy LU 1.1.7:** Preserve and protect important agricultural resources, including farmland and grazing land, through designating these areas as Rural Land on the Land Use Map where appropriate.

- **Policy CO 10.1.9:** Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas, and other open space that provides nature carbon sequestration benefits.

The 2012 Certified EIR for the Santa Clarita Valley Area Plan (Impact Sciences, Inc. 2012) concluded that upon implementation of the above policies, impacts related to conversion of agricultural land in the Santa Clarita Valley Planning Area would be less than significant. Because the Proposed Project would not change any land use designations in the Santa Clarita Valley Planning Area, this significance determination is incorporated in this DEIR by reference.

Santa Monica Mountains Planning Area

Unlike the Antelope Valley Planning Area and Santa Clarita Valley Planning Area, the Santa Monica Mountains Planning Area does not have an Area Plan that covers its entire geographic area. The Santa Monica Mountains North Area Plan applies to the northern portion of the Planning Area and the remaining portion is located within the Coastal Zone.

In Table 5.2-9, below, land use designations in the Santa Monica Mountains Planning Area are classified as being either compatible or incompatible with agricultural operations. Although agricultural uses would still be allowed under many of these land use designations, hypothetical buildout of allowed nonagricultural uses (such as residential units) would be incompatible with continued agricultural operations.

Table 5.2-9 Compatibility of Existing Land Use Designations for Mapped Important Farmland with Continued Agricultural Use, Santa Monica Mountains Planning Area

Designation	Prime Farmland	Unique Farmland	Total
Land Use Designations for Land Uses Compatible with Continued Agricultural Use			
Malibu Coastal Land Use Plan Area			
M2 - Mountain Land (1 du/20 ac)	0	30	30
3 - Rural Land I (1 du/10 ac)	0	21	21
4 – Rural Land II (1 du/5 ac)	0	40	40
Subtotal	**0**	**91**	**91**
Santa Monica Mountains North Area Plan Area			
N5 - Mountain Lands 5 (1 du/5 ac max)	0	73	73
N10 - Mountain Lands 10 (1 du/10 ac max)	0	16	16
Subtotal	**0**	**89**	**89**
SUBTOTAL	**0**	**180**	**180**
Designations for Land Uses Incompatible with Continued Agricultural Use			
Malibu Coastal Land Use Plan Area			
5 - Rural Land III (1 du/2 ac)	46	11	57
6 - Residential I (1 du/ac)	24	0	24
11 - Institution and Public Facilities	3	1	4
16 - Low-Intensity Visitor-Serving Commercial Recreation	28	12	40
18 - Parks	3	0	3
Subtotal	**104**	**24**	**128**
Total	**104**	**204**	**308**

As shown in Table 5.2-9, all of the Prime Farmland, and over 88 percent of the Unique Farmland in the Planning Area would be converted to non-agricultural land uses by buildout of the Proposed Project. This represents a substantial conversion of mapped Important Farmland to non-agricultural uses. Therefore, implementation of the Proposed Project would result in a significant impact in the Santa Monica Mountains Planning Area.

Conclusion

Implementation of proposed ARA policies would reduce direct and indirect impacts of conversion of mapped Important Farmland to non-agricultural uses. However, ARAs would not be agricultural preserves, and some conversion of Important Farmland to non-agricultural uses would be permitted in ARAs. Therefore, conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to buildout of the Proposed Project would be a potentially significant impact in the Antelope Valley Area Planning Area and Santa Monica Mountains Planning Area. In the remaining nine Planning Areas, impacts would be less than significant.

Impact 5.2-2: The Proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act. [Threshold AG-2]

Impact Analysis:

Proposed Zoning Changes

The Proposed Project includes establishment of five new zones. Three of the new zones, the R-5 High Density Residence Zone, the MXD Mixed Use Zone, and the C-MJ Major Commercial Zone, would be designated in intensely urbanized areas; designation of such zones would have no impact on agricultural uses on mapped farmland. The Proposed Project does not add the R-5 zone to the Zoning Map. The two other proposed zones are for rural areas: the C-RU Rural Commercial Zone and the MXD-RU Mixed Use Rural Zone. The Proposed Project does not add either of these zones to the Zoning Map. Therefore, implementation of the Proposed Project would not involve rezoning of farmland and impacts regarding conversion of mapped farmland to non-agricultural uses would be less than significant.

Williamson Act Contracts

The only Williamson Act contracts in effect in Los Angeles County are for land on Santa Catalina Island (CDC 2013). There is no mapped Important Farmland on the Island. The Proposed Project does not propose changes to land use designations or zoning on Santa Catalina Island. No impact to Williamson Act contracts would occur.

Impact 5.2-3: The Proposed Project would not conflict with zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)). [Threshold AG-3]

Impact Analysis: Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits" (California Public Resources Code Section 12220[g]). Timberland is defined as "land…which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees" (California Public Resources Code Section 4526). The Los Angeles County Zoning Code does not contain zones specifically for forest use or production of forest resources. Additionally, forest use is not specified as a permitted use in any of the three agricultural zones.

Two of the five new zones proposed by the Proposed Project were created for future use in rural areas: the C-RU Rural Commercial Zone and the MXD-RU Mixed Use Rural Zone. However, the Proposed Project does not add either of these zones to the Zoning Map. The remaining three proposed zones would only be designated in intensely urban areas, and would thus not impact forest land.

As the County has no existing zoning specifically designating forest use, implementation of the Proposed Project would not conflict with existing zoning for forest land or timberland. No impact would occur.

Impact 5.2-4: The Proposed Project will not result in the loss of forest land or conversion of forest land to nonforest use. [Threshold AG-4]

Impact Analysis: Forests in Los Angeles County are largely limited to mountain ranges in three of the eleven Planning Areas: Antelope Valley, Santa Clarita Valley, and Santa Monica Mountains. Small areas of forest are also found at the northern edge of the East San Gabriel Valley and West San Gabriel Valley Planning Areas. The largest concentration of forest is in the Angeles National Forest, which covers 25 percent of the land area of Los Angeles County. Despite the large extent of the Angeles National Forest, very little of its area contains forests or woodlands as defined by the California Public Resources Code. Most of the land area in the Angeles National Forest is chaparral or similar scrub communities. Forests in Los Angeles County are limited to narrow formations along creeks and other watercourses and the highest elevations of the San Gabriel Mountains.

Coast live oak riparian forest occurs in narrow formations along watercourses. Southern cottonwood-willow riparian forest occurs in frequently flooded lands along perennially wet reaches of streams (UCSB 1998). These plant communities would be protected by existing regulations, including Sections 1600 et seq. of the California Fish and Game Code.[2] Mitigation measures set forth in Section 5.4 of this DEIR would reduce impacts to these natural communities from projects approved under the Proposed Project.

Oak riparian forest occurs in canyons at higher elevations. Many of the higher-elevation canyons in the county are already protected within the Angeles National Forest and the Santa Monica Mountains National Recreation Area. In addition, some oak riparian forest is in riparian habitat jurisdictional to the CDFW. While oak riparian forest is not a sensitive species specified in Section 5.4 of this DEIR, existing protected areas and regulatory protections would limit impacts to this forest community.

Forest land within Los Angeles County is protected through the County's Significant Ecological Area (SEA) Ordinance. As part of the Proposed Project, the County is in the process of updating the SEA designations and policies, including changes to the policies, boundaries and technical descriptions of the County's SEAs. The Proposed Project identifies 21 SEAs and 9 Coastal Resource Areas (CRAs)[3,4] that represent the wide-ranging biodiversity of Los Angeles County and contain its most important biological resources. The 21 SEAs and 9 CRAs are recommended to replace the 61 SEAs as designated in the Existing General Plan. Only those areas designated as SEA would be subject to the SEA program, while the CRAs would fall under the regulation of the California Coastal Act. Compliance with the SEA Ordinance will reduce potential impacts to forest land to a less than significant level.

[2] California Department of Fish and Wildlife (CDFW) jurisdiction over riparian habitat extends to the edge of riparian habitat extending outward from a stream, pursuant to California Fish and Game Code Sections 1600 et seq.
[3] It should be noted that because portions of the Santa Monica Mountains SEA and the Palos Verdes Peninsula and Coastline SEA are within the California Coastal Zone, these portions of the SEAs are proposed as Coastal Resource Areas (CRAs). The Draft SEA Ordinance will not apply to CRAs. Although CRAs have equivalent ecological significance to SEAs, the CRAs are within the California Coastal Zone, and the SEA Ordinance is superseded by the California Coastal Act. Both Santa Catalina Island and the Coastal Zone of the Santa Monica Mountains have individual California Coastal Commission Local Coastal Programs which regulate development within them.
[4] Santa Catalina Island is designated as a CRA only and is not considered a SEA.

Impact 5.2-5: Buildout of the Proposed Project would involve other changes in the existing environment that could result in conversion of farmland to non-agricultural use or conversion of forest land to nonforest use. [Threshold AG-5]

Impact Analysis:

Land Use Compatibility

Agricultural use can be incompatible with some other land uses–such as residential, school, hospital, and day care uses–due to pesticide use, noise, dust emissions, and odors. As mapped Important Farmland in the Project Area is generally scattered, buildout of the Proposed Project would involve development of non-agricultural uses along many edges of Important Farmland areas, as well as within some Important Farmland areas. New nonagricultural uses may develop around existing agricultural uses, creating pressure for them to be converted to nonagricultural uses.

Antelope Valley Planning Area

Most of the areas of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland within the Antelope Valley Planning Area are surrounded by Nonurban-1 (N-1) designation, which permits a wide range of land uses intended for remote areas including residential development at a density of up to 0.5 residential units per acre. Agriculture is permitted in the N-1 designation. However, analysis of impacts to farmland under CEQA generally focuses on intensive commercial agriculture rather than small-scale farms or grazing land. It is assumed that residential densities higher than 0.2 units per acre–or, one unit per five acres–are incompatible with intensive commercial agriculture. Thus, buildout of land surrounding existing mapped Important Farmland within the Antelope Valley Planning Area under the existing Antelope Valley Area Plan would contribute to pressure to convert mapped farmland to non-agricultural uses.

Santa Clarita Valley Planning Area

Impacts arising from land use incompatibility between agricultural uses and urban uses were identified as significant and unavoidable in the Certified EIR for the Santa Clarita Valley Area Plan for the Santa Clarita Valley Planning Area. That finding is incorporated into this DEIR by reference.

Santa Monica Mountains Planning Area

Mapped Important Farmland in the Santa Monica Mountains Planning Area is surrounded by numerous land use designations. Indirect impacts causing conversion of mapped important farmland to non-agricultural uses due to proposed development projects on sites adjacent to such farmland would be evaluated in subsequent project-level CEQA documentation. Farmland conversion in the Santa Monica Mountains would be incremental and scattered. For this reason, and because there is so little farmland in the Planning Area under existing conditions, substantial conversion of farmland is not anticipated.

Water Use

Increasing water demands in a region can reduce the practicability and/or economic feasibility of commercial agriculture.

Antelope Valley Planning Area

As shown in Table 5.2-10, the two foremost sources of water in the Antelope Valley are local groundwater and water imported from Northern California via the State Water Project. The Antelope Valley–East Kern Water Agency (AVEK), the largest water wholesaler in the Antelope Valley region, purchases imported water and resells it to local water providers. Groundwater pumping in the Antelope Valley is limited to a safe yield of 110,000 acre-feet per year under an adjudication by the Superior Court of California. Agricultural water demand in the Antelope Valley is estimated as 92,000 acre-feet per year through the 2010-2035 period (AVEK 2011).[5] The AVEK forecasts that groundwater, plus imported water, will be adequate to meet water demands in its service area through the 2010-2035 period. Therefore, water supply is not expected to constrain agricultural production in the Antelope Valley during nondrought years through 2035.

Table 5.2-10 Projected Water Supplies and Demands, Antelope Valley Integrated Regional Water Management Region, Acre-Feet per Year

	2015	2025	2035
Water Supplies			
Local Groundwater	110,000	110,000	110,000
Imported Water (State Water Project)	95,900	95,900	95,900
Surface Water	4,000	4,000	4,000
Recycle/Reuse	82	82	82
Total	**210,600**	**210,600**	**210,600**
Demands			
Urban	95,000	108,000	118,000
Agricultural	92,000	92,000	92,000
Total	**187,000**	**200,000**	**210,000**
Supplies less Demands	**23,600**	**10,600**	**600**

Source: AVRWMG 2013

Santa Clarita Valley Planning Area

Impacts on water supplies of buildout of the Santa Clarita Valley Area Plan were identified as less than significant in the Certified EIR for the Santa Clarita Valley Area Plan. Therefore, water supplies would not be a substantial constraint on agricultural production in the Santa Clarita Valley Planning Area.

[5] The projections of agricultural water use here are for the service area of the Antelope Valley – East Kern Water Agency, which includes nearly all of the part of the Antelope Valley in Los Angeles County, plus a large part of southeast Kern County.

Santa Monica Mountains Planning Area

No adverse impact on water supplies due to buildout of the Santa Monica Mountains North Area Plan was identified in the Initial Study for the Santa Monica Mountains North Area Plan prepared by the Los Angeles County Department of Regional Planning in 2007. Thus, water supplies would not be a substantial constraint on agricultural production within the Santa Monica Mountains North Area Plan. Furthermore, Section 5.17 of this DEIR, *Utilities and Service Systems*, addresses the issue of water supply and determines that impacts related to water supply in the region would be less than significant.

Conclusion

Implementation of proposed ARA policies would reduce direct and indirect impacts of conversion of mapped Important Farmland to incompatible non-agricultural uses. However, ARAs would not be agricultural preserves, and some conversion of Important Farmland to non-agricultural uses would be permitted in ARAs. Buildout of the Proposed Project based on the existing Antelope Valley Area Plan in the Antelope Valley Planning Area and on the existing Santa Clarita Valley Area Plan in the Santa Clarita Planning Area would have a significant indirect impact on conversion of mapped Important Farmland to non-agricultural use due to pressure to convert farmland to non-agricultural uses and related incompatibilities between agricultural and urban uses. Such indirect impacts would be less than significant in the other nine Planning Areas.

5.2.5 Cumulative Impacts

Cumulative projects are those that would be developed in cities in Los Angeles County along with buildout of the Proposed Project. Projections of numbers of housing units and jobs in the Project Area at 2035 and corresponding 2035 projections for cities in Los Angeles County and Los Angeles County (as a whole) are shown in Section 4.4, *Assumptions Regarding Cumulative Impacts*. Cumulative projects in Los Angeles County could cause significant cumulative impacts if they did any of the following:

- Convert substantial areas of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland to non-agricultural uses. There are about 11,752 acres of Prime Farmland, 434 acres of Farmland of Statewide Importance, and 441 acres of Unique Farmland in cities in Los Angeles County. The total of those three categories, 12,627 acres, is about 32 percent of the corresponding countywide total. The great majority of the aforementioned Important Farmland is in the Antelope Valley and Santa Clarita Valley Planning Areas, as with the Important Farmland in the Project Area.

- Conflict with existing zoning for agricultural use. Cumulative projects would not conflict with Williamson Act contracts because the only land subject to such contracts in Los Angeles County is on Santa Catalina Island in the unincorporated areas. Because no development is proposed in these areas and no agricultural uses exist within the City of Avalon, no cumulative impacts would occur.

- Conflict with existing zoning for forest land; or cause loss of forest land or convert forest land to non-forest use.

- Indirectly cause conversion of one or more of the above-listed three categories of mapped Important Farmland to non-agricultural use; such as through development of land uses incompatible with farming abutting farmland.

Implementation of projects in cities would have the following cumulative environmental effects when combined with implementation the Proposed Project:

- Some projects would be proposed on mapped farmland and/or land zoned for agricultural use. Cumulative impacts to mapped Important Farmland[6] would be limited to the Antelope Valley, Santa Clarita Valley, and Santa Monica Mountains Planning Areas, as much of urbanized Los Angeles County is not mapped by the FMMP.

- Some projects proposing land uses incompatible with farming—including residential, commercial, and institutional uses—would be sited next to mapped farmland, contributing to pressure to convert mapped farmland to non-agricultural uses in the Project Area.

- Substantial adverse cumulative impacts to forest land, or zoning for forest use, are unlikely. Almost all of the forests in Los Angeles County are in the high-elevation parts of the Project Area and not in cities.

- Cumulative projects in combination with implementation of the Proposed Project would result in significant cumulative impacts related to conversion of mapped Important Farmland to non-agricultural uses; both directly and indirectly. No mitigation measures are available that would reduce cumulative impacts to less than significant; thus, cumulative impacts would be significant and unavoidable.

5.2.6 Existing Regulations and Standard Conditions

State

- California Government Code Sections 51200 et. seq.: Williamson Act

- California Government Code Section 65570: Authorized Farmland Mapping and Monitoring Program

- California Public Resources Code, Section 21095: Land Evaluation and Site Assessment (LESA) Model

- California Public Resources Code, Section 21060.1: Established farmland mapping categories

Local

- Adopted Community and Area Plans
- Los Angeles County Code of Ordinances Title 22

[6] *Mapped Important Farmland* here means Prime Farmland, Farmland of Statewide Importance, and Unique Farmland.

5.2.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the all of the aforementioned impacts would be less than significant: Impact 5.2-2, Impact 5.2-3, and Impact 5.2-3. Without mitigation, the following impacts would be **potentially significant:**

- **Impact 5.2-1** Buildout of the Proposed Project would convert mapped Important Farmland in the Antelope Valley Area Plan area to non-agricultural uses.

- **Impact 5.2-5** Buildout of the Proposed Project would indirectly result in conversion of mapped Important Farmland to non-agricultural land uses in the Antelope Valley Planning Area.

5.2.8 Mitigation Measures

Impact 5.2-1

No mitigation measures are available that would reduce impacts of conversion of mapped Important Farmland to less than significant. Efforts to preserve offsite farmland through agricultural or conservation easements, or mitigation banks, do not offset or decrease the reduction in total mapped Important Farmland due to implementation of a project. The proposed ARA program and related policies in the Proposed General Plan Update (Policies C/NR 8.1 through C/NR 8.3) would encourage the continued use of farmland for agricultural operation. However, the ARAs would not be agricultural preserves and would not guarantee the preservation of farmland. Impacts would be significant and unavoidable.

The California Court of Appeal has held that a mitigation measure requiring an agricultural land mitigation bank does not actually avoid or reduce the loss of farmland subject to development (*Friends of the Kangaroo Rat v. California Department of Corrections* (August 18, 2003) Fifth Appellate District Number F040956). Therefore, an Agricultural Land Mitigation Bank is not a valid form of mitigation for farmland conversion impacts. Since then, two other California appellate courts have issued conflicting rulings on whether preservation of offsite farmland mitigates conversion of farmland on a project site to non-agricultural uses. The three rulings are unpublished and are not legal precedents, but do include arguments that might be used in future legislation or court opinions on this topic. One of the rulings, *County of Santa Cruz v. City of San Jose* (2003; WL No. 1566913) by the Sixth District Appellate Court, found that preservation of offsite farmland does not mitigate conversion of farmland by a project because it does not create new farmland or offset the loss of farmland due to the project. The other ruling, *South County Citizens for Responsible Growth v. City of Elk Grove* (2004; WL No. 219789) by the Third District Court, disagreed with the earlier two rulings. The last ruling stated that conservation fees can mitigate for the loss of agricultural lands by diminishing development pressures due to the conversion of farmland and reducing the domino effect created by projects. The question of whether offsite preservation of farmland mitigates conversion of farmland to non-agricultural uses has yet to be settled by the courts or the legislature.

As most of Los Angeles County is 1) urbanized, 2) mountainous terrain unsuitable for intensive commercial agriculture, or 3) land with other constraints that make commercial agriculture infeasible (such as lack of

water supply or lack of soil suitability), use of such mitigation would require acquisition of land outside of Los Angeles County. Therefore, mitigation banks and similar programs designed to offset the loss of agricultural land are considered infeasible.

Impact 5.2-5

See explanation for Impact 5.2-1, above. No feasible mitigation measures beyond the goals and policies already incorporated into the Proposed Project are feasible to reduce impacts to farmland that would result from implementation of the Proposed Project.

5.2.9 Level of Significance After Mitigation

Impact 5.2-1

Buildout of the Proposed Project would convert mapped important farmland in the Antelope Valley Planning Area to non-agricultural uses. No mitigation measures are available that would reduce the impacts of the conversion of mapped important farmland to less than significant. Efforts to preserve offsite farmland through agricultural or conservation easements, or mitigation banks, do not offset or decrease the reduction in total mapped important farmland due to the implementation of a project. This impact would remain significant and unavoidable.

Impact 5.2-5

Buildout of the Proposed Project would indirectly result in the conversion of mapped important farmland to non-agricultural uses in the Antelope Valley and Santa Clarita Valley Planning Areas. Although goals and policies have been incorporated into the Proposed Project to protect farming operations from urbanization, these goals and policies cannot ensure that additional conversion of farmland will not occur. This impact would remain significant and unavoidable.

5.2.10 References

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5. Environmental Analysis
AGRICULTURE AND FORESTRY RESOURCES

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5.3 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Proposed General Plan Update (Proposed Project) to impact or be impacted by air quality. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (SCAQMD) and the Antelope Valley Air Quality Management District (AVAQMD). The analysis focuses on air pollution from regional emissions and localized pollutant concentrations. Transportation-sector impacts are based on average daily vehicle trips and vehicle miles traveled provided by Iteris (see Appendix L). Criteria air pollutant emissions modeling for the project is included in Appendix G of this DEIR.

5.3.1 Environmental Setting

5.3.1.1 REGULATORY BACKGROUND

Ambient air quality standards (AAQS) have been adopted at state and federal levels for criteria air pollutants. In addition, both the State and federal government regulate the release of toxic air contaminants (TACs). Los Angeles County spans two air basins (shown in Figure 8.1, *Air Basins*, in the General Plan). The metropolitan portions of Los Angeles County are within the South Coast Air Basin (SoCAB), and the desert portions of the Los Angeles County lie within the Mojave Desert Air Basin (MDAB). Depending on which air basin a site lies within, land use is subject to the rules and regulations imposed by SCAQMD or the AVAQMD, as well as the California AAQS adopted by the California Air Resources Board (CARB) and National AAQS adopted by the United States Environmental Protection Agency (USEPA). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the Proposed Project are summarized below.

Federal and State Laws

Ambient Air Quality Standards

The Clean Air Act (CAA) was passed in 1963 by the U.S. Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act, signed into law in 1988, requires all areas of the State to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS.

The National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

5. Environmental Analysis
AIR QUALITY

Both California and the federal government have established health-based AAQS for seven air pollutants, which are shown in Table 5.3-1, *Ambient Air Quality Standards for Criteria Pollutants*. These pollutants are ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 5.3-1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Major Pollutant Sources
Ozone (O_3)	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.075 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Average	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	*1	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	*1	
Respirable Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarterly	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)	24 hours	25 µg/m^3	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid

Table 5.3-1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Major Pollutant Sources
				coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hour	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2013b.
Notes: ppm: parts per million; µg/m^3: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked.

Air Pollutants of Concern

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb) are primary air pollutants. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that AAQS have been established for them. VOC and NO_x are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary pollutants.

A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

- **Carbon Monoxide** is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation

(SCAQMD 2005; USEPA 2012). Both the SoCAB and the Antelope Valley portion of the MDAB are designated under the California and National AAQS as being in attainment of CO criteria levels (CARB 2013a).

- **Volatile Organic Compounds** are comprised primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources of VOCs include evaporative emissions associated with paints and solvents, asphalt paving, and household consumer products such as aerosols (SCAQMD 2005). There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of O_3, SCAQMD and AVAQMD have established a significance threshold for this pollutant.

- **Nitrogen Oxides** are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_2 produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_x. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (SCAQMD 2005, USEPA 2012). The SoCAB is designated an attainment area for NO_2 under the National AAQS and nonattainment under the California AAQS (CARB 2013a).[1] The Antelope Valley portion of the MDAB is designated an attainment area for NO_2 under the National and California AAQS (CARB 2013a).

- **Sulfur Dioxide** a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO_2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing.) At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations

[1] CARB has proposed to redesignate the SoCAB as attainment for NO_2 under the California AAQS (CARB 2013c).

such as children, the elderly, and asthmatics (SCAQMD 2005; USEPA 2012). The SoCAB and the Antelope Valley portion of the MDAB are designated attainment under the California and National AAQS (CARB 2013a).

- **Suspended Particulate Matter** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤2.5 millionths of a meter or 0.0001 inch). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The USEPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (SCAQMD 2005). There has been emerging evidence that even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), known as ultrafine particulates (UFPs), have human health implications because UFPs toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lung, and other organs (SCAQMD 2012c). However, the USEPA or CARB have yet to adopt AAQS to regulate the even smaller fractions of PM. Diesel particulate matter (DPM) is classified by CARB as a carcinogen. Particulate matter can also cause environmental effects such as visibility impairment,[2] environmental damage,[3] and aesthetic damage[4] (SCAQMD 2005; USEPA 2012). The SoCAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2013a).[5] The Antelope Valley portion of the MDAB is identified as unclassified/attainment for $PM_{2.5}$ under California and National AAQS, attainment for PM_{10} under the National AAQS, and a nonattainment area for PM_{10} under the California AAQS (CARB 2013a).[6]

- **Ozone** is commonly referred to as "smog" and is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a

[2] $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.
[3] Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.
[4] Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.
[5] CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM_{10} standards from 2004 to 2007. In June 2013, the USEPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.
[6] CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM_{10} standards from 2004 to 2007. In June 2013, the USEPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation, including forest trees and plants during the growing season (SCAQMD 2005; USEPA 2012). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2013a). The Antelope Valley portion of the MDAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and serious-17 nonattainment under the National AAQS (8-hour) (CARB 2013a).

- **Lead** is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (SCAMQD 2005; USEPA 2012). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the USEPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the USEPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.[7] As a result of these violations, the Los Angeles County portion of the SoCAB was designated in 2010 as nonattainment under the California and National AAQS for lead (SCAQMD 2012a).[8] The Antelope Valley portion of the MDAB is designated in attainment under the California and National AAQS for lead (CARB 2013a). Because emissions of lead are found only in projects that are permitted by SCAQMD and AVAQMD, lead is not a pollutant of concern for the Proposed Project.

[7] Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2012a).
[8] CARB has proposed to redesignate the SoCAB as attainment for lead under the California AAQS (CARB 2013c).

Toxic Air Contaminants (TAC)

Public exposure to TACs is a significant environmental health issue in California. In 1983, the California legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health" (Title 17, CCR, Section 93000). A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 U.S. Code Section 7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act set up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit that TAC. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

In 1998, CARB identified DPM as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs.

SoCAB Multiple Air Toxics Exposure Study III

In 2000, SCAQMD conducted a study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,400 in a million. The largest contributor to this risk was diesel

exhaust, accounting for 71 percent of the air toxics risk. In 2008, SCAQMD conducted its third update to its study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in one million. The largest contributor to this risk was diesel exhaust, accounting for approximately 84 percent of the air toxics risk in the SoCAB (SCAQMD 2008a).

5.3.1.2 EXISTING CONDITIONS

South Coast Air Quality Management District (SCAQMD)

SCAQMD is the agency responsible for assuring that the National and California AAQS are attained and maintained in the SoCAB.

Air Quality Management Planning

SCAQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2012 AQMP

On December 7, 2012, SCAQMD adopted the 2012 AQMP, which employs the most up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on- and off-road mobile sources, and area sources. It also addresses several state and federal planning requirements, incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models. The 2012 AQMP builds upon the approach identified in the 2007 AQMP for attainment of federal PM and ozone standards and highlights the significant amount of reductions needed. It also highlights the urgent need to engage in interagency coordinated planning to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria air pollutant standards within the time frames allowed under the CAA. The 2012 AQMP demonstrates attainment of federal 24-hour $PM_{2.5}$ standard by 2014 and the federal 8-hour ozone standard by 2023. It includes an update to the revised USEPA 8-hour ozone control plan with new commitments for short-term NO_X and VOC reductions. The AQMP also identifies emerging issues—ultrafine ($PM_{1.0}$) particulate matter and near-roadway exposure and an analysis of energy supply and demand.

Lead State Implementation Plan

In 2008, the USEPA designated the Los Angeles County portion of the SoCAB as a nonattainment area under the federal lead classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the City of Vernon and in the City of Industry exceeding the new standard in the 2007 to 2009 period. The remainder of the SoCAB, outside the Los Angeles County nonattainment area, remains in attainment of the new standard. On May 24, 2012, CARB approved the State Implementation Plan (SIP) revision for the federal lead standard, which the USEPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the USEPA for approval.

SoCAB Nonattainment Areas

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the SIP. Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet the ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

Transportation conformity for nonattainment and maintenance areas is required under the federal CAA to ensure federally supported highway and transit projects conform to the SIP. The USEPA approved California's SIP revisions for attainment of the 1997 8-hour O_3 National AAQS for the SoCAB in March 2012. Findings for the new 8-hour O_3 emissions budgets for the SoCAB and consistency with the recently adopted SCAG 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) were submitted to the USEPA for approval.

The attainment status for the SoCAB is shown in Table 5.3-2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*. The SoCAB is designated in attainment of the California AAQS for sulfates. It will have to meet the new federal 8-hour O_3 standard by 2023 and the federal 24-hour $PM_{2.5}$ standards by 2014 (with the possibility of up to a five-year extension to 2019, if needed). The SoCAB is designated a nonattainment area for NO_2 (entire basin) and lead (Los Angeles County only) under the California AAQS. However, CARB has proposed to redesignate the SoCAB as attainment for NO_2 and lead under the California AAQS (CARB 2013c).

Table 5.3-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM_{10}	Serious Nonattainment	Attainment/Maintenance[1]
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Nonattainment[2]	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Nonattainment (Los Angeles County only)[2, 3]	Nonattainment (Los Angeles County only)[3]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2013a.

[1] Annual standard revoked September 2006. CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM10 to attainment for PM10 under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM10 standards from 2004 to 2007. In June 2013, the USEPA approved the State of California's request to redesignate the South Coast PM10 nonattainment area to attainment of the PM10 National AAQS, effective on July 26, 2013.

[2] CARB has proposed to redesignate the SoCAB as attainment for lead and NO2 under the California AAQS (CARB 2013c).

[3] In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas within the SoCAB are unclassified.

South Coast Air Basin (SoCAB)

Part of the project site is in the SoCAB, which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SoCAB is in a coastal plain with connecting broad

valleys and low hills and is bounded by the Pacific Ocean in the southwest, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (SCAQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

Humidity

Although the SoCAB has a semi-arid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. This "ocean effect" is dominant except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 2005).

Wind

Wind patterns across the southern coastal region are characterized by westerly or southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east inhibit the eastward transport and diffusion of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the Project Area (SCAQMD 2005).

Antelope Valley Air Quality Management District (AVAQMD)

The desert portion of Los Angeles County broke away from SCAQMD and established a new air district as of July 1, 1997. The Antelope Valley portion of the MDAB is bounded by Kern County to the north, San Bernardino County to the east, and has a jagged southwest boundary that runs roughly from the Gorman area in the northwest to the San Bernardino County line in the Angeles Forest in the southeast. The AVAQMD portion of the MDAB covers approximately 1,300 square miles and includes the cities of Lancaster and Palmdale. AVAQMD is the agency responsible for assuring that the National and California AAQS are attained and maintained in the Antelope Valley portion of the MDAB.

Air Quality Management Planning

AVAQMD is responsible for preparing an air quality management plan to attain the federal ozone standard for the western (Antelope Valley) portion of the MDAB.

Ozone Attainment Plan

The AVAQMD's most recent O_3 attainment plan is the *AVAQMD Federal 8-Hour Ozone Attainment Plan, Western Mojave Desert Non-Attainment Area*, which was adopted on May 20, 2008. The Antelope Valley is downwind of the SoCAB, and to a lesser extent, downwind of the San Joaquin Valley. Prevailing winds transport ozone and ozone precursors from both regions into and through the Antelope Valley during the summer ozone season. Local Antelope Valley emissions contribute to exceedances of both the National AAQS and California AAQS for ozone, but the Antelope Valley would be in attainment of both standards without the influence of this transported air pollution from upwind regions. The 2008 Ozone Attainment Plan provides for the implementation, maintenance, and enforcement of the National AAQS, enforceable emission limitations, a monitoring program, a permit program (including a new source review program), contingency measures, and air quality modeling. The 2008 Ozone Attainment Plan demonstrates that the AVAQMD will be in attainment of the 8-hour National AAQS by 2021 (AVAQMD 2008).

Antelope Valley Portion of the MDAB Nonattainment Areas

The attainment status for the Antelope Valley portion of the MDAB is shown in Table 5.3-3, *Attainment Status of Criteria Pollutants in the Antelope Valley Portion of the Mojave Desert Air Basin*. The Antelope Valley portion of the MDAB is designated nonattainment of the National and California AAQS for ozone and $PM_{2.5}$.

Table 5.3-3 Attainment Status of Criteria Pollutants in the Antelope Valley Portion of the Mojave Desert Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Severe-17 Nonattainment	No Federal Standard
Ozone – 8-hour	Severe-17 Nonattainment	Severe-17 Nonattainment
PM_{10}	Attainment	Attainment/Unclassified
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2013a.

Mojave Desert Air Basin (MDAB)

The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor (AVAQMD 2011). Elevations in the Antelope Valley portion of the MDAB range from 2,300 to over 8,000 feet (AVAQMD 2008). Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The MDAB is separated from the Southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet) whose passes form the main channels for these air masses. The Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevada in the north by the Tehachapi Pass (3,800 feet elevation). The Antelope Valley is bordered to the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 feet) (AVAQMD 2011).

Temperature and Precipitation

During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time the reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The MDAB is classified a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate at least three months have maximum average temperatures over 100.4°F (AVAQMD 2011). Most of the Antelope Valley is classified high desert, although small portions extend into the San Gabriel Mountains. Annual precipitation averages 7 inches in the desert portions of the Antelope Valley to over 20 inches in the mountain areas. In the City of Lancaster, summer daily maximum temperatures average 96°F, and winter daily maximum temperatures average 57°F (AVAQMD 2008).

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in Los Angeles County are best documented by measurements made by SCAQMD and AVAQMD. CARB compiles countywide data for O_3, $PM_{2.5}$, and NO_2. County-level data is not available for PM_{10} or CO. Countywide data compiled by CARB for SCAQMD and AVAQMD monitoring stations in Los Angeles County are summarized in Table 5.3-4, *Ambient Air Quality Monitoring Summary – Los Angeles County*. The data show that the area regularly exceeds the state one-hour and the state and federal eight-hour O_3 standards and the federal $PM_{2.5}$ standard within the last five recorded years. The NO_2 standards have not been exceeded in the last five years in Los Angeles County.

Table 5.3-4 Ambient Air Quality Monitoring Summary – Los Angeles County

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2008	2009	2010	2011	2012
Ozone (O_3)					
State 1-Hour ≥ 0.09 ppm	76	74	39	55	64
State 8-hour ≥ 0.07 ppm	102	100	105	96	110
Federal 8-Hour > 0.075 ppm	75	88	69	76	79
Max. 1-Hour Conc. (ppm)	0.160	0.176	0.126	0.144	0.147
Max. 8-Hour Conc. (ppm)	0.131	0.123	0.106	0.123	0.112
Nitrogen Dioxide (NO_2)					
State 1-Hour ≥ 0.18 ppm	3	2	1	1	0
Max. 1-Hour Conc. (ppb)	125.0	115.0	117.8	109.6	97.8
Fine Particulates ($PM_{2.5}$)					
Federal 24-Hour > 35 µg/m^3	17	15	9	13	10
Max. 24-Hour Conc. (µg/m^3)	78.3	82.9	58.1	94.6	58.7

Source: CARB 2014.
ppm: parts per million; ppb: parts per billion; µg/m^3: micrograms per cubic meter.

Existing Emissions

Table 5.3-5, *Existing Unincorporated Areas Criteria Air Pollutant Emissions Inventory*, identifies the existing criteria air pollutant emissions inventory of the unincorporated areas. The inventory is based on existing land uses in the unincorporated areas. Criteria air pollutant emissions generated within the unincorporated areas was estimated using EMFAC2011, OFFROAD2007, and CalEEMod 2013.2.2 emission factors. Emissions within the unincorporated areas come from the following sources:

- **Energy:** Emissions generated from natural gas consumption used for cooking and heating in the unincorporated areas were based on natural gas use provided by ICF for land uses in the unincorporated areas and emission factors for criteria air pollutants identified in the CalEEMod Users Guide, Version 2013.2.2.

- **Transportation:** Emissions from vehicle trips beginning and ending within the unincorporated areas and from external/internal vehicle trips (i.e., trips that either begin or end within the unincorporated areas)

are modeled using EMFAC2011-PL. Vehicle miles traveled (VMT) and trips were provided by Iteris using SCAG's regional transportation model. Per capita VMT and trips were adjusted based on the population and employment in the unincorporated areas.

- **Area Sources:** Emissions from agricultural equipment, construction and mining equipment, entertainment equipment, industrial equipment, lawn and garden equipment, light commercial equipment, recreational equipment, and transport refrigeration units were modeled using OFFROAD2011. Countywide emissions in the model were interpolated for the unincorporated areas based on unincorporated area–specific data (e.g., building constructions, population, employment, farmland acres). Consumer product use from residential units is based on emission rates identified in the CalEEMod User's Guide, Version 2013.2.2.

Table 5.3-5 Existing Unincorporated Areas Criteria Air Pollutant Emissions Inventory

Sector	Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Energy[1]	514	4,469	2,419	28	355	355
Transportation[2]	33,171	41,524	236,494	341	4,657	2,283
Area [1, 3]	11,398	2,974	2,355	3	119	118
Existing Land Uses Total	**45,083**	**48,967**	**241,268**	**372**	**5,132**	**2,756**
Sector	Criteria Air Pollutant Emissions (tons per year)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Energy[1]	94	816	441	5	65	65
Transportation[2]	5,755	7,204	41,032	59	808	396
Area [1, 3]	2,080	543	430	1	22	22
Existing Land Uses Total	**7,929**	**8,563**	**41,903**	**65**	**895**	**482**

Source: Values may not sum to 100 percent due to rounding.
[1] CalEEMod Version 2013.2.2 emission rates.
[2] EMFAC2011-PL.
[3] OFFROAD2007.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are also considered sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and

intermittent, because the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

5.3.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.

AQ-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

AQ-3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

AQ-4 Expose sensitive receptors to substantial pollutant concentrations.

AQ-5 Create objectionable odors affecting a substantial number of people.

5.3.2.1 AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

The analysis of the Proposed Project's air quality impacts follows the guidance and methodologies recommended in SCAQMD's *CEQA Air Quality Handbook,* the significance thresholds on SCAQMD's website,[9] and AVAQMD's *CEQA and Federal Conformity Guidelines* (2011). CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. SCAQMD and AVAQMD have established regional thresholds of significance. In addition to the regional thresholds, projects are also subject to the AAQS.

SCAQMD Regional Significance Thresholds

SCAQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 5.3-6, *SCAQMD Significance Thresholds*, lists SCAQMD's regional significance thresholds. There is growing evidence that while ultrafine particulates (UFPs) contribute a very small portion of the overall atmospheric mass concentration they represent a greater proportion of the health risk from PM. However, the USEPA or CARB have yet to adopt AAQS to regulate the even smaller fractions of PM and therefore SCAQMD has not developed thresholds for UFPs at this time.

[9] SCAQMD's Air Quality Significance Thresholds are current as of March 2011 and can be found at: http://www.aqmd.gov/ceqa/hdbk.html.

Table 5.3-6 SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Nitrogen Oxides (NO_x)	100 lbs/day	55 lbs/day
Sulfur Oxides (SO_x)	150 lbs/day	150 lbs/day
Particulates (PM_{10})	150 lbs/day	150 lbs/day
Particulates ($PM_{2.5}$)	55 lbs/day	55 lbs/day

Source: SCAQMD 2011a.

AVAQMD Regional Significance Thresholds

AVAQMD has adopted regional emissions thresholds to determine a project's cumulative impact on air quality in the Antelope Valley portion of the MDAB. Table 5.3-7, *AVAQMD Annual Significance Thresholds*, lists AVAQMD's regional significance thresholds. AVAQMD also has daily thresholds for multi-phased projects with phases shorter than one year. Because this is not applicable to the Proposed Project, this is not included in the table.

Table 5.3-7 AVAQMD Annual Significance Thresholds

Air Pollutant	Annual[1]
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	25 tons/year
Carbon Monoxide (CO)	100 tons/year
Nitrogen Oxides (NO_x)	25 tons/year
Sulfur Oxides (SO_x)	25 tons/year
Particulates (PM_{10})	15 tons/year
Particulates ($PM_{2.5}$)	15 tons/year

Source: AVAQMD 2011.
[1] AVAQMD also has daily thresholds for multi-phases projects with phases shorter than one year. Because this is not applicable to the Proposed Project, this is not included in the table.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. Typically, for an intersection to exhibit a significant CO concentration, it would operate at level of service (LOS) E or worse without improvements (Caltrans 1997).

Localized Significance Thresholds

Both the SCAQMD and AVAQMD identify localized significance thresholds. Emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at a project site (offsite mobile-source emissions are not included in the LST analysis) could expose sensitive receptors to substantial concentrations of criteria air pollutants. Table 5.3-8, *Localized Significance Thresholds*, shows the localized significance thresholds. A project that generates emissions that trigger a violation of the AAQS when added to the local background concentrations would generate a significant impact.

Table 5.3-8 Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO_2 Standard (CAAQS)	0.18 ppm
Annual NO_2 Standard (CAAQS)	0.03 ppm
24-Hour PM_{10} Standard (AVAQMD)	50 µg/m
24-Hour $PM_{2.5}$ Standard (AVAQMD)	35 µg/m
24-Hour PM_{10} Standard – Construction (SCAQMD)[1]	10.4 µg/m^3
24-Hour $PM_{2.5}$ Standard – Construction (SCAQMD)[1]	10.4 µg/m^3
24-Hour PM_{10} Standard – Operation (SCAQMD)[1]	2.5 µg/m^3
24-Hour $PM_{2.5}$ Standard – Operation (SCAQMD)[1]	2.5 µg/m^3

Source: SCAQMD 2011a and CARB 2013b.
ppm – parts per million; µg/m^3 – micrograms per cubic meter
[1] Threshold is based on SCAQMD Rule 403. Since the SoCAB is in nonattainment for PM_{10} and $PM_{2.5}$, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

Health Risk Thresholds

Whenever a project would require use of chemical compounds that have been identified in SCAQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the USEPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the SCAQMD or AVAQMD. Table 5.3-9, *Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. Residential, commercial, and office uses do not use substantial quantities of TACs, so these thresholds are typically applied to new industrial projects. Although not officially adopted by SCAQMD, these thresholds are also commonly used to determine the air quality land use compatibility when major sources of TACs are within 1,000 feet of a Proposed Project.

Table 5.3-9 Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0

Source: SCAQMD 2011a and AVAQMD 2011.

In the AVAQMD, the following project types proposed for sites within the specified distance of an existing or planned (zoned) sensitive receptor land use must be evaluated for potential health risk using significance threshold criteria identified in Table 5.3-9:

- Any industrial project within 1,000 feet;
- A distribution center (40 or more trucks per day) within 1,000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1,000 feet;
- A dry cleaner using perchloroethylene within 500 feet;
- A gasoline dispensing facility within 300 feet.

5.3.3 Relevant General Plan Goals and Policies

Following is a list of the goals and policies of the Proposed Project that are intended to reduce potentially significant adverse effects concerning air quality.

Land Use Element

- **Policy LU 1.5:** In the review of a project-specific amendment(s) to convert OS-C designated lands to other land use designations, ensure that the project-specific amendment(s) does not contribute to the overall loss of open space that protects water quality, provides natural habitats, and contributes to improved air quality.

- **Policy LU 1.6:** In the review of a project-specific amendment(s) to convert lands within the EPD Overlay to non-industrial land use designations, ensure that the project-specific amendment(s):

  - Is located on a parcel that adjoins a parcel with a comparable use, at a comparable scale and intensity;
  - Will not negatively impact the productivity of neighboring industrial activities;
  - Is necessary to promote the economic value and the long-term viability of the site; and
  - Will not subject future residents to potential noxious impacts, such as noise, odors or dust or pose significant health and safety risks.

- **Policy LU 2.4:** Coordinate with other local jurisdictions to develop compatible land uses.

- **Policy LU 2.5:** Support and actively participate in inter-jurisdictional and regional planning efforts to help inform community-based planning efforts.

- **Policy LU 2.9:** Utilize the General Plan Land Use Legend and the Hazard, Environmental and Resource Constraints Model to inform the development of land use policy maps.

- **Policy LU 3.1:** Encourage the protection and conservation of areas with natural resources, and SEAs.

- **Policy LU 3.2:** Discourage development in areas with high environmental resources and/or severe safety hazards.
- **Policy LU 3.3:** Discourage development in undeveloped areas where infrastructure and public services do not exist, or where no or where no major infrastructure projects are planned, such as state and/or federal highways.
- **Policy LU 4.1:** Encourage infill development in urban and suburban areas on vacant, underutilized, and/or brownfield sites.
- **Policy LU 4.2:** Encourage the adaptive reuse of underutilized structures and the revitalization of older, economically distressed neighborhoods.
- **Policy LU 4.3:** Encourage transit-oriented development in urban and suburban areas with the appropriate residential density along transit corridors and within station areas.
- **Policy LU 4.4:** Encourage mixed use development along major commercial corridors in urban and suburban areas.
- **Policy LU 5.1:** Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.
- **Policy LU 5.2:** Encourage a diversity of commercial and retail services, and public facilities at various scales to meet regional and local needs.
- **Policy LU 5.3:** Support a mix of land uses that promote bicycling and walking, and reduce VMTs.
- **Policy LU 5.4:** Encourage community-serving uses, such as early care and education facilities, grocery stores, farmers markets, restaurants, and banks to locate near employment centers.
- **Policy LU 5.7:** Direct resources to areas that lack amenities, such as transit, clean air, grocery stores, bikeways, parks, and other components of a healthy community.
- **Policy LU 5.10:** Encourage employment opportunities and housing to be developed in proximity to one another.
- **Policy LU 7.1:** Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.
- **Policy LU 7.2:** Protect industrial parks and districts from incompatible uses.
- **Policy LU 7.3:** Protect public and semi-public facilities, including but not limited to major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.

- **Policy LU 7.9:** Encourage development in rural areas that is compatible with rural community character, preserves open space, conserves agricultural land, and promotes efficiencies in services and infrastructure.

- **Policy LU 8.2:** Evaluate the potential impact of new structures within MOAs to ensure the safety of the residents on the ground and continued viability of military operations within the MOAs. In the review of development within MOAs, consider the following:

  - Uses that produce electromagnetic and frequency spectrum interference, which could impact military operations;

  - Uses that release into the air any substance such as steam, dust and smoke, which impair pilot visibility;

  - Uses that produce light emissions, glare or distracting lights, which could interfere with pilot vision or be mistaken for airfield lighting; and

  - Uses that physically obstruct any portion of the MOA due to relative height above ground level.

- **Policy LU 9.1:** Promote community health for all neighborhoods.

- **Policy LU 10.4:** Promote environmentally-sensitive and sustainable design.

- **Policy LU 10.6:** Encourage pedestrian activity through the following:

  - Designing the main entrance of buildings to front the street;
  - Incorporating landscaping features;
  - Limiting masonry walls and parking lots along commercial corridors and other public spaces;
  - Incorporating street furniture, signage, and public events and activities; and
  - Using wayfinding strategies to highlight community points of interest.

- **Policy LU 10.7:** Promote public spaces, such as plazas that enhance the pedestrian environment, and, where appropriate, continuity along commercial corridors with active transportation activities.

- **Policy LU 11.1:** Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.

- **Policy LU 11.2:** Support the design of developments that provide substantial tree canopy cover, and utilize light colored paving materials and energy-efficient roofing materials to reduce the urban heat island effect.

- **Policy LU 11.3:** Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.

- **Policy LU 11.4:** Encourage subdivisions to utilize sustainable design practices, such as maximizing energy efficiency through lot configuration; preventing habitat fragmentation; promoting storm water retention; promoting the localized production of energy; promoting water conservation and reuse; maximizing interconnectivity; and utilizing public transit.

- **Policy LU 11.5:** Prohibit the use of private yards as required open space within subdivisions, unless such area includes active recreation or outdoor activity areas dedicated for common and/or public use.

- **Policy LU 11.7:** Encourage the use of density controlled design techniques to conserve natural resource areas.

- **Policy LU 11.8:** Encourage sustainable subdivisions that meet green neighborhood standards, such as Leadership in Energy and Environmental Design–Neighborhood Development (LEED-ND).

Mobility Element

- **Policy M 1.1:** Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.

- **Policy M 2.4:** Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible:

    - Designs that limit dead-end streets and dead-end sidewalks.

    - Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops.

    - Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA).

    - Perpendicular curb ramps at locations where it is feasible.

    - Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.)

    - Approved devices to extend the pedestrian clearance times at signalized intersections.

    - Accessible Pedestrian Signals (APS) at signalized intersections.

    - Pedestrian crossings at signalized intersections without double or triple left or right turn lanes.

    - Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections.

- Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes.
- Advance stop lines at signalized intersections.
- Pedestrian Hybrid Beacons.
- Medians or crossing islands to divide long crossings.
- High visibility crosswalks.
- Pedestrian signage.
- Advanced yield lines for uncontrolled crosswalks.
- Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic.
- Safe and convenient crossing locations at transit stations and transit stops located at safe intersections.

- **Policy M 2.5:** Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible:
  - Bicycle signal heads at intersections.
  - Bicycle signal detection at all signalized intersections.
  - Wayfinding signage.
  - Road diet techniques, such as lane narrowing, lane removal, and parking removal/restriction.
  - Appropriate lighting on all bikeways, including those in rural areas.
  - Designs, or other similar features, such as: shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.

- **Policy M 2.7:** Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.

- **Policy M 2.8:** Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.

- **Policy M 2.10:** Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.
- **Policy M 4.1:** Expand transportation options that reduce automobile dependence.
- **Policy M 4.2:** Expand shuttle services to connect major transit centers to community points of interest.
- **Policy M 4.3:** Maintain transit services within the unincorporated areas that are affordable, timely, cost-effective, and responsive to growth patterns and community input.
- **Policy M 4.4:** Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.
- **Policy M 4.6:** Support alternative LOS standards that account for a multimodal transportation system.
- **Policy M 4.11:** Improve the efficiency of the public transportation system with bus lanes, signal prioritization, and connections to the larger regional transportation network.
- **Policy M 4.12:** Work with adjacent jurisdictions to ensure connectivity and the creation of an integrated regional network.
- **Policy M 4.14:** Coordinate with Caltrans on mobility and land use decisions that may affect state transportation facilities.
- **Policy M 4.15:** Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting.
- **Policy M 4.16:** Promote mobility management practices, including incentives to change transit behavior and using technologies, to reduce VMTs.
- **Policy M 5.1:** Facilitate transit-oriented land uses and pedestrian-oriented design to encourage transit ridership.
- **Policy M 5.2:** Implement parking strategies that facilitate transit use and reduce automobile dependence.
- **Policy M 5.3:** Maintain transportation right-of-way corridors for future transportation uses, including bikeways, or new passenger rail or bus services.
- **Policy M 5.4:** Support and pursue funding for the construction, maintenance and improvement of roadway, public transit, and equestrian pedestrian and bicycle transportation systems.

- **Policy M 6.4:** Minimize noise and other impacts of goods movement, truck traffic, deliveries, and staging in residential and mixed-use neighborhoods.

- **Policy M 7.3:** Encourage the use of sustainable transportation facilities and infrastructure technologies, such as liquid and compressed natural gas, and hydrogen gas stations, ITS, and electric car plug-in ports.

Air Quality Element

- **Policy AQ 1.1:** Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.

- **Policy AQ 1.2:** Encourage the use of low or no volatile organic compound (VOC) emitting materials.

- **Policy AQ 1.3:** Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.

- **Policy AQ 1.4:** Work with local air quality management districts to publicize air quality warnings, and to track potential sources of airborne toxics from identified mobile and stationary sources.

- **Policy AQ 2.1:** Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.

- **Policy AQ 2.2:** Participate in, and effectively coordinate the development and implementation of community and regional air quality programs.

- **Policy AQ 2.3:** Support the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.

- **Policy AQ 3.1:** Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals.

- **Policy AQ 3.2:** Reduce energy consumption in County operations by 20 percent by 2015.

- **Policy AQ 3.3:** Reduce water consumption in County operations.

- **Policy AQ 3.4:** Participate in local, regional and state programs to reduce greenhouse gas emissions.

- **Policy AQ 3.5:** Encourage maximum amounts of energy conservation in new development and municipal operations.

- **Policy AQ 3.7:** Support and expand urban forest programs within the unincorporated areas.

Conservation And Natural Resources Element

- **Policy C/NR 3.4:** Conserve and sustainably manage forests and woodlands.
- **Policy C/NR 3.5:** Ensure compatibility of development in the National Forests in conjunction with the U.S. Forest Service Land and Resource Management Plan.
- **Policy C/NR 4.1:** Conserve and sustainably manage oak woodlands.
- **Policy C/NR 9.2:** Support innovative agricultural practices that conserve resources and promote sustainability, such as drip irrigation, hydroponics, organic farming, and the use of compost.
- **Policy C/NR 12.1:** Encourage the production and use of renewable energy resources.
- **Policy C/NR 12.2:** Encourage the effective management of energy resources, such as ensuring adequate reserves to meet peak demands.

Parks And Recreation Element

- **Policy P/R 4.1**: Create multi-use trails to accommodate all users.
- **Policy P/R 4.2:** Develop staging areas and trail heads at strategic locations to accommodate multi-use trail users.
- **Policy P/R 4.3:** Develop a network of feeder trails into regional trails.
- **Policy P/R 4.5:** Collaborate with other public, non-profit, and private organizations in the development of a comprehensive trail system.
- **Policy P/R 4.6:** Create new multi-use trails that link community destinations including parks, schools and libraries.
- **Policy P/R 6.1:** Support the use of recycled water for landscape irrigation in County parks.
- **Policy P/R 6.2:** Support the use of alternative sources of energy, such as wind and solar sources to reduce the use of energy at existing parks.
- **Policy P/R 6.4:** Ensure that new buildings on County park properties are environmentally sustainable by reducing carbon footprints, and conserving water and energy.
- **Policy P/R 6.5:** Ensure the routine maintenance and operations of County parks and recreational facilities to optimize water and energy conservation.

Public Services And Facilities Element

- **Policy PS/F 2.1:** Support water conservation measures.
- **Policy PS/F 2.2:** Support educational outreach efforts that discourage wasteful water consumption.
- **Policy PS/F 3.1:** Increase the supply of water though the development of new sources, such as recycled water, gray water, and rainwater harvesting.
- **Policy PS/F 3.2:** Support the increased production, distribution and use of recycled water, gray water, and rainwater harvesting to provide for groundwater recharge, seawater intrusion barrier injection, irrigation, industrial processes and other beneficial uses.
- **Policy PS/F 5.3:** Discourage incompatible land uses near or adjacent to solid waste disposal facilities identified in the Countywide Integrated Waste Management Plan.
- **Policy PS/F 5.4:** Encourage solid waste management facilities that utilize conversion and other alternative technologies and waste to energy facilities.
- **Policy PS/F 5.5:** Reduce the County's waste stream by minimizing waste generation and enhancing diversion.
- **Policy PS/F 5.6:** Encourage the use and procurement of recyclable and biodegradable materials.
- **Policy PS/F 5.7:** Encourage the recycling of construction and demolition debris generated by public and private projects.
- **Policy PS/F 6.5:** Encourage the use of renewable energy sources in utility and telecommunications networks.
- **Policy PS/F 6.8:** Encourage projects that incorporate onsite renewable energy systems.

Economic Development Element

- **Policy ED 1.2:** Encourage and foster the development of the renewable energy economic sectors.
- **Policy ED 2.2:** Utilize adequate buffering and other land use practices to facilitate the compatibility between industrial and non-industrial uses.
- **Policy ED 2.3:** Ensure environmental justice in economic development activities.
- **Policy ED 2.4:** Ensure high standards of development and encourage environmentally sustainable practices in economic development activities.

- **Policy ED 2.5:** Encourage employment opportunities to be located in proximity to housing.

- **Policy ED 2.6:** Encourage community-serving uses, such as child care centers and personal services, to be located in proximity to employment centers.

- **Policy ED 4.7:** Support expedited permitting for green building retrofits.

5.3.4 Environmental Impacts

Methodology

This air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant air quality impacts are likely to occur in conjunction with future development that would be accommodated by the Proposed Project. Both the SCAQMD and the AVAQMD have published guidelines that are intended to provide local governments with guidance for analyzing and mitigating air quality impacts, which were used in this analysis. The County's criteria air pollutant emissions inventory includes the following sectors:

- **Energy:** Natural gas use for residential and nonresidential land uses in Los Angeles County was modeled using data from the utilities compiled by ICF for the *Unincorporated Los Angeles County Community Climate Action Plan 2020* (2014) (CCAP). Forecasts are adjusted for increases in residential units and employment in the unincorporated areas. Criteria air pollutant emissions are based on the natural gas emission rates in the CalEEMod User's Guide, Version 2013.2.2.

- **Transportation:** Transportation emissions forecasts were modeled using CARB's EMFAC2011-PL. Model runs were based on daily per capita VMT data provided by Iteris using the SCAG regional transportation demand model and 2010 (existing) and 2035 emission rates. The VMT provided in the model includes the full trip length for land uses in the unincorporated areas (origin-destination approach) and does not include a 50 percent reduction in VMT for external-internal/internal-external trips. It should be noted that there is no transportation data collected by SCAG for the Coastal Islands Planning Area, which includes the City of Avalon. However, this would be expected to be a very small portion of the total emissions.

- **Area Sources:** OFFROAD2007 was used to estimate criteria air pollutant emissions from agricultural equipment, construction and mining equipment, entertainment equipment, industrial equipment, lawn and garden equipment, light commercial equipment, recreational equipment, and transport refrigeration units in Los Angeles County. OFFROAD2007 is a database of equipment use and associated emissions for each county compiled by CARB. Annual emissions were compiled using OFFROAD2007 for Los Angeles County for the year 2010. In order to determine the percentage of emissions attributable to the unincorporated areas, emissions for the unincorporated areas are extrapolated based on building constructions, population, employment, or farmland acreage for the unincorporated areas as a percentage of Los Angeles County as a whole. Forecasts are adjusted for increases in population and employment in the unincorporated areas. Consumer product use from residential units is based on emission rates

identified in the CalEEMod User's Guide, Version 2013.2.2. Area sources exclude emissions from occasional fireplace use in the unincorporated areas.

The following impact analysis addresses thresholds of significance for which the NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.3-1: Buildout of the Proposed Project would generate more growth than the Existing General Plan; therefore, the project would be inconsistent with SCAQMD's and AVAQMD's air quality management plans. [Threshold AQ-1]

Impact Analysis: The following describes potential air quality impacts of consistency with the AQMP from the implementation of the Proposed Project.

Proposed General Plan Update

CEQA requires that general plans be evaluated for consistency with the air quality management plan(s). A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the air quality management plan(s). It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals in the air quality management plan(s). Only new or amended general plan elements, specific plans, and major projects need to undergo a consistency review. This is because the air quality management plan strategy is based on projections from local general plans.

AVAQMD and SCAQMD consider a project consistent with the air quality management plan if it is consistent with the existing land use plan. Zoning changes, specific plans, general plan amendments, and similar land use plan changes that do not increase dwelling unit density, vehicle trips, or vehicle miles traveled are deemed to not exceed this threshold (SCAQMD 1993 and AVAQMD 2011). SCAG projections for the unincorporated areas are partially based on the Existing General Plan within the 2012 RTP/SCS. The horizon year for the 2012 RTP/SCS is 2035. Table 5.3-10 compares the population, employment, and daily VMT generation of the Proposed Project compared to the population, employment, and daily VMT generation of the 2035 forecast, which is used for regional air quality management planning. As shown in Table 5.3-10, *Comparison of Population, Employment, and VMT Forecasts*, buildout of the Proposed Project would result in higher population and generate more employment for the unincorporated areas than SCAG forecasts.

Table 5.3-10 Comparison of Population, Employment, and VMT Forecasts

Scenario	Population	Employment	Service Population (SP)	Daily VMT	VMT/SP
Existing	1,935,489	683,942	2,619,431	72,286,974	27.60
RTP/SCS Horizon Year 2035	2,413,096	866,010	3,279,106	92,531,346	28.22
General Plan Buildout Post-2035	3,394,938	1,025,472	4,420,410	120,709,763	27.31
General Plan Update – Change from Existing	1,459,449	341,530	1,800,979	48,422,789	-0.29
General Plan Update – Change from 2035	981,842	159,462	1,141,304	28,178,417	-0.91

Source: Iteris 2013. Based on the full trip length for interjurisdictional trips.

Although individual development projects would be consistent with the control measures/regulations identified in SCAQMD's 2012 AQMP and AVAQMD's Ozone Attainment Plan, Table 5.3-10 shows that the Proposed Project would generate substantially more growth for the unincorporated areas than the 2035 forecast. However, buildout of the Proposed Project would slightly reduce per capita VMT. It should be noted that the Proposed Project assumes buildout of the unincorporated areas post-2035, since there is no schedule for when this development would occur. In contrast, the growth projections that are integrated in the air quality management plans are based on SCAG's 2012 RTP/SCS. Full buildout associated with the Proposed Project is not currently included in the emissions inventory for the SoCAB or Antelope Valley portion of the MDAB. As identified in Table 5.3-10, the Proposed Project would not be consistent with the air quality management plans because buildout of the unincorporated areas under the Proposed Project would exceed the forecasts in the air quality attainment plans. Consequently, the Proposed Project would cumulatively contribute to the existing nonattainment designations in the SoCAB and Antelope Valley portion of the MDAB because these emissions are not included in the current regional emissions inventory for the SoCAB and MDAB, respectively. The Proposed Project would be considered inconsistent with the SCAQMD's AQMP and AVAQMD's Ozone Attainment Plan, resulting in a significant impact in this regard.

Community Climate Action Plan

Implementation of the CCAP, which is part of the Proposed Project, would reduce Los Angeles County's greenhouse gases (GHG) emissions and therefore, has the potential to reduce criteria air pollutant emissions in Los Angeles County as well. While some actions would generate construction emissions (e.g., bicycle lane construction), construction-related emissions are considered under buildout under the Proposed Project, as discussed below under Impact 5.3-2. Future development projects would be required to adhere to the measures in order to be consistent with the County's CCAP. Because individual measures would not have the potential to result in an increase in criteria air pollutant emissions, adoption of the CCAP would be less than significant.

Impact 5.3-2: Construction activities associated with the Proposed Project would generate a substantial increase in short-term criteria air pollutant emissions that exceed the threshold criteria and would cumulatively contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB. [Thresholds AQ-2, AQ-3, and AQ-4]

Impact Analysis: The following describes potential regional and localized construction air quality impacts in Los Angeles County from the implementation of the Proposed Project.

Proposed General Plan Update

Construction activities associated with development that would be accommodated by the Proposed Project would occur over the buildout horizon (post-2035) of the Proposed Project and cause short-term emissions of criteria air pollutants. The primary source of NO_x, CO, and SO_x emissions is the operation of construction equipment. The primary sources of particulate matter (PM_{10} and $PM_{2.5}$) emissions are activities that disturb the soil, such as grading and excavation, road construction, building demolition and construction, off-road vehicle exhaust. The primary source of VOC emissions is the application of architectural coating and off-gas emissions associated with asphalt paving. A discussion of health impacts associated with air pollutant emissions generated by construction activities is included under "Air Pollutants of Concern" in Section 5.3-1, *Environmental Setting*.

Information regarding specific development projects, soil types, and the locations of receptors would be needed in order to quantify the level of impact associated with construction activity. Due to the scale of development activity associated with buildout of the Proposed Project, emissions would likely exceed the SCAQMD and AVAQMD regional significance thresholds and therefore, in accordance with the SCAMQD and AVAQMD methodology, would cumulatively contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB, respectively. The MDAB is currently designated nonattainment for O_3 and particulate matter ($PM_{2.5}$). The SoCAB is designated nonattainment for O_3, $PM_{2.5}$, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for PM_{10} and NO_2 under the California AAQS.[10, 11] Emissions of VOC and NO_x are precursors to the formation of O_3. In addition, NO_x is a precursor to the formation of particulate matter (PM_{10} and $PM_{2.5}$). Therefore, the Proposed Project would cumulatively contribute to the existing nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB.

Valley Fever

Valley Fever is an infectious disease caused by the fungus *Coccidioides immitis* and *Coccidioides psadasii*. According to the County Department of Public Health (2014), this fungus is a major cause of community—acquired pneumonia in the southwestern United States. Valley Fever fungus is most prevalent in the San Joaquin Valley and the Central Valley where land is arid to semi-arid and receives moderate rainfall (5 to 20 inches per year).

[10] CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the national AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM_{10} standards during the period from 2004 to 2007. In June 2013, the USEPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.
[11] CARB has proposed to redesignate the SoCAB as attainment for lead and NO_2 under the California AAQS (CARB 2014).

Several factors indicate a project's potential to expose sensitive receptors to Valley Fever: disturbance of the top soil of undeveloped land, dust storms, strong winds, earthquakes, archaeological digs, agricultural activities, and construction activities. There is the potential that construction activities could result in exposure of sensitive receptors to Valley Fever in the arid, desert portions of the unincorporated areas. Individual projects developed under the Proposed Project would be required to reduce potential risk of exposing sensitive receptors to Valley Fever through implementation of AVAPCD and SCAQMD fugitive dust control measures. SCAQMD and AVAQMD dust control rules would reduce fugitive dust emissions as well as exposure to on-site workers. Proposed General Plan Update policies, including Policy AQ 1.3, would further reduce the impacts from fugitive dust during construction, as described further below. Implementation of SCAQMD and AVAQMD measures and Proposed Project policies would limit exposure of sensitive receptors to Valley Fever.

Conclusion

Air quality emissions related to construction must be addressed on a project-by-project basis. For this broad-based Proposed General Plan Update, it is not possible to determine whether the scale and phasing of individual projects would result in the exceedance of SCAQMD's or AVAQMD's short-term regional or localized construction emissions thresholds. In addition to regulatory measures (e.g., new source review, permit to operate, rules for fugitive dust control, and CARB's airborne toxic control measures), mitigation may include extension of construction schedules and/or use of special equipment.

The following Proposed Project policies would reduce construction-related criteria air pollutant emissions to the extent feasible:

- **Policy AQ 1.3:** Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.

- **Policy PS/F 5.7:** Encourage the recycling of construction and demolition debris generated by public and private projects.

Nevertheless, because of the likely scale and extent of construction activities pursuant to the future development that would be accommodated by the Proposed Project, at least some projects would likely continue to exceed the relevant SCAQMD and AVAQMD thresholds. Consequently, construction-related air quality impacts associated with development in accordance with the Proposed Project are deemed significant.

Community Climate Action Plan

Implementation of the CCAP would reduce GHG emissions for the unincorporated areas and therefore, has the potential to reduce criteria air pollutant emissions in Los Angeles County as well. Implementation of local GHG reduction actions would generate construction-related criteria air pollutant emissions. However, construction-related emissions are considered under buildout under the Proposed Project. Future development projects would be required to adhere to the mandatory measures and implement all feasible voluntary measures in order to be consistent with the Proposed Project. Because individual measures would

not have the potential to result in an increase in criteria air pollutant emissions, adoption of the CCAP would be less than significant.

Impact 5.3-3: Long-term operation of the Proposed Project would generate a substantial increase in criteria air pollutant emissions that exceed the threshold criteria and would cumulatively contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB. [Thresholds AQ-2 and AQ-3]

Impact Analysis: The following describes potential regional operational air quality impacts in Los Angeles County from implementation of the Proposed Project.

Proposed General Plan Update

It is important to note that, based on the requirements of CEQA, this analysis is based on a comparison of the Land Use Policy Map of the Proposed General Plan Update to existing land uses and not to the Land Use Policy Map of the Existing General Plan (see Chapter 7, *Alternatives to the Proposed Project*).

It is also important to note that the Proposed Project is a regulatory document that sets up the framework for future growth and development and does not directly result in development in and of itself. Before any development can occur in the unincorporated areas, all such development is required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

The Proposed Project guides growth and development within the unincorporated areas by designating land uses in the Proposed Project and through implementation of the goals and policies of the Proposed Project. New development would increase air pollutant emissions in the unincorporated areas and contribute to the overall emissions inventory in the SoCAB and Antelope Valley portion of the MDAB. A discussion of health impacts associated with air pollutant emissions generated by operational activities is included in the Air Pollutants of Concern discussion in Section 5.3.1, *Environmental Setting*.

The Proposed Project sets the direction for the development of residential and non-residential land uses within developed and undeveloped portions of the unincorporated areas. Buildout of the Proposed Project would result in an increase in land use intensity in the unincorporated areas, as shown in Table 3-2.

SCAG RTP/SCS Horizon Year 2035

The increase in criteria air pollutant emissions for the SCAG RTP/SCS horizon year 2035 scenario is based on the difference between existing land uses and an estimate of population and employment within Los Angeles County at 2035 based on SCAG forecasts (SCAG 2012). Table 5.3-11, *Horizon Year 2035 Unincorporated Areas Criteria Air Pollutant Emissions Inventory – Daily Emissions*, and Table 5.3-12, *Horizon Year 2035 Unincorporated Areas Criteria Air Pollutant Emissions Inventory – Annual Emissions*, shows a forecast of the unincorporated areas criteria air pollutant emissions inventory in horizon year 2035 compared to the daily and annual emissions thresholds, respectively.

Table 5.3-11 SCAG RTP/SCS Horizon Year 2035 Unincorporated Areas Criteria Air Pollutant Emissions Inventory – Daily Emissions

Sector	Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing (2035 Emission Rates)						
Energy[1]	514	4,469	2,419	28	355	355
Transportation[2]	8,086	11,095	65,992	352	4,199	1,846
Area [1, 3]	11,398	2,974	2,355	3	119	118
Existing Land Uses Total	**19,997**	**18,538**	**70,765**	**384**	**4,673**	**2,319**
Horizon Year 2035						
Energy[1]	711	6,171	3,277	39	491	491
Transportation[2]	10,193	13,035	87,128	457	5,457	2,379
Area [1, 3]	17,940	3,870	3,055	4	155	153
Horizon Year 2035 Land Uses Total	**28,844**	**23,076**	**93,460**	**500**	**6,104**	**3,024**
Net Change in Emissions – 2035						
Net Change 2035 Land Uses Total	8,847	4,538	22,695	116	1,430	705
Daily Significance Threshold (SCAQMD)	55	55	550	150	150	55
Exceeds Daily Significance Threshold	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

Source:
[1] CalEEMod Version 2013.2.2 emission rates.
[2] EMFAC2011-PL.
[3] OFFROAD2007.

Table 5.3-12 SCAG RTP/SCS Horizon Year 2035 Unincorporated Areas Criteria Air Pollutant Emissions Inventory – Annual Emissions

Sector	Criteria Air Pollutant Emissions (Tons per Year)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing (2035 Emission Rates)						
Energy[1]	94	816	441	5	65	65
Transportation[2]	1,403	1,925	11,450	61	729	320
Area [1, 3]	2,080	543	430	1	22	22
Existing Land Uses Total	**3,577**	**3,283**	**12,321**	**67**	**815**	**407**
Horizon Year 2035						
Energy[1]	130	1,126	598	7	90	90
Transportation[2]	1,768	2,262	15,117	79	947	413
Area [1, 3]	3,274	706	558	1	28	28
Horizon Year 2035 Land Uses Total	**5,172**	**4,094**	**16,272**	**87**	**1,065**	**530**
Net Change in Emissions						
Net Change 2035 Land Uses Total	1,596	811	3,952	20	250	124
Annual Significance Threshold (AVAQMD)	25	100	25	25	15	15
Exceeds Annual Significance Threshold	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

Source:
[1] CalEEMod Version 2013.2.2 emission rates.
[2] EMFAC2011-PL.
[3] OFFROAD2007.

As shown in Table 5.3-11 and Table 5.3-12, the Proposed Project at SCAG RTP/SCS horizon year 2035 would generate long-term emissions that exceed the daily SCAQMD thresholds and the annual AVAQMD thresholds for all criteria pollutants except SO_x. The Antelope Valley portion of the MDAB is currently designated nonattainment for O_3 and particulate matter ($PM_{2.5}$). The SoCAB is designated nonattainment for O_3, $PM_{2.5}$, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for PM_{10} and NO_2 under the California AAQS.[12, 13] Emissions of VOC and NO_x are precursors to the formation of O_3. In addition, NO_x is a precursor to the formation of particulate matter (PM_{10} and $PM_{2.5}$). Therefore, the Proposed Project would cumulatively contribute to the existing nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB.

Proposed Project Buildout

The increase in criteria air pollutant emissions for the full buildout scenario is based on the difference between existing land uses and land uses associated with buildout of the Proposed Project. Buildout of the Proposed Project is not linked to any development timeframe. The timeframe of buildout would extend far beyond the 2035 horizon year. Table 5.3-13, *Post-2035 Unincorporated Areas Criteria Air Pollutant Emissions Inventory – Daily Emissions*, and Table 5.3-14, *Post-2035 Unincorporated Areas Criteria Air Pollutant Emissions Inventory – Annual Emissions*, shows a forecast of the unincorporated areas criteria air pollutant emissions inventory in post-2035 compared to the daily and annual emissions thresholds, respectively.

[12] CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the national AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM_{10} standards during the period from 2004 to 2007. In June 2013, the USEPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.
[13] CARB has proposed to redesignate the SoCAB as attainment for lead and NO_2 under the California AAQS (CARB 2014).

Table 5.3-13 Buildout (Post-2035) of the Unincorporated Areas Criteria Air Pollutant Emissions Inventory – Daily Emissions

Sector	Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing (2035 Emission Rates)						
Energy[1]	514	4,469	2,419	28	355	355
Transportation[2]	8,086	11,095	65,992	352	4,199	1,846
Area [1, 3]	11,398	2,974	2,355	3	119	118
Existing Land Uses Total	**19,997**	**18,538**	**70,765**	**384**	**4,673**	**2,319**
Post – 2035						
Energy[1]	1,099	9,531	5,033	60	759	759
Transportation[2]	15,492	20,866	138,866	734	8,742	3,785
Area [1, 3]	30,259	6,435	5,036	7	257	255
Horizon Year 2035 Land Uses Total	**46,850**	**36,832**	**148,936**	**801**	**9,759**	**4,798**
Net Change in Emissions – P-2035						
Net Change 2035 Land Uses Total	26,852	18,294	78,171	417	5,086	2,479
Daily Significance Threshold (SCAQMD)	55	55	550	150	150	55
Exceeds Daily Significance Threshold	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Source:
[1] CalEEMod Version 2013.2.2 emission rates.
[2] EMFAC2011-PL.
[3] OFFROAD2007.

Table 5.3-14 Buildout (Post-2035) Unincorporated Areas Criteria Air Pollutant Emissions Inventory – Annual Emissions

Sector	Criteria Air Pollutant Emissions (Tons per Year)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing (2035 Emission Rates)						
Energy[1]	94	816	441	5	65	65
Transportation[2]	1,403	1,925	11,450	61	729	320
Area [1, 3]	2,080	543	430	1	22	22
Existing Land Uses Total	**3,577**	**3,283**	**12,321**	**67**	**815**	**407**
Post – 2035						
Energy[1]	201	1,739	919	11	139	139
Transportation[2]	2,688	3,620	24,093	127	1,517	657
Area [1, 3]	5,522	1,174	919	1	47	46
Horizon Year 2035 Land Uses Total	**8,411**	**6,534**	**25,931**	**140**	**1,702**	**842**
Net Change in Emissions – P-2035						
Net Change 2035 Land Uses Total	4,834	3,251	13,610	73	887	435
Annual Significance Threshold (AVAQMD)	25	100	25	25	15	15
Exceeds Daily Significance Threshold	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Source:
[1] CalEEMod Version 2013.2.2 emission rates.
[2] EMFAC2011-PL.
[3] OFFROAD2007.

As shown in Table 5.3-13 and Table 5.3-14, buildout of the Proposed Project would generate long-term emissions that exceed the daily SCAQMD thresholds and the annual AVAQMD thresholds for all criteria pollutants. The MDAB is currently designated nonattainment for O_3 and particulate matter ($PM_{2.5}$). The SoCAB is designated nonattainment for O_3, $PM_{2.5}$, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for PM_{10} and NO_2 under the California AAQS.[14, 15] Emissions of VOC and NO_x are precursors to the formation of O_3. In addition, NO_x is a precursor to the formation of particulate matter (PM_{10} and $PM_{2.5}$). Therefore, the Proposed Project would cumulatively contribute to the existing nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB.

Conclusion

As identified above, criteria air pollutants generated throughout the lifetime of the Proposed Project would exceed the significance thresholds of SCAQMD and AVAQMD and cumulatively contribute to the nonattainment designations of the SoCAB and Antelope Valley portions of the MDAB.

Implementation of Proposed Project policies would reduce impacts to the extent feasible (see Section 5.3-8, *Applicable General Plan Policies*, below).

- **Policy LU 5.3:** Support a mix of land uses that promote bicycling and walking, and reduce VMTs.
- **Policy LU 11.1:** Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.
- **Policy M 4.1:** Expand transportation options that reduce automobile dependence.
- **Policy M 4.15:** Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting.
- **Policy M 4.16:** Promote mobility management practices, including incentives to change transit behavior and using technologies, to reduce VMTs.
- **Policy M 5.1:** Facilitate transit-oriented land uses and pedestrian-oriented design to encourage transit ridership.
- **Policy M 5.2:** Implement parking strategies that facilitate transit use and reduce automobile dependence.
- **Policy AQ 1.2:** Encourage the use of low or no volatile organic compound (VOC) emitting materials.

[14] CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the national AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM_{10} standards during the period from 2004 to 2007. In June 2013, the USEPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.
[15] CARB has proposed to redesignate the SoCAB as attainment for lead and NO_2 under the California AAQS (CARB 2014).

- **Policy AQ 2.2**: Participate in, and effectively coordinate the development and implementation of community and regional air quality programs.
- **Policy AQ 3.2:** Reduce energy consumption in County operations by 20 percent by 2015.
- **Policy AQ 3.5:** Encourage energy conservation in new development and municipal operations.

Nonetheless, operational-related air quality impacts associated with future development that would be accommodated by the Proposed Project are significant.

Community Climate Action Plan

Implementation of the CCAP would reduce GHG emissions in the unincorporated areas and therefore has the potential to reduce criteria air pollutant emissions in Los Angeles County as well. Future development projects would be required to adhere to the mandatory measures and implement all feasible voluntary measures in order to be consistent with the Proposed Project. Because individual measures would not have the potential to result in an increase in criteria air pollutant emissions, adoption of the CCAP would be less than significant.

Impact 5.3-4: Buildout of the Proposed Project could result in new source sources of criteria air pollutant emissions and/or toxic air contaminants proximate to existing or planned sensitive receptors. [Threshold AQ-4]

Impact Analysis: The following describes potential localized operational air quality impacts in Los Angeles County from the implementation of the Proposed Project.

Proposed General Plan Update

Operation of new land uses, consistent with the land use plan of the Proposed Project, would generate new sources of criteria air pollutants and TACs.

Localized Significance Thresholds

SCAQMD and AVAQMD consider projects that cause or contribute to an exceedance of the California or National AAQS to result in significant impacts. Information regarding specific development projects, soil types, and the locations of receptors would be needed in order to quantify the level of impact associated with future development projects. Due to the scale of development activity associated with buildout of the Proposed Project, emissions could exceed the SCAQMD and AVAQMD regional significance thresholds and therefore, in accordance with the SCAQMD and AVAQMD methodology, may result in significant localized impacts. Air quality emissions would be addressed on a project-by-project basis. For this broad-based Proposed General Plan Update, it is not possible to determine whether the scale and phasing of individual projects would result in the exceedance of localized emissions thresholds. Nevertheless, because of the likely scale of future development that would be accommodated by the Proposed Project, at least some projects would likely exceed the AAQS.

Toxic Air Contaminants

Operation of new land uses, consistent with the Proposed Project, could also generate new sources of TACs within the unincorporated areas from various industrial and commercial processes (e.g., manufacturing, dry cleaning). Stationary sources used as emergency power supply to communication equipment could also generate new sources of TACs and particulate matter (PM_{10}, $PM_{2.5}$, and UFP). Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from SCAQMD or AVAQMD include industrial land uses, such as chemical processing facilities, dry cleaners, and gasoline-dispensing facilities. In Los Angeles County, operators of certain types of facilities must submit emissions inventories. The Air Toxics Program categorizes each facility as being high, intermediate, and low priority based on the potency, toxicity, quantity, and volume of its emissions. If the risks are above established levels, facilities are required to notify surrounding populations and to develop and implement a risk reduction plan. In addition, the County Department of Public Health has a significant proactive role in working with regulatory agencies in addressing these potential hot spots.

In addition to stationary/area sources of TACs, warehousing operations could generate a substantial amount of diesel particulate matter emissions from off-road equipment use and truck idling. New land uses in the unincorporated areas that generate trucks trips (including trucks with transport refrigeration units) could generate an increase in DPM that would contribute to cancer and non-cancer health risk in the SoCAB or Antelope Valley portion of the MDAB. These new land uses could be near existing sensitive receptors within the unincorporated areas.

Stationary sources of emissions would be controlled by SCAQMD or AVAQMD through permitting and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under SCAQMD's or AVAQMD's New Source Review, as described above. Because the nature of those emissions cannot be determined at this time and they are subject to further regulation and permitting, they will not be addressed further in this analysis but are considered a potentially significant impact of the Proposed Project.

AVAQMD identifies the following project types (and associated buffer distance) that would require further evaluation to ensure that sensitive receptors would not be exposed to substantial pollutant concentrations:

- Any industrial project within 1,000 feet;
- A distribution center (40 or more trucks per day) within 1,000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1,000 feet;
- A dry cleaner using perchloroethylene within 500 feet;
- A gasoline dispensing facility within 300 feet.

Implementation of the following Proposed Project policies would ensure that review of air quality compatibility would be conducted when siting receptors near major sources.

- **Policy LU 7.1:** Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.

- **Policy LU 6.2:** Protect industrial parks and districts from incompatible uses.

- **Policy AQ 1.1:** Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.

However, operation of new sources of emissions near existing or planned sensitive receptors is considered a potentially significant impact of the project.

Community Climate Action Plan

Implementation of the County's CCAP would reduce GHG emissions in the unincorporated areas and, therefore, has the potential to reduce TACs and criteria air pollutant emissions in Los Angeles County as well. Future development projects would be required to adhere to the mandatory measures and implement all feasible voluntary measures in order to be consistent with the Proposed Project. Because individual measures would not have the potential to result in an increase in TAC or criteria air pollutant emissions, adoption of the CCAP would be less than significant.

Impact 5.3-5: Placement of new sensitive receptors near major sources of toxic air contaminants in the unincorporated areas could expose people to substantial pollutant concentrations. [Threshold AQ-4]

Impact Analysis: The following describes potential impacts of TACs on new sensitive receptors in Los Angeles County from implementation of the Proposed Project.

Proposed General Plan Update

Because placement of sensitive land uses falls outside CARB jurisdiction, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to address the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources.

AVAQMD identifies the following project types (and associated buffer distance) that would require further evaluation to ensure that sensitive receptors would not be exposed to substantial pollutant concentrations:

- Any industrial project within 1,000 feet;
- A distribution center (40 or more trucks per day) within 1,000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1,000 feet;
- A dry cleaner using perchloroethylene within 500 feet;
- A gasoline dispensing facility within 300 feet.

Table 5.3-15, *CARB Recommendations for Siting New Sensitive Land Uses*, shows a summary of CARB recommendations for siting new sensitive land uses within the vicinity of air-pollutant-generating sources.

Recommendations in Table 5.3-15 are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

Table 5.3-15 CARB Recommendations for Siting New Sensitive Land Uses

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	▪ Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.
Distribution Centers	▪ Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units [TRUs] per day, or where TRU unit operations exceed 300 hours per week). ▪ Take into account the configuration of existing distribution centers and avoid locating residences and other sensitive land uses near entry and exit points.
Rail Yards	▪ Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. ▪ Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	▪ Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or CARB on the status of pending analyses of health risks.
Refineries	▪ Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	▪ Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	▪ Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult with the local air district. ▪ Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	▪ Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.

Source: CARB 2005.

CARB's recommendations were based on a compilation of studies that evaluated data on the adverse health effects ensuing from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases both exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic: DPM from trucks and benzene and 1,3 butadiene from passenger vehicles. Potential sources of TACs in the unincorporated areas include stationary sources permitted by SCAQMD and AVAQMD and roadways with more than 100,000 average daily traffic volumes.

Other near roadway pollutants include UFPs. UFPs have also been shown to be toxic and have health impacts. UFPs are emitted from almost every fuel combustion process, including diesel, gasoline, and jet engines, as well as external combustion processes such as wood burning. Consequently, there is growing concern that people living in close proximity to highly trafficked roadways and other sources of combustion-related pollutants (e.g. airports and rail yards) may be exposed to significant levels of UFPs and other air

toxics. However, UFPs are not specifically regulated since USEPA or CARB have yet to adopt AAQS for the even smaller fractions of PM (SCAQMD 2012c).

Table 5.3-16, *Existing Unincorporated Areas Land Uses Within 500 Feet of a Freeway*, identifies existing land uses within 500 feet of a freeway in the unincorporated areas.

Table 5.3-16 Existing Unincorporated Areas Land Uses Within 500 Feet of a Freeway

Unincorporated Community	Total acreage within buffer	Number of Parcels[1]	Units[1]	Total Number of Schools[3]
Alondra Park	1.70	0	0	0
Altadena	28.33	52	45	0
Antelope Valley	6,182.79	613	406	3
Avocado Heights	135.81	153	105	0
Covina Islands	87.92	368	362	0
Del Aire	246.03	698	1,145	2
East Los Angeles	1,137.72	3,394	4,791	12
East Pasadena - East San Gabriel	78.84	208	108	0
East Rancho Dominguez	59.62	288	276	0
East San Dimas	15.54	28	22	0
Hacienda Heights	694.81	1,766	2,303	7
Kagel / Lopez Canyons	50.86	7	211	0
La Crescenta - Montrose	286.68	948	1,315	3
Ladera Heights / Viewpark - Windsor Hills	8.32	8	6	0
Lennox	234.95	459	892	5
Lynwood Island	58.44	7	0	0
North Whittier	115.53	172	167	0
Oat Mountain	161.36	66	120	0
Rancho Dominguez	120.45	42	0	0
Rowland Heights	336.52	521	472	1
Santa Clarita Valley	5,734.91	936	706	0
Santa Monica Mountains North Area	440.31	61	5	2
South Diamond Bar	102.44	2	0	0
South San Gabriel	26.30	78	55	0
Twin Lakes	28.48	98	70	0
Universal City	19.63	0	0	0
W Athens - Westmont	224.19	375	809	2
W Rancho Dominguez - Victoria	26.01	81	92	0
Walnut Islands	326.87	56	49	1
West Carson	388.16	1,043	1,127	1

Table 5.3-16 Existing Unincorporated Areas Land Uses Within 500 Feet of a Freeway

Unincorporated Community	Total acreage within buffer	Number of Parcels[1]	Units[1]	Total Number of Schools[3]
West Claremont	49.34	68	63	1
West Fox Hills	7.71	29	31	0
West Los Angeles (Sawtelle Va)	167.50	1	0	0
West San Dimas	6.62	0	0	0
West Whittier - Los Nietos	404.50	1,088	1,251	3
Whittier Narrows	504.83	220	203	0
Willowbrook	198.26	517	515	2

Notes:
1 Based on latest Assessor Data. Parcel count and Unit totals are the estimated values within the 500 foot freeway buffer.
2 Based on 2010 Census Blocks. Totals are the estimated values within the 500 foot freeway buffer.
3 Data from Los Angeles County Enterprise GIS - collaboration between various departments - includes Public and Private Schools, Universities and Community Colleges.

The Land Use Element of the Proposed General Plan Update identifies land use compatibility as a major consideration in the siting of new sensitive land uses. The General Plan addresses land use compatibility by mapping and regulating uses and intensities, and by including policies and programs that mitigate land use conflicts through design, such as the use of landscaping, walls, building orientation, and performance standards. Implementation of the following Proposed Project policies would ensure that review of air quality compatibility would be conducted when siting receptors near major sources.

- **Policy LU 1.6:** In the review of a project-specific amendment(s) to convert lands within the EPD Overlay to non-industrial land use designations, ensure that the project-specific amendment(s):
  - Is located on a parcel that adjoins a parcel with a comparable use, at a comparable scale and intensity;
  - Will not negatively impact the productivity of neighboring industrial activities;
  - Is necessary to promote the economic value and the long-term viability of the site; and
  - Will not subject future residents to potential noxious impacts, such as noise, odors or dust or pose significant health and safety risks.
- **Policy LU 7.1:** Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.
- **Policy M 6.4:** Minimize noise and other impacts of goods movement, truck traffic, deliveries, and staging in residential and mixed-use neighborhoods.

- **Policy AQ 1.1:** Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.

- **Policy AQ 2.1:** Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.

- **Policy ED 2.2:** Utilize adequate buffering and other land use practices to facilitate the compatibility between industrial and non-industrial uses.

However, placement of sensitive receptors proximate to the sources above is considered a potentially significant impact of the Proposed Project.

Community Climate Action Plan

Implementation of the County's CCAP would reduce GHG emissions in the unincorporated areas and therefore has the potential to reduce TACs and criteria air pollutant emissions in Los Angeles County as well. Future development projects would be required to adhere to the mandatory measures and implement all feasible voluntary measures in order to be consistent with the County's CCAP. Furthermore, individual measures would not affect the land use designations identified in the Proposed Project would not increase exposure of people to major sources of air toxics. Adoption of the CCAP would be less than significant.

Impact 5.3-6: Industrial land uses associated with the Proposed Project could create objectionable odors. [Threshold AQ-5]

Impact Analysis: The following describes potential odor impacts in Los Angeles County from the implementation of the Proposed Project.

Proposed General Plan Update

Growth in the unincorporated areas could generate new sources of odors and place sensitive receptors near existing sources of odors. Nuisance odors from land uses in the SoCAB are regulated under SCAQMD Rule 402, *Nuisance*, while odors within the Antelope Valley portion of the MDAB are regulated under AVAQMD Rule 402, *Nuisanc*e. Major sources of odors include wastewater treatment plants, chemical manufacturing facilities, food processing facilities, agricultural operations, and waste facilities (e.g., landfills, transfer stations, compost facilities).

There are two types of odor impacts: 1) siting sensitive receptors near nuisance odors, and 2) siting new sources of nuisance odors near sensitive receptors. The Proposed Project designates residential areas and industrial areas of the unincorporated areas to prevent potential mixing of incompatible land use types.

- Future non-industrial development would involve minor odor-generating activities, such as lawn mower exhaust and application of exterior paints for building improvement. It should be noted that while

restaurants can generate odors, these sources are not typically identified as nuisance odors since they typically do not generate significant odors that affect a substantial number of people.

- Industrial uses, including food processing facilities and waste transfer stations, have the potential to generate substantial odors. Individual projects associated with the Proposed Project, including commercial, industrial, and office, are also required to comply with SCAQMD's or AVAQMD's Rule 402 to prevent public nuisances. While these odors would be required to be controlled, additional measures may be warranted to prevent a nuisance, depending on the nature of the proposed use. Consequently, industrial land uses associated with the buildout of the Proposed Project may generate odors that affect a substantial number of people.

- Construction activities would require the operation of equipment that may generate exhaust from either gasoline or diesel fuel. Construction and development would also require the application of paints and the paving of roads, which could generate odors. These types and concentrations of odors are typical of developments and are not considered significant air quality impacts.

SCAQMD and AVAQMD Rule 402, Nuisance, requires abatement of any nuisance generated by an odor complaint. Because existing sources of odors are required to comply with SCAQMD's or AVAQMD Rule 402, impacts to siting of new sensitive land uses would be less than significant. Future environmental review for major sources of odors are required to ensure that sensitive land uses are not exposed to nuisance odors. Rule 402 requires abatement of any nuisance generating an odor complaint.

Implementation of the following Proposed Project policies would ensure that review of odor impacts of a project.

- **Policy LU 1.6:** In the review of a project-specific amendment(s) to convert lands within the EPD Overlay to non-industrial land use designations, ensure that the project-specific amendment(s):

  - Is located on a parcel that adjoins a parcel with a comparable use, at a comparable scale and intensity;
  - Will not negatively impact the productivity of neighboring industrial activities;
  - Is necessary to promote the economic value and the long-term viability of the site; and
  - Will not subject future residents to potential noxious impacts, such as noise, odors or dust or pose significant health and safety risks.

- **Policy LU 7.3:** Protect public and semi-public facilities, including but not limited to major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.

However, industrial land uses associated with buildout of the Proposed Project may generate odors that affect a substantial number of people.

Community Climate Action Plan

Individual measures identified in the Proposed Project would not have the potential to generate odors that affect a substantial number of people. Adoption of the CCAP would be less than significant.

5.3.5 Cumulative Impacts

In accordance with the SCAQMD's *CEQA Air Quality Analysis Handbook*, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment adds to the cumulative impact. The geographic scope for air quality includes cumulative growth projections for Los Angeles County that are reflected in the SCAG RTP/SCS, as described in Section 4.4, *Cumulative Impact Assumptions*, of this DEIR. The greatest source of emissions within the SoCAB is from mobile sources. Due to the extent of the area potentially impacted from cumulative project emissions, the SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD regional emissions thresholds shown above in Tables 5.3-11 through 5.3-13.

Construction

The SoCAB is designated nonattainment for O_3, PM_{10}[16], $PM_{2.5}$, and lead (Los Angeles County only) under the California and national AAQS, and nonattainment for NO_2 under the California AAQS. Construction of cumulative projects will further degrade the regional air quality. Already-imposed mitigation measures from certified EIRs prepared for cumulative projects as well as existing regulatory programs will assist in mitigating these cumulative impacts. However, even with the implementation of mitigation measures and existing regulatory programs, construction emissions for major development projects would still exceed the SCAQMD significance thresholds for VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$. Therefore, construction emissions associated with future development pursuant to the Proposed Project would be significant.

Operation

For operational air quality emissions, any project that does not exceed or can be mitigated to less than the daily regional threshold values is not considered by the SCAQMD to be a substantial source of air pollution and does not add significantly to a cumulative impact. As discussed above, operation of future development pursuant to the Proposed Project would result in emissions in excess of the SCAQMD regional daily emissions thresholds for VOC, NO_X, CO, SO_2, PM_{10} and $PM_{2.5}$. Therefore, the Proposed Project's contribution to cumulative operational air quality impacts would be significant.

5.3.6 Existing Regulations and Standard Conditions

State

- Clean Car Standards – Pavely (AB 1493)

[16] CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010 because the SoCAB did not violated federal 24-hour PM_{10} standards during the period from 2004 to 2007. However, the USEPA has not yet approved this request.

- California Advanced Clean Cars CARB (Title 13 CCR)
- Low-Emission Vehicle Program – LEV III (Title 13 CCR)
- Statewide Retail Provider Emissions Performance Standards (SB 1368).
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

SCAQMD

- SCAQMD Rule 201: Permit to Construct
- SCAQMD Rule 402: Nuisance Odors
- SCAQMD Rule 403: Fugitive Dust
- SCAQMD Rule 1113: Architectural Coatings
- SCAQMD Rule 1403: Asbestos Emissions from Demolition/Renovation Activities
- SCAQMD Rule 1186: Street Sweeping

AVAQMD

- AVAQMD Rule 201: Permit to Construct
- AVAQMD Rule 203: Permit to Operate
- AVAQMD Rule 402: Nuisances
- AVAQMD Rule 403 and 403.2: Fugitive Dust Control
- AVAQMD Regulation XIII, New Source Review

Local

- Control of Hazardous Dust Conditions (County Code Chapter 12.32)

5.3.7 Level of Significance Before Mitigation

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.3-1** Buildout of the Proposed Project would generate more growth than the Existing General Plan; and therefore, the Proposed Project would be inconsistent with SCAQMD's and AVAQMD's air quality management plans.

- **Impact 5.3-2** Construction activities associated with the Proposed Project would generate a substantial increase short-term criteria air pollutant emissions that exceed the threshold criteria and would cumulative contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB.

- **Impact 5.3-3** Long-term operation of the Proposed Project would generate a substantial increase in criteria air pollutant emissions that exceed the threshold criteria and would cumulative contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB.

- **Impact 5.3-4** Buildout of the Proposed Project could result in new source sources of criteria air pollutant emissions and/or toxic air contaminants proximate to existing or planned sensitive receptors.

- **Impact 5.3-5** Buildout of the Proposed Project could result in new source sources of criteria air pollutant emissions and/or toxic air contaminants proximate to existing or planned sensitive receptors.

- **Impact 5.3-6** Industrial land uses associated with the Proposed Project could create objectionable odors.

5.3.8 Mitigation Measures

Impact 5.3-1

Mitigation measures incorporated into future development projects and adherence to the Proposed Project policies for operation and construction phases described under Impacts 5.3-2 and 5.3-3 below would reduce criteria air pollutant emissions associated with buildout of the Proposed Project. Goals and policies in the Proposed Project would facilitate continued County participation/cooperation with SCAQMD, AVAQMD, and SCAG to achieve regional air quality improvement goals, promote energy conservation design and development techniques, encourage alternative transportation modes, and implement transportation demand management strategies. However, no mitigation measures are available that would reduce impacts associated with inconsistency with the air quality management plans due to the magnitude of growth and associated emissions that would be generated by the buildout of the unincorporated areas in accordance with the Proposed Project.

Impact 5.3-2

AQ-1 If, during subsequent project-level environmental review, construction-related criteria air pollutants are determined to have the potential to exceed the applicable air quality management district (AQMD) adopted thresholds of significance, the County Department of Regional Planning shall require that applicants for new development projects incorporate mitigation measures as identified in the CEQA document prepared for the project to reduce air pollutant

emissions during construction activities. Mitigation measures that may be identified during the environmental review include but are not limited to:

- Using construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower.
- Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards.
- Limiting nonessential idling of construction equipment to no more than five consecutive minutes.
- Water all active construction areas at least three times daily, or as often as needed to control dust emissions. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- Pave, apply water three times daily or as often as necessary to control dust, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily (with water sweepers using reclaimed water if possible), or as often as needed, all paved access roads, parking areas, and staging areas at the construction site to control dust.
- Sweep public streets daily (with water sweepers using reclaimed water if possible) in the vicinity of the project site, or as often as needed, to keep streets free of visible soil material.
- Hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- Enclose, cover, water three times daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).

Impact 5.3-3

Goals and policies are included in the Proposed Project that would reduce air pollutant emissions. However, due to the magnitude of emissions generated by the buildout of residential, office, commercial, industrial, and warehousing land uses in the unincorporated areas, no mitigation measures are available that would reduce impacts below SCAQMD's or AVAQMD's thresholds.

Impact 5.3-4

AQ-2 New industrial or warehousing land uses that: 1) have the potential to generate 40 or more diesel trucks per day and 2) are located within 1,000 feet of a sensitive land use (e.g. residential, schools, hospitals, nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the County Department of Regional Planning prior to future discretionary project approval. The HRA shall be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment and the applicable air quality management district. If the HRA shows that the incremental cancer risk exceeds ten in one million (I0E-06), particulate matter concentrations would exceed 2.5 $\mu g/m^3$, or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that best available control technologies for toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, restricting idling onsite or electrifying warehousing docks to reduce diesel particulate matter, or requiring use of newer equipment and/or vehicles. T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the Proposed Project.

Impact 5.3-5

AQ-3 Applicants for sensitive land uses within the following distances as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, from these facilities:

- Industrial facilities within 1000 feet
- Distribution centers (40 or more trucks per day) within 1,000 feet
- Major transportation projects (50,000 or more vehicles per day) within 1,000 feet
- Dry cleaners using perchloroethylene within 500 feet
- Gasoline dispensing facilities within 300 feet

Applicants shall submit a health risk assessment (HRA) to the County prior to future discretionary project approval. The HRA shall be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the applicable Air Quality Management District. The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children age 0 to 6 years. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06) or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:

- Air intakes located away from high volume roadways and/or truck loading zones, unless it can be demonstrated to the County Department of Regional Planning that there are operational limitations.
- Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency rating value (MERV) filters.

Mitigation measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the Proposed Project. The air intake design and MERV filter requirements shall be noted and/or reflected on all building plans submitted to the County and shall be verified by the County Department of Regional Planning.

Impact 5.3-6

AQ-4 If it is determined during project-level environmental review that a project has the potential to emit nuisance odors beyond the property line, an odor management plan may be required, subject to County's regulations. Facilities that have the potential to generate nuisance odors include but are not limited to:

- Wastewater treatment plants
- Composting, greenwaste, or recycling facilities
- Fiberglass manufacturing facilities
- Painting/coating operations
- Large-capacity coffee roasters
- Food-processing facilities

If an odor management plan is determined to be required through CEQA review, the County shall require the project applicant to submit the plan prior to approval to ensure compliance with the applicable Air Quality Management District's Rule 402, for nuisance odors. If applicable, the Odor Management Plan shall identify the Best Available Control Technologies for Toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers (e.g., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.

5.3.9 Level of Significance After Mitigation

Impact 5.3-1

Buildout of the Proposed Project would generate more population and employment growth and more VMT than the Existing General Plan; therefore, the project would be inconsistent with SCAQMD's 2012 AQMP

and AVAQMD's Ozone Attainment Plan. Mitigation measures incorporated into future development projects and adherence to the Proposed Project policies for operation and construction phases described in Impacts 5.3-2 and 5.3-3 above would reduce criteria air pollutant emissions associated with buildout of the Proposed Project. Goals and policies included in the Proposed Project would facilitate continued County participation/cooperation with SCAQMD, AVAQMD, and SCAG to achieve regional air quality improvement goals, promote energy conservation design and development techniques, encourage alternative transportation modes, and implement transportation demand management strategies. However, no mitigation measures are available that would reduce impacts associated with inconsistency with the air quality management plans due to the magnitude of growth and associated emissions that would be generated by the buildout of the unincorporated areas in accordance with the Proposed Project. Impact 5.3-1 would remain Significant and Unavoidable.

Impact 5.3-2

Construction activities associated with the buildout of the Proposed Project would generate criteria air pollutant emissions that would exceed SCAQMD's and AVAQMD's regional significance thresholds and would contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB. Goals and policies are included in the Proposed Project that would reduce air pollutant emissions. However, due to the magnitude of emissions generated by future construction activities associated with the buildout of the Proposed Project, no mitigation measures are available that would reduce impacts below SCAQMD's and AVAQMD's thresholds. Impact 5.3-2 would remain Significant and Unavoidable.

Impact 5.3-3

Buildout of the proposed land use plan would generate additional vehicle trips and area sources of criteria air pollutant emissions that exceed SCAQMD's and AVAQMD's regional significance thresholds and would contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB. Goals and policies are included in the Proposed Project that would reduce air pollutant emissions. However, due to the magnitude of emissions generated by the buildout of the Proposed Project, no mitigation measures are available that would reduce impacts below SCAQMD's or AVAQMD's thresholds. Impact 5.3-3 would remain Significant and Unavoidable.

Impact 5.3-4

Buildout of the Proposed Project could result in new sources of criteria air pollutant emissions and/or toxic air contaminants near existing or planned sensitive receptors. Goals and policies are included in the Proposed Project that would reduce concentrations of criteria air pollutant emissions and TACs generated by new development.

Review of projects by SCAQMD or AVAQMD for permitted sources of air toxics (e.g., industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure health risks are minimized. Mitigation Measure 3-2 would ensure mobile sources of TACs not covered under SCAQMD or AVAQMD permits are considered during subsequent project-level environmental review. Development of individual projects would

be required to achieve the incremental risk thresholds established by SCAQMD or AVAQMD, and TACs would be less than significant.

However, localized emissions of criteria air pollutants could exceed the SCAQMD or AVAQMD regional significance thresholds because of the scale of development activity associated with buildout of the Proposed Project. The Proposed General Plan Update is a high-level planning program and no specific development projects are proposed at this time. As a result, it is not possible to determine whether the scale and phasing of individual projects would result in the exceedance of the localized emissions thresholds. Therefore, in accordance with the SCAQMD and AVAQMD methodology, Impact 5.3-4 would remain Significant and Unavoidable.

Impact 5.3-5

Placement of new sensitive receptors within the unincorporated areas near major sources of TACs could expose people to substantial pollutant concentrations. Goals and policies are included in the Proposed Project that would reduce concentrations of criteria air pollutant emissions and air toxics generated by new development. Mitigation Measure 3-3 would ensure that placement of sensitive receptors near major sources of air pollution would achieve the incremental risk thresholds established by SCAQMD and AVAQMD, and Impact 5.3-5 would be less than significant.

Impact 5.3-6

Mitigation Measure 3-4 would ensure that odor impacts are minimized and facilities would comply with SCAQMD and AVAQMD Rule 402. Impact 5.3-6 would be less than significant.

5.3.10 References

Antelope Valley Air Quality Management District (AVAQMD). 2011, August. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines.

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———. 1993. California Environmental Quality Act Air Quality Handbook.

U.S. Environmental Protection Agency (USEPA). 2013, December 5. The Green Book Nonattainment Areas for Criteria Air Pollutants. http://www.epa.gov/air/oaqps/greenbk/index.html.

5. Environmental Analysis
AIR QUALITY

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5.4 BIOLOGICAL RESOURCES

The analysis in this section is based in part on the following technical report(s):

- *Final Environmental Impact Report and Statement for the West Mojave Plan.* Bureau of Land Management, January 2005.
- *Los Angeles County Significant Ecological Area Study*, England and Nelson Environmental Consultants, 1976.
- *California Natural Diversity Database (available by subscription) and Rarefind*, California Department of Fish and Wildlife, Natural Diversity Database (CNDDB), February 2014. (http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi)
- *Inventory of Rare and Endangered Plants of California*, California Native Plant Society, February 2014.
- *Los Angeles County Significant Ecological Area Update Study 2000*, PCR Services Corporation, November 2000.
- *South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion*, South Coast Wildlands, 2008.

Complete copies of these studies are included in the Appendix H to this Draft EIR

5.4.1 Environmental Setting

5.4.1.1 REGULATORY SETTING

A number of local plans and ordinances regulate biological resources within the unincorporated areas of Los Angeles County (unincorporated areas), and are summarized below. Federal and state regulations are described after the Local Plans and Ordinances section.

Local Plans and Ordinances

Significant Ecological Areas

The County of Los Angeles's (County) Significant Ecological Area (SEA) Program began in 1980 with the adoption of SEAs as Special Management Areas in the Los Angeles County General Plan (Existing General Plan). The objective of the SEA Program is to preserve the genetic and physical ecological diversity of Los Angeles County by designing biological resource areas capable of sustaining themselves into the future. The SEA designation is given to land that contains irreplaceable biological resources, and includes undisturbed or lightly disturbed habitats that support valuable and threatened species and linkages and corridors to promote species movement.

SEAs are not wilderness preserves, and much of the land within SEAs is privately held, used for public recreation or abuts developed areas. The SEA Program is intended to ensure that privately held lands within the SEAs retain the right of reasonable use, while avoiding activities and developments that are incompatible

with the long-term survival of the SEAs. The County has regulated development within the SEAs with the SEA Conditional Use Permit.

Marina del Rey Local Coastal Program

The Marina del Rey Local Coastal Program (LCP), consists of both a Land Use Plan and Local Implementation Program.

The Marina del Rey Land Use Plan was initially approved by the County Board of Supervisors in September 1984, and was subsequently certified by the California Coastal Commission in October 1984. This Land Use Plan was last approved, as amended, by the Board of Supervisors in March 2011 and subsequently certified by the California Coastal Commission in February 2012. It serves as the community plan for the Marina del Rey area, and constitutes a refinement of General Plan policy to provide a basis for its implementation.

The Marina del Rey Specific Plan is the primary implementation mechanism for the Marina del Rey Land Use Plan. It is designed to implement the Marina del Rey Land Use Plan through the application of site-specific development standards and guidelines. The Marina del Rey Specific Plan constitutes the most detailed interpretation of General Plan policy, and was last certified, as amended, in February 2012.

Santa Catalina Island Local Coastal Program

In 1974, a 50-year Open Space Easement Agreement (terminating in 2024) was signed between the County and the Santa Catalina Island Company. The Agreement calls for preservation of the natural character of Santa Catalina Island and improvement of the Island's access and recreational opportunities. Shortly thereafter, the Santa Catalina Island Conservancy was established to manage the Island's biotic and natural resources in perpetuity.

The California Coastal Act of 1976, which sets forth policies to guide new development and to improve public access to coastal areas, required the submission and approval of an LCP for coastal areas such as Santa Catalina Island. This LCP recognizes and responds to the goals and requirements of the Open Space Easement Agreement, the Santa Catalina Island Conservancy and the California Coastal Act, and ensures that the vast majority of the Island will remain in its present natural state for future generations.

Malibu Local Coastal Land Use Plan

Portions of the unincorporated areas are located within the Malibu Coastal Zone and covered by the Malibu Local Coastal Land Use Plan. The Coastal Zone includes the unincorporated areas within the Santa Monica Mountains that is located west of the City of Los Angeles, east of Ventura County, and south of the coastal zone boundary (excluding the City of Malibu), and extends inland from the shoreline approximately five miles, encompassing approximately 81 square miles. The Malibu Land Use Plan has been the basic planning tool for the Coastal Zone and was certified by the Coastal Commission in 1986.

Oak Tree Ordinance

The County Oak Tree Ordinance applies to all unincorporated areas. The Oak Tree Ordinance requires that a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree

of the oak tree genus that is 25 inches or more in circumference (8 inches in diameter) as measured 4.5 feet above mean natural grade, or in the case of an oak with more than one trunk, whose combined circumference of any two trunks is at least 38 inches (12 inches in diameter) as measured 4.5 feet above mean natural grade (i.e., diameter at breast height [DBH]), or (b) any tree that has been provided as a replacement tree, without first obtaining an oak tree permit.

Oak Woodlands Conservation Management Plan

To further the County's compliance with Public Resources Code Section 21083.4, which provides for the conservation of oak woodlands, the County adopted the Los Angeles County Oak Woodlands Conservation Management Plan (OWCMP) in 2012. The OWCMP develops a consistent policy for the management of oak woodlands by providing a voluntary conservation strategy in order to meet the requirements of the California Oak Woodlands Conservation Act (AB 242). The OWCMP extends CEQA consideration of impacts to oak woodlands comprised of oaks greater than 5 inches at DBH and recognizes that conservation of oak woodland habitat extends beyond the protection of individual trees.

Hillside Management Areas

The County of Los Angeles Hillside Management Area (HMA) Ordinance applies to all unincorporated areas of Los Angeles County that contain terrain with a natural slope of 25 percent or greater. The goal of the ordinance is to ensure that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character. Locating development outside of HMAs to the greatest extent feasible will be the first emphasis of sensitive hillside design. Where avoidance is not feasible, development of HMAs will be located in the lowest and flattest areas of the hillside in order to minimize impacts on steeper hillside areas. Last, development will utilize a variety of sensitive hillside design techniques to ensure compatability with the hillside and enhance community character.

Federal Regulations

Federal regulations applicable to biological resources within the unincorporated areas are summarized below.

Federal Endangered Species Act

The federal Endangered Species Act of 1973 (FESA) defines an "endangered" species as "any species which is in danger of extinction throughout all or a significant portion of its range." A "threatened" species is defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range". Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA as to: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Furthermore, the U.S. Fish and Wildlife Service (USFWS), through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant or animal species, the property owner and agency are required to consult with USFWS pursuant to Section 7 of the FESA if there is a federal nexus, or pursuant to Section 10 of the

FESA. Section 9(a)(2)(b) if the FESA addresses the protections afforded to listed plants. "Critical habitat" is defined in Section 3(5A) of the FESA as: the specific areas within the geographic area, occupied by the species at the time it was listed, which contain the physical or biological features that are essential to the conservation of endangered and threatened species and that may need special management or protection. Critical habitat may also include areas that were not occupied by the species at the time of listing but are essential to its conservation." Critical habitat designations affect only federal agency actions or federally funded or permitted activities. Critical habitat designations do not affect activities by private landowners if there is no federal "nexus"—that is, no federal funding or authorization.

The status of federally listed species is assigned by USFWS as one of the following:

- Federally Endangered (FE)
- Federally Threatened (FT)
- Federally Proposed as Endangered (FPE)
- Federally Proposed as Threatened (FPT)
- Federally Proposed for Delisting (FPD)
- Federal Candidate for a Proposed Species (FC)

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any parts, nests, or eggs of any bird listed as migratory. In practice, federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.[1]

Federal Clean Water Act, Section 404

Section 404 of the Clean Water Act (CWA) regulates the discharge of dredged or fill material into Waters of the U.S. and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. Implementing regulations for the CWA define Waters of the U.S. as "rivers, creeks, streams, and lakes extending to their headwaters and any associated wetlands." Wetlands are defined as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions." The permit review process entails an assessment of potentially adverse impacts to U.S. Army Corps of Engineers (USACE) jurisdictional Waters of the U.S.

[1] USFWS. 2012. Birds Protected By The Migratory Bird Treaty Act, List of Migratory Birds. Online at: http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/mbtandx.html#p. Site last accessed February 2014.

Over the years, the USACE has modified its regulations, typically due to evolving policy or judicial decisions, through the issuance of Regulatory Guidance Letters, memorandums, or more expansive instruction guidebooks. These guidance documents help to update and define how jurisdiction is claimed, and how these Waters of the U.S. will be regulated. The most recent, significant modification occurred on June 5, 2007, subsequently updated in December 2008, when the USACE and the U.S. Environmental Protection Agency (USEPA) issued a series of guidance documents outlining the requirements and procedures, effective immediately, to establish jurisdiction under Section 404 of the CWA and the Section 10 of the Rivers and Harbors Act of 1899. These documents are intended to be used for all jurisdictional delineations and provide specific guidance for the jurisdictional determination of potentially jurisdictional features affected by the U.S. Supreme Court rulings in *Rapanos v. the United States* and *Carabell v. the United States* 547 U.S. 715 (2006) (jointly referred to as Rapanos).

The Rapanos case outlines the conditions and criteria used by the USACE to assess and claim jurisdiction over non-isolated, non-navigable, ephemeral tributaries. Under a plurality ruling, the Court noted that certain "not relatively permanent" (i.e., ephemeral), non-navigable tributaries must have a "significant nexus" to downstream traditional navigable waters to be jurisdictional. An ephemeral tributary has a significant nexus to downstream navigable "waters" when it has "more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a Traditional Navigable Water (TNW)." A significant nexus is established through the consideration of a variety of hydrologic, geologic and ecological factors specific to the particular drainage feature in question. For drainage features that do not meet the significant nexus criteria, a significant nexus determination is provided by the USACE to the USEPA for the final determination of federal jurisdiction. Drainage features that do not meet the significant nexus criteria based on completion of an Approved Jurisdictional Delineation, and/or are determined to be isolated pursuant to the SWANCC ruling (see below), may still be regulated by California Department of Fish and Wildlife (CDFW) under Fish and Game Code Section 1600 or the Regional Water Quality Control Board (RWQCB) under the Porter-Cologne Water Quality Act.

On January 15, 2003, the USACE and USEPA issued a Joint Memorandum to provide clarifying guidance regarding the United States Supreme Court ruling in the Solid Waste Agency of *Northern Cook County v. United States Army Corps of Engineers*, No. 99-1178 (January 9, 2001) ("the SWANCC ruling"), (Federal Register: Vol. 68, No. 10.). This ruling held that the CWA does not give the federal government regulatory authority over non-navigable, isolated, intra-state waters. As a result of this decision, some previously regulated depressional areas such as mudflats, sandflats, wetlands, prairie potholes, wet meadows, playa lakes, natural ponds, and vernal pools, which are not hydrologically connected to other intra- or inter-state "waters of the U.S.," are no longer regulated by the USACE.

Federal Clean Water Act, Section 401

The mission of the RWQCB is to develop and enforce water quality objectives and implement plans that will best protect the beneficial uses of the state's waters, recognizing local differences in climate, topography, geology, and hydrology. The California RWQCB is also responsible for implementing compliance not only with state codes such as the California Water Code, but also some federal acts such as Section 401 of the CWA. Section 401 of the CWA requires that any applicant for a federal permit for activities that involve a discharge to waters of the state shall provide the federal permitting agency with a certification from the state

in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal CWA. As such, before the USACE will issue a CWA Section 404 permit, applicants must apply for and receive a Section 401 water quality certification (WQC) from the RWQCB. The RWQCB regulates "discharging waste, or proposing to discharge waste, within any region that could affect "waters of the state" (Water Code § 13260 (a)), pursuant to provisions of the Porter-Cologne Water Quality Control Act, which defines RWQCB jurisdictional "waters of the state" as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code § 13050 (e)).

With the exception of isolated waters and wetlands, most discharges of fill to waters of the state are also subject to a CWA Section 404 permit. If a CWA Section 404 permit is not required for the project, the RWQCB may still require issuance of Waste Discharge Requirements (WDR) under the Porter-Cologne Water Quality Control Act. The RWQCB may regulate isolated waters that are not under jurisdiction of the USACE through issuance of WDR's. However, projects that obtain a Section 401 WQC are simultaneously enrolled in a statewide general WDR. Processing of Section 401 WQC's generally requires submittal of 1) a construction storm water pollution prevention plan (SWPPP), 2) a final water quality technical report that demonstrates that post-construction storm water Best Management Practices (BMPs) comply with the local design standards for municipal storm drain permits (MS4 permits) implemented by the State Water Resources Control Board effective January 1, 2011, and 3) a conceptual Habitat Mitigation and Monitoring Plan (HMMP) to compensate for permanent impacts to RWQCB waters, if any. In addition to submittal of a draft CEQA document, a WQC application typically requires a discussion of avoidance and minimization of impacts to RWQCB jurisdictional resources, and efforts to protect beneficial uses as defined by the local RWQCB basin plan for the project. The RWQCB cannot issue a Section 401 WQC until the project CEQA document is certified by the lead agency.

West Mojave Plan

Portions of the unincorporated areas are located within the West Mojave Plan (WEMO). The WEMO is a habitat conservation plan adopted by the Bureau of Land Management (BLM) in 2006 that encompasses most of California's western Mojave Desert, including parts of San Bernardino, Los Angeles, Kern, and Inyo counties. Although the WEMO planning area covers 9.3 million acres, the plan applies to the 3.2 million acres of public lands within the planning area, as non-federal agencies did not formally adopt the habitat conservation plan proposed in the West Mojave Plan to cover their jurisdictions (i.e., therefore the adopted plan only applies to federal public lands).

Draft Desert Renewable Energy Conservation Plan

Portions of the unincorporated areas are located within the Draft Desert Renewable Energy Conservation Plan (DRECP). California Executive Order S-14-08 requires the development of the DRECP for the Mojave and Colorado deserts in order to provide binding, long-term endangered species permit assurances and to facilitate the review and approval of compatible renewable energy projects. The DRECP is a major component of California's renewable energy planning efforts and is intended to provide effective protection and conservation for desert ecosystems and to allow for the development of compatible renewable energy projects. The DRECP is a proposed Natural Community Conservation Plan (NCCP) (to comply with the California NCCP Act and the California Endangered Species Act [CESA]), Habitat Conservation Plan (HCP)

(to comply with the Federal Endangered Species Act [FESA]), and Land Use Plan Amendment (LUPA) (in accordance with the Federal Land Policy and Management Act [FLPMA]). The DRECP will include implementation of a scientifically based adaptive management and monitoring program as a part of its overall conservation strategy.

State Regulations

State regulations applicable to biological resources within Los Angeles County are summarized below.

California Endangered Species Act

The California Endangered Species Act (CESA) defines an endangered species as:

> *…a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.*

The State defines a threatened species as:

> *…a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.*

Candidate species are defined as:

> *…a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.*

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species by stating:

> *…no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.*

Under the CESA, "take" is defined as, "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Additionally, some sensitive mammals and birds are protected by the state as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively.

California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed species are not protected per se, but warrant consideration in the preparation of biological assessments. For some species, the California Natural Diversity Database (CNDDB), a resource maintained by CDFW of recorded locations where sensitive species have been documented, is only concerned with specific portions of the life history, such as roosts, rookeries, or nest areas.

For the purposes of this EIR, the following abbreviations are used for state status species, as applicable:

- State Endangered (SE)
- State Threatened (ST)
- State Rare (SR)
- State Candidate for Endangered (SCE)
- State Candidate for Threatened (SCT)
- State Fully Protected (SFP)
- California Species of Special Concern (SSC)

State of California Fish and Game Code, Section 3503/3503.5/3513

Section 3503 of the California Fish and Game Code states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3513 states that is it unlawful to take any non-game migratory bird protected under the MBTA.

State of California Fish and Game Code, Section 4150

Section 4150 of the California Fish and Game Code states that "All mammals occurring naturally in California which are not game mammals, fully protected mammals, or fur-bearing mammals, are nongame mammals. Nongame mammals or parts thereof may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission."

State of California Code of Regulations, Sections 250 and 251.1

Section 250 of the California Fish and Game Code states that "Except as otherwise authorized in these regulations or in the Fish and Game Code, resident game birds, game mammals and furbearing mammals may

not be taken at any time." Section 251.1 of the California Fish and Game Code states that "Except as otherwise authorized in these regulations or in the Fish and Game Code, no person shall harass, herd or drive any game or nongame bird or mammal or furbearing mammal. For the purposes of this section, harass is defined as an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering. This section does not apply to a landowner or tenant who drives or herds birds or mammals for the purpose of preventing damage to private or public property, including aquaculture and agriculture crops." Activities that result in the take or harassment of a nongame mammal may also be considered in violation of this code.

California Native Plant Society

The California Native Plant Society (CNPS) is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of rare, threatened, and endangered vascular plant species of California.[2] The list has served as a potential candidate list for listing as Threatened and Endangered by CDFW. CNPS has developed five categories of rarity, referred to as California Rare Plant Ranks (CRPRs), of which CRPRs 1A, 1B, 2A,and 2B are considered particularly sensitive:

- CRPR 1A Presumed Extirpated in California and either Rare or Extinct elsewhere.
- CRPR 1B Plants Rare, Threatened, or Endangered in California and elsewhere.
- CRPR 2A Presumed Extirpated in California, but more common elsewhere.
- CRPR 2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- CRPR 3 Plants about which we need more information – a review list.
- CRPR 4 Plants of limited distribution – a watch list.

The CNPS appends CRPR categorizations with "threat ranks" that parallel the ranks used by the CNDDB, and are added as a decimal code after the CRPR (e.g., CRPR 1B.1). The threat codes are as follows:

- .1 – Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- .2 – Fairly endangered in California (20 – 80% occurrences threatened);
- .3 – Not very endangered in California (<20% of occurrences threatened or no current threats known).

State of California Fish and Game Code, Section 1602

Streambeds and other drainages that occur within the unincorporated areas are subject to regulation by the CDFW. Section 1602 of the California Fish and Game Code requires any entity (e.g., person, state or local government agency, or public utility) who proposes a project that will substantially divert or obstruct the

[2] CNPS (California Native Plant Society). 2012. Inventory of Rare and Endangered Plants of California. California Native Plant Society: available online (http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi).

natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake to notify the CDFW of the proposed project. In the course of this notification process, the CDFW will review the proposed project as it affects streambed habitats within the project area. The CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

State of California Porter-Cologne Water Quality Control Act

If a CWA Section 404 permit is not required for the project, the RWQCB may still require issuance of WDR under the Porter-Cologne Water Quality Control Act, which regulates State water rights and water quality. The RWQCB may regulate isolated waters that are not under jurisdiction of the USACE through issuance of WDRs.

5.4.1.2 EXISTING CONDITIONS

Plant Communities/Habitat

Los Angeles County is comprised of a diverse variety of ecosystems that include coastal areas, islands, plains, mountains, and deserts. Los Angeles County possesses an extremely varied topography, and elevations range from sea level to over 10,000 feet. Climates range from mild near the coast to severe in the high mountains and desert regions. In addition, the soils and underlying geology vary according to prehistoric volcanic activity, marine sedimentation, and river deposition. This wide variation in physical environments has produced the unique and diverse collection of biological resources found in Los Angeles County today.

Vegetation

Los Angeles County has a diversity of geography and habitats, including coastlines, islands, dunes, sea cliffs, hills, mountain ranges, valleys, plains, deserts, marshes, tidal flats, freshwater ponds, rivers, streams, wetlands, woodlands, shrublands, and grasslands. As a consequence, Los Angeles County supports a wide variety of plant communities within its boundaries. Some of the more common plant communities identified include mixed conifer-oak woodland, foothill woodland, coast live oak woodland, pinyon-juniper woodland, Joshua tree woodland, juniper woodland, southern cottonwood-willow riparian forest, southern willow scrub, mule fat scrub, chaparral, coastal sage scrub-chaparral mixed scrub, coastal sage scrub, desert scrub, and non-native annual grassland. Unique or less common plant communities include bigcone spruce-canyon oak woodland, valley oak woodland, coast live oak riparian forest, walnut woodland, southern sycamore-alder woodland, white alder riparian forest, mesquite bosque, mainland cherry forest, California buckeye woodland, alluvial fan sage scrub, redshank chaparral, native grassland, wildflower field, freshwater marsh, alkali marsh, salt marsh, and vernal pool. Santa Catalina Island exhibits a specialized subset of the above communities identified as maritime succulent scrub, southern coastal bluff scrub, island chaparral, island oak woodland, island ironwood forest, and island cherry woodland.

Mixed conifer-oak woodland formations typically have an overstory of oaks (canyon [*Quercus chrysolepis*], or interior live [*Q. wislizenii*]) intermixed with bigcone spruce (*Pseudotsuga macrocarpa*), incense cedar (*Calocedrus decurrens*), and yellow pine (*Pinus ponderosa*), of varying densities and compositions depending upon slope orientation, substrates, and fire history. Understory vegetation usually is dominated by chaparral species such as scrub oak (*Quercus berberidifolia*), manzanita (*Arctostaphylos* species), and California lilac (*Ceanothus* species).

Bigcone spruce-canyon oak woodland is a dense woodland with a mixture of dominant tree species. Canyon oak forms a broken canopy with bigcone spruce, California black oak (*Quercus kelloggii*), and California foothill pine (*Pinus sabiniana*) scattered among it. Areas outside the canopy are usually dominated by chaparral species such as scrub oak, manzanita, and California lilac.

Foothill woodland is a broad community designation encompassing the tree-dominated plant communities occurring transitionally between grasslands and montane chaparral or bigcone spruce- canyon oak woodland. Dominant tree species include interior live oak, blue oak (*Quercus douglasii*), valley oak (*Q. lobata*), and California foothill pine.

Coast live oak woodland consists of moderate-density overstory formations of coast live oak trees (*Quercus agrifolia*), on erosional plains along the margins of canyon bottoms and on lower slopes within chaparral and coastal sage scrub understory habitats. Trees typically grow to heights of 20 to 40 feet and form both closed and open canopy woodlands. Associated species in the understory include blue elderberry (*Sambucus nigra* ssp. *caerulea*), chaparral currant (*Ribes malvaceum*), skunkbrush (*Rhus aromatica*), and California peony (*Paeonia californica*).

Valley oak woodland is an open woodland community dominated by valley oak. The understory is a grassy savannah composed mostly of non-native grasses.

Walnut woodland community is dominated by the Southern California black walnut (*Juglans californica*) which grows 10 to 30 feet tall. More often than not, the Southern California walnut black grows in open stands; however, closed tree canopies are not uncommon. Associated species include coast live oak, sugar bush (*Rhus ovata*), and skunkbrush.

Pinyon-juniper woodland typically consists of a mixture of single-needle leaf pinyon pine (*Pinus monophylla*) and California juniper (*Juniperus californica*), with desert mountain mahogany (*Cercocarpus ledifolius*), California buckwheat (*Eriogonum fasciculatum*), skunkbrush, chaparral yucca (*Hesperoyucca whipplei*), penstemons (*Penstemon* species), and native grasses.

Joshua tree woodland is an open formation dominated by Joshua tree (*Yucca brevifolia*), which usually is the only arborescent species in the community, and with numerous smaller shrub species interspersed. Shrub species commonly associated with Joshua tree woodland habitat include creosote bush (*Larrea tridentata*), Great Basin sagebrush (*Artemisia tridentata*), California buckwheat, saltbush (*Atriplex* species), little leaf horsebrush (*Tetradymia glabrata*), desert almond (*Prunus fasciculata*), and antelope brush (*Purshia tridentata* var. *glandulosa*), rubber rabbitbrush (*Ericameria nauseosa*), and cheesebush (*Ambrosia salsola*) and California juniper.

Juniper woodland is an open formation dominated by California juniper, often with an understory of desert scrub species Nevada ephedra and mormon tea (*Ephedra nevadensis* and *E. viridis*).

Oak riparian forest. This community is dominated by coast live oak or canyon oak in canyons at higher elevations. Other riparian trees such as western sycamore (*Platanus racemosa*) and willow (*Salix* species) commonly occur as well. Understory species in canyon bottom habitats may include toyon (*Heteromeles arbutifolia*), golden currant (*Ribes aureum*), laurel sumac (*Malosma laurina*), blue elderberry, and mule fat (*Baccharis salicifolia*).

Coast live oak riparian forest is a variation of coast live oak woodland wherein the canopy is more closely grown, and the trees occur in narrower formations along watercourses. Associated species may include willow, California bay (*Umbellularia californica*), and mule fat.

Southern sycamore-alder woodland is a formation that may occur on broad plains with heavy alluvial substrates, and often along narrow creeks and streams with high-energy, permanent flows within the drainage. White alders (*Alnus rhombifolia*), which grow 30 to 40 feet high over a sparse shrub understory, typically occur along the watercourse, while western sycamores usually grow a bit further from the active flowing channel. This is not a common community within Los Angeles County

Southern cottonwood-willow riparian forest is an open broad-leaved winter-deciduous riparian forest variously dominated by Fremont cottonwood or black cottonwood (*Populus fremontii* or *Populus trichocarpa*, respectively), Gooding's black willow (*Salix gooddingii*), or red willow (*Salix laevigata*). The community may rarely support alder, and western sycamore on drier sites.

Southern willow scrub is a riparian community consisting of dense, broad-leaved, winter-deciduous riparian thickets occurring within and adjacent to seasonal or permanent water courses. The community formation generally is sub-mature – a state which often is maintained by frequent heavy flooding – and may attain woodland or forest stature if undisturbed for several decades. Dominant species of this community are mule fat, sandbar willow (*Salix exigua*) and arroyo willow (*Salix lasiolepis*). Red willow and Gooding's black willow may also occur in some locations.

Mule fat scrub is dominated by mule fat, but also may include willows, sedges (*Carex* species) and stinging nettle (*Urtica dioica*). The community may get established wherever the soil is moist for long periods of time into the summer months.

Mesquite bosque consists of dense thickets of mesquite (*Prosopis glandulosus*) trees, usually found where groundwater resources are sufficient in quantity and depth to support the trees. This community is confined to desert environments.

Mainland cherry forest is not well defined community but is typically composed of tall stands of hollyleaf cherry (*Prunus ilicifolia*) along the margins of drainages. This community is found primarily within the Santa Clara River watershed.

Chaparral consists of broad-leaved or needle-leaved, sclerophyllous (hard-leaved), medium height to tall shrubs that form a dense cover on steep slopes, usually below 5,000 feet in Southern California. It is a common shrub community composed of robust, mostly evergreen species. The chaparral types are identified according to their dominant plant species. These may include chamise (*Adenostoma fasciculatum*), buck brush (*Ceanothus cuneatus*), California lilac, scrub oak, interior live oak, and birch-leaf mountain-mahogany (*Cercocarpus betuloides*) on north-facing exposures. Coastal occurrences of chaparral may include laurel sumac, toyon, lemonade berry (*Rhus integrifolia*), big-pod ceanothus (*Ceanothus megacarpus*) and manzanita as dominant species. Additional species that often occur include scrub oaks (several species including *Quercus durata*), California buckwheat, chaparral yucca, sugar bush, holly-leaved cherry, hollyleaf redberry (*Rhamnus ilicifolia*), hoary leaved ceanothus (*Ceanothus crassifolius*), black sage (*Salvia mellifera*), and sawtooth goldenbush (*Hazardia squarrosa*) on south-facing slopes. Thick leaved yerba santa (*Eriodictyon crassifolium*) may be abundant along dirt

roads and other disturbed areas. In the canyons bottoms, where groundwater levels are higher, giant rye grass (*Elymus condensatus*), blue elderberry, sacapellote (*Acourtia microcephala*), redberry (*Rhamnus crocea*), toyon, and holly-leaved cherry may occur.

Redshank chaparral is a similar community to the chaparral described above, with the exception that red shank (*Adenostoma sparsifolium*) is the dominant species and the community has a more restricted occurrence in Los Angeles County, although more wide-ranging in distribution elsewhere in California and Baja California.

Coastal sage scrub-chaparral mixed scrub are formations that typically occur on drier south or west-facing slopes. Dominant species typically are California sagebrush (*Artemisia californica*), purple sage (*Salvia leucophylla*), black sage, white sage (*Salvia apiana*), Menzies' goldenbush (*Isocoma menziesii*), California buckwheat, chaparral yucca, bush sunflower (*Encelia californica*), golden yarrow (*Eriophyllum confertiflorum*), chamise, hoary-leaf ceanothus, and a variety of annuals and bulbs.

Coastal sage scrub community is dominated by California sagebrush, bush sunflower, white sage, black sage, and California buckwheat. Coastal sage scrub also forms dense stands that may grow three to four feet in height. Other common species within this community may include woolly blue-curls (*Trichostema lanatum*), chaparral yucca, black sage, Acton encelia (*Encelia actoni*; in more inland locations), white sage, and chamise. A variety of less common associated species are also present including lance-leaved live-forever (*Dudleya lanceolata*), common tarplant (*Deinandra fasciculata*), beavertail cactus (*Opuntia basilaris*), turkish rugging (*Chorizanthe staticoides*), and Southern California morning-glory (*Calystegia macrostegia*). Disked or cleared areas that have regrown may have a dense cover of oats (*Avena* species) and bromes (*Bromus* species), California poppy (*Eschscholzia californica*), fiddleneck (*Amsinckia menziesii*), several species of lupines (*Lupinus* species), popcorn flower (*Cryptantha* and *Plagiobothrys* species), comb-bur (*Pectocarya recurvata*) and other disturbance-favored native annuals.

Alluvial fan sage scrub is a shrub community characterized by harsh substrates subject to episodic flooding and scouring. It is generally restricted to floodplains in broad canyon outwashes, or alluvial washes. The community generally consists of a mixture of shrubs that colonize and persist with infrequent scouring and flooding. The dominant shrub in most washes is scalebroom (*Lepidospartum squamatum*), but Great Basin sagebrush, rubber rabbitbrush, sweetbush (*Bebbia juncea*), and chaparral yucca are also common.

Desert scrub is a comprehensive plant assemblage term applied for a number of relatively low-stature, widely-spaced desert formations of shrubs and subshrubs, commonly occurring on open, sandy soils where groundwater is inaccessible to all but a few deep-rooted species. Dominants include Great Basin sagebrush, antelope bush, brittlebush (*Encelia farinosa*), creosote bush, several species of saltbush, rubber rabbitbrush, cheesebush, sages (*Salvia* species), winterfat (*Krascheninnikovia lanata*), and burrobrush (*Ambrosia dumosa*), often with one or more perennial grass (needlegrass [*Stipa* species], or sand drop-seed [*Sporobolus cryptandrus*]).

Grassland communities consist of low, herbaceous vegetation that often is dominated by grasses. These communities also support native forbs and bulbs as well as naturalized annual forbs. Only fragmentary representatives of native grasslands remain in Los Angeles County. Non-native grassland consists of dominant invasive annual grasses that are primarily of Mediterranean origin.

- **Native grassland** consists of a minimum ten percent cover of native grassland species, most commonly including *Elymus*, *Poa*, and *Stipa* species, along with a variety of native forbs and perennials.

- **Non-native grassland** consists primarily of various non-native annual grasses and forbs. These opportunistically growing species include brome grasses, wild oats, and mustards (*Brassica* species or *Hirschfeldia incana*). This community may include slender oats (*Avena barbata*), wild oats (*A. fatua*), ripgut brome (*Bromus diandrus*), foxtail chess (*B. madritensis* ssp. *rubens*), golden top (*Lamarckia aurea*), Mediterranean grass (*Schismus arabicus*), red-stemmed filaree (*Erodium cicutarium*), and wild mustard (commonly *Brassica nigra*).

- **Wildflower field** is an amorphous mix of herbaceous species noted for conspicuous annual wildflower displays. Species dominance varies from site to site and from year to year at any one particular site. Species frequently present include California poppy, tidy tips (*Layia platyglossa*), annual lupine (*Lupinus bicolor*), purple owl's clover (*Castilleja exserta*), and broad-leaved gilia (*Aliciella latifolia*).

Freshwater marsh is found at scattered locations within Los Angeles County in areas of still or slow-moving permanent freshwater, and often along faults where aquifers are blocked and water accumulates at the surface. Freshwater marsh requires perennially shallow water or saturated soils. This community may also exist at other locations, in or adjacent to artificially created impoundments used to water livestock. This community is dominated by the perennial cattail (*Typha* species), which may reach heights of seven feet and grow in such densities as to form a closed canopy. Dominant plants often include emergent species such as cattails and bulrush (*Schoenoplectus americanus*).

Alkali marsh is similar to the freshwater marsh described above but with more salt-tolerant plant species present. Species associated with this community include cattail, sedges, saltgrass (*Distichlis spicata*), and common reed (*Phragmites australis*).

Salt marsh is also similar to the freshwater marsh described above but with more salt-tolerant hydrophytes present, often occurring along the coast. Species associated with this community include cattails, pickleweed (*Salicornia* species), saltgrass, and cord grass (*Spartina* species). Salt marsh is rare within Los Angeles County and is best represented at Malibu Lagoon.

Vernal pool sites occur primarily in the Canyon Country and Val Verde areas near the City of Santa Clarita. True vernal pools, which are rare in Southern California and extremely rare in Los Angeles County, form seasonally in shallow, closed basins, usually where a lens of heavy clay soil holds surface water following rainfall events. State and federal agency-listed sensitive plant species occurring within the known pool systems within Los Angeles County and include California Orcutt grass (*Orcuttia californica*) and spreading navarretia (*Navarretia fossalis*), along with other vernal pool endemics such as hairgrass (*Deschampsia elongata*), woolly-marbles (*Psilocarphus brevissimus*), shortseed waterwort (*Elatine brachysperma*), and broad toothed monkeyflower (*Mimulus latidens*).

Island Vegetation Communities

Maritime succulent scrub is a low, open scrub of soft-leaved shrubs and herbs with a rich admixture of stem and leaf succulents occurring on steep coastal slopes. This community is dominated by California

sagebrush and prickly-pear cactus (*Opuntia littoralis*) located mainly on the exposed, dry south-facing slopes typically with well-drained soils. Other species associated with this community include Catalina wild-apple (*Crossosoma californicum*), bush sunflower, St. Catherine's lace (*Eriogonum giganteum*), Santa Catalina Island bedstraw (*Galium catalinense* ssp. *catalinense*), island broom (*Acmispon dendroideus* var. *dendroideus*), laurel sumac, lemonade berry, and black sage.

Southern coastal bluff scrub is a low scrub community adapted to exposed areas with nearly constant winds and high salt content. It consists of the largest reservoir of sensitive species and island endemics due to its location within inaccessible areas. This community is dominated by giant coreopsis (*Leptosyne gigantea*), Catalina wild-apple, *Dudleya* spp., St. Catherine's lace, island buckwheat (*Eriogonum grande* var. *grande*), and island tarplant (*Deinandra clementina*).

Island chaparral consists of tall broad-leaved shrubs that form a dense cover on steep slopes. Dominant species found within this community include MacDonald's scrub oak (*Quercus* x *macdonaldii*), island scrub oak (*Quercus pacifica*), toyon (*Heteromeles arbutifolia*), Catalina Island ceanothus (*Ceanothus arboreus*), chamise, island redberry (*Rhamnus pirifolia*), Catalina wild-apple, and Santa Catalina Island manzanita (*Arctostaphylos catalinae*).

Island oak woodland is dominated by island live oak (*Quercus tomentella*) with a poorly developed shrub layer which includes California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), heart-leaved penstemon (*Keckiella cordifolia*), and pink honeysuckle (*Lonicera hispidula* var. *vacillans*). Some island oak woodlands along riparian habitat include scattered arroyo willows. This community occurs in relatively moist, protected canyon bottoms with rich alluvial soils.

Island ironwood forest is an upland community characterized by a dominance of Catalina ironwood (*Lyonothamnus floribundus* ssp. *floribundus*). This Santa Catalina Island endemic is a broad-leaved tree and occurs in groves of 50 – 100 trees located along the north- and east-facing slopes. Other species occasionally associated include island scrub oak and Catalina manzanita. The understory is sparse, supporting a number of herbaceous annuals and ferns. This community is typically found in protected canyons with rich alluvial soils in the northern portion of the Island.

Island cherry woodland is an open to dense woodland dominated by Catalina cherry (*Prunus ilicifolia* ssp. *lyonii*), often associated with toyon, blue elderberry, island scrub oak, and arroyo willow, with an understory consisting of Santa Catalina figwort (*Scrophularia villosa*), common sandaster (*Corethrogyne filaginifolia* var. *filaginifolia*), wild cucumber (*Marah macrocarpa*), chaparral mallow (*Malacothamnus fasciculatus*), island morning-glory (*Calystegia macrostegia* ssp. *macrostegia*), and many of the weedy forb and grass species. This community occurs mostly along riparian habitats, in valley/canyon bottoms in the northern portion of the Island, and canyons along the eastern coast of the islands.

Wildlife

Los Angeles County is a mosaic of open space areas, suburban and rural areas, and densely developed urban areas. Wildlife within Los Angeles County is extremely diverse with greater abundance in open space areas that have undeveloped, high quality habitats (e.g., Angeles National Forest, Santa Monica Mountains). While a few wildlife species are entirely dependent upon a single vegetative community, many species utilize a number of habitat types during their life histories. Thus, the entire mosaic of natural areas within Los Angeles County and adjoining areas constitutes a functional regional ecosystem that supports the multifaceted needs of these species.

Amphibian populations are generally restricted to moister areas where water is readily available, such as riparian areas along canyon bottoms and ponding features. Representative amphibian species found within Los Angeles County include northern Pacific tree frog (*Pseudacris regilla*), Baja California tree frog (*Pseudacris hypochondriaca hypochondriaca*), California toad (*Anaxyrus boreas halophilus*), and the non-native American bullfrog (*Lithobates catesbeianus*).

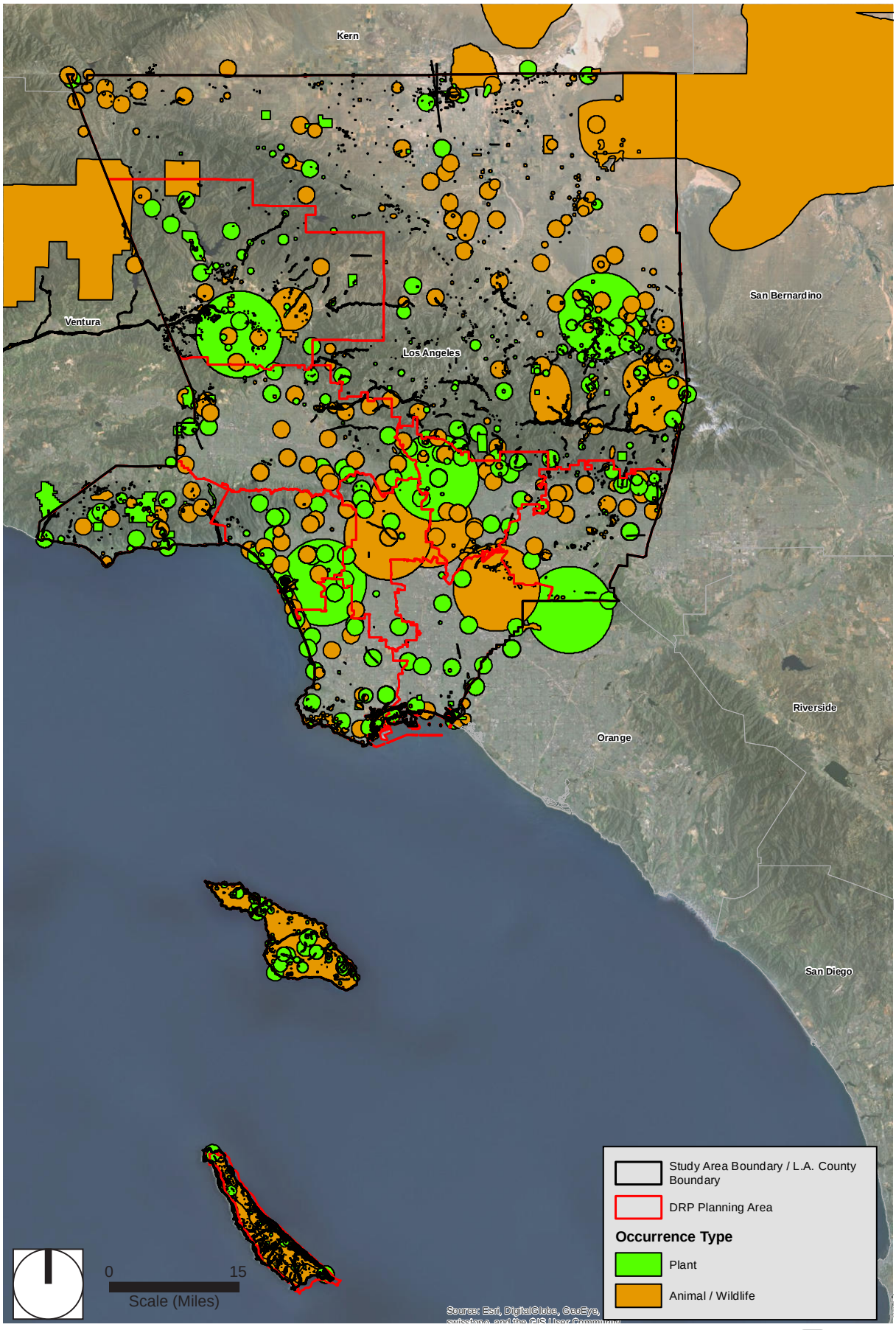
Diverse reptile populations within Los Angeles County are typically found in drier open scrub, chaparral, and alluvial fan habitats, though some species, such as the Pacific pond turtle (*Actinemys marmorata*) are found in association with streams. Representative reptile species found within Los Angeles County include California side-blotched lizard (*Uta stansburiana elegans*), Great Basin fence lizard (*Sceloporus occidentalis longipes*), tiger whiptail (*Aspidoscelis tigris*), Blainville's horned lizard (*Phrynosoma blainvillii*), red racer (*Coluber flagellum piceus*), California striped racer (*Coluber lateralis lateralis*), western rattlesnake (*Crotalus oreganus*), Pacific gopher snake (*Pituophis catenifer catenifer*), and California kingsnake (*Lampropeltis californiae*).

Los Angeles County supports a wide variety of avian species. The natural areas within Los Angeles County provide excellent foraging and cover habitat for year-round resident, seasonal resident, and migrating songbirds, as well as foraging, perching, and nesting opportunities for raptors. Additionally, water sources and riparian habitat attract large numbers of resident and migratory birds, including waders and waterfowl. Representative bird species found within Los Angeles County include western scrub jay (*Aphelocoma californica*), Anna's hummingbird (*Calypte anna*), California quail (*Callipepla californica*), California horned lark (*Eremophila alpestris actia*), greater roadrunner (*Geococcyx californianus*), Bullock's oriole (*Icterus bullockii*), northern mockingbird (*Mimus polyglottos*), savannah sparrow (*Passerculus sandwichensis*), phainopepla (*Phainopepla nitens*), black-headed grosbeak (*Pheucticus melanocephalus*), California towhee (*Melozone crissalis*), spotted towhee (*Pipilo maculatus*), western meadowlark (*Sturnella neglecta*), and California thrasher (*Toxostoma redivivum*). Some representative raptor species observed within Los Angeles County include Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), American kestrel (*Falco sparverius*), and barn owl (*Tyto alba*).

Los Angeles County also supports a wide variety of mammal species. Representative mammal species commonly found within Los Angeles County include species such as the desert woodrat (*Neotoma lepida*), western gray squirrel (*Sciurus griseus*), California ground squirrel (*Otospermophilus beecheyi*), desert cottontail (*Sylvilagus audobonii*), brush rabbit (*Sylvilagus bachmani*) black-tailed jackrabbit (*Lepus californicus*), northern raccoon (*Procyon lotor*), common gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), mountain lion (*Puma concolor*), and mule deer (*Odocoileus hemionus*).

Sensitive Resources

Figure 5.4-1, *Sensitive Biological Resources* shows the locations of special-status plant and wildlife species occurrences within the County Planning areas. Additional Figures of Sensitive Biological Resources are located in Appendix H1 of this DEIR, showing the designated critical habitat for each Planning Area. Similarly, Figure 5.4-2, *Designated Critical Habitat* shows the locations of critical habitat for federally-listed plant and wildlife species occurrences within Los Angeles County. Additional figures of depicting Designated Critical Habitat are provided in Appendix H1, showing the critical habitat for federally-listed plant and wildlife species occurrences for each Planning Area.


Kern
Ventura
Los Angeles
San Bernardino
Riverside
Orange
San Diego
Study Area Boundary / L.A. County Boundary
DRP Planning Area
Occurrence Type
Plant
Animal / Wildlife
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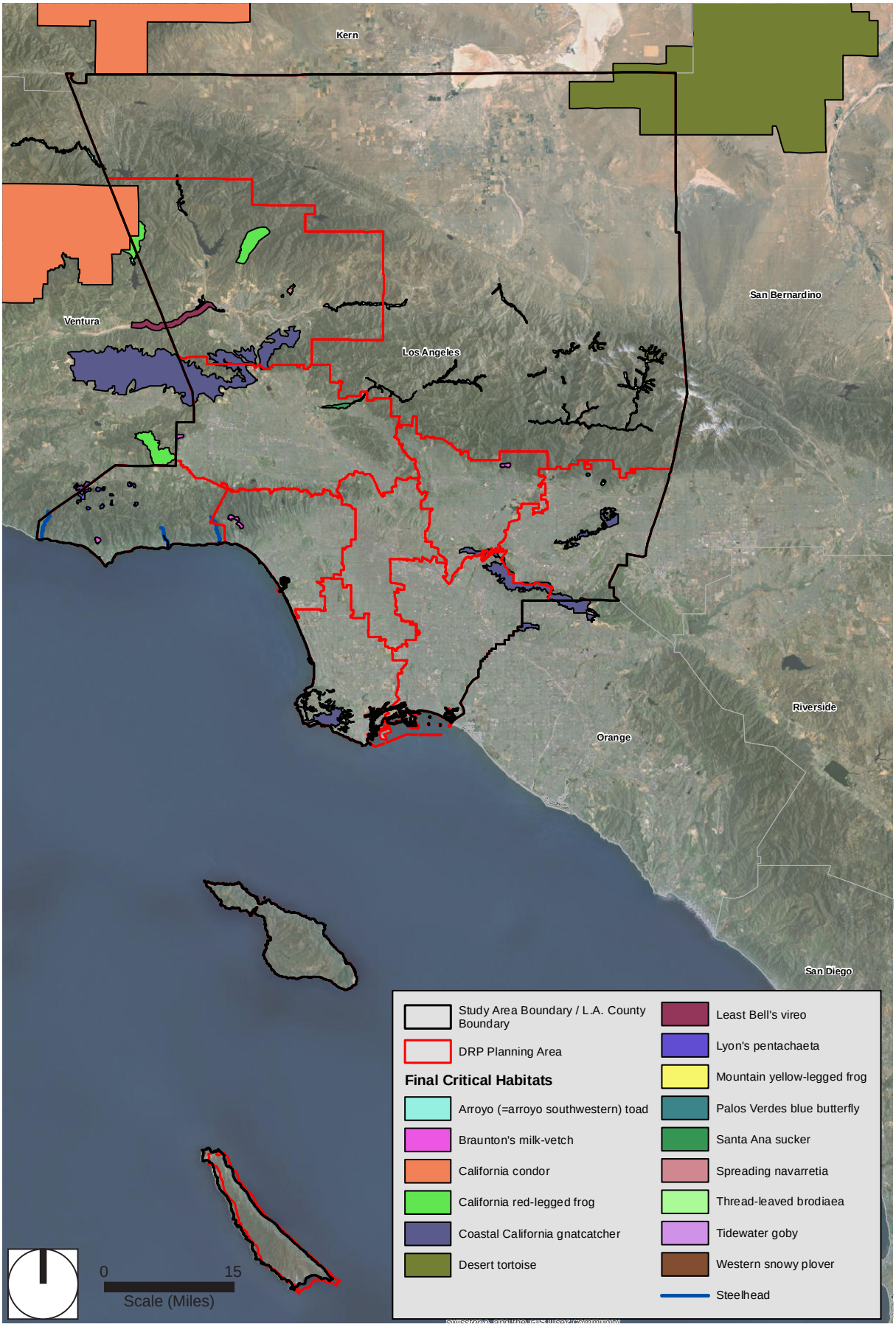
DESIGNATED CRITICAL HABITATS

FIGURE 5.4-2



PLACEWORKS

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Sensitive Plant Communities

Antelope Valley Planning Area

The CNDDB identifies a wide variety of sensitive plant communities occurring within the Antelope Valley Planning Area, including canyon live oak ravine forest, Mojave riparian forest, Riversidean alluvial fan sage scrub, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern mixed riparian forest, southern riparian forest, southern riparian scrub, southern sycamore alder riparian woodland, southern willow scrub, valley needlegrass grassland, valley oak woodland, wildflower field, vernal pool, Southern California arroyo chub/Santa Ana sucker stream, and Southern California threespine stickleback stream.

Coastal Islands Planning Area

A number of sensitive plant communities are identified by the CNDDB within the Coastal Islands Planning Area, including island cherry forest, island ironwood forest, maritime succulent scrub, southern coastal bluff scrub, southern dune scrub, and southern foredunes.

East San Gabriel Valley Planning Area

A number of sensitive plant communities are identified by the CNDDB within the East San Gabriel Valley Planning Area, including California walnut woodland, canyon live oak ravine forest, Riversidean alluvial fan sage scrub, coast prickly pear scrub, southern coast live oak riparian forest, southern sycamore alder riparian woodland, and walnut forest.

Gateway Planning Area

Sensitive plant communities identified in the CNDDB within the Gateway Planning Area include California walnut woodland, freshwater marsh, and southern coastal salt marsh.

Metro Planning Area

A number of sensitive plant communities are identified by the CNDDB within the Metro Planning Area, including California walnut woodland, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern sycamore alder riparian woodland, and walnut forest.

San Fernando Valley Planning Area

The CNDDB identifies a wide variety of sensitive plant communities occurring within the San Fernando Valley Planning Area, including California walnut woodland, Riversidean alluvial fan sage scrub, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern mixed riparian forest, southern sycamore alder riparian woodland, valley oak woodland, and Southern California arroyo chub/Santa Ana sucker stream.

Santa Clarita Valley Planning Area

The CNDDB identifies a wide variety of sensitive plant communities occurring within the Santa Clarita Valley Planning Area, including California walnut woodland, mainland cherry forest, Riversidean alluvial fan

sage scrub, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern mixed riparian forest, southern riparian scrub, southern sycamore alder riparian woodland, southern willow scrub, valley oak woodland, and Southern California threespine stickleback stream. In addition, although not included in the CNDDB, vernal pools have been identified on Cruzan Mesa, and within Vasquez Canyon, Plum Canyon, and on Fair Oaks Ranch. These are highly significant sensitive resources within the Santa Clarita Valley Planning Area.

Santa Monica Mountains Planning Area

The CNDDB identifies a wide variety of sensitive plant communities occurring within the Santa Monica Mountains Planning Area, including California walnut woodland, southern coast live oak riparian forest, southern coastal salt marsh, southern sycamore alder riparian woodland, valley oak woodland, Southern California coastal lagoon, and Southern California steelhead stream.

South Bay Planning Area

Sensitive plant communities identified in the CNDDB within the South Bay Planning Area include southern coastal bluff scrub, vernal pool, and southern dune scrub.

West San Gabriel Valley Planning Area

A number of sensitive plant communities are identified by the CNDDB within the West San Gabriel Valley Planning Area, including open Engelmann oak woodland, Riversidean alluvial fan sage scrub, southern coast live oak riparian forest, and southern sycamore alder riparian woodland.

Westside Planning Area

A number of sensitive plant communities are identified by the CNDDB within the Westside Planning Area, including California walnut woodland, southern coast live oak riparian forest, southern coastal salt marsh, southern dune scrub, and southern sycamore alder riparian woodland.

Sensitive Plants

Antelope Valley Planning Area

The Antelope Valley Planning Area does not support designated critical habitat for any federally-listed plant species. Nevertheless, this Planning Area supports more than 60 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are two federal and/or state-listed species, including San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*) and slender-horned spineflower (*Dodecahema leptoceras*).

Coastal Islands Planning Area

The Coastal Islands Planning Area does not support designated critical habitat for any federally-listed plant species. However, this Planning Area supports at least 62 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant

species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are 12 Federal and/or State-listed species, including Catalina Island mountain-mahogany (*Cercocarpus traskiae*), Lyon's pentachaeta (*Pentachaeta lyonii*), San Clemente Island bush-mallow (*Malacothamnus clementinus*), San Clemente Island larkspur (*Delphinium variegatum* ssp. *kinkiense*), San Clemente Island woodland star (*Lithophragma maximum*), Santa Cruz Island winged-rockcress (*Sibara filifolia*), beach spectaclepod (*Dithyrea maritima*), San Clemente Island bedstraw (*Galium catalinense* ssp. *acrispum*), San Clemente Island bird's-foot trefoil (*Acmispon argophyllus* var. *adsurgens*), island rush-rose (*Crocanthemum greenei*), San Clemente Island lotus (*Acmispon dendroideus* var. *traskiae*), and San Clemente Island paintbrush (*Castilleja grisea*).

East San Gabriel Valley Planning Area

The East San Gabriel Valley Planning Area supports designated critical habitat for thread-leaved brodiaea (*Brodiaea filifolia*). In addition, this Planning Area supports at least 19 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are two federal and/or state-listed species, including Nevin's barberry (*Berberis nevinii*) and thread-leaved brodiaea.

Gateway Planning Area

The Gateway Planning Area does not support designated critical habitat for any federally-listed plant species. However, this Planning Area supports at least 16 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are two federal and/or state-listed species, including California Orcutt grass and salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*).

Metro Planning Area

The Metro Planning Area does not support designated critical habitat for any federally-listed plant species. However, this Planning Area supports at least 23 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are six federal and/or state-listed species, including Braunton's milk-vetch (*Astragalus brauntonii*), California Orcutt grass, coastal dunes milk-vetch (*Astragalus tener* var. *titi*), Gambel's water cress (*Nasturtium gambelii*), marsh sandwort (*Arenaria paludicola*), and Nevin's barberry.

San Fernando Valley Planning Area

The San Fernando Valley Planning Area supports designated critical habitat for Braunton's milk-vetch. In addition, this Planning Area supports at least 21 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are five federal and/or state-listed species,

including San Fernando Valley spineflower, Braunton's milk-vetch, California Orcutt grass, Nevin's barberry, and slender-horned spineflower.

Santa Clarita Valley Planning Area

The Santa Clarita Valley Planning Area supports designated critical habitat for spreading navarretia. In addition, this Planning Area supports at least 20 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are five federal and/or state-listed species, including San Fernando Valley spineflower, California Orcutt grass, Nevin's barberry, slender-horned spineflower, and spreading navarretia.

Santa Monica Mountains Planning Area

The Santa Monica Mountains Planning Area supports designated critical habitat for Braunton's milk-vetch and Lyon's pentachaeta. In addition, this Planning Area supports at least 21 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are five federal and/or state-listed species, including Braunton's milk-vetch, Lyon's pentachaeta, Agoura Hills dudleya (*Dudleya cymosa* ssp. *agourensis*), marcescent dudleya (*Dudleya cymosa* ssp. *marcescens*), and Santa Monica dudleya (*Dudleya cymosa* ssp. *ovatifolia*).

South Bay Planning Area

The South Bay Planning Area does not support designated critical habitat for any federally-listed plant species. However, this Planning Area supports at least 22 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are six federal and/or state-listed species, including California Orcutt grass, coastal dunes milk-vetch, Lyon's pentachaeta, salt marsh bird's-beak, beach spectaclepod, and spreading navarretia.

West San Gabriel Valley Planning Area

The West San Gabriel Valley Planning Area supports designated critical habitat for Braunton's milk-vetch. In addition, this Planning Area supports at least 24 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are three federal and/or state-listed species, including Braunton's milk-vetch, Nevin's barberry and slender-horned spineflower.

Westside Planning Area

The Westside Planning Area supports designated critical habitat for Braunton's milk-vetch. In addition, this Planning Area supports at least 26 special-status plant species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered rare by the CNPS. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-1, *Special-Status Plant Species*. Among these are nine federal and/or state-listed species, including San Fernando Valley spineflower, Braunton's milk-vetch, coastal dunes milk-vetch, Gambel's water cress, marsh sandwort, salt marsh bird's-beak, Ventura Marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), beach spectaclepod, and Santa Monica dudleya.

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Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Lichens						
Baja rock lichen *Graphis saxorum*	—	—	3	Moderately shaded volcanic rock, usually north-facing, vertical or almost vertical and on underhangs. Coastal areas of Southern California to Baja California.	Lichen N/A	Coastal Islands
Woven-spored lichen *Texosporium sancti-jacobi*	—	—	1B.2	Arid to semi-arid shrub-steppe, grassland or savannah communities up to 1,000 m asl. Requires natural openings in arid vegetation that are not maintained by fire, sparsely vegetated with native forbs and bunchgrasses, free of weeds and supporting well developed biological crusts on non-saline and non-calcareous soils. Intolerant of disturbed sites.	Lichen N/A	Coastal Islands
Bryophytes						
Slender silver moss *Anomobryum julaceum*	—	—	2B.2	Damp rock and soil substrates on outcrops and road cuts in broad-leaved upland forest, lower montane coniferous forest, and North Coast coniferous forest communities between 100 and 1,000 m asl.	Moss N/A	Antelope Valley
Norris' beard moss *Didymodon norrisii*	—	—	2B.2	Intermittently mesic, rocky habitats within cismontane woodland and lower montane coniferous forest communities at approximately 600 m elevation.	Moss N/A	Santa Monica Mountains
California screw-moss *Tortula californica*	—	—	1B.2	Sandy soils in chenopod scrub and valley and foothill grassland communities between 10 and 1,460 m asl.	Moss N/A	Santa Monica Mountains
Ferns and Allies						
Western spleenwort *Asplenium vespertinum*	—	—	4.2	Rocky habitats in chaparral, cismontane woodland, and coastal scrub communities between 800 and 1,000 m asl.	Rhizomatous herb February – June	Antelope Valley, East San Gabriel Valley, West San Gabriel Valley
Scalloped moonwort *Botrychium crenulatum*	—	—	2B.2	Bogs and fens, lower montane coniferous forest, meadows and seeps, freshwater marshes and swamps and upper montane coniferous forest communities between 1,268 and 3,280 m asl.	Rhizomatous herb June – September	Antelope Valley
Bluish spike-moss *Selaginella asprella*	—	—	4.3	Granitic, rocky. Cismontane woodland, Lower montane coniferous forest, Pinyon and juniper woodland, Subalpine coniferous forest, Upper montane coniferous forest 1600-2700 m	Perennial rhizomatous herb July	Antelope Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Sonoran maiden fern *Thelypteris puberula* var. *sonorensis*	—	—	2B.2	Meadows, seeps and streams between 50 and 610 m asl.	Rhizomatous herb January – September	Antelope Valley, East San Gabriel Valley, West San Gabriel Valley Santa Monica Mountains,
Dicots						
Red sand-verbena *Abronia maritima*	—	—	4.2	Coastal dunes below 100 m asl.	Perennial herb February – November	Coastal Islands, Santa Monica Mountains, South Bay, Westside
Chaparral sand-verbena *Abronia villosa* var. *aurita*	—	—	1B.1	Sandy soils in chaparral, coastal scrub, and desert dune communities between 80 and 1,600 m asl.	Annual herb January – September	Antelope Valley
Heart-leaved thorn-mint *Acanthomintha obovata* ssp. *cordata*	—	—	4.2	Clay soils in openings in chaparral, cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland communities between 785 and 1,540 m asl.	Annual herb April – July	Antelope Valley
Parish's oxytheca *Acanthoscyphus parishii* var. *parishii*	—	—	4.2	Sandy or gravelly soils in chaparral and lower montane coniferous forest communities between 1,220 and 2,600 m asl.	Annual herb June – September	Antelope Valley
San Clemente Island bird's-foot trefoil *Acmispon argophyllus* var. *adsurgens*	—	SE	1B.1	Rocky substrate in coastal bluff scrub and coastal scrub communities between 15 and 395 m asl.	Perennial herb April – June	Coastal Islands
Island broom *Acmispon dendroideus* var. *dendroideus*	—	—	4.2	Open sites near ocean bluffs, inland canyons, growing within coastal bluff scrub, closed-cone coniferous forest, chaparral, cistmontane woodland, coastal scrub below 460 m asl	Perennial shrub January – August	Coastal Islands
San Clemente Island lotus *Acmispon dendroideus* var. *traskiae*	FT	SE	1B.1	Coastal bluff scrub, coastal scrub, and valley and foothill grassland communities between 15 and 365 m asl.	Perennial shrub February – August	Coastal Islands
Watson's amaranth *Amaranthus watsonii*	—	—	4.3	Mojavean and Sonoran desert scrub communities between 20 and 1,700 m asl.	Annual herb April – September	Antelope Valley, East San Gabriel Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
California androsace *Androsace elongata* ssp. *acuta*	—	—	4.2	Chaparral, cismontane woodland, coastal scrub, meadow, seep, pinyon and juniper woodland, and valley and foothill grassland communities between 150 and 1,200 m asl.	Annual herb March – June	Antelope Valley, East San Gabriel Valley
Aphanisma *Aphanisma blitoides*	—	—	1B.1	Sandy habitats in coastal bluff scrub, coastal dune, and coastal scrub communities between 1 and 305 m asl.	Annual herb March – June	Coastal Islands, South Bay
Santa Catalina Island manzanita *Arctostaphylos catalinae*	—	—	1B.2	Volcanic soils in chaparral communities between 75 and 600 m asl.	Perennial evergreen shrub February – May	Coastal Islands
Santa Cruz Island manzanita *Arctostaphylos crustacea* ssp. *subcordata*	—	—	4.2	Rocky closed-cone coniferous forest, chaparral 100–730`m	Perennial evergreen shrub January – April	Coastal Islands
San Gabriel manzanita *Arctostaphylos glandulosa* ssp. *gabrielensis*	—	—	1B.2	Rocky habitats in montane chaparral around 1500 m asl.	Evergreen shrub March	Antelope Valley
Interior manzanita *Arctostaphylos parryana* ssp. *tumescens*	—	—	4.3	Montane chaparral and cismontane woodland communities between 2,100 and 2,310 m asl.	Evergreen shrub February – April	Antelope Valley
Marsh sandwort *Arenaria paludicola*	FE	SE	1B.1	Sandy soils and openings associated with freshwater marshes and swamps between 3 and 170 m asl.	Stoloniferous herb May – August	Metro, Westside
Island sagebrush *Artemisia nesiotica*	—	—	4.3	Rocky coastal scrub, valley and foothill grassland below 320 m asl.	Evergreen shrub April – September	Coastal Islands
Crested milk-vetch *Astragalus bicristatus*	—	—	4.3	Sandy or rocky, carbonate soils in lower and upper montane coniferous forest communities between 1,700 and 2,745 m asl.	Perennial herb May – August	Antelope Valley
Braunton's milk-vetch *Astragalus brauntonii*	FE	—	1B.1	Limited to carbonate soils (limestone outcrops), usually on recent burns or disturbed areas in chaparral, coastal sage scrub, closed-cone forest, and grassland communities between 4 and 640 m asl.	Perennial herb January – August	San Fernando Valley, Santa Monica Mountains, Westside, West San Gabriel Valley, Metro

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
San Antonio milk-vetch *Astragalus lentiginosus* var. *antonius*	—	—	1B.3	Dry slopes in lower montane coniferous forest and upper montane coniferous forest communities between 1,500 and 2,600 m asl.	Perennial herb April – June	Antelope Valley
Big Bear Valley milk-vetch *Astragalus lentiginosus* var. *sierrae*	—	—	1B.2	Gravelly or rocky soils in Mojavean desert scrub, meadows and seeps, pinyon and juniper woodland, upper montane coniferous forest communities between 1,800 and 2,600 m asl.	Perennial herb April – August	Antelope Valley
Big Bear Valley woollypod *Astragalus leucolobus*	—	—	1B.2	Rocky habitats in lower and upper montane coniferous forest, pebble plain, and pinyon and juniper woodland communities between 1,750 and 2,665 m asl.	Perennial herb May – July	Antelope Valley
San Clemente Island milk-vetch *Astragalus miguelensis*	—	—	4.3	Slopes, bluffs, and coastal beaches in coastal bluff scrub, coastal dunes, coastal scrub below 500 m asl.	Perennial herb March – July	Coastal Islands
San Clemente Island milk-vetch *Astragalus nevinii*	—	—	1B.2	Coastal dune, coastal scrub, valley and foothill grassland communities between 5 and 225 m asl.	Perennial herb February – July	Coastal Islands
Lancaster milk-vetch *Astragalus preussi* var. *laxiflorus*	—	—	1B.1	Chenopod scrub habitats around 700 m asl.	Perennial herb March – May	Antelope Valley
Ventura marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	FE	SE	1B.1	Coastal dunes, coastal scrub, and edges of coastal salt and brackish marsh and swamp communities between 1 and 35 m asl.	Perennial herb June – October	Westside
Coastal dunes milk-vetch *Astragalus tener* var. *titi*	FE	SE	1B.1	Sandy, often vernally mesic habitats in coastal bluff scrub, coastal dune, and coastal prairie communities between 1 and 50 m asl.	Annual herb March – May	Metro, South Bay, Westside

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Coulter's saltbush *Atriplex coulteri*	—	—	1B.2	Ocean bluffs, ridge tops and alkaline lowlands in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland communities between 3 and 460 m asl.	Perennial herb March – October	Coastal Islands, Gateway, Santa Monica Mountains
South coast saltscale *Atriplex pacifica*	—	—	1B.2	Coastal bluff scrub, coastal dune, coastal scrub, and playa communities between 0 and 140 m asl.	Annual herb March – October	Coastal Islands, South Bay
Parish's brittlescale *Atriplex parishii*	—	—	1B.1	Alkaline soils in chenopod scrub, playas, and vernal pools between 25 and 1,900 m asl.	Annual herb June – October	Gateway, Metro, San Fernando Valley, South Bay, Westside
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	—	—	1B.2	Alkaline soils in coastal bluff scrub and coastal scrub habitats between 10 and 200 m asl.	Annual herb April – October	Coastal Islands, Metro, Santa Monica Mountains, South Bay, Westside
Malibu baccharis *Baccharis malibuensis*	—	—	1B.1	Chaparral, cismontane woodland, coastal scrub, and riparian woodland communities between 150 and 305 m asl.	Deciduous shrub August	Santa Monica Mountains
Plummer's baccharis *Baccharis plummerae* ssp. *plummerae*	—	—	4.3	Rocky habitats in broad-leaved upland forest, chaparral, cismontane woodland, and coastal scrub communities between 5 and 425 m asl.	Deciduous shrub May – October	Santa Monica Mountains
Nevin's barberry *Berberis nevinii*	FE	SE	1B.1	Sandy or gravelly habitats on steep north-facing slopes and in low-grade washes in chaparral, cismontane woodland, and coastal and riparian scrub communities between 274 and 825 m asl. Plants in San Francisquito Canyon are introduced.[3]	Evergreen shrub March – June	East San Gabriel Valley, Metro, Santa Clarita Valley, San Fernando Valley, West San Gabriel Valley
Golden-spined cereus *Bergerocactus emoryi*	—	—	2B.2	Sandy soils in closed-cone coniferous forest, chaparral, and coastal scrub communities between 3 and 395 m asl.	Perennial stem succulent May – June	Coastal Islands
Pinyon rockcress *Boechera dispar*	—	—	2B.3	Granitic, gravelly. Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland. 1200-2540 m	Perennial herb March-June	Antelope Valley
Lincoln rockcress *Boechera lincolnensis*	—	—	2B.3	Chenopod scrub and Mojavean desert scrub communities between 1100 and 1205 m asl.	Perennial herb March – May	Antelope Valley

[3] California Native Plant Society. 2011. Species account for *Berberis nevinii*. Inventory of Rare and Endangered Plants (online edition, v7-11jan). California Native Plant Society. Sacramento, CA. Accessed on Fri, Jan. 21, 2011 from http://www.cnps.org/inventory

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Brewer's calandrinia *Calandrinia breweri*	—	—	4.2	Sandy or loamy soils in disturbed or burned sites within chaparral and coastal scrub communities between 10 and 1,220 m asl.	Annual herb March – June	Antelope Valley, East San Gabriel Valley, San Fernando Valley, Santa Monica Mountains, West San Gabriel Valley, Westside
Round-leaved filaree *California macrophylla*	—	—	1B.1	Clay soils in cismontane woodland, valley and foothill grassland communities between 15 and 1200 m asl.	Annual herb March – May	Antelope Valley, Coastal Islands, East San Gabriel Valley, Metro, San Fernando Valley, Santa Clarita Valley, Santa Monica Mountains, West San Gabriel Valley
Island morning-glory *Calystegia macrostegia* ssp. *amplissima*	—	—	4.3	Rocky slopes, canyon walls in coastal bluff scrub, coastal dunes, valley and foothill grasslands between 10 and 275 m asl.	Rhizomatous herb February – July	Coastal Islands
Peirson's morning-glory *Calystegia peirsonii*	—	—	4.2	Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland communities between 30 and 1500 m asl.	Rhizomatous herb April – June	Antelope Valley, Santa Clarita Valley
Santa Barbara morning-glory *Calystegia sepium* ssp. *binghamiae*	—	—	1A	Presumed extinct. Coastal marshes and swamps between 0 and 20 m asl.	Rhizomatous herb April – May	Gateway, Metro, West San Gabriel Valley, Westside
San Clemente Island evening-primrose *Camissoniopsis guadalupensis* ssp. *clementina*	—	—	1B.2	Coastal dunes between 0 and 30 m asl.	Annual herb April – June	Coastal Islands
Lewis' evening-primrose *Camissoniopsis lewisii*	—	—	3	Sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland communities between 0 and 300 m asl.	Annual herb March – May (June)	Metro, San Fernando Valley, Santa Clarita Valley, Santa Monica Mountains, South Bay, Westside
White pygmy-poppy *Canbya candida*	—	—	4.2	Gravelly and sandy soils in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland communities between 600 and 1,460 m asl.	Annual herb March – June	Antelope Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Mount Gleason Indian paintbrush *Castilleja gleasonii*[4]	—	Rare	1B.2	Granitic habitats in open flats or slopes in granitic soil in chaparral, lower montane coniferous forest, pinyon and juniper woodland communities between 1,160 and 2,170 m asl; restricted to the San Gabriel Mountains	Perennial herb (hemiparasitic) May – June	Antelope Valley
San Clemente Island paintbrush *Castilleja grisea*	FE	SE	1B.3	Rocky substrates often in canyons in coastal bluff scrub and coastal scrub communities between 10 and 535 m asl.	Annual herb (hemiparasitic) December – August	Coastal Islands
Mojave paintbrush *Castilleja plagiotoma*	—	—	4.3	Alluvial Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, and pinyon and juniper woodland communities between 300 and 2,500 m asl.	Perennial herb (hemiparasitic) April – June	Antelope Valley
Island ceanothus *Ceanothus megacarpus var. insularis*	—	—	4.3	Sandy soils and rocky slopes, canyons, chaparral between 30 and 600 m asl.	Evergreen shrub February – July	Coastal Islands
Southern tarplant *Centromadia parryi* ssp. *australis*	—	—	1B.1	Vernally mesic, often alkaline, habitats in marshes and swamp margins, valley and foothill grassland, and vernal pool communities between 0 and 427 m asl.	Annual herb May – November	Antelope Valley, Coastal Islands , Gateway, Metro, South Bay, West San Gabriel Valley, Westside
Island mountain-mahogany *Cercocarpus betuloides* var. *blancheae*	—	—	4.3	Closed-cone coniferous forest and chaparral communities between 30 and 600 m asl.	Evergreen shrub February – May	Coastal Islands, Santa Monica Mountains
Catalina Island mountain-mahogany *Cercocarpus traskiae*	FE	SE	1B.1	Rocky, gabbro habitats in chaparral and coastal scrub communities between 100 and 250 m asl. Mainland occurrence of one plant from Los Angeles County may be introduced or a hybrid with *C. betuloides* var. *betuloides*.	Evergreen shrub March – May	Coastal Islands
Orcutt's pincushion *Chaenactis glabriuscula* var. *orcuttiana*	—	—	1B.1	Sandy habitats in coastal bluff scrub and coastal dunes communities between 3 and 100 m asl.	Annual herb January – August	Santa Monica Mountains, South Bay, Westside

[4] See *Castilleja pruinosa* in the 1993 edition of *The Jepson Manual*.

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Southern mountain misery *Chamaebatia australis*	—	—	4.2	Gabbroic or metavolcanic soils in chaparral communities between 300 and 700 m asl.	Evergreen shrub November – May	Santa Monica Mountains
Coastal goosefoot *Chenopodium littoreum*	—	—	1B.2	Coastal dune communities between 10 and 30 m asl.	Annual herb April – August	Westside
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	FE	SE	1B.2	Coastal dunes, marshes and swamps between 0 and 30 m asl.	Annual herb (hemiparasitic) May – October	Gateway, South Bay, Westside
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	FC	SE	1B.1	Sandy soils in coastal scrub and valley and foothill grassland communities between 150 and 1220 m asl.	Annual herb April – July	Antelope Valley, San Fernando Valley, Santa Clarita Valley, Westside
Parry's spineflower *Chorizanthe parryi* var. *parryi*	—	—	1B.1	Sandy or rocky habitats and openings in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland communities between 275 and 1220 m asl.	Annual herb April – June	Antelope Valley, East San Gabriel Valley, Santa Clarita Valley, Santa Monica Mountains, West San Gabriel Valley
Mojave spineflower *Chorizanthe spinosa*	—	—	4.2	Chenopod scrub, Joshua tree woodland, and Mojavean desert scrub communities between 6 and 1,300 m asl.	Annual herb March – July	Antelope Valley
White-bracted spineflower *Chorizanthe xanti* var. *leucotheca*	—	—	1B.2	Sandy or gravelly substrates in Mojave Desert scrub and pinyon juniper woodland communities between 300 and 1,200 m asl.	Annual herb April – June	Antelope Valley [Note: This taxon appears in the CNDDB database in Los Angeles County but the record is most likely in error.]
Bolander's water-hemlock *Cicuta maculata* var. *bolanderi*	—	—	2B.1	Coastal, fresh or brackish water marshes and swamps between 0 and 200 m asl.	Perennial herb July – September	N/A
Seaside cistanthe *Cistanthe maritima*	—	—	4.2	Sandy. Coastal bluff scrub, Coastal scrub, Valley and foothill grassland. 5-300 m	Annual Herb February-August	Coastal Islands

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Kern Canyon clarkia *Clarkia xantiana* ssp. *parviflora*	—	—	4.2	Sandy and rocky soils on slopes and roadsides within chaparral, cismontane woodland, Great Basin scrub, and valley and foothill grassland communities between 700 and 3,620 m asl.	Annual herb May – June	Antelope Valley
Monkey-flower savory *Clinopodium mimuloides*[5]	—	—	4.2	Stream banks and mesic habitats within chaparral, and North Coast coniferous forest communities between 305 and 1,800 m asl.	Perennial herb June – October	Antelope Valley, West San Gabriel Valley
Nevin's woolly sunflower *Constancea nevinii*	—	—	1B.3	Coastal bluff scrub and coastal scrub communities between 5 and 410 m asl.	Perennial deciduous shrub April – August	Coastal Islands
Small-flowered morning-glory *Convolvulus simulans*	—	—	4.2	Serpentinite clay soils in seeps and openings in chaparral, coastal scrub, and valley and foothill grassland communities between 30 and 700m asl.	Annual herb March – July	Metro, Santa Monica Mountains, South Bay
Island rush-rose *Crocanthemum greenei*	FT	—	1B.2	Rocky substrate found in Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub communities between 15 and 490 m asl.	Perennial evergreen shrub January – August	Coastal Islands
Catalina crossosoma *Crossosoma californicum*	—	—	1B.2	Rocky soils in chaparral and coastal scrub communities between 0 and 500 m asl.	Deciduous shrub February – May	Coastal Islands, South Bay
Clokey's cryptantha *Cryptantha clokeyi*	—	—	1B.2	Mojavean desert scrub communities between 725 and 1365 m asl.	Annual herb April	Antelope Valley
Trask's cryptantha *Cryptantha traskiae*	—	—	1B.1	Coastal bluff scrub, coastal scrub, and coastal dune communities between 15 and 400 m asl.	Annual herb March – June	Coastal Islands
Wiggins' cryptantha *Cryptantha wigginsii*	—	—	1B.1	Often in clay soils in coastal scrub communities between 20 and 275 m asl.	Annual herb February – June	Coastal Islands
Peruvian dodder *Cuscuta obtusiflora* var. *glandulosa*	—	—	2B.2	Marsh and fresh water swamp communities between 15 and 280 m asl.	Annual vine, parasitic July – October	West San Gabriel Valley
Desert cymopterus *Cymopterus deserticola*	—	—	1B.2	Sandy substrate in Joshua tree scrub and Mojavean desert scrub communities between 630 and 1500 m asl.	Perennial herb March – May	Antelope Valley

[5] See *Satureja mimuloides* in the 1993 edition of *The Jepson Manual.*

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Island tarplant *Deinandra clementina*	—	—	4.3	Coastal bluff scrub, valley and foothill grassland communities and salt marsh edges between 15 and 200 m asl.	Deciduous shrub April – July	Coastal Islands
Santa Susana tarplant *Deinandra minthornii*[6]	—	Rare	1B.2	Sandstone outcrops and crevices in chaparral and coastal scrub communities between 280 and 760 m asl.	Deciduous shrub July – November	San Fernando Valley, Santa Monica Mountains
San Clemente Island larkspur *Delphinium variegatum* ssp. *kinkiense*	FE	SE	1B.1	Valley and foothill grassland communities in coastal areas between 75 and 500 m asl.	Perennial herb March – April	Coastal Islands
Thorne's royal larkspur *Delphinium variegatum* ssp. *thornei*	—	—	1B.1	Cismontane woodland and valley and foothill grassland (located in coastal areas) communities between 250 and 575 m asl.	Perennial herb March – May	Coastal Islands
South island bush-poppy *Dendromecon harfordii* var. *rhamnoides*[7]	—	—	3.1	Chaparral, cismontane woodland, coastal scrub communities between 150 and 520 m asl.	Perennial evergreen shrub April – June	Coastal Islands
Western dichondra *Dichondra occidentalis*	—	—	4.2	Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities between 50 and 500 m asl.	Rhizomatous herb (January) March – July	Coastal Islands, Santa Monica Mountains, Westside
Beach spectaclepod *Dithyrea maritima*	—	ST	1B.1	Sandy soils in coastal dune and scrub communities between 3 and 50 m asl.	Rhizomatous herb March – May	Westside, Coastal Islands, South Bay
Slender-horned spineflower *Dodecahema leptoceras*	FE	SE	1B.1	Sandy soils in flood-deposited terraces and washes in alluvial scrub communities between 200 and 760 m asl	Annual herb April – June	Antelope Valley, San Fernando Valley, Santa Clarita Valley, West San Gabriel Valley
Ewan's woodbeauty *Drymocallis cuneifolia* var. *ewanii*	—	—	1B.3	Lower montane coniferous forest (near seeps and springs) and meadow and seep communities between 1900 and 2400 m asl.	Perennial herb June – July	Antelope Valley

6 State-listed as *Hemizonia minthornii*; see this name in the 1993 edition of *The Jepson Manual*.
7 A synonym of *D. harfordii* in *TJM* (1993) and *TJM 2*. USFWS uses the name *D. rigida* ssp. *rhamnoides*.

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	—	—	1B.1	Rocky, clay or serpentinite substrates in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland communities between 5 and 450 m asl.	Perennial herb April – June	San Fernando Valley, Santa Monica Mountains
Agoura Hills dudleya *Dudleya cymosa* ssp. *agourensis*[8]	FT	—	1B.2	Rocky, volcanic substrates in chaparral and cismontane woodland communities between 200 and 500 m asl.	Perennial herb May – June	Santa Monica Mountains
San Gabriel River dudleya *Dudleya cymosa* ssp. *crebrifolia*	—	—	1B.2	Granitic cliffs and outcrops in chaparral communities between 275 and 457 m asl.	Perennial herb April – June	Antelope Valley, West San Gabriel Valley
Marcescent dudleya *Dudleya cymosa* ssp. *marcescens*	FT	Rare	1B.2	Rocky, volcanic substrates in chaparral communities between 150 and 520 m asl.	Perennial herb April – June	Santa Monica Mountains
Santa Monica dudleya *Dudleya cymosa* ssp. *ovatifolia*[9]	FT	—	1B.1	Volcanic, rocky substrates in chaparral and coastal scrub communities between 150 and 1,675 m asl. Confined to Malibu and Topanga Canyons in LA County.[10]	Perennial herb March – June	Santa Monica Mountains, Westside
San Gabriel Mountains dudleya *Dudleya densiflora*	—	—	1B.1	In crevices and on decomposed granite of cliffs and canyon walls in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland communities between 244 and 610 m asl.	Perennial herb March – June	Antelope Valley, East San Gabriel Valley, West San Gabriel Valley
Many-stemmed dudleya *Dudleya multicaulis*	—	—	1B.2	Heavy, often clay, soils in chaparral, coastal scrub, valley and foothill grassland habitats between 15 and 790 m asl.	Perennial herb April – July	Gateway, East San Gabriel Valley, Metro, San Fernando Valley
Catalina Island dudleya *Dudleya virens* ssp. *hassei*	—	—	1B.2	Rocky substrate on coastal buff scrub communities between 0 and 400 m asl.	Perennial herb March – June	Coastal Islands

8 A synonym of *Dudleya cymosa* ssp. *ovatifolia* in the 1993 edition of *The Jepson Manual*; USFWS also uses this name.

9 CNPS listing does not include *Dudleya cymosa* ssp. *agourensis*.

10 Field work by S. McCabe has determined that an Orange County population attributed to this taxon is not *D. cymosa ovatifolia*. [Email communication from S. Harris to Los Angeles County staff, dated 24 April, 2014.]

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Island green dudleya *Dudleya virens ssp.insularis*	—	—	1B.2	Rocky substrate on coastal buff scrub communities between 5 and 300 m asl.	Perennial herb April – June	Coastal Islands, South Bay
Bright green dudleya *Dudleya virens* ssp. *virens*	—	—	1B.2	Rocky substrates in coastal bluff scrub, chaparral bluff scrub, and chaparral communities between 5 and 400 m asl.	Perennial herb April – July	Coastal Islands
Hoover's eriastrum *Eriastrum hooveri*	DL[11]	—	4.2	Sometimes gravelly. Chenopod scrub, Pinyon and juniper woodland, Valley and foothill grassland 50-915 m asl.	Annual Herb March – July	Antelope Valley
Rosamond eriastrum *Eriastrum rosamondense*	—	—	1B.1	Alkaline hummocks, often sandy. Chenopod scrub (openings), Vernal pools (edges) 700-715 m asl.	Annual Herb April-July	Antelope Valley
San Jacinto Mountains daisy *Erigeron breweri* var. *jacinteus*	—	—	4.3	Rocky substrate in subalpine coniferous forest, upper montane coniferous forest 2700-2900 m asl.	Perennial rhizomatous herb June-September	Antelope Valley
San Clemente Island buckwheat *Eriogonum giganteum* var. *formosum*	—	—	1B.2	Rocky substrate within coastal bluff srub communities between 10 and 455 m asl.	Perennial deciduous shrub March – October	Coastal Islands
Santa Catalina Island buckwheat *Eriogonum giganteum* var. *giganteum*	—	—	4.3	Rocky substrate in chaparral, coastal scrub between 10-535 m asl.	Evergereen shrub March – October	Coastal Islands, East San Gabriel Valley, Santa Monica Mountains, Westside
Island buckwheat *Eriogonum grande* var. *grande*	—	—	4.2	Sandy soils in coastal bluff scrub, coastal scrub, valley and foothill grassland below 460 m asl.	Perennial herb June – October	Coastal Islands
Southern alpine buckwheat *Eriogonum kennedyi* var. *alpigenum*	—	—	1B.3	Granitic, gravelly soils in alpine boulder and rock field and subalpine coniferous forest communities between 2,600 and 3,500 m asl.	Perennial herb July – September	Antelope Valley

[11] Previously listed as Threatened by USFWS, but delisted in 2003.

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Johnston's buckwheat *Eriogonum microthecum* var. *johnstonii*	—	—	1B.3	Rocky habitats of granite or limestone on slopes and ridges within subalpine coniferous forest and upper montane coniferous forest communities between 1,829 and 2,926 m asl.	Deciduous shrub July – September	Antelope Valley
Alpine sulfur-flowered buckwheat *Eriogonum umbellatum* var. *minus*	—	—	4.3	Gravelly. Subalpine coniferous forest, Upper montane coniferous forest 1800 – 3068 m	Perennial Herb June-September	Antelope Valley
Barstow woolly sunflower *Eriophyllum mohavense*	—	—	1B.2	Chenopod scrub, Mojavean desert scrub and playa communities between 500-960 m asl.	Annual herb Mar – May	Antelope Valley
Suffrutescent wallflower *Erysimum suffrutescens*	—	—	4.2	Coastal bluff scrub, Chaparral (maritime), Coastal dunes, Coastal scrub 0-150 m	Perennial Herb January-July	South Bay, Westside
Island poppy *Eschscholzia ramosa*	—	—	4.3	Open places, especially chaparral but also coastal bluff scrub, coastal scrub below 380 m asl.	Annual herb Mar – May	Coastal Islands
Cliff spurge *Euphorbia misera*	—	—	2B.2	Rocky habitats within coastal bluff scrub, coastal scrub, and Mojavean desert scrub communities between 10 and 500 m asl.	Perennial shrub December – August	Coastal Islands
Pine green-gentian *Frasera neglecta*	—	—	4.3	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest 1400 – 2500 m	Perennial Herb May-July	Antelope Valley
Phlox-leaf serpentine bedstraw *Galium andrewsii* ssp. *gatense*	—	—	4.2	Serpentinite, rocky habitats within chaparral, cismontane woodland, and lower montane coniferous forest communities between 150 and 1450 m asl.	Perennial herb April – July	Antelope Valley
San Antonio Canyon bedstraw *Galium angustifolium* ssp. *gabrielense*	—	—	4.3	Chaparral, Lower montane coniferous forest 1200 – 2650 m	Perennial Herb April-August	Antelope Valley, West San Gabriel Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
San Clemente Island bedstraw *Galium catalinense* ssp. *acrispum*	—	SE	1B.2	Valley and foothill grassland communities between 25 and 275 m asl.	Perennial deciduous shrub March – August	Coastal Islands
Santa Catalina Island bedstraw *Galium catalinense* ssp. *catalinense*	—	—	1B.2	Chaparral and coats scrub communities between 5 and 300 m asl.	Perennial deciduous shrub February – July	Coastal Islands
Santa Barbara bedstraw *Galium cliftonsmithii*	—	—	4.3	Cismontane woodland 200 – 1220 m	Perennial Herb May – July	Santa Monica Mountains
San Gabriel bedstraw *Galium grande*	—	—	1B.2	Open chaparral and low, open oak forest; on rocky slopes between 425 and 1,500 m asl.	Deciduous shrub January – July	Antelope Valley, Santa Clarita Valley, West San Gabriel Valley
Jepson's bedstraw *Galium jepsonii*	—	—	4.3	Granitic, rocky or gravelly. Lower montane coniferous forest, Upper montane coniferous forest 1540 – 2500 m	perennial rhizomatous herb July – August	Antelope Valley
Johnston's bedstraw *Galium johnstonii*	—	—	4.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland, Riparian woodland 1220 – 2300 m	Perennial Herb June – July	Antelope Valley
Nuttall's island bedstraw *Galium nuttallii* ssp. *insulare*	—	—	4.3	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest beloe 440 m asl.	Perennial Herb March – June	Coastal Islands
Showy island snapdragon *Gambelia speciosa*	—	—	1B.2	Rocky substrate in coast scrub communities between 0 and 900 m asl.	Perennial shrub February – May	Coastal Islands
Cuyama gilia *Gilia latiflora* ssp. *cuyamensis*	—	—	4.3	Pinyon and juniper woodland (sandy) 595 – 2000 m	Annual Herb April – June	Antelope Valley
Nevin's gilia *Gilia nevinii*	—	—	4.3	Rocky, grassy slopes, in coastal bluff scrub, coastal scrub, valley and foothill grassland between 5 and 600 m asl.	Annual herb March – May	Coastal Islands

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Golden goodmania *Goodmania luteola*	—	—	4.2	Alkaline or clay. Mojavean desert scrub, Meadows and seeps, Playas, Valley and foothill grassland 20-2200 m	Annual Herb April – August	Antelope Valley
Palmer's grapplinghook *Harpagonella palmeri*	—	—	4.2	Clay soils in chaparral, coastal scrub, and valley and foothill grassland communities between 20 and 955 m asl.	Annual herb March – May	Santa Clarita Valley, San Fernando Valley
San Clemente Island hazardia *Hazardia cana*	—	—	1B.2	Coastal bluff scrub, coastal scrub, and riparian forest communities between 60 and 500 m asl.	Perennial evergreen shrub June – September	Coastal Islands
Newhall sunflower *Helianthus inexpectatus*	—	—	1B.1	Freshwater marshes and swamps and riparian woodland communities near 305 m asl.	Rhizomatous herb August – October	Santa Clarita Valley
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	—	—	1A	Presumed extinct. Coastal, salt and freshwater marshes and swamps between 5 and 1675 m asl.	Rhizomatous herb August – October	Metro, West San Gabriel Valley, Westside
Abrams' alumroot *Heuchera abramsii*	—	—	4.3	Upper montane coniferous forest (rocky) 2800-3500 m	perennial rhizomatous herb July-August	Antelope Valley
Urn-flowered alumroot *Heuchera caespitosa*	—	—	4.3	Rocky substrate. Cismontane woodland, Lower montane coniferous forest, Riparian forest (montane), Upper montane coniferous forest 1155 – 2650 m	Perennial rhizomatous herb May-August	Antelope Valley, Santa Clarita Valley
Mesa horkelia *Horkelia cuneata* ssp. *puberula*	—	—	1B.1	Sandy or gravelly sites in chaparral, cismontane woodland, and coastal scrub communities between 70 and 810 m asl.	Perennial herb February – July (September)	Antelope Valley, Metro, East San Gabriel Valley, San Fernando Valley, West San Gabriel Valley, Westside
San Gabriel Mountains sunflower *Hulsea vestita* ssp. *gabrielensis*	—	—	4.3	Lower and upper montane coniferous forest communities between 1,500 and 2,500 m asl.	Perennial herb May – July	Antelope Valley, Santa Clarita Valley
Parry's sunflower *Hulsea vestita* ssp. *parryi*	—	—	4.3	Rocky, granitic or carbonate openings within lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest communities between 1370 and 2895 m asl.	Perennial herb April – August	Antelope Valley, Santa Clarita Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Decumbent goldenbush *Isocoma menziesii* var. *decumbens*	—	—	1B.2	Chaparral and sandy, disturbed coastal scrub communities between 10 and 35 m asl.	Perennial shrub April – November	Coastal Islands, Santa Monica Mountains
Island jepsonia *Jepsonia malvifolia*	—	—	4.2	Rocky outcrops, clay slopes in chaparral, coastal scrub between 15 and 1,000 m asl.	Perennial herb August – January	Coastal Islands
Southern California black walnut *Juglans californica*	—	—	4.2	Chaparral, cismontane woodland and coastal scrub communities between 50 and 900 m asl.	Deciduous tree March – August	Coastal Islands, East San Gabriel Valley, Gateway, Metro, San Fernando Valley, Santa Clarita Valley, Santa Monica Mountains, Westside, West San Gabriel Valley
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	—	—	1B.1	Alkaline soils in coastal salt marshes and swamps, playas, and vernal pools between 1 and 1,220 m asl.	Annual herb February – June	Gateway, Metro, San Fernando Valley, Santa Monica Mountains, South Bay, Westside, West San Gabriel Valley
Southern island mallow *Lavatera assurgentiflora* ssp. *glabra*	—	—	1B.1	Coastal bluff scrub communities between 5 and 220 m asl.	Perennial evergreen shrub May – September	Coastal Islands
Pale-yellow layia *Layia heterotricha*	—	—	1B.1	Alkaline or clay soils in cismontane woodland, coastal scrub, pinyon and juniper woodland, and valley and foothill grassland communities between 300 and 1705 m asl.	Annual herb March – June	Antelope Valley
Fragrant pitcher sage *Lepechinia fragrans*	—	—	4.2	Chaparral communities between 20 and 1,310 m asl.	Shrub March – October	Coastal Islands, East San Gabriel Valley, Santa Clarita Valley, Santa Monica Mountains, West San Gabriel Valley
Ross's pitcher sage *Lepechinia rossii*	—	—	1B.2	Soils derived from fine-grained, reddish sedimentary rock in chaparral communities between 305 and 790 m asl.	Perennial shrub May – September	Santa Clarita Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	—	—	1B.2	Dry soils in chaparral and coastal scrub habitats between 1 and 835 m asl.	Annual herb January – July	Antelope Valley, Coastal Islands, East San Gabriel Valley, Metro, San Fernando Valley, West San Gabriel Valley
Pygmy leptosiphon *Leptosiphon pygmaeus* ssp. *pygmaeus*	—	—	1B.2	Coastal scrub and valley and foothill communities between 455 and 595 m asl.	Annual herb April	Coastal Islands
Short-sepaled lewisia *Lewisia brachycalyx*	—	—	2B.2	Mesic habitats in lower montane coniferous forest, meadow and seep communities between 1370 and 2300 m asl.	Perennial herb February – July	Antelope Valley
San Gabriel linanthus *Linanthus concinnus*	—	—	1B.2	Rocky soils and openings in chaparral, lower montane coniferous forest, and upper montane coniferous forest communities between 1520 and 2800 m asl.	Annual herb April – July	Antelope Valley
Orcutt's linanthus *Linanthus orcuttii*	—	—	1B.3	Openings in chaparral, lower montane coniferous forest, and pinyon and juniper woodland communities between 915 and 2,145 m asl.	Annual herb May – June	Metro, West San Gabriel Valley
San Clemente Island woodland star *Lithophragma maximum*	FE	SE	1B.1	Rocky habits within coastal bluff scrub and coastal scrub communities between 120 and 400 m asl.	Perennial rhizomatous herb April – June	Coastal Islands
Sagebrush loeflingia *Loeflingia squarrosa* var. *artemisiarum*	—	—	2B.2	Sandy flats, dunes and sandy areas around clay slicks within Great Basin scrub, Sonoran desert scrub and desert dunes communities between 700 and 1615 m asl; associated with *Sarcobatus*, *Atriplex*, *Tetradymia*, *etc*.	Annual herb April – May	Antelope Valley
San Nicolas Island lomatium *Lomatium insulare*	—	—	1B.2	Sandy substrate in coastal bluff scrub communities between 15 and 800 m asl.	Perennial herb January – June	Coastal Islands
Santa Barbara honeysuckle *Lonicera subspicata* var. *subspicata*	—	—	1B.2	Chaparral, cismontane woodland, and coastal scrub communities between 35 and 1000 m asl.	Evergreen shrub May – August (December)	Coastal Islands

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Silky lupine *Lupinus elatus*	—	—	4.3	Lower montane coniferous forest, Upper montane coniferous forest 1500 – 3000 m	Perennial Herb June-August	Antelope Valley
Interior bush lupine *Lupinus excubitus* var. *johnstonii*	—	—	4.3	Decomposed granitic. Chaparral, Lower montane coniferous forest 1500 – 2500 m	Perennial Herb May- July	Antelope Valley
Guadalupe Island lupine *Lupinus guadalupensis*	—	—	4.2	Sandy, gravelly, or rocky; substrates in coastal scrub communities between 10 and 465 m asl.	Perennial herb February – April	Coastal Islands
Pierson's lupine *Lupinus peirsonii*	—	—	1B.3	Decomposed granite slide and talus on slopes and ridges within Joshua tree woodland, lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest communities between 1000 and 2000 m asl.	Perennial herb April – June	Antelope Valley
Santa Catalina Island desert-thorn *Lycium brevipes* var. *hassei*	—	—	1B.1	Coastal bluff scrub and coastal scrub communities between 10 and 300 m asl.	Perennial deciduous shrub June	Coastal Islands, South Bay
California box-thorn *Lycium californicum*	—	—	4.2	Coastal bluff scrub, Coastal scrub 5 – 150 m.	Perennial Shrub December-August	Coastal Islands, Santa Monica Mountains, South Bay
Santa Cruz Island ironwood *Lyonothamnus floribundus* ssp. *aspleniifolius*	—	—	1B.2	Rocky slopes, canyons in broadleaf upland forest, chaparral, and cismontane woodland communities between 20 and 580 m asl.	Perennial evergreen tree May – July	Coastal Islands
Santa Catalina Island ironwood *Lyonothamnus floribundus* ssp. *floribundus*	—	—	1B.2	Broadleaf upland forest, chaparral, and cismontane woodland communities between 75 and 500 m asl.	Perennial evergreen tree May – June	Coastal Islands
San Clemente Island bush-mallow *Malacothamnus clementinus*	FE	SE	1B.1	Rocky substrates in valley and foothill grassland communities between 10 and 275 m asl.	Perennial deciduous shrub March – August	Coastal Islands

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Davidson's bushmallow *Malacothamnus davidsonii*	—	—	1B.2	Sandy washes within cismontane woodland, coastal scrub, riparian woodland and chaparral between 180 and 855 m asl.	Deciduous shrub June – January	Antelope Valley, San Fernando Valley, Santa Clarita Valley
Leafy malacothrix *Malacothrix foliosa* ssp. *foliosa*	—	—	4.2	Sandy, open areas or among shrubs in coastal scrub or chaparral below 150 m asl.	Annual Herb March – July	Coastal Islands
Dunedelion *Malacothrix incana*	—	—	4.3	Coastal dunes or coastal scrub below 300 m asl.	Perennial Herb January – October	Coastal Islands
Small-flowered microseris *Microseris douglasii* ssp. *platycarpha*	—	—	4.2	Clay. Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools 15-1070 m	Annual Herb March – May	Coastal Islands, Gateway
Sylvan microseris *Microseris sylvatica*	—	—	4.2	Chaparral, Cismontane woodland, Great Basin scrub, Pinyon and juniper woodland, Valley and foothill grassland (serpentinite) 45 – 1500 m	Perennial Herb March-June	Antelope Valley
Island bush monkeyflower *Mimulus aurantiacus* var. *parviflorus*[12]	—	—	4.3	Rocky hillsides, canyon walls, cliffs in coastal bluff scrub, closed-cone coniferous forest, chaparral, coastal scrub below 600 m asl.	Evergreen shrub March – October	Coastal Islands
Johnston's monkeyflower *Mimulus johnstonii*	—	—	4.3	Lower montane coniferous forest (scree, disturbed areas, rocky or gravelly, roadside) 975 – 2920 m	Annual Herb May-August	Antelope Valley, Santa Clarita Valley
Santa Catalina Island monkeyflower *Mimulus traskiae*	—	—	1A	Coastal scrub communities.	Annual herb March – April	Coastal Islands
Gray monardella *Monardella australis* ssp. *cinerea*	—	—	4.3	Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest 1800 – 3050 m	perennial rhizomatous herb July-August	Antelope Valley

[12] Listed as *Mimulus flemingii* in CNDDB.

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
White-veined monardella *Monardella hypoleuca* ssp. *hypoleuca*	—	—	1B.3	Chaparral and cismontane woodland communities between 5 and 1525 m asl.	Perennial herb April – December	Santa Monica Mountains, Westside
Tehachapi monardella *Monardella linoides* ssp. *oblonga*	—	—	1B.3	Lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest communities between 900 and 2,470 m asl.	Rhizomatous herb June – August	Antelope Valley
Hall's monardella *Monardella macrantha* ssp. *hallii*	—	—	1B.3	Dry slopes and ridges within broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland communities between 730 and 2195 m asl.	Rhizomatous herb June – August	Antelope Valley
Rock monardella *Monardella saxicola*	—	—	4.2	Rocky, usually serpentinite substrate. Closed-cone coniferous forest, Chaparral, Lower montane coniferous forest 500 – 1800 m	Perennial rhizomatous herb June-September	Antelope Valley
California spineflower *Mucronea californica*	—	—	4.2	Sandy soil. Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland 0-1400 m	Annual Herb March – August	East San Gabriel Valley, Santa Clarita Valley, Santa Monica Mountains, Westside
Blair's munzothamnus *Munzothamnus blairii*	—	—	1B.2	Rocky substrates in coastal bluff scrub and coastal scrub communities between 25 and 455 m asl.	Perennial shrub July – September	Coastal Islands
Mud nama *Nama stenocarpum*	—	—	2B.2	Marshes, swamps, lake margins, and riverbanks between 5 and 500 m asl.	Annual/perennial herb January – July	Coastal Islands, Westside
Gambel's water cress *Nasturtium gambelii*	FE	SE	1B.1	Freshwater or brackish marshes and swamps between 5 and 330 m asl.	Rhizomatous herb April – October	Metro, South Bay, Westside
Spreading navarretia *Navarretia fossalis*	FT	—	1B.1	Vernal pools, chenopod scrub, marshes, swamps and playas on San Diego hardpan and San Diego claypan soils between 30 and 1300 m asl.	Annual herb April – June	Santa Clarita Valley, South Bay
Ojai navarretia *Navarretia ojaiensis*	—	—	1B.1	Openings in chaparral, coastal scrub, and valley and foothill grassland communities between 275 and 620 m asl.	Annual herb May – July	Santa Clarita Valley, Santa Monica Mountains

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Baja navarretia *Navarretia peninsularis*	—	—	1B.2	Mesic, opening habitats in chaparral, lower montane coniferous forest, meadows and seeps, and pinyon and juniper woodland communities between 1500 and 2300 m asl.	Annual herb June – August	Antelope Valley
Prostrate vernal pool navarretia *Navarretia prostrata*	—	—	1B.1	Alkaline soils, vernal pools and mesic habitats within coastal scrub, meadow, seep and valley and foothill grassland communities between 15 and 700 m asl.	Annual herb April – July	Gateway, Metro, South Bay
Piute Mountains navarretia *Navarretia setiloba*	—	—	1B.1	Clay or gravelly loam soils in cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland communities between 305 and 2100 m asl.	Annual herb April – July	Antelope Valley, Santa Clarita Valley
Coast woolly-heads *Nemacaulis denudata* var. *denudata*	—	—	1B.2	Coastal dune communities between 0 and 100 m asl.	Annual herb April – September	Coastal Islands, Gateway, South Bay
Slender cottonheads *Nemacaulis denudata* var. *gracilis*	—	—	2B.2	Coastal dune, desert dune, and Sonoran desert scrub between -50 and 400 m asl.	Annual herb (March) April – May	N/A
Robbins' nemacladus *Nemacladus secundiflorus* var. *robbinsii*	—	—	1B.2	Openings within chaparral, valley, and foothill grassland communities between 350 and 1700 m asl.	Annual herb April – June	Antelope Valley
Short-joint beavertail *Opuntia basilaris* var. *brachyclada*	—	—	1B.2	Sandy soil or coarse granitic loam within chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon juniper woodland and riparian woodland communities between 425 and 1,800 m asl.	Perennial stem succulent April – June	Antelope Valley, Santa Clarita Valley
Bakersfield cactus *Opuntia basilaris* var. *treleasei*[13]	FE	SE	1B.1	Sandy or gravelly soils in chenopod scrub, cismontane woodland, and valley and foothill grassland communities between 120 and 55 m asl.	Perennial stem succulent April – May	Antelope Valley
Woolly mountain-parsley *Oreonana vestita*	—	—	1B.3	High ridges, scree, talus or gravel in lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest, between 1,615 and 3,500 m asl.	Perennial herb May – September	Antelope Valley

13 USFWS uses the name *Opuntia treleasei.*

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Short-lobed broomrape *Orobanche parishii* ssp. *brachyloba*	—	—	4.2	Sandy soil within coastal bluff scrub, coastal dunes, and coastal scrub between 3 and 305 m asl.	Perennial herb parasitic April – October	Coastal Islands
Rock creek broomrape *Orobanche valida* ssp. *valida*	—	—	1B.2	Parasitic on various chaparral shrubs on slopes of loose decomposed granite within chaparral, pinyon and juniper woodland communities between 1,250 and 2,000 m asl.	Perennial herb parasitic May – September	Antelope Valley
Rock-loving oxytrope *Oxytropis oreophila* var. *oreophila*	—	—	2B.3	Gravelly or rocky soils in alpine boulder and rock field, subalpine coniferous forest communities between 3,400 and 3,800 m asl.	Perennial herb Jun – September	Antelope Valley
San Bernardino ragwort *Packera bernardina*	—	—	1B.2	Mesic, sometimes alkaline habitats in meadow, seep, pebble plain, and upper montane coniferous forest communities between 1,800 and 2,300 m asl.	Perennial herb May – July	Antelope Valley
Tehachapi ragwort *Packera ionophylla*	—	—	4.3	Granitic, rocky. Lower montane coniferous forest, Upper montane coniferous forest 1500 – 2700m.	Perennial Herb June – July	Antelope Valley
San Bernardino grass-of-Parnassus *Parnassia cirrata* var. *cirrata*	—	—	1B.3	Mesic habitats, sometimes in calcareous soils, within lower montane coniferous forest, meadows, seeps, and upper montane coniferous forest communities between 1250 and 2440 m asl.	Perennial herb August – September	Antelope Valley
Golden-rayed pentachaeta *Pentachaeta aurea* ssp. *aurea*	—	—	4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley and foothill grassland between80 – 1850 m asl.	Annual Herb March – July	N/A
Lyon's pentachaeta *Pentachaeta lyonii*	FE	SE	1B.1	Hambright series rocky and clay soils in openings within chaparral, coastal scrub, and valley and foothill grassland communities between 30 and 630 m asl.	Annual herb March – August	Coastal Islands, Santa Monica Mountains, South Bay
Gairdner's yampah *Perideridia gairdneri* ssp. *gairdneri*	—	—	4.2	Vernally mesic. Broad-leaved upland forest, Chaparral, Coastal prairie, Valley and foothill grassland, Vernal pools 0-610 m	Perennial Herb June – October	N/A
Adobe yampah *Perideridia pringlei*	—	—	4.3	Serpentinite, often clay substrate. Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland 300-1800 m.	Perennial Herb April-June	Antelope Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Transverse Range phacelia *Phacelia exilis*	—	—	4.3	Sandy or gravelly soil. Lower montane coniferous forest, Meadows and seeps, Pebble (Pavement) plain, Upper montane coniferous forest 1100-2700 m	Annual Herb May-August	Antelope Valley
Many-flowered phacelia *Phacelia floribunda*	—	—	1B.2	Coastal scrub communities between 15 and 500 m asl.	Perennial herb March – May	Coastal Islands
Hubby's phacelia *Phacelia hubbyi*	—	—	4.2	Gravelly, rocky, talus habitats in chaparral, coastal scrub, and valley and foothill grassland from 0 to 1000 m asl.	Annual herb April – June	Antelope Valley, East San Gabriel Valley, Metro, San Fernando Valley, Santa Clarita Valley, Santa Monica Mountains, South Bay, Westside
Mojave phacelia *Phacelia mohavensis*	—	—	4.3	Sandy or gravelly soils within cismontane woodland, lower montane coniferous forest, meadow, seep, and pinyon and juniper woodland communities between 1,400 and 2,500 m asl.	Annual herb April – August	Antelope Valley, Santa Clarita Valley
South coast branching phacelia *Phacelia ramosissima* var. *austrolitoralis*	—	—	4.2	Sandy, sometimes rocky habitats in chaparral, coastal dune, coastal scrub, and coastal salt marsh and swamp communities between 6 and 300 m asl.	Perennial herb March – August	Santa Monica Mountains, Westside
Brand's star phacelia *Phacelia stellaris*	FC	—	1B.1	Coastal dune and coastal scrub communities between 1 and 400 m asl.	Annual herb March – June	East San Gabriel Valley, West San Gabriel Valley, Gateway, South Bay, Westside
Woolly chaparral-pea *Pickeringia montana* var. *tomentosa*	—	—	4.3	Gabbroic, granitic, clay soils. Chaparral 0 – 1700 meters.	Evergreen shrub May – August	Santa Clarita Valley

5. Environmental Analysis
BIOLOGICAL RESOURCES

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Parish's popcorn-flower *Plagiobothrys parishii*	—	—	1B.1	Alkaline, mesic habitats within Great Basin scrub and Joshua tree woodland communities between 750 and 1400 m asl.	Annual herb March – June	Antelope Valley
Fish's milkwort *Polygala cornuta* var. *fishiae*[14]	—	—	4.3	Chaparral, cismontane woodland, and riparian woodland communities between 100 and 1,000 m asl.	Deciduous shrub May – August	Santa Monica Mountains, West San Gabriel Valley
Ballona cinquefoil *Potentilla multijuga*	—	—	1A	Presumed extinct. Brackish meadows and seeps between 0 and 2 m asl.	Perennial herb June – August	Westside
White rabbit-tobacco *Pseudognaphalium leucocephalum*	—	—	2B.2	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats between 0 and 2100 m asl.	Perennial herb (July) August – November (December)	Antelope Valley, East San Gabriel Valley, Metro, San Fernando Valley, West San Gabriel Valley, Westside
San Gabriel oak *Quercus durata* var. *gabrielensis*	—	—	4.2	Chaparral and cismontane woodland communities within the San Gabriel Mountains between 450 and 1,000 m asl.	Evergreen shrub April – May	Antelope Valley, East San Gabriel Valley, San Fernando Valley, Santa Clarita Valley, West San Gabriel Valley
Engelmann oak *Quercus engelmannii*	—	—	4.2	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland 50 – 1300 m	Perennial deciduous tree March – June	Antelope Valley, Coastal Islands, East San Gabriel Valley, San Fernando Valley, Santa Clarita Valley, West San Gabriel Valley
Island scrub oak *Quercus pacifica*	—	—	4.2	Closed-cone coniferous forest, chaparral, cismontane woodland below 610 m asl.	Evergreen shrub March – April	Coastal Islands
Island oak *Quercus tomentella*	—	—	4.2	Closed-cone coniferous forest, chaparral, cismontane woodland, riparian woodland between 15 and 730 m asl.	Evergreen tree March – July	Coastal Islands
Island redberry *Rhamnus pirifolia*	—	—	4.2	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub between 10 and 1,000 m asl.	Evergreen tree February – July	Coastal Islands
Parish's gooseberry *Ribes divaricatum* var. *parishii*	—	—	1A	Presumed extinct. Riparian woodland communities between 65 and 300 m asl.	Deciduous shrub February – April	Antelope Valley, Metro, San Fernando Valley, West San Gabriel Valley

[14] Includes *Polygala cornuta* var. *pollardii*.

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Santa Catalina Island currant *Ribes viburnifolium*	—	—	1B.2	Chaparral and cismontane woodland communities between 30 and 350 m asl.	Perennial evergreen shrub February – April	Coastal Islands
Coulter's matilija poppy *Romneya coulteri*	—	—	4.2	Often in burns.Chaparral, Coastal scrub 20-1200m	Perennial rhizomatous herb March-June	Coastal Islands, East San Gabriel Valley, San Fernando Valley, Santa Monica Mountains, West San Gabriel Valley, Westside
Parish's rupertia *Rupertia rigida*	—	—	4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Pebble (Pavement) plain, Valley and foothill grassland. 700-2500 m	perennial herb June-August	West San Gabriel Valley
Santa Catalina figwort *Scrophularia villosa*	—	—	1B.2	Chaparral and coast scrub communities between 45 and 510 m asl.	Perennial shrub April – August	Coastal Islands
Southern mountains skullcap *Scutellaria bolanderi* ssp. *austromontana*	—	—	1B.2	Mesic habitats in chaparral, cismontane woodland, and lower montane coniferous forest communities between 425 and 2000 m asl.	Rhizomatous herb June – August	West San Gabriel Valley
Chaparral ragwort *Senecio aphanactis*	—	—	2B.2	Drying alkaline flats in chaparral, cismontane woodland, and coastal scrub habitats between 15 and 800 m asl.	Annual herb January – April	Coastal Islands, East San Gabriel Valley, Santa Clarita Valley
San Gabriel ragwort *Senecio astephanus*	—	—	4.3	Rocky slopes. Coastal bluff scrub, Chaparral 400-1500 m	Perennial Herb May-July	Antelope Valley, West San Gabriel Valley
Santa Cruz Island winged-rockcress *Sibara filifolia*	FE	—	1B.1	Rocky, volcanic soils in coastal scrub communities between 60 and 305 m asl.	Annual herb March – April	Coastal Islands
Salt spring checkerbloom *Sidalcea neomexicana*	—	—	2B.2	Alkali playas and brackish marshes within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playa communities between 15 and 1530 m asl.	Perennial herb March – June	East San Gabriel Valley, Gateway, Westside
Chickweed oxytheca *Sidotheca caryophylloides*	—	—	4.3	Lower montane coniferous forest (sandy) 1114 – 2600 m	Annual Herb July-September	Antelope Valley
Wallace's nightshade *Solanum wallacei*	—	—	1B.1	Rocky soils in chaparral and cismontane woodland communities between 3 and 410 m asl.	Perennial herb March – August	Coastal Islands

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Mason's neststraw *Stylocline masonii*	—	—	1B.1	Sandy habitats within chenopod scrub and pinyon juniper woodland communities between 100 and 1200 m asl.	Annual herb March – May	Antelope Valley
Estuary seablite *Suaeda esteroa*	—	—	1B.2	Clay, silt and sand substrates in coastal salt marshes and swamps between 0 and 5 m asl.	Perennial herb May – October (January)	Gateway, South Bay
Woolly seablite *Suaeda taxifolia*	—	—	4.2	Coastal bluff scrub, Coastal dunes, Marshes and swamps (margins of coastal salt) 0-50 m	Perennial evergreen shrub January-December	Coastal Islands, Gateway, Santa Monica Mountains, South Bay, Westside
San Bernardino aster *Symphyotrichum defoliatum*	—	—	1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows, seeps, marshes, swamps, vernally mesic valley and foothill grassland, and near ditches, streams, and springs between 2 and 2040 m asl.	Rhizomatous herb July – November	Antelope Valley, East San Gabriel Valley, Gateway, Metro, South Bay, Westside
Greata's aster *Symphyotrichum greatae*	—	—	1B.3	Mesic habitats in broadleaved upland forest, chaparral, cismontane woodland, riparian woodland and lower montane coniferous forest communities between 300 and 2010 m asl.	Rhizomatous herb June – October	Antelope Valley, East San Gabriel Valley, Metro, San Fernando Valley , Santa Clarita Valley, West San Gabriel Valley
Lemmon's syntrichopappus *Syntrichopappus lemmonii*	—	—	4.3	Sandy or gravelly soils within chaparral and Joshua tree woodland communities between 860 and 1760 m asl.	Annual herb April – May	Antelope Valley
Silvery false lupine *Thermopsis californica* var. *argentata*	—	—	4.3	Lower montane coniferous forest, Pinyon and juniper woodland 665 – 1595 m.	perennial rhizomatous herb April-October	Antelope Valley
Rigid fringepod *Thysanocarpus rigidus*	—	—	1B.2	Dry rocky slopes within juniper and Pinyon woodland communities between 600 and 2200 m asl.	Annual herb February – May	East San Gabriel Valley
Grey-leaved violet *Viola pinetorum* ssp. *grisea*	—	—	1B.3	Meadows, seeps, subalpine coniferous forest, and upper montane coniferous forest communities between 1500 and 3400 m asl.	Perennial herb April – July	Antelope Valley
Golden violet *Viola purpurea* ssp. *aurea*	—	—	2B.2	Sandy soil. Great Basin scrub, Pinyon and juniper woodland 1000 – 2500 m	Perennial Herb April-June	Antelope Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Monocots						
Mt. Pinos onion *Allium howellii* var. *clokeyi*	—	—	1B.3	Great Basin scrub and pinyon and juniper woodland communities between 1,300 and 1,800 m asl.	Bulbiferous herb April – June	Antelope Valley
Thread-leaved brodiaea *Brodiaea filifolia*	FT	SE	1B.1	Openings, often in clay soils, within chaparral, cismontane woodland, coastal scrub, playa, valley and foothill grassland, and vernal pools communities between 25 and 860 m asl.	Bulbiferous herb March – June	East San Gabriel Valley
San Clemente Island brodiaea *Brodiaea kinkiensis*	—	—	1B.2	Clay soils in valley and foothill grassland communities between 305 and 600 m asl.	Perennial bulbiferous herb May – June	Coastal Islands
Catalina mariposa lily *Calochortus catalinae*	—	—	4.2	Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities between 15 and 700 m asl	Bulbiferous herb (February) March – June	Antelope Valley, Coastal Islands, East San Gabriel Valley, Metro, San Fernando Valley, Santa Clarita Valley, Santa Monica Mountains
Club-haired mariposa lily *Calochortus clavatus* var. *clavatus*	—	—	4.3	Usually serpentinite, clay, or rocky soils in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities between 75 and 1,300 m asl.	Bulbiferous herb May – June	Antelope Valley, East San Gabriel Valley, Santa Clarita Valley, Santa Monica Mountains, Westside
Slender mariposa-lily *Calochortus clavatus* var. *gracilis*	—	—	1B.2	Shaded foothill canyons, often on grassy slopes within chaparral and coastal scrub communities between 360 and 1000 m asl.	Bulbiferous herb March – June	East San Gabriel Valley, Metro, San Fernando Valley, Santa Clarita Valley, Santa Monica Mountains
Late-flowered mariposa lily *Calochortus fimbriatus*	—	—	1B.2	Often on serpentinite substrates in chaparral, cismontane woodland, and riparian woodland communities between 275 and 1905 m asl.	Bulbiferous herb June – August	Santa Clarita Valley, San Fernando Valley
Palmer's mariposa lily *Calochortus palmeri* var. *palmeri*	—	—	1B.2	Mesic habitats in chaparral, lower montane coniferous forest, meadow and seep communities between 1000 and 2390 m asl.	Bulbiferous herb April – July	Antelope Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Plummer's mariposa lily *Calochortus plummerae*	—	—	4.2	Rocky and sandy sites, usually of granitic or alluvial material in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest communities between 100 and 1700 m asl.	Bulbiferous herb May – July	Antelope Valley, East San Gabriel Valley, Gateway, Metro, San Fernando Valley, Santa Clarita Valley, Santa Monica Mountains, West San Gabriel Valley, Westside
Alkali mariposa-lily *Calochortus striatus*	—	—	1B.2	Alkaline meadows and ephemeral washes within chaparral, chenopod scrub, Mojavean desert scrub and meadows between 70 and 1595 m asl.	Bulbiferous herb April – June	Antelope Valley
Intermediate mariposa lily *Calochortus weedii* var. *intermedius*	—	—	1B.2	Rocky, calcareous soils in chaparral, coastal scrub, and valley and foothill grassland communities between 105 and 855 m asl.	Bulbiferous herb May – July	Gateway, East San Gabriel Valley
Western sedge *Carex occidentalis*	—	—	2B.3	Lower montane coniferous forest, meadow and seep communities between 1645 and 3135 m asl.	Rhizomatous herb June – August	Antelope Valley
California sawgrass *Cladium californicum*	—	—	2B.2	Alkaline or freshwater habitats in meadow, seep, marsh and swamp communities between 60 and 865 m asl.	Rhizomatous herb June – September	West San Gabriel Valley
California dissanthelium *Dissanthelium californicum*	—	—	1B.2	Coastal scrub communities between 5 and 500 m asl.	Annual Herb March – May	Coastal Islands
Hot springs fimbristylis *Fimbristylis thermalis*	—	—	2B.2	Alkaline habitats near hot springs within meadow and seep communities between 110 and 1340 m asl.	Rhizomatous herb July – September	Antelope Valley
Pine fritillary *Fritillaria pinetorum*	—	—	4.3	Granitic or metamorphic. Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland, Subalpine coniferous forest, Upper montane coniferous forest 1735 – 3300 m	Perennial bulbiferous herb May-September	Antelope Valley
Vernal barley *Hordeum intercedens*	—	—	3.2	Saline flats and depressions in coastal dune, coastal scrub, valley and foothill grassland and vernal pool communities between 5 and 1,000 m asl.	Annual herb March – June	Coastal Islands, Metro, Santa Monica Mountains, West San Gabriel Valley, Westside
California satintail *Imperata brevifolia*	—	—	2B.1	Mesic, often alkaline, habitats within chaparral, coastal scrub, Mojavean desert scrub, meadow, seep, and riparian scrub communities between 0 and 500 m asl.	Rhizomatous herb September – May	Antelope Valley, West San Gabriel Valley

Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Southwestern spiny rush *Juncus acutus* ssp. *leopoldii*	—	—	4.2	Mesic and alkaline habitats in coastal dune, meadow, seep, marsh and swamp communities between 3 and 900 m asl.	Rhizomatous herb May – June	Antelope Valley, Coastal Islands, Santa Monica Mountains, South, Bay, Westside
Ocellated Humboldt lily *Lilium humboldtii* ssp. *ocellatum*[15]	—	—	4.2	Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland communities between 30 and 1,800 m asl.	Bulbiferous herb March – July (August)	Antelope Valley, East San Gabriel Valley, San Fernando Valley, Santa Monica Mountains, West San Gabriel Valley
Lemon lily *Lilium parryi*[16]	—	—	1B.2	Wet, mountainous terrain, generally in forested areas, shady streamsides, and open, boggy meadows and seeps between 1220 and 2745 m asl.	Bulbiferous herb July – August	Antelope Valley
Appressed muhly *Muhlenbergia appressa*	—	—	2B.2	Rocky substrate in coastal scrub, Mojavean desert scrub, avlley and foothill grassland communities between 20 and 1600 m asl.	Annual herb April – May	Coastal Islands
California muhly *Muhlenbergia californica*	—	—	4.3	Mesic habitats in chaparral, coastal scrub, lower montane coniferous forest, meadow, seep, and stream bank communities between 100 and 2,000 m asl.	Rhizomatous herb June – September	Antelope Valley
Crowned muilla *Muilla coronata*	—	—	4.2	Chenopod scrub, Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland 765 – 1960 m	Perennial bulbiferous herb March-May	Antelope Valley
California Orcutt grass *Orcuttia californica*	FE	SE	1B.1	Vernal pools between 15 and 660 m asl.	Annual herb April – August	Gateway, Metro, San Fernando Valley, Santa Clarita Valley, South Bay
Chaparral rein orchid *Piperia cooperi*	—	—	4.2	Chaparral, Cismontane woodland, Valley and foothill grassland 15 – 1585 m	Perennial Herb March-June	Antelope Valley, Coastal Islands, East San Gabriel Valley, San Fernando Valley, Santa Monica Mountains, West San Gabriel Valley

[15] Includes *Lilium humboldtii* var. *bloomerianum* and *L. fairchildii*.
[16] CNPS listing includes *Lilium parryi* var. *kessleri*.

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Table 5.4-1 Special-Status Plant Species

Common name *Scientific name*	Federal status	State status	CNPS List	Habitat	Growth form Blooming period*	Planning Area
Narrow-petaled rein orchid *Piperia leptopetala*	—	—	4.3	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest 380 – 2225 m	Perennial Herb May-July	Antelope Valley
Michael's rein orchid *Piperia michaelii*	—	—	4.2	Coastal bluff scrub, Closed-cone coniferous forest, Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest 3 – 915 m	Perennial Herb April-August	N/A
Triteleia clementina	—	—	1B.2	Valley and foothill grassland communities between 100 and 445 m asl.	Perennial bulbiferous herb March – April	Coastal Islands

* – Months given in parentheses indicate dates on which unusually early or late flowering records have been reported
N/A – Information not avaliable

Status abbreviations

Federal
FE: federally listed as Endangered
FT: federally listed as Threatened
FC: federal Candidate for listing as Endangered or Threatened

State
SE: state listed as Endangered
ST: state listed as Threatened
SC: state Candidate for listing as Endangered or Threatened

CNPS lists
1A: presumed extirpated in California
1B: rare, threatened, or endangered in California and elsewhere
2A: presumed extirpated in California, but more common elsewhere
2B: rare, threatened, or endangered in California, but more common elsewhere
3: more information needed to determine rarity
4: limited distribution

CNPS threat ranks
0.1: seriously threatened in California
0.2: fairly threatened in California
0.3: not very threatened in California

Sensitive Wildlife

Antelope Valley Planning Area

The Antelope Valley Planning Area supports designated critical habitat for the arroyo toad (*Anaxyrus californicus*), California condor (*Gymnogyps californianus*), desert tortoise (*Gopherus agassizii*), southern mountain yellow-legged frog (*Rana muscosa*), and Santa Ana sucker (*Catostomus santaanae*). In addition, this Planning Area supports more than 60 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are 16 federal and/or state-listed species, including bald eagle (*Haliaeetus leucocephalus*), arroyo toad, California condor, least Bell's vireo (*Vireo belli pusillus*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), southern mountain yellow-legged frog, southwestern willow flycatcher (*Empidonax traillii extimus*), unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), Mohave ground squirrel (*Xerospermophilus mohavensis*), Nelson's antelope squirrel (*Ammospermophilus nelsoni*), Swainson's hawk (*Buteo swainsoni*), California red-legged frog (*Rana draytonii*), coastal California gnatcatcher (*Polioptila californica californica*), desert tortoise, Santa Ana sucker, and western snowy plover (*Charadrius alexandrinus nivosus*).

Coastal Islands Planning Area

The Coastal Islands Planning Area does not support designated critical habitat for any federally-listed wildlife species. However, this Planning Area supports more than 20 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are seven federal and/or state-listed species, including Xantus' murrelet (*Synthliboramphus hypoleucus*), bald eagle, San Clemente loggerhead shrike (*Lanius ludovicianus mearnsi*), Santa Catalina Island fox (*Urocyon littoralis catalinae*), San Clemente Island fox (*Urocyon littoralis clementae*), island night lizard (*Xantusia riversiana*), and San Clemente sage sparrow (*Artemisiospiza belli clementeae*).

East San Gabriel Valley Planning Area

The East San Gabriel Valley Planning Area supports designated critical habitat for coastal California gnatcatcher. In addition, this Planning Area supports at least 25 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are five federal and/or state-listed species, including least Bell's vireo, bank swallow (*Riparia riparia*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), coastal California gnatcatcher, and Santa Ana sucker.

Gateway Planning Area

The Gateway Planning Area supports designated critical habitat for coastal California gnatcatcher. In addition, this Planning Area supports at least 25 special-status wildlife species that are federal and/or state-

listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are eight federal and/or state-listed species, including California least tern (*Sternula antillarum browni*), least Bell's vireo, southwestern willow flycatcher, bank swallow, Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), western yellow-billed cuckoo, coastal California gnatcatcher, and green turtle (*Chelonia mydas*).

Metro Planning Area

The Metro Planning Area does not support designated critical habitat for any federally-listed wildlife species. However, this Planning Area supports at least 14 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are three federal and/or state-listed species, including least Bell's vireo, southwestern willow flycatcher, and bank swallow.

San Fernando Valley Planning Area

The San Fernando Valley Planning Area supports designated critical habitat for coastal California gnatcatcher and Santa Ana sucker. In addition, this Planning Area supports at least 33 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are eight federal and/or state-listed species, including arroyo toad, least Bell's vireo, southern mountain yellow-legged frog, southwestern willow flycatcher, Swainson's hawk, western yellow-billed cuckoo, coastal California gnatcatcher, and Santa Ana sucker.

Santa Clarita Valley Planning Area

The Santa Clarita Valley Planning Area supports designated critical habitat for arroyo toad, California condor, California red-legged frog, coastal California gnatcatcher, and least Bell's vireo. In addition, this Planning Area supports at least 33 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are nine federal and/or state-listed species, including arroyo toad, California condor, least Bell's vireo, southwestern willow flycatcher, unarmored threespine stickleback, Swainson's hawk, California red-legged frog, coastal California gnatcatcher, and Santa Ana sucker.

Santa Monica Mountains Planning Area

The Santa Monica Mountains Planning Area supports designated critical habitat for California red-legged frog, southern steelhead (*Oncorhynchus mykiss*), tidewater goby (*Eucyclogobius newberryi*), and western snowy plover. In addition, this Planning Area supports at least 27 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by

the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are three federal and/or state-listed species, including southern steelhead, tidewater goby, and coastal California gnatcatcher.

South Bay Planning Area

The South Bay Planning Area supports designated critical habitat for coastal California gnatcatcher, Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*), and western snowy plover. In addition, this Planning Area supports at least 24 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are seven federal and/or state-listed species, including California least tern, El Segundo blue butterfly (*Euphilotes battoides allyni*), Pacific pocket mouse (*Perognathus longimembris pacificus*), Palos Verdes blue butterfly, bank swallow, and coastal California gnatcatcher.

West San Gabriel Valley Planning Area

The West San Gabriel Valley Planning Area supports designated critical habitat for coastal California gnatcatcher. In addition, this Planning Area supports at least 23 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are seven federal and/or state-listed species, including least Bell's vireo, southern mountain yellow-legged frog, southwestern willow flycatcher, bank swallow, Swainson's hawk, western yellow-billed cuckoo, and coastal California gnatcatcher.

Westside Planning Area

The Westside Planning Area supports designated critical habitat for western snowy plover. In addition, this Planning Area supports at least 35 special-status wildlife species that are federal and/or state-listed (e.g., endangered or threatened), and/or are considered a Species of Special Concern by the CDFW. Special-status plant species within Los Angeles County, as well as the Planning Areas where known occurrences have been recorded, are summarized in Table 5.4-2, *Special-Status Wildlife Species*. Among these are 11 federal and/or state-listed species, including California least tern, El Segundo blue butterfly, Pacific pocket mouse, southern steelhead, southwestern willow flycatcher, bank swallow, Belding's savannah sparrow, California black rail (*Laterallus jamaicensis coturniculus*), Swainson's hawk, coastal California gnatcatcher, and western snowy plover.

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Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Mollusks					
San Clemente Island snail *Micrarionta gabbi*	—	—	CDFW Special Animals List	Smalll air-breathing land snail; closely associated with *Opuntia littoralis* litter and rock crevices in north-facing canyon within *Lycium* and *Opuntia*-Phases of maritime desert scrub; less common in maritime sage scrub and stabilized sand dunes.	Coastal Islands
Shepard's snail *Pristiloma shephardae*	—	—	CDFW Special Animals List	Minute terrestrial snail, life history not well known. No ecological data is documented for this species, elevation between 15 and 30 m asl.	Coastal Islands
Catalina mountain snail *Radiocentrum avalonense*	—	—	CDFW Special Animals List	Smalll air-breathing land snail; steep, south-facing slopes sparsely covered by coastal sage scrub (with *Artemisia californica, Salvia mellifera*, *Opuntia littoralis*, *Rhus integrifolia* and *Heteromeles arbutifolia*) elevation below 30 m asl.	Coastal Islands
San Clemente Island blunt-top snail *Sterkia clementina*	—	—	CDFW Special Animals List	Smalll air-breathing land snail;. Beneath rocks or iceplant in maritime sage scrub consisting of *Mesebryanthemum crystallinum*, *Marah macrocarpus, Opuntia littoralis* and *Amsinckia menziesii*, elevation between 30 and 160 m asl.	Coastal Islands
Mimic tryonia *Tryonia imitator*	—	—	CDFW Special Animals List	Inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County. Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities.	Westside, South Bay
Horseshoe snail *Xerarionta intercisa*	—	—	CDFW Special Animals List	Terrestrial snail; beneath rocks, on spoil surface and associated with *Opuntia* in various vegetation types elevation at 130 m asl.	Coastal Islands
Wreathed cactus snail *Xerarionta redimita*	—	—	CDFW Special Animals List	Terrestrial snail; maritime sage scrub and *Opuntia*-Phase of maritime desert scrub; less common in *Lycium*-Phase of maritime desert scrub; uncommonly found in stabilized sand dunes elevation at 130 m asl.	Coastal Islands
Arachnids					
Gertsch's socalchemmis spider *Socalchemmis gertschi*	—	—	CDFW Special Animals List	Known only from Brentwood and Topanga Canyon.	Santa Monica Mountains, Westside
Crustaceans					
Vernal pool fairy shrimp *Branchinecta lynchi*	FT	—	—	Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains in astatic rain-filled pools. Inhabit small, clear-water sandstone depression pools and grassed swale, earth slump, or basalt flow depression pools.	Santa Clarita Valley

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Insects					
Santa Monica shieldback katydid *Aglaothorax longipennis*	—	—	CDFW Special Animals List	Occur nocturnally in chaparral and canyon stream bottom vegetation in the Santa Monica Mountains of Southern California. Inhabit introduced iceplant and native chaparral plants.	Santa Monica Mountains
Belkin's dune tabanid fly *Brennania belkini*	—	—	CDFW Special Animals List	Inhabits coastal sand dunes of Southern California.	Westside, South Bay
San Gabriel Mountains elfin butterfly *Callophrys mossii hidakupa*	—	—	CDFW Special Animals List	San Gabriel and San Bernardino Mountains at elevations of 3,000 to 5,500 feet. Host plant is *Sedum spathulifolium*. Type locality is southern mixed evergreen forest.	Antelope Valley
Busck's gallmoth *Carolella busckana*	—	—	CDFW Special Animals List	Sand dunes.	Westside, South Bay
Cuckoo wasp (no common name) *Ceratochrysis longimala*	—	—	CDFW Special Animals List	Reported from Hungry Valley, five miles south of Gorman.	Antelope Valley
Western tidal-flat tiger beetle *Cicindela gabbii*	—	—	CDFW Special Animals List	Inhabits estuaries and mudflats along the coast of Southern California. Generally found on dark-colored mud in the lower zone; occasionally found on dry saline flats of estuaries.	Gateway, South Bay
Sandy beach tiger beetle *Cicindela hirticollis gravida*	—	—	CDFW Special Animals List	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	Coastal Islands, Westside, South Bay, Gateway
Western beach tiger beetle *Cicindela latesignata latesignata*	—	—	CDFW Special Animals List	Mudflats and beaches in coastal Southern California.	Gateway, South Bay
Senile tiger beetle *Cicindela senilis frosti*	—	—	CDFW Special Animals List	Inhabits marine shoreline from central California south to salt marshes of San Diego. Also found at Lake Elsinore. Inhabits dark colored mud in the lower zone and dried salt pans in the upper zone.	Coastal Islands, Gateway, South Bay

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Globose dune beetle *Coelus globosus*	—	—	CDFW Special Animals List	Inhabitant of coastal sand dune habitats from Bodega Head in Sonoma County to Ensenada, Mexico. Inhabits foredunes and sand hummocks. Burrows beneath the sand surface and is most common beneath dune vegetation.	Santa Monica Mountains, Coastal Islands, Westside
Monarch butterfly (wintering sites) *Danaus plexippus*	—	—	CDFW Special Animals List	Roosts located in wind-protected tree groves (especially eucalyptus and Monterey cypress), with nectar and water sources nearby. Winter Roost sites extend along the coast from northern Mendocino County to Baja California, Mexico.	San Fernando Valley, Santa Monica Mountains, Westside, South Bay, Gateway
California diplectronan caddisfly *Diplectrona californica*	—	—	CDFW Special Animals List	Unknown habitat requirements. Collected from Claremont.	East San Gabriel Valley
Henne's eucosman moth *Eucosma hennei*	—	—	CDFW Special Animals List	Endemic to the El Segundo Dunes (type locality), Los Angeles County. Larval food plant is *Phacelia ramosissima* var. *austrolitoralis*. Larvae can be found on woody stems and upper root parts.	Westside
El Segundo blue butterfly *Euphilotes battoides allyni*	FE	—	Xerces Critical	Restricted to remnant coastal dune habitat in Southern California. Host plant is *Eriogonum parvifolium*; larvae feed only on the flowers and seeds; used by adults as major nectar source.	Westside, South Bay
Quino checkerspot butterfly *Euphydryas editha quino*	FE	—	Xerces Critical	Hills and mesas near the coast. Needs high densities of food plants (*Plantago erecta*, *P. insularis*, *Orthocarpus purpurascens*)	Santa Monica Mountains, Santa Clarita Valley
Palos Verdes blue butterfly *Glaucopsyche lygdamus palosverdesensis*	FE	—	Xerces Critical	Confined to coastal sage scrub community, dependent on two known larval hostplants, Santa Barbara milkvetch (*Astragalus trichopodus* var. *lonchus*) and common deerweed (*Acmispon glaber*).	South Bay
Lange's El Segundo Dune weevil *Onychobaris langei*	—	—	CDFW Special Animals List	Known from El Segundo Dunes.	Westside
Wandering skipper *Panoquina errans*	—	—	CDFW Special Animals List	Southern California coastal salt marshes. Requires moist saltgrass for larval development.	Westside

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
San Gabriel Mountains blue butterfly *Plebejus saepiolus aureolus*	—	—	CDFW Special Animals List	The San Gabriel blue, an undescribed subspecies, is believed to be extinct. It lived in wet meadows of the big pine recreation area in the San Gabriel Mountains until the U.S. Forest Service drained the meadows. Food plant is *Trifolium wormskioldii*.	Antelope Valley
San Emigdio blue butterfly *Plebulina emigdionis*	—	—	CDFW Special Animals List	Often near streambeds, washes, or alkaline areas. Associated with four-wing saltbush (*Atriplex canescens*).	Antelope Valley
El Segundo flower-loving fly *Rhaphiomidas terminatus terminatus*	—	—	CDFW Special Animals List	Found only at the western edge of the Los Angeles Basin, in areas of fine sandy soil.	South Bay
Santa Monica grasshopper *Trimerotropis occidentiloides*	—	—	CDFW Special Animals List	Known only from the Santa Monica Mountains Found on bare hillsides and along dirt trails in chaparral.	Santa Monica Mountains
Santa Ana sucker *Catostomus santaanae*	FT, FSS	SSC	—	Habitat generalist, but prefers sand, rubble, or boulder bottoms, in cool, clear water with algae to graze.	San Fernando Valley, Antelope Valley, Santa Clarita Valley, East San Gabriel Valley
Tidewater goby *Eucyclogobius newberryi*	FE	SSC	AFS: Endangered	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Santa Monica Mountains
Unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	FE, FSS	SE, CDFW Fully Protected	—	Cool, clear water with abundant vegetation in weedy pools, backwaters and among emergent vegetation at the stream edge in small Southern California streams.	Antelope Valley, Santa Clarita Valley
Arroyo chub *Gila orcuttii*	FSS	SSC	—	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Santa Monica Mountains, East San Gabriel Valley

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Southern steelhead—Southern California DPS *Oncorhynchus mykiss irideus*	FE	SSC	—	Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen. Federal listing refers to populations from the Santa Maria River south to the southern extent of the species range (San Mateo Creek in San Diego County). Southern steelhead likely has greater physiological tolerance of warmer water and more variable conditions than northern subspecies.	Santa Clarita Valley, Santa Monica Mountains
Santa Ana speckled dace *Rhinichthys osculus* ssp. 3	FSS	SSC	—	Requires permanent flowing streams with summer water temperatures of 17 to 20 degrees C. Usually inhabits shallow cobble and gravel riffles. Occurs in the headwaters of the Santa Ana and San Gabriel Rivers.	Antelope Valley, San Fernando Valley, East San Gabriel Valley, West San Gabriel Valley
Amphibians					
Arroyo toad *Anaxyrus californicus*	FE	SSC	—	Rivers, washes or intermittent streams with sandy banks, willows, cottonwoods and sycamores within valley-foothill, desert riparian and desert wash communities in semi-arid regions; loose gravelly areas of streams in drier parts of range.	Antelope Valley, Santa Clarita Valley, San Fernando Valley
San Gabriel Mountains slender salamander *Batrachoseps gabrieli*	FSS	—	—	Known only from the San Gabriel Mountains; found under rocks, wood, fern fronds and on soil at the base of talus slopes. Most active on the surface in winter and early spring.	Antelope Valley
Yellow-blotched salamander *Ensatina eschscholtzii croceator*	BLMS, FSS	SSC	—	Forests and well-shaded canyons, as well as oak woodlands and old chaparral. Needs surface objects, such as logs, boards and rocks. Also needs rodent burrows or other underground retreats.	Antelope Valley
Large-blotched salamander *Ensatina klauberi*	—	SSC	—	Inhabits moist shaded evergreen and deciduous forests and oak woodlands. Found under rocks, logs, other debris, especially bark that has peeled off and fallen beside logs and trees. Most common where there is a lot of coarse woody debris on the forest foor. In dry or very cold weather, stays inside moist logs, animal burrows, under roots, woodrat nests, under rocks.	Antelope Valley
Foothill yellow-legged frog *Rana boylii*	BLMS, FSS	SSC	—	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	Santa Clarita Valley

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
California red-legged frog *Rana draytonii*	FT	SSC	—	Requires 11 to 20 weeks of permanent water for larval development; must have access to aestivation habitat. Occurs in lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Antelope Valley, Santa Clarita Valley
Southern mountain yellow-legged frog *Rana muscosa*	FE, FSS	SSC	—	Always encountered within a few feet of water. Tadpoles may require 2 to 4 years to complete their aquatic development. Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino Mountains only.	Antelope Valley, San Fernando Valley, West San Gabriel Valley
Western spadefoot *Spea hammondii*	BLMS	SSC	—	Vernal pools and other areas of seasonally ponded water, primarily in grasslands habitats, but can be found in valley-foothill hardwood woodlands.	San Fernando Valley, Santa Clarita Valley, Gateway
Coast Range newt *Taricha torosa*	—	SSC	—	Occurs primarily in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub and mixed chaparral, but is also known from annual grassland and mixed conifer types. Elevation range extends from near sea level to about 1,830 m. Terrestrial individuals seek cover under surface objects such as rocks and logs, or in mammal burrows, rock fissures, or human-made structures such as wells. Aquatic larvae find cover beneath submerged rocks, logs, debris, and undercut banks. Breeding and egg-laying occur in intermittent streams, rivers, permanent and semi-permanent ponds, lakes and large reservoirs.	Antelope Valley, East San Gabriel Valley, West San Gabriel Valley
Reptiles					
Silvery legless lizard *Anniella pulchra pulchra*	FSS	SSC	—	Leaf litter associates with sandy or loose loamy soil of high moisture content under sparse vegetation	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Santa Monica Mountains, East San Gabriel Valley, Metro, South Bay
Coastal whiptail *Aspidoscelis tigris stejnegeri*	—	—	CDFW Special Animals List	Various habitats in firm, sandy or rocky soils within sparse vegetation, open areas, woodlands and riparian communities of deserts and semi-arid areas.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Santa Monica Mountains, Westside, East San Gabriel Valley, West San Gabriel Valley, Gateway
Southern rubber boa *Charina umbratica*	—	ST	—	Found in a variety of montane forest habitats in the vicinity of streams of wet meadows. Requires loose, moist soils for burrowing; seeks cover in rotting logs. restricted to the San Bernardino and San Jacinto Mountains	Antelope Valley

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Rosy boa *Charina trivirgata*	BLMS, FSS	—	—	Habitats with a mix of brushy cover and rocky soil such as coastal canyons and hillsides, desert canyons, washes and mountains in desert and chaparral from the coast to the Mojave and Colorado Deserts	Antelope Valley, Santa Clarita Valley
Green turtle *Chelonia mydas*	FT	—	—	Adult females migrate from foraging areas to mainland or island nesting beaches and may travel hundreds or thousands of kilometers each way. After emerging from the nest, hatchlings swim to offshore areas, where they are believed to live for several years, feeding close to the surface on a variety of pelagic plants and animals. Once the juveniles reach a certain age/size range, they leave the pelagic habitat and travel to nearshore foraging grounds. Once they move to these nearshore benthic habitats, adult green turtles are almost exclusively herbivores, feeding on sea grasses and algae.	Gateway
San Bernardino ringneck snake *Diadophis punctatus modestus*	FSS	—	—	Surface litter or herbaceous vegetation in open, relatively rocky areas, often in somewhat moist areas near intermittent streams.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Santa Monica, Westside, East San Gabriel Valley, West San Gabriel Valley
Western pond turtle *Emys marmorata*	BLMS, FSS	SSC	—	Requires basking sites such as partially submerged logs, vegetation mats or open mud banks and needs suitable nesting sites in permanent or near permanent bodies of water in many habitat types below 2,000 m asl.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Santa Monica Mountains, Westside, East San Gabriel Valley, West San Gabriel Valley, Gateway
Desert tortoise *Gopherus agassizii*	FT	ST	—	Most common in desert scrub, desert wash and Joshua tree habitats. Occurs in almost every desert habitat. Requires friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms is preferred.	Antelope Valley
San Bernardino mountain kingsnake *Lampropeltis zonata parvirubra*	FSS	SSC	—	Big-cone spruce and chaparral at lower elevations to black oak, incense cedar, and Jeffrey pine at higher elevations. Requires well-lit canyons with rocky outcrops or talus.	Antelope Valley

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
San Diego mountain kingsnake *Lampropeltis zonata pulchra*	FSS	SSC	—	Most common in the vicinity of rocks or boulders near streams or lake shores. May also utilize rotting logs and seek cover under dense shrubs. Occurs in a variety of habitats including valley-foothill hardwood, and hardwood-conifer, mixed and montane chaparral, valley-foothill riparian, coniferous forests, and wet meadows.	West San Gabriel Valley, East San Gabriel Valley, Santa Monica Mountains, Antelope Valley, San Fernando Valley
Coast horned lizard *Phrynosoma blainvillii*	BLMS, FSS	SSC	—	Occurs in relatively open areas of coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest habitat on sandy soils, often in association with harvester ants.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Santa Monica, Westside, East San Gabriel Valley, West San Gabriel Valley, Metro, South Bay, Gateway
Two-striped garter snake *Thamnophis hammondii*	BLMS, FSS	SSC	—	Perennial and intermittent streams having rocky or sandy beds and artificially created aquatic habitats (manmade lakes and stock ponds); requires dense riparian vegetation. From sea level to 2,400 m (8,000 ft).	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Santa Monica Mountains, Westside, East San Gabriel Valley
Santa Catalina Island garter snake *Thamnophis hammondii ssp.*	—	—	CDFW Special Animals List	Perennial and intermittent streams having rocky or sandy beds and artificially created aquatic habitats (manmade lakes and stock ponds); requires dense riparian vegetation.	Coastal Islands
South coast garter snake *Thamnophis sirtalis* ssp.	—	SSC	—	Marsh and upland habitats near permanent water with well developed strips of riparian vegetation on the Southern California coastal plain from Ventura County to San Diego County and from sea level to approximately 850 m asl.	Santa Clarita Valley
Island night lizard *Xantusia riversiana*	FT	—	—	Found in almost any island habitat that provides it protection and shade - maritime desert scrub, grassland, chaparral, oak savanna, cactus, dry streambeds, cliffs, rocky beaches, sparsely-vegetated areas. Takes shelter in cracks in rocks or in the ground, and under surface objects such as rocks, fallen vegetation and beach driftwood.	Coastal Islands
Birds					
Cooper's hawk (nesting) *Accipiter cooperii*	—	CDFW Watch List	—	Nests in open forests, groves, or trees along rivers, or low scrub of treeless areas. The wooded area is often near the edge of a field or water opening.	Antelope Valley, Santa Clarita Valley, Santa Monica, West San Gabriel Valley

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Tricolored blackbird (nesting colony) *Agelaius tricolor*	BCC, BLMS	SSC	USBC, AWL, ABC	Highly colonial species, requiring open water, protected nesting substrate and foraging areas with insect prey within a few km of the colony.	Antelope Valley San Fernando Valley, South Bay, Gateway
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	—	CDFW Watch List	—	Frequents relatively steep, often rocky hillsides with grass and forb patches. Resident in Southern California coastal sage scrub and mixed chaparral.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, East San Gabriel Valley
Grasshopper sparrow *Ammodramus savannarum*	—	—	CDFW Special Animals List	Occurs in dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches. Apparently a thick cover of grasses and forbs is essential for concealment.	Antelope Valley, Santa Clarita Valley
Bell's sage sparrow *Amphispiza belli belli*	BCC	CDFW Watch List	—	Nests on the ground beneath shrubs or in shrubs 6 to 18 inches above the ground within chaparral communities dominated by fairly dense stands of chamise or in coastal scrub in southern part of the range.	Antelope Valley, Santa Clarita Valley
Golden eagle (nesting and wintering) *Aquila chrysaetos*	BCC, BLMS	CDFW Watch List, CDFW Fully Protected, CDF	—	Open terrain in deserts, mountains, slopes, and valleys. Nest mainly on cliffs, also in large trees (such as oaks), and rarely on artificial structures or the ground.	Antelope Valley, Santa Monica Mountains
Short-eared owl (nesting) *Asio flammeus*	—	SSC	USBC, AWL, ABC, LAA (wintering)	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation. Historically, common in wet meadow lands and fresh water marshes in coastal Los Angeles County. Wintering birds favor expanses of open country: freshwater and saltwater marshes, wet meadows, weedy fields, agricultural stubble, *etc*. Although Los Angeles County is well within this owl's wintering range, the bird is no longer found within Los Angeles County with the exception of infrequent reports from the Ballona area (during migration) and the Antelope Valley (generally in winter at Piute Ponds, but including also three summertime records).[17]	Antelope Valley

[17] Allen, LW, et al. 2009. Los Angeles County's Sensitive Bird Species. *Western Tanager*. 75(3).

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Burrowing owl (burrow sites) *Athene cunicularia*	BCC, BLMS	SSC	—	Open, dry grassland and desert habitats throughout California, or scrublands characterized by low-growing, widely spaced vegetation. Dependent upon burrowing mammals, especially California ground squirrel.	Antelope Valley, Santa Clarita, San Fernando Valley, Westside, West San Gabriel Valley, Metro, Gateway
San Clemente Sage Sparrow *Artemisiospiza belli clementeae*	FT, BCC	SSC	—	Prefers semiopen habitats with evenly spaced shrubs 1-2 m high;nominate in dry chaparral and coastal sage scrub along coastal lowlands	Coastal Islands
Ferruginous hawk (wintering) *Buteo regalis*	BCC, BLMS	CDFW Watch List	AWL, LAA	Forages in agricultural and urban habitats, as well as creosote bush and saltbush scrub. Breeds in isolated trees, small groves of trees, on rocky ledges, or occasionally on the ground. Nests are adjacent to open areas such as grasslands or shrublands. Prefers open country, where it often hunts from low perches on fence posts, utility poles, or small trees. Occurs in Los Angeles County only as a winter visitant, making use of extensive agricultural fields and areas of grassland and open desert scrub in the Antelope Valley to forage for rodents and lagomorphs. Agricultural fields planted in alfalfa seem to be the areas most frequented by these birds in Los Angeles County.[18]	Antelope Valley
Swainson's hawk (nesting) *Buteo swainsoni*	BCC, FSS	ST	USBC, AWL, ABC	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannas and agricultural or ranch fields. Requires adjacent suitable foraging areas such as grasslands or agricultural fields supporting rodent populations.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Westside, West San Gabriel Valley
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	BCC, FSS	SSC	—	Southern California coastal sage scrub. Tall *Opuntia* cacti are required for nesting and roosting.	East San Gabriel Valley
Western snowy plover *Charadrius alexandrinus nivosus*	FT, BCC	SSC	ABC, AWL, USBC	Nests, feeds, and takes cover on sandy or gravelly beaches along the coast, on estuarine salt ponds, alkali lakes, and at the Salton Sea. Requires a sandy, gravelly or friable soil substrate for nesting.	Coastal Islands, Westside, South Bay, Antelope Valley, Santa Clarita Valley, Gateway, Santa Monica Mountains
Mountain plover (wintering) *Charadrius montanus*	BCC	SSC	USBC, AWL, ABC	Short vegetation, bare ground and flat topography associated with grasslands, freshly plowed fields, newly sprouting grain fields and sometimes sod farms. Prefers grazed areas and areas with burrowing rodents.	Antelope Valley

[18] Allen, LW, et al. 2009. Los Angeles County's Sensitive Bird Species. *Western Tanager*. 75(3).

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	FC, BCC, FSS	SE	—	Nests in riparian jungles of willow, often mixed with cottonwood with an understory of blackberry, nettles or wild grape.	San Fernando Valley, East San Gabriel Valley, West San Gabriel Valley, Gateway
Black swift (nesting) *Cypseloides niger*	BCC	SSC	USBC, AWL, ABC	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea bluffs above the surf along the coastal belt of Santa Cruz and Monterey County, the central and southern Sierra Nevada, and the San Bernardino and San Jacinto Mountains	Antelope Valley
White-tailed kite (nesting) *Elanus leucurus*	—	CDFW Fully Protected	—	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows or marshes for foraging close to close to isolated, dense-topped trees for nesting and perching.	Santa Clarita Valley
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	FE, FSS (full species)	SE (full species)	USBC, AWL, ABC (all include full species)	Dense willow thickets are required for nesting and roosting. Nesting site usually near languid stream, standing water, or seep. Most numerous where extensive thickets of low, dense willows edge on wet meadows, ponds, or backwaters.	Antelope Valley, San Fernando Valley, Santa Clarita Valley, West San Gabriel Valley, Metro, Westside, Gateway
California horned lark *Eremophila alpestris actia*	—	CDFW Watch List	LAA (full species, coastal slope)	Inhabits coastal regions from Sonoma County to San Diego County. Also know from the main part of the San Joaquin valley east to the foothills. Inhabitant of short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats. Requires open areas with short vegetation, sparse brush, and a preponderance of bare ground. Populations in the southeastern portions of Los Angeles County appear to belong to the coastal subspecies *actia*, whereas the few birds breeding in the San Fernando Valley may belong to the widespread Mojave Desert subspecies *ammophila*.[19]	Santa Clarita Valley, West San Gabriel Valley, East San Gabriel Valley, San Fernando Valley, Gateway
Merlin *Falco columbarius*	—	CDFW Watch List	—	Seacoast, tidal estuaries, open woodlands, savannas, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country.	Antelope Valley, East San Gabriel Valley

[19] Allen, LW, et al. 2009. Los Angeles County's Sensitive Bird Species. *Western Tanager*. 75(3).

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Prairie falcon (nesting) *Falco mexicanus*	BCC	CDFW Watch List	LAA	Breeds on cliffs in dry, open terrain and forages far afield, even to marshlands and ocean shores. Forages widely over desert scrub and arid grasslands, but nesting is generally confined to sheltered cliff ledges, potholes, and caves in rugged terrain. Apparently no longer occupy certain locations from which historical records exist. Fewer than 10 pairs remaining in Los Angeles County.[20]	Antelope Valley, Santa Clarita Valley
American peregrine falcon (nesting) *Falco peregrinus anatum*	BCC, FSS	SE, CDF, CDFW Fully Protected	AWL, ABC	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Antelope Valley, San Fernando Valley, Santa Monica Mountains, West San Gabriel Valley, Metro
California condor *Gymnogyps californianus*	FE	SE, CDF, CDFW Fully Protected	USBC, AWL, ABC	Nets in deep canyons containing clefts in rocky walls of mountain ranges of moderate altitude. Forages up to 100 miles from nest sites over vast expanses of open savanna, grasslands and foothill habitats.	Antelope Valley, Santa Clarita Valley
Bald eagle (nesting and wintering) *Haliaeetus leucocephalus*	—	SE, CDF, CDFW Fully Protected	—	Nests in large, old growth or dominant large trees with open branches, especially ponderosa pines. Roosts communally in winter. Occurs along ocean shore, lake margins and rivers for both nesting and wintering. Most nests within a mile of water.	Antelope Valley, Coastal Islands
Yellow-breasted chat (nesting) *Icteria virens*	—	SSC	—	Summer resident in riparian thickets of willow and other brushy tangles such as blackberry and wild grape near water courses.	West San Gabriel Valley
Loggerhead shrike (nesting) *Lanius ludovicianus*	BCC	SSC	LAA (coastal slope wintering)	Found in broken woodlands, savanna, pinyon-juniper woodland, Joshua tree woodland, riparian woodland, desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting. Largely avoid urban areas and face declines due to the development and conversion of scrubland, grassland, and agricultural areas. Wintering birds have declined severely on the coastal slope and valleys along with the habitat they depended upon.[21]	Antelope Valley, Santa Clarita Valley

[20] Allen, LW, et al. 2009. Los Angeles County's Sensitive Bird Species. *Western Tanager*. 75(3).
[21] Allen, LW, et al. 2009. Los Angeles County's Sensitive Bird Species. *Western Tanager*. 75(3).

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
San Clemente loggerhead shrike *Lanius ludovicianus mearnsi*	FE	SSC	—	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Coastal Islands
California black rail *Laterallus jamaicensis coturniculus*	BCC	ST, CDFW Fully Protected	USBC, AWL, ABC (all listings include full species)	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate during the year and dense vegetation for nesting habitat.	Westside
Channel Island song sparrow *Melospiza melodia graminea*	BCC	SSC	—	Resident of brackish-water marshes on Catalina Island. Inhabits cattails, tules and other sedges, and *Salicornia*; also known to frequent tangles bordering sloughs. Subspecies validity uncertain.	Coastal Islands
Ashy storm-petrel *Oceanodroma homochroa*	—	SSC	—	Nesting occurs on islands; eggs are deposited in natural cavities under rocks or in existing burrows, and sometimes in similar artificial sites, from near seal level to the highest interior parts of the nesting islands. Nesting areas are either devoid of predatory mammals (e.g., offshore rocks) or in sites that are basically inaccessible to them (e.g., steep slopes, sea caves).	Coastal Islands
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	—	SE	—	Very local breeder on the southern coast from Santa Barbara to San Diego County. Nests in *Salicornia* on and about margins of tidal flats.	Westside, Gateway
California brown pelican *Pelecanus occidentalis californicus*	FD	SD, CDFW Fully Protected	—	Colonial nester on coastal islands just outside the surf line. Nests on Islands of small to moderate size which afford immunity from attack by ground dwelling predators.	Westside, Gateway, South Bay

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
White-faced ibis *Plegadis chihi*	—	CDFW Watch List	LAA	Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland. Roosts amidst dense, freshwater emergent vegetation such as bulrushes, cattails, reeds or low shrubs over water. Extensive marshes are required for nesting. No longer breeds at three historic locations on the coastal slope of Los Angeles County, but since 1988 a few dozen pairs have nested at Piute Ponds, and foraged there or in nearby agricultural fields.[22]	Antelope Valley
Coastal California gnatcatcher *Polioptila californica californica*	FT	SSC	USBC, AWL, ABC	Obligate permanent resident of coastal sage and alluvial scrub habitats below 800 m asl in Southern California.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Santa Monica Mountains, Westside, East San Gabriel Valley, West San Gabriel Valley, Gateway, South Bay
Bank swallow (nesting) *Riparia riparia*	—	ST	—	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Westside, East San Gabriel Valley, West San Gabriel Valley, Metro, Gateway, South Bay
California least tern *Sternula antillarum browni*	FE	SE, CDFW Fully Protected	USBC, ABC (both listings include full species)	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	South Bay, Gateway, Westside
Xantu's murrelet *Synthliboramphus hypoleucus*	FC, BCC	ST		Feeds at sea, nests in small crevices, caves and under dense bushes on arid islands in loose scattered colonies. It returns to the colony only at night, laying two eggs which are incubated for about a month	Coastal Islands
Least Bell's vireo *Vireo bellii pusillus*	FE, BCC	SE	USBC, AWL, ABC	Resident below about 600 m (2,000 ft) in willows and other low, dense valley foothill riparian habitat. Thickets of willow and other low shrubs afford nesting and roosting cover. May inhabit thickets along dry, intermittent streams.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Westside, East San Gabriel Valley, West San Gabriel Valley, Metro, Gateway, South Bay

[22] Allen, LW, et al. 2009. Los Angeles County's Sensitive Bird Species. *Western Tanager*. 75(3).

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Mammals					
Pallid bat *Antrozous pallidus*	FSS, BLMS	SSC	WBWG High	Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and open buildings.	Santa Clarita Valley, San Fernando Valley, Westside, East San Gabriel Valley, West San Gabriel Valley, Metro
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	—	SSC	—	Sandy, herbaceous areas, Usually in association with rocks or coarse gravel in coastal scrub, chaparral, grassland, and sagebrush communities of southwestern California.	East San Gabriel valley
Pallid San Diego pocket mouse *Chaetodipus fallax pallidus*	—	SSC	—	Sandy, herbaceous areas, usually in association with rocks or coarse gravel in desert wash, desert scrub, desert succulent scrub, pinyon-juniper woodlands, *etc*, of desert border areas of eastern San Diego County	Antelope Valley
Spotted bat *Euderma maculatum*	BLMS	SSC	WBWG High	Habitats occupied include arid deserts, grasslands and mixed conifer forests from below sea level in California to above 3,000 m (10,000 ft) in New Mexico. Prefers to roost in rock crevices. Occasionally found in caves and buildings. Cliffs provide optimal roosting habitat.	Santa Clarita Valley, Santa Monica Mountains
Western mastiff bat *Eumops perotis californicus*	BLMS	SSC	WBWG High	Roosts in crevices in cliff faces, high buildings, trees and tunnels within many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, *etc*.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, Santa Monica Mountains, Westside, East San Gabriel Valley, West San Gabriel Valley, Metro, South Bay, Gateway
Silver-haired bat *Lasionycteris noctivagans*	—	—	WBWG Medium	Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark. Females may form nursery colonies or occur as solitary individuals in dense foliage or hollow trees. Needs drinking water.	San Fernando Valley, Westside, West San Gabriel Valley, Gateway
Hoary bat *Lasiurus cinereus*	—	—	WBWG Medium	Habitats suitable for bearing young include all woodlands and forests with medium to large-size trees and dense foliage. Generally roosts in dense foliage of medium to large trees.	Antelope Valley, San Fernando Valley, Santa Monica, East San Gabriel Valley, West San Gabriel Valley, Metro
Western yellow bat *Lasiurus xanthinus*	—	—	WBWG High	Found in valley foothill riparian, desert riparian, desert wash, and desert palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	San Fernando Valley, East San Gabriel Valley, Metro

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	—	SSC	—	Shrub habitats and intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges.	Santa Clarita Valley, San Fernando Valley, West San Gabriel Valley
California leaf-nosed bat *Macrotus californicus*	FSS	SSC	WBWG High	Roosts in rocky, rugged terrain with mines or caves in riparian, wash, succulent scrub, alkali scrub and palm oasis habitats of deserts.	San Fernando Valley
South coast marsh vole *Microtus californicus stephensii*	—	SSC	—	Tidal marshes in Los Angeles, Orange and southern Ventura Counties.	Antelope Valley, Westside, South Bay
Western small-footed myotis *Myotis ciliolabrum*	BLMS	—	WBWG Medium	A common bat of arid uplands in California. Coastal California from Contra Costa County to the Mexican border, and west and east sides of the Sierra Nevada, and Great Basin and desert habitats from Modoc to Kern and San Bernardino Counties It occurs in a wide variety of habitats, primarily in relatively arid wooded and brushy uplands near water from sea level to 8,900 feet. Often seen foraging among trees and over water. Seeks cover in caves, buildings, mines, crevices, and occasionally under bridges and under bark. Separate night roosts may be used, and have been found in buildings and caves. Maternity colonies of females and young are found in buildings, caves, and mines. Requires water. Humid roost sites are preferred.	Antelope Valley, Santa Monica Mountains, Westside
Long-eared myotis *Myotis evotis*	BLMS	—	WBWG Medium	Widespread in California, but generally uncommon in most of its range. Occurring along the entire coast and in the Sierra Nevada, Cascades, and Great Basin from Oregon south through the Tehachapi Mts. to the Coast Ranges. Found in nearly all brush, woodland, and forest habitats, from sea level to at least 2,700 m (9,000 ft), but coniferous woodlands and forests seem to be preferred. Roosts in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts. Roosts singly, or is found in fairly small groups. Nursery colonies of 12 – 30 individuals are found in buildings, crevices, snags, and behind bark. Probably requires water.	Antelope Valley

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Fringed myotis *Myotis thysanodes*	BLMS	—	WBWG High	Widespread in California, occurring in all but the Central Valley and Colorado and Mojave deserts. Irregular but may be common locally. Occurs in a wide variety of habitats from sea level to 2,850 m (9,350 ft). Optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer, generally at 1,300 – 2,200 m (4,000 – 7,000 ft). Roosts in caves, mines, buildings, and crevices. Separate day and night roosts may be used. Maternity colonies of up to 200 individuals located in caves, mines, buildings, or crevices. Requires water. Uses open habitats, early successional stages, streams, lakes, and ponds as foraging areas.	Antelope Valley
Long-legged myotis *Myotis volans*	BLMS	SSC	WBWG Medium	Restricted in California to lowlands of Colorado River and adjacent mountain ranges, in San Bernardino, Riverside, and Imperial Counties, although more common farther east. Once common; has experienced significant declines, and status in California is uncertain. Habitats occupied in California include desert scrub, desert succulent shrub, desert wash, and desert riparian. Colonial cave-dweller, occurring in colonies of several thousand individuals in most of its range. Mines and buildings also may be used. Hibernation caves have high humidity, often with standing or running water and little air movement. Uses temporary night roosts. Nursery colonies are in the hibernation cave or another cave. Occasionally other sites, such as bridges, are used. Optimal sites are relatively warm, with little human disturbance. Probably requires water.	Antelope Valley
Yuma myotis *Myotis yumaensis*	BLMS	—	WBWG Low – Medium	Common and widespread in California outside the Mojave and Colorado Desert regions, except for the mountain ranges bordering the Colorado River Valley. Found in a wide variety of habitats ranging from sea level to 11,000 ft, uncommon to rare above 8,000 feet. Optimal habitats are open forests and woodlands with sources of water over which to feed. Roosts in buildings, mines, caves, or crevices, abandoned swallow nests and under bridges. Maternity colonies of several thousand females and young may be found in buildings, caves, mines, and under bridges. Warm, dark sites are preferred.	Antelope Valley, Santa Monica Mountains
Lodgepole chipmunk *Neotamias speciosus speciosus*	—	—	CDFW Special Animals List	Usually found in open canopy forests, lodgepole pine forests in the San Bernardino Mountains and chinquapin slopes on the San Jacinto Mountains	Antelope Valley
San Diego desert woodrat *Neotoma lepida intermedia*	—	SSC	—	Moderate to dense canopies in coastal scrub of Southern California from San Diego County to San Luis Obispo County. Particularly abundant in rock outcrops, rocky cliffs and slopes.	Santa Clarita Valley, San Fernando Valley, Santa Monica Mountains, East San Gabriel Valley, Metro, South Bay

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Pocketed free-tailed bat *Nyctinomops femorosaccus*	—	SSC	WBWG Medium	Rocky areas with high cliffs in a variety of arid areas in Southern California—pine-juniper woodlands, desert scrub, palm oases, desert wash, desert riparian, *etc*.	East San Gabriel Valley, South Bay
Big free-tailed bat *Nyctinomops macrotis*	—	SSC	WBWG Medium—High	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	San Fernando Valley, East San Gabriel Valley, Metro, Gateway
Southern grasshopper mouse *Onychomys torridus ramona*	—	SSC	—	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropod prey, especially scorpions and orthopterans.	Antelope Valley, Santa Clarita Valley, San Fernando Valley, West San Gabriel Valley
Nelson's bighorn sheep *Ovis canadensis nelsoni*	BLMS, FSS	—	—	Open, rocky, steep areas with available water and herbaceous forage. widely distributed from the White Mountains in Mono County to the Chocolate Mountains in Imperial County	Antelope Valley
Tehachapi pocket mouse *Perognathus alticolus inexpectatus*	FSS	SSC	—	Arid annual grassland and desert shrub communities, but also found in fallow grain fields and Russian-thistle (*Salsola tragus*). Burrows for cover and nesting. Aestivates and hibernates through extreme weather. Forages on open ground and under shrubs.	Antelope Valley
San Joaquin pocket mouse *Perognathus inornatus inornatus*	BLMS	—	—	Friable soils, typically in grasslands and blue oak savannas.	Antelope Valley
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	FSS	SSC	—	Lower elevation grasslands and coastal sage associations in the Los Angeles basin, from approximately Burbank and San Fernando on the northwest to San Bernardino on the northeast, and Cabazon, Hemet, and Aguanga on the east and southeast. Geographic limits on the southwest are not clear, but probably lie somewhere near the Hollywood Hills. Inhabits open ground with soils composed of fine sands. May not often dig burrows but hide under weeds and dead leaves instead, though this behavior is disputable.	San Fernando Valley
Pacific pocket mouse *Perognathus longimembris pacificus*	FE	SSC	—	Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles County. Seems to prefer soils of fine alluvial sands near the ocean, but much remains to be learned.	Westside, South Bay

Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Southern California saltmarsh shrew *Sorex ornatus salicornicus*	—	SSC	—	Coastal marshes in Los Angeles, Orange and Ventura Counties. Requires dense vegetation and woody debris for cover.	Westside
Santa Catalina shrew *Sorex ornatus willetti*	—	SSC	—	Coastal marshes. Requires dense vegetation and woody debris for cover.	Coastal Islands
American badger *Taxidea taxus*	—	SSC	—	Drier, open stages of most shrub, forest, and herbaceous habitats with friable soils.	Antelope Valley, San Fernando Valley, Santa Monica Mountains, Westside, East San Gabriel Valley, West San Gabriel Valley, Metro, Gateway
Santa Catalina Island fox *Urocyon littoralis clatalinae*	FE	ST	—	Preferred habitat is complex layer vegetation with a high density of woody, perennially fruiting shrubs but lives in all of the island biomes.	Coaastal Islands
San Clemente Island fox *Urocyon littoralis clementae*	—	ST	—	Preferred habitat is complex layer vegetation with a high density of woody, perennially fruiting shrubs but lives in all of the island biomes.	Coaastal Islands
Mojave ground squirrel *Xerospermophilus mohavensis*	—	ST	—	Sandy to gravelly soils in open desert scrub, alkali scrub and Joshua tree woodland. Avoids rocky areas. Nests in burrows and uses burrows at the base of shrubs for cover. Also feeds in annual grassland. Restricted to the Mojave Desert.	Antelope Valley

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Table 5.4-2 Special-Status Wildlife Species

Common name Scientific name	Federal status	State status	Other lists	Habitat	Planning Area
Status abbreviations					
Federal		State		Other	
FE: Federally listed as Endangered vulnerable, FT: Federally listed as Threatened FPE: Federally proposed for listing as Endangered FPT: Federally proposed for listing as Threatened FPD: Federally proposed for delisting FC: Federal Candidate species SC: National Marine Fisheries Service Species of Concern BLMS: Bureau of Land Management Sensitive Species FSS: USDA Forest Service Sensitive Species BCC: Fish and Wildlife Service Birds of Conservation Concern		SE: State-listed as Endangered ST: State-listed as Threatened SCE: State candidate for listing as Endangered SCT: State candidate for listing as Threatened SCD: State candidate for delisting CDF: California Department of Forestry and Fire Protection Sensitive Species SSC: CDFW Species of Special Concern CDFW Special Animals List - 2011		AFS: American Fisheries Society categories of risk: threatened, or endangered AWL: Audubon Watchlist ABC: American Bird Conservancy Green List LAA: Los Angeles Audubon list of Los Angeles County's Sensitive Bird Species USBC: United States Bird Conservation Watch List WBWG: Western Bat Working Group: High, Medium and Low priority Xerces: Xerces Society Red List of Pollinators	

Significant Ecological Areas

A Significant Ecological Area (SEA) designation is given to land in Los Angeles County that contains irreplaceable biological resources. Individual SEAs include undisturbed or lightly disturbed habitat supporting valuable and threatened species, linkages and corridors to promote species movement, and are sized to support sustainable populations of its component species.

SEA History

The identification of important biological resources and preservation of SEAs has a long history in Los Angeles County. In 1970, the County adopted the Environmental Development Guide that contains a schematic map called the Open Space Concept Plan, which closely resembles the current proposed SEA Map and depicts areas thought to be of significance for both conservation and safety. Then in 1972, the Environmental Resource Committee of the Southern California Academy of Sciences and members of the UCLA botany and zoology faculties prepared an environmental resources survey for the County, which identifies areas throughout Los Angeles County that warrant special consideration due to their high biological resource value. As a result of this effort, 81 of these areas were identified on the vegetation and wildlife map in the 1973 Los Angeles County General Plan.

In 1976, the Los Angeles County Significant Ecological Areas Study was conducted to reevaluate those areas identified in the 1972 survey by the Environmental Resource Committee. In an effort to protect the full range of biological diversity in Los Angeles County, a total of 115 areas were identified as possible SEAs, and ultimately 62 of the most significant areas were recommended as SEAs. Of these, 61 of the SEAs were adopted in 1980 as part of the Los Angeles County General Plan's Conservation and Open Space Element.

Since 1980, a number of the biological resources within these SEAs were impacted by development activity within and around the SEA boundaries. In 1982 and 1991, supplemental studies were conducted to further assess the biological resources within 13 SEAs within the Santa Monica Mountains, San Gabriel Canyon, Chino Hills, San Francisquito Canyon and Kentucky Springs. For each study, if it was determined that the SEA boundaries did not adequately encompass the specific species identified in the SEA description, then expansion of the boundaries was recommended to better encompass the resources.

In 1999, the County began a comprehensive revision to the existing General Plan. As part of this revision, an updated study of the SEAs was commissioned which resulted in the 2000 Los Angeles County Significant Ecological Area Update Study. This updated study evaluated existing SEAs for changes in biotic conditions and considered additional areas for SEA status; proposed SEA boundaries based upon biotic evaluation; and proposed guidelines for managing and conserving biological resources within SEAs. After consideration of public and resource agency input, a proposed SEA Map was released for public review as part of the Comprehensive Update and Amendment to the Los Angeles County General Plan (Initial Study) in 2002.

In 2003, based on biological information and public input received, the County released a Draft General Plan policy and map document called Shaping the Future 2025, which included the draft SEA map that reflected changes to the proposed SEAs. The proposed SEAs were refined from 2003 through 2007 based on the SEA criteria, additional field work and literature review, and to address public comments. In 2008, the draft SEA map was released for public review as part of the draft General Plan. In 2010, an expert panel of biologists

was convened to evaluate the SEA boundaries, and additional locations were identified as areas that warranted the SEA designation. Throughout the entirety of the SEA Study and update process, modifications to the proposed boundaries have occurred based on biological information received through multiple public review periods. In 2011, the draft SEA Map was released for public review as part of the Los Angeles County Draft 2035 General Plan.

SEA Current Status

Currently, the County is in the process of updating the SEA designations and policies, including changes to the policies, boundaries and technical descriptions of the County's SEAs. The Project identifies 21 SEAs and 9 Coastal Resource Areas (CRAs)[23,24] that represent the wide-ranging biodiversity of Los Angeles County and contain its most important biological resources. The 21 SEAs and 9 CRAs are recommended to replace the 61 SEAs as designated in the Existing General Plan. Only those areas designated as SEA would be subject to the SEA program, while the CRAs would fall under the regulation of the California Coastal Act. The following provides descriptions of both the existing and proposed SEAs. Figure 5.4-3, *Existing and Proposed Significant Ecological Areas (SEAs)* shows the locations of both the existing and proposed SEAs within Los Angeles County. Additional Figures are provided in Appendix H1 showing the existing and proposed SEAs for each Planning Area.

Criteria for SEA Designation

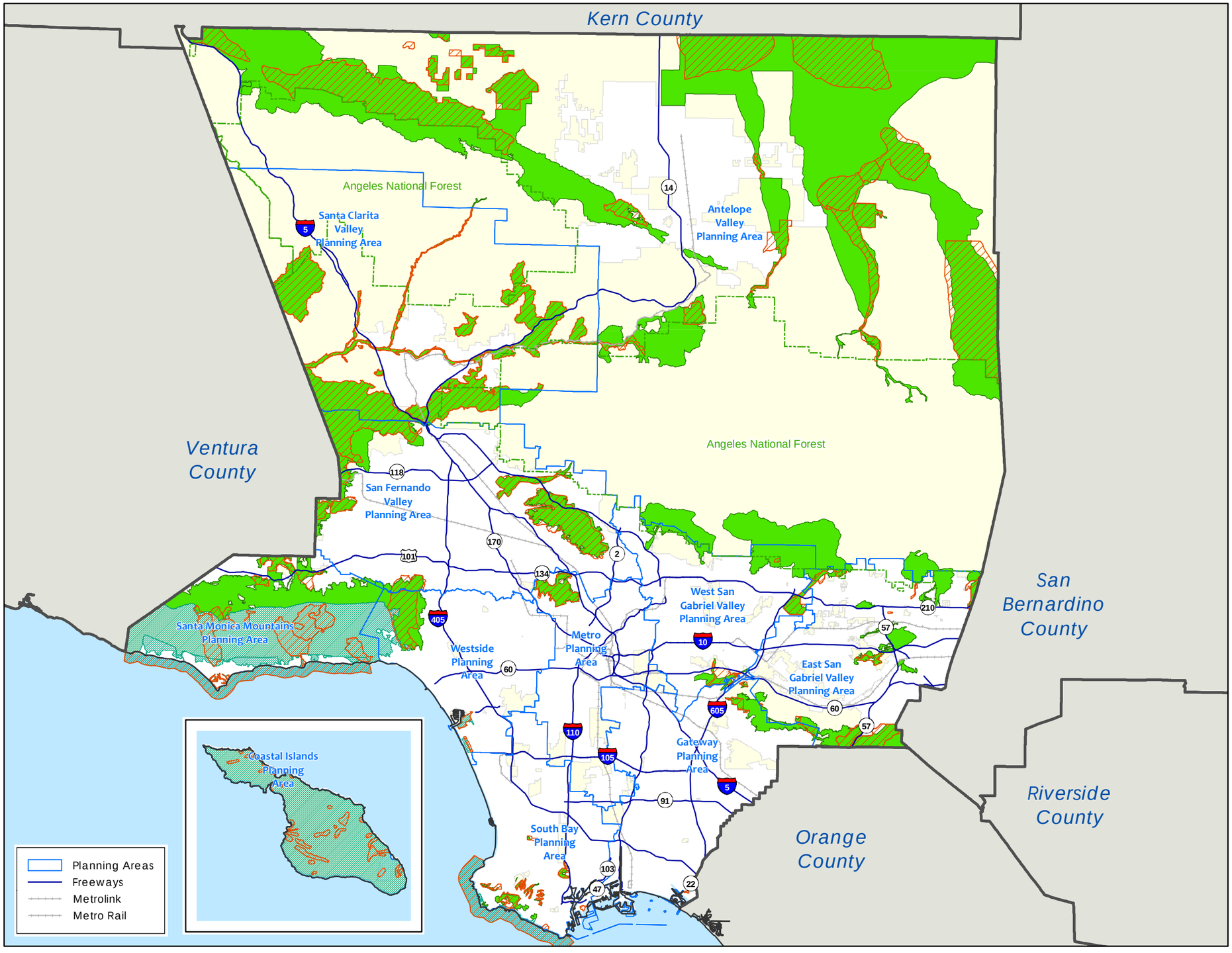
The SEAs were originally designated based on eight criteria set forth in the 1976 Los Angeles County Significant Ecological Area Study.[25] These criteria are as follows:

- **Class 1 -** The habitat of rare, endangered, and threatened plants and animals.
- **Class 2 -** Biotic communities, vegetative associations, and habitats of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.
- **Class 3 -** Biotic communities, vegetative associations, and habitats of plant and animal species that are either one of kind, or are restricted in distribution in Los Angeles County.
- **Class 4 -** Habitat that serves, at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, or migrating grounds, and is limited in availability.
- **Class 5 -** Biotic resources that are of scientific interest because they either are an extreme in physical/geographical limitations, or they represent an unusual variation in a population or community.

[23] It should be noted that because portions of the Santa Monica Mountains SEA and the Palos Verdes Peninsula and Coastline SEA are within the California Coastal Zone, these portions of the SEAs are proposed as Coastal Resource Areas (CRAs). The Draft SEA Ordinance will not apply to CRAs. Although CRAs have equivalent ecological significance to SEAs, the CRAs are within the California Coastal Zone, and the SEA Ordinance is superseded by the California Coastal Act. Santa Catalina Island has an individual California Coastal Commission Local Coastal Program. The Coastal Zone of the Santa Monica Mountains is currently regulated by the Malibu Local Coastal Land Use Plan.
[24] Santa Catalina Island is designated as a CRA only and is not considered a SEA.
[25] England and Nelson Environmental Consultants. 1976. Los Angeles County Significant Ecological Area Study. Prepared for Los Angeles County Department of Regional Planning.

FIGURE 5.4-3

EXISTING AND PROPOSED SIGNIFICANT ECOLOGICAL AREAS (SEAs)



Significant Ecological Area - Proposed

Coastal Resource Area - Proposed

Significant Ecological Area - Existing

Source: Department of Regional Planning, 2014

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- **Class 6 -** Areas important as game habitat or fisheries.

- **Class 7 -** Areas that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.

- **Class 8 -** Special areas (i.e., areas that do not fit the above criteria, but that have some notable biological values or functions [such as a wildlife corridor] and are worthy of inclusion) can also be designated as SEAs.

In 2000 Significant Ecological Area Update Study, the criteria were modified slightly, and have been updated to the following:

- **Criterion A -** The habitat of core populations of endangered or threatened plant or animal species.

- **Criterion B -** On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.

- **Criterion C -** Within Los Angeles County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.

- **Criterion D -** Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in Los Angeles County.

- **Criterion E -** Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.

- **Criterion F -** Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in Los Angeles County.

Existing SEAs

There are 61 existing SEAs and many small SEA areas identified on Santa Catalina Island. Of these, 19 are currently entirely within County jurisdiction (i.e., not within the jurisdiction of cities or U.S. Forest Service [USFS] lands), 22 plus Santa Catalina Island are currently partially within County jurisdiction (i.e., the SEA boundary lies within both an unincorporated area and a city), and 20 are currently not within the unincorporated areas, as summarized in Table 5.4-3, *Summary of Existing SEA Jurisdictions*, below.

Descriptions of each of the 61 existing SEAs that are treated in the revision of the SEA program are included in Appendix H8 of this DEIR.

Table 5.4-3 Summary of Existing SEA Jurisdictions

SEAs Entirely within County Jurisdiction			
4.	Upper La Sierra Canyon	54.	Piute Butte
7.	Hepatic Gulch	55.	Desert Montane Transect
8.	Malibu Creek State Park Buffer Area	57.	Fairmont And Antelope Buttes
9.	Cold Creek	58.	Portal Ridge/Liebre Mountain
43.	Rio Hondo College Wildlife Sanctuary	59.	Tehachapi Foothills
47.	Edwards Air Force Base	60.	Joshua Tree Woodland Habitat
48.	Big Rock Wash	61.	Kentucky Springs
50.	Rosamond Lake	63.	Lyon Canyon
51.	Saddleback Butte State Park	64.	Valley Oaks Savannah, Newhall
53.	Lovejoy Butte		
SEAs Partially within County Jurisdiction			
1.	Malibu Coastline	21.	Santa Susana Pass
3.	Zuma Canyon	23.	Santa Clara River
5.	Malibu Canyon And Lagoon	25.	San Dimas Canyon
6.	Las Virgenes	35.	Harbor Lake Regional Park
10.	Tuna Canyon	42.	Whittier Narrows Dam County Recreation Area
12.	Palo Comado Canyon	44.	Sycamore And Turnbull Canyons
14.	Simi Hills	45.	Dudleya Densiflora Population
15.	Tonner Canyon/Chino Hills	49.	Little Rock Wash
16.	Buzzard Peak/San Jose Hills	52.	Alpine Butte
17.	Powder Canyon/Puente Hills	56.	Ritter Ridge
19.	San Francisquito Canyon		Santa Catalina Island
20.	Santa Susana Mountains		
SEAs Not within County Jurisdiction			
2.	Point Dume	30.	Alamitos Bay
11.	Temescal-Rustic-Sullivan Canyons	31.	Rolling Hills Canyons
13.	Chatsworth Reservoir	32.	Agua Amarga Canyon
18.	Way Hill	33.	Terminal Island
22.	Santa Fe Dam Floodplain	34.	Palos Verdes Peninsula Coastline
24.	Tujunga Valley/Hansen Dam	36.	Madrona Marsh
26.	San Antonio Canyon Mouth	37.	Griffith Park
27.	Portuguese Bend Landslide	39.	Encino Reservoir
28.	El Segundo Dunes	40.	Verdugo Mountains
29.	Ballona Creek	62.	Galium Grande Population

Source: County of Los Angeles

Proposed SEAs

The Proposed Project proposes 21 SEAs and 9 CRAs. Because portions of the Santa Monica Mountains SEA and the Palos Verdes Peninsula and Coastline SEA are within the California Coastal Zone, these portions of the SEAs are proposed as CRAs. As a consequence, the Santa Monica Mountains SEA and the Palos Verdes Peninsula and Coastline SEA are included in both the SEA and CRA total. Santa Catalina Island is here designated as a CRA. The draft SEA Program and ordinance do not include the Santa Catalina Island SEA, which is regulated separately under the Local Coastal Program for the Island. The Island has 34 designated areas that make up the Santa Catalina Island SEA, and projects there are reviewed by SEATAC under the SEA provisions of Zoning Code 22.56.215. The SEA Ordinance, which is part of the Project, will not apply to the other CRAs as they are regulated separately in Chapters 22.44 and 22.46 of Los Angeles County Code. Although CRAs have equivalent ecological significance to SEAs, all CRAs are within the California Coastal Zone, and the SEA Ordinance is superseded by the California Coastal Act. Both Santa Catalina Island and the Coastal Zone of the Santa Monica Mountains have independent Local Coastal Programs, which regulate development within them. Of the proposed SEAs and CRAs, 22 are entirely or partially within the jurisdiction of the County (17 SEAs and 5 CRAs), and 8 are not within County jurisdiction (4 SEAs and 4 CRAs), as summarized in Table 5.4-4, *Proposed SEAs and CRAs*, below, as of the publication of this document.

Descriptions of each of the 28[26] proposed SEAs and CRAs are included in DEIR Appendix H8.

[26] The portions of the Santa Monica Mountains SEA and the Palos Verdes Peninsula and Coastline SEA are within the California Coastal Zone; thus, these portions of the SEAs are considered CRAs. However, only one description is provided for each.

Table 5.4-4 Proposed SEAs and CRAs

Proposed SEAs	Proposed CRAs
Altadena Foothills and Arroyos*	Alamitos Bay+
Antelope Valley*	Ballona Wetlands*+
Cruzan Mesa Vernal Pools*	El Segundo Dunes+
East San Gabriel Valley*	Malibu Coastline*+
Griffith Park+	Palos Verdes Peninsula and Coastline*+
Harbor Lake Regional Park*+	Point Dume+
Joshua Tree Woodlands*	Santa Catalina Island*
Madrona Marsh Preserve +	Santa Monica Mountains*
Palos Verdes Peninsula and Coastline*+	Terminal Island (Pier 400)
Puente Hills*	
Rio Hondo College Wildlife Sanctuary*+	
San Andreas*	
San Dimas Canyon and San Antonio Wash*	
San Gabriel Canyon*	
Santa Clara River*	
Santa Felicia*	
Santa Monica Mountains*	
Santa Susana Mountains and Simi Hills*	
Tujunga Valley and Hansen Dam+	
Valley Oaks Savannah*+	
Verdugo Mountains+	

Source: County of Los Angeles
+ Proposed SEA is the same as or comparable to Existing SEA
* Proposed SEAs entirely or partially within the County's jurisdiction

Wildlife Movement Corridors

Wildlife corridors are areas of habitat, usually linear in nature, that connect two or more habitat patches that would otherwise be fragmented or isolated from one another (e.g., by rugged terrain, changes in vegetation, or human disturbance). Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. A wildlife corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species. Wildlife corridors and landscape linkages are vital in promoting habitat connectivity, facilitating wildlife movement on a regional scale, and sustaining species and wildlife communities through the impacts of climate change.

The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Various studies have concluded that in the absence of habitat linkages that allow movement to adjoining open space areas, some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because barriers of many kinds prohibit the infusion of new individuals and genetic material.[27,28,29,30]

[27] MacArthur, R. M. and E. O. Wilson. 1967. *The Theory of Island Biogeography*. Princeton University Press: Princeton, New Jersey.
[28] Soulé, M. E. 1987. *Viable Populations for Conservation*. Sinaur Associates Inc., Publishers, Sunderland, Massachusetts.

Corridors mitigate the effects of habitat fragmentation by: (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.[31,32,33,34] Wildlife movement activities usually fall into one of three movement categories (though often the motivating needs are a combination of these): (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and, (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). Although the nature of each of these types of movement is species specific, large open spaces will generally support a diverse wildlife community and will provide for all types of movement. Each type of movement may also be represented at a variety of scales in space and time, from generational time scales for immobile plants and small animals with limited home ranges to home ranges of many square-miles for large mammals and raptorial birds.

Los Angeles County Regional Wildlife Linkages

The South Coast Missing Linkages report[35] is the result of a collaborative inter-agency effort to identify missing landscape linkages throughout Southern California that are important to habitat connectivity. In reference to Los Angeles County region, there are five linkages identified by South Coast Wildlands within Los Angeles County and the immediately surrounding areas:

- San Gabriel – Castaic Connection
- San Gabriel – San Bernardino Connection
- Santa Monica – Sierra Madre Connection
- Sierra Madre – Castaic Connection
- Tehachapi Connection

These linkages are described in more detail below with respect to each of the Planning Areas within which the linkages are located. The South Coast Missing Linkages report did not identify any regional wildlife linkages within the Coastal Islands Planning Area, Gateway Planning Area, Metro Planning Area, South Bay Planning Area, West San Gabriel Valley Planning Area, or Westside Planning Area. In addition, based on review of the West Mojave Plan,[36] Puente Hills Habitat Preservation Authority: Resource Management

[29] Harris, L. D. and P. B. Gallagher. 1989. New Initiatives for Wildlife Conservation: The Need for Movement Corridors. Pages 11-34 in G. Mackintosh, ed. *Preserving Communities and Corridors*. Defenders of Wildlife. Washington D.C. 96 pp.
[30] Bennett, A. F. 1990. *Habitat Corridors and the Conservation of Small Mammals in a Fragmented Forest Environment*. Landscape Ecol. 4:109-122.
[31] Noss, R. F. 1983. *A Regional Landscape Approach to Maintain Diversity*. BioScience. 33:700 – 706.
[32] Fahrig, L. and G. Merriam. 1985. *Habitat Patch Connectivity and Population Survival*. Ecology. 66:1762-1768.
[33] Simberloff, D. and J. Cox. 1987. *Consequences and Costs of Conservation Corridors*. Conserv.Biol. 1:63-71.
[34] Harris, L. D. and P. B. Gallagher. 1989. New Initiatives for Wildlife Conservation: The Need for Movement Corridors. Pages 11-34 in G. Mackintosh, ed. *Preserving Communities and Corridors*. Defenders of Wildlife. Washington D.C. 96 pp.
[35] South Coast Wildlands. 2008. *South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion*. South Coast Wildlands, Idyllwild, CA. Available online at: www.scwildlands.org. March 2008.
[36] Bureau of Land Management. 2005. *Final Environmental Impact Report and Statement for the West Mojave Plan.* A Habitat Conservation Plan and California Desert Conservation Area Plan Amendment. Volume 1A. January 2005.

Plan,[37] and the Chino Hills State Park General Plan,[38] an additional linkage in the Antelope Valley Planning Area and one additional linkage in the East San Gabriel Valley Planning Area were identified and included on the linkages map. Figure 5.4-4, *Regional Wildlife Linkages* shows these regional wildlife linkages identified by the South Coast Missing Linkages project and various plans within Los Angeles County.

Other important habitat linkages in Los Angeles County include those along linear topographic features such as principle water courses of the County: the Antelope Wash, Little Rock Creek, Big Rock Creek, San Antonio Canyon, San Gabriel River, Los Angeles River, Santa Clara River, Topanga Canyon, Malibu Canyon, Zuma Canyon, and the Arroyo Sequit; those along the mountain and hilly ranges of the County: the San Gabriel Mountains, of the Transverse Ranges[39], the Tehachapi Mountains, the Santa Susana Mountains, the Simi Hills, the Santa Monica Mountains, the Verdugo Mountains, the San Jose Hills, the Palos Verdes Peninsula, and the Puente Hills; and the linkage along the San Andreas Fault.

The San Andreas Fault linkage transits the County from the far east end to the far west end, and provides linkage between the coastal and desert watersheds. This fault enters Los Angeles County on the east from San Bernardino County high in the San Gabriel Mountains on the east in the community of Wrightwood, descends to near the base of the mountains on the desert side west of Big Pines, and from there runs west near the northern boundary of the San Gabriels to the Gormon area on the far west side of the County at the base of the Tehachapi Mountains. At Gorman the fault continues into Kern County and the South Coast Ranges. The fault zone has numerous water features of springs, marshes, and ponds, which are extremely valuable to wildlife in this arid area. Earthquakes have worked the terrain of the fault valleys so that they are relatively flat compared to the rugged terrain of the mountains, easier to traverse for wildlife and plants. The fault valley provides a rich mosaic of vegetation habitats, valuable to a diverse assemblage of species. Water courses from the fault valleys extend to the Santa Clara River and the Antelope Valley.

Antelope Valley Planning Area

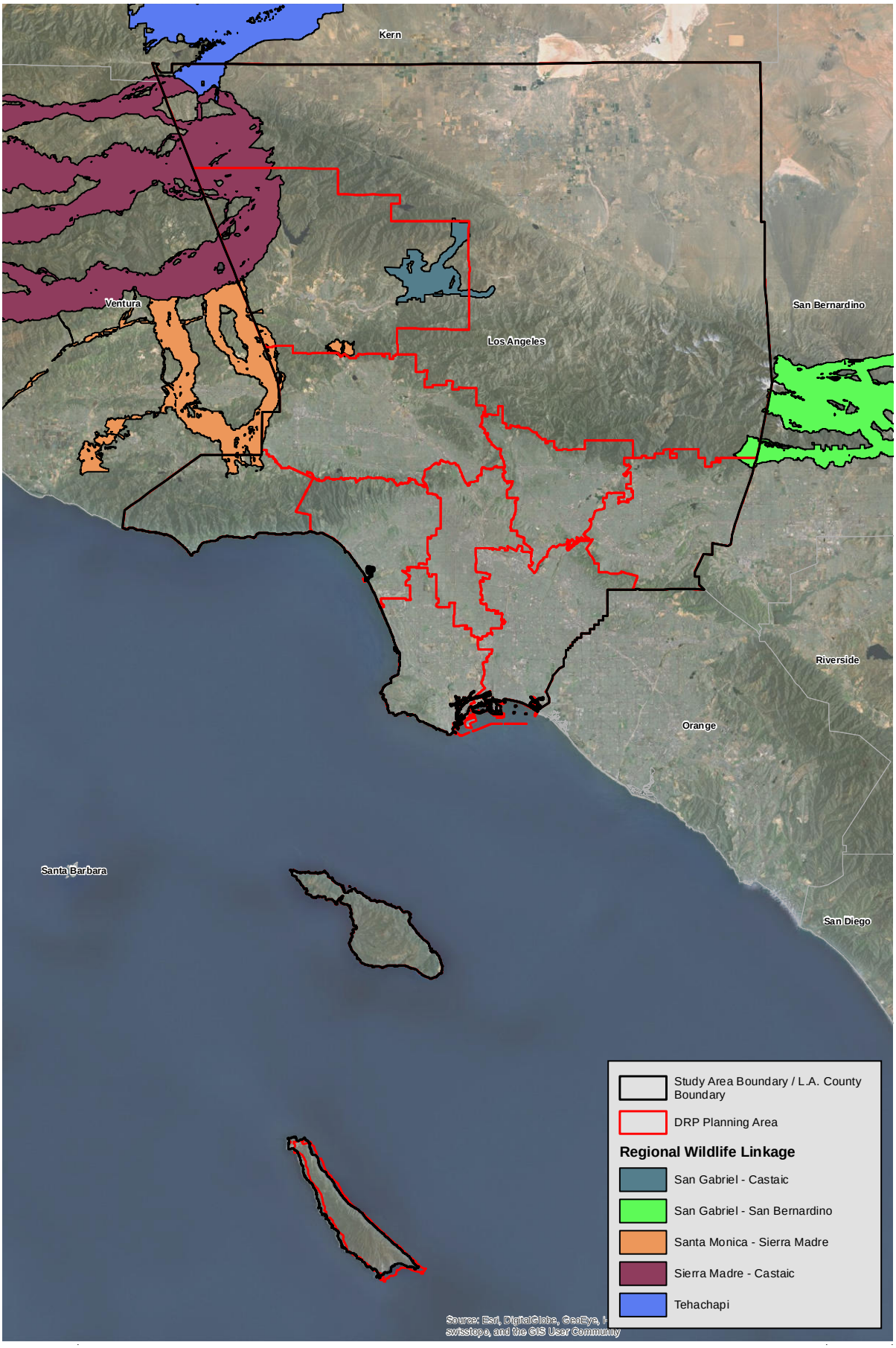
Tehachapi Connection: The southernmost portion of the Tehachapi Connection occurs within the northwestern corner of the Antelope Valley Planning Area. The Tehachapi Mountains are located at the junction of several ecoregions, including the Central Valley, Sierra Nevada Range, South Coast Range, San Gabriel Mountains, and Mojave Desert, and the Tehachapi Connection provides connectivity to open space areas in each ecoregion. The San Andreas Fault runs along the base of the Tehachapi Mountains in their southwest corner.

Sierra Madre – Castaic Connection: The eastern edge of the Sierra Madre – Castaic Connection is located within the northwestern portion of the Antelope Valley Planning Area. This linkage provides a connection between the Los Padres National Forest and the Angeles National Forest.

[37] LSA Associates, Inc. 2007. *Puente Hills Landfill Native Habitat Preservation Authority: Resource Management Plan.* Prepared by LSA Associates, Inc. Submitted to Puente Hills Landfill Native Habitat Preservation Authority. Adopted July 26, 2007.
[38] California State Parks. 1999. *Chino Hills State Park General Plan.* Prepared by the California Department of Parks and Recreation Southern Service Center. February 1999.
[39] The western part of the San Gabriel Mountains has been given various names including "Sierra Pelona," "Liebre Mountains," and "Castaic Ranges." The Transverse Ranges are also referred to as "Sierra Madre".

REGIONAL WILDLIFE LINKAGES

FIGURE 5.4-4



PLACEWORKS

5. Environmental Analysis
BIOLOGICAL RESOURCES

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San Gabriel – Castaic Connection: The San Gabriel – Castaic Connection has fingers extending east into the central portion of the Antelope Valley Planning Area in the San Gabriel Mountains. However, the majority of the linkage is in the Santa Clarita Valley Planning Area, just west of the Antelope Valley Planning Area border in the vicinity of the community of Agua Dulce. This linkage connects the eastern and western parts of the San Gabriel Mountains and the eastern and western sides of the Angeles National Forest across the Santa Clara River Valley in the vicinity of the community of Agua Dulce. The Agua Dulce area of the Santa Clara River watershed is a highly diverse transition zone between coastal and desert ecoregions. This Connection straddles the border between the Antelope Valley Planning Area and the Santa Clarita Valley Planning Area, so that parts of this Connection are in both planning areas.

San Gabriel – San Bernardino Connection: Portions of the western border of the San Gabriel – San Bernardino Connection extend into the boundary of the Antelope Valley Planning Area in the vicinity of San Antonio Canyon. This linkage identifies important montane connections between the Angeles National Forest and the San Bernardino National Forest. Two branches of this Connection extend into the Antelope Valley Planning Area. The first is on the coastal side of the San Gabriel Mountains and foothills near the San Antonio Dam and connects to both the Antelope Valley Planning Area and the East San Gabriel Valley Planning Area. The second branch extends into the Antelope Valley Planning Area north of Baldy Village and extends along the south face of the San Antonio massif as far as the East Fork of the San Gabriel River.

In addition, *Figure 5.4-4, Regional Wildlife Linkages* depicts a north-south linkage in the eastern portion of the Antelope Valley Planning Area. This linkage is identified in the West Mojave Plan consistent with the proposed Antelope Valley SEA boundary and provides a connection of desert habitat linking Rogers Dry Lake and the open space areas of Edwards Air Force Base in the Mojave Desert in the north with the Angeles National Forest areas of the San Gabriel Mountains to the south following Big Rock Wash.

San Andreas Fault: The extent of this fault in Los Angeles County is completely within the Antelope Valley Planning Area.

Additional topographical linear connection linkages in the Antelope Valley Planning Area, proceeding roughly from the north to the south of Los Angeles County, include the part of the Tehachapi Mountains that is in Los Angeles County; Antelope Wash; Little Rock Creek and Wash; Big Rock Creek and Wash (mentioned above); the eastern section of the San Gabriel Mountains and the northern part of the western section; the San Andreas Fault; the upper section of the Santa Clara River and headwaters of some tributaries of the Santa Clara River; Tujunga Canyon, which is a major tributary of the Los Angeles River; the headwaters of the San Gabriel River; and a tributary to the Santa Ana River., the part of San Antonio Canyon in Los Angeles County.

Coastal Islands Planning Area

No regional terrestrial wildlife linkages were identified within the Coastal Islands Planning Area, as these islands are isolated from the Los Angeles County mainland. However, the offshore Channel Islands are important parts of the broad Pacific Flyway, used by many millions of birds in their biannual migrations. The channels between the islands and the California coast are important links in the migration of the gray whale between its calving sites in the lagoons of Baja California and its fattening areas in the Bering Sea. Whales

and less well-known marine animals benefit from seasonal variations in incidence of prey species. Both predators such as flying fishes, yellowfin tuna, and barracuda and their prey migrate into and out of the Southern California Bight. Blue whales also migrate through this region, utilizing seasonally fluctuating prey abundance. The islands are important landfalls as well as endpoints for numerous annual breeding cycles of seabirds. Isolation within the terrestrial habitats of island range is important in maintaining the distinctiveness of the plants and animals that live on the island and that were long ago isolated there by rising sea levels.

East San Gabriel Valley Planning Area

San Gabriel – San Bernardino Connection: A small portion of one of the branches of the San Gabriel – San Bernardino linkage extends into the northeastern corner of the East San Gabriel Valley Planning Area near the San Antonio Dam. The linkage connects across San Antonio Canyon in the San Gabriel Mountains and across Cajon Canyon and the San Andreas Fault to the San Bernardino Mountains. The various branches of the linkage also connect the Angeles National Forest to the San Bernardino National Forest. In addition, Figure 5.4-4, *Regional Wildlife Linkages* depicts a linkage connecting the open space areas within Puente Hills and Chino Hills to the southeast. The importance of this connection is mentioned in the Puente Hills Habitat Preservation Authority: Resource Management Plan and the Chino Hills State Park General Plan. The Wildlife Corridor Conservation Authority (WCCA) was established to provide for the proper planning, conservation, environmental protection, and maintenance of lands within the Puente-Chino Hills corridor area. Its goal is to assure that sufficient continuity of habitat can be preserved to maintain a functioning wildlife corridor made up of about 40,000 acres of land located between the Santa Ana Mountains and Whittier Hills, a part of the Puente Hills.[40] This connection is very important in maintaining the viability of animal and plant populations within the western Puente Hills via genetic exchange with the greater Peninsular Ranges to the east and south. Bird populations such as those of California gnatcatcher and cactus wren also benefit from the connectivity between the Peninsular Ranges and the Transverse Ranges provided by habitat patches within the Puente Hills and elsewhere in the eastern San Gabrial Valley. The connection linkages are through the connecting hills and watercourses across and bordering the Los Angeles Basin, and these are chiefly in the East San Gabriel Valley Planning Area.

Topographical linear connections in the East San Gabriel Valley Planning Area include the San Jose Hills, the Puente Hills, the southern edge of the eastern section of the San Gabriel Mountains, and parts of the San Gabriel River. and its tributaries in the eastern Los Angeles Basin. Most of the watercourses of the San Gabriel River Watershed have concrete linings in this Planning Area, but intermittent natural areas provide stepping stones for wildlife and plants.

Gateway Planning Area

The Gateway Planning Area is an important area on the Pacific Flyway, which has millions of migrating birds passing through twice a year. Several globally Important Bird Areas are identified in this area by the California Audubon because of the importance to migratory birds. Rivers are important to many migrating bird species, and the Gateway Planning Area has extensive reaches on both of the principal rivers of the Los Angeles Basin, the Los Angeles and San Gabriel Rivers, as well as the mouths of both rivers. The estuarine and

[40] http://www.smmc.ca.gov/WCCA.asp

brackish conditions at the river mouths and Los Alamitos embayment and some extent upstream on the rivers are the globally Important Bird Areas.

The Gateway Planning Area additionally has important linkage areas of the Puente Hills, such as part of the Whittier Hills and the Montebello Hills, and it includes part of the connective-crossroads area of the Whittier Narrows.

Metro Planning Area

The Metro Planning Area contains the eastern terminus of the Santa Monica Mountains in Griffith Park, as well as the south face of the eastern reach of the Verdugo Mountains (San Rafael Hills). This part of the Verdugo Mountains is a largely natural area which is not included in any SEA, but which figures importantly in connecting the Altadena Foothills and Arroyos SEA with the Verdugo Mountains SEA. The Metro Planning Area contains a large reach of the Los Angeles River, most of it channelized, but natural habitat has developed in the Glendale Narrows section which lacks a concrete bottom.

San Fernando Valley Planning Area

Santa Monica – Sierra Madre Connection: The eastern border of the Santa Monica – Sierra Madre Connection linkage lies along the western boundary of the San Fernando Valley Planning Area. This linkage connects the coastal Santa Monica Mountains with the inland Santa Susana Mountains and the Sierra Madre Ranges of the Los Padres National Forest. This is one of the most important coastal-to-inland connections within the South Coast Ecoregion. Although not a part of the Santa Monica – Sierra Madre Connection, natural habitat linkages extend from there along the spine of the Santa Susana Mountains to the San Fernando Pass area via bridges and underpasses across I-5 into the triangular area known as the "Newhall Wedge"--the natural area of savannahs, oak woodland, and steep-sided hills between the I-5 and SR-14. Beyond the Newhall Wedge, habitat connectivity extends across SR-14 via underpasses and waterway channels to contact with the eastern part of the San Gabriel Mountains. A lobe of this Connection extends into the San Fernando Valley Planning Area at the I-5/I-14 interchange in the San Fernando Pass.

Topographical linear connections in the San Fernando Valley Planning Area include the adjacent San Gabriel Mountain foothills; the Tujunga Wash; the upland portions of the Los Angeles River including the headwaters in the Simi Hills, much of the River channelized, but not all; the southern side of the Santa Susana Mountains, and the northern side of the Santa Monica Mountains. The Santa Susana Mountains extend into Ventura County and also connect in an eastern direction in Los Angeles County through under- and overpasses across Highways I-5 and SR-14 in the San Fernando Pass area, linking here to the eastern section of the San Gabriel Mountains. The Simi Hills and the Verdugo Mountains are important connective areas for the San Fernando Valley Planning Area.

Griffith Park SEA, the eastern end of the Santa Monica Mountains, is only two miles distant from another urban SEA, the Verdugo Mountains SEA, which is wholly within the San Fernando Valley Planning Area. This gap in connectivity in the San Fernando Valley Planning Area is crossed by the Los Angeles River (in the Metro Planning Area), which has a riparian natural habitat here because the concrete channel has no concrete floor in the Glendale Narrows. Native riparian trees and other native plants are able to grow here, and the

area is naturally restoring itself. This area has great potential for connectivity in providing links to the two mountain ranges and the Los Angeles River.

Santa Clarita Valley Planning Area

Sierra Madre – Castaic Connection: The eastern portion of the Sierra Madre – Castaic Connection linkage is located within the northwestern portion of the Santa Clarita Valley Planning Area. This linkage connects the western extent of the Angeles National Forest with the large open space areas found within the Los Padres National Forest to the west.

Santa Monica – Sierra Madre Connection: The northeastern border of the Santa Monica – Sierra Madre Connection linkage occurs along the southwestern boundary of the Santa Clarita Valley Planning Area. The linkage provides connectivity of the coastal Santa Monica Mountains with the Sierra Madre ranges through connections with the Simi Hills and the Santa Susana Mountains.

San Gabriel – Castaic Connection: The majority of the San Gabriel – Castaic linkage occurs within the eastern portion of the Santa Clarita Valley Planning Area. This linkage provides connection of open space areas across the Santa Clara River Valley and Agua Dulce community, linking the eastern and western sections of the Angeles National Forest and the eastern and western sections of the San Gabriel Mountains.

Topographical linear connections in the Santa Clarita Valley Planning Area include parts of the eastern and western San Gabriel Mountains, a major part of the Santa Clara River, and the northern slopes of the Santa Susana Mountains.

Santa Monica Mountains Planning Area

Santa Monica – Sierra Madre Connection: The southern portion of the Santa Monica – Sierra Madre Connection linkage connects habitat within the Santa Monica Mountains Planning Area to inland areas to the north through the adjacent Simi Hills.

The Point Dume CRA and Malibu Coastline CRAs are connected by the Santa Monica Mountains. These coastal areas are important to migrants on the Pacific Flyway as stopover points, and they are endpoints for some migrants that winter in those areas.

Topographical linear connections in this area include the western part of the Santa Monica Mountains in Los Angeles County and part of the Simi Hills. Numerous drainages connect north-south through the Santa Monicas to the Pacific Ocean in the Santa Monica Bay area, and some of the major ones in Los Angeles County are Topanga Creek, Malibu Creek (which originates in the Simi Hills), Zuma Creek, and the Arroyo Sequit.

South Bay Planning Area

The Harbor Lake Regional Park is a very important stopover point for migrants on the Pacific Flyway. The bird list for this park exceeds 300 species by including migrant non-residents. It has an important variety of habitats including freshwater marsh, freshwater lake, willow forest, vernal pool, and lawns.

The South Bay Planning Area is an important site on the Pacific Flyway. Its beaches, headlands, and marshes are important endpoints and resting areas for the biannual migration of many birds, marine birds as well as inland-breeding birds such as the California Gull and the endangered western snowy plover. A topographical linear connection in the South Bay Planning area is the Palos Verdes Peninsula. Terminal Island SEA is an endpoint for migrations of the least tern, which breeds there, and is probably a stopover point for other migrants.

West San Gabriel Valley Planning Area

Topographical migratory areas include the southern foothills of the eastern San Gabriel Mountains; headwaters of tributaries to both the Los Angeles and San Gabriel Rivers; much of the San Gabriel River, and the east end of the Verdugo Mountains (San Rafael Hills).

Westside Planning Area

At times in the historical and prehistorical past, the Los Angeles River terminated in the Ballona Lagoon and Wetlands area, which is still a good place to see winter migrants. The Westside coastal areas are important sites on the Pacific Flyway and are migrant endpoints for marine and inland birds that spend the winter in the Los Angeles County areas. The Westside Planning Area includes part of the Santa Monica Mountains.

SEAs and Regional Wildlife Linkages

The proposed SEAs play a critical role in identifying important biological resources within Los Angeles County as well as habitat areas that provide linkages and corridors to promote regional species movement within Los Angeles County and to adjacent counties with similar areas of biological importance. Within each planning area, a number of proposed SEAs overlap with Regional Wildlife Linkages and are described below.

Antelope Valley Planning Area

The San Andreas SEA overlaps with the Tehachapi Connection and the northeasternmost portions of the Sierra Madre – Castaic Connection. This proposed SEA includes substantial portions of the San Andreas Fault Zone; most of the Los Angeles County portion of the Tehachapi Mountains; the headwaters of Antelope Wash; part of the San Gabriel Mountains western section; a portion of the headwaters of Piru Creek, the largest tributary of the Santa Clara River; a portion of the headwaters of Castaic Creek, the largest tributary of the Santa Clara River within Los Angeles County; and portions of the headwaters of the Santa Clara River itself.

The Joshua Tree Woodland SEA is chiefly centered around the Antelope Wash in this Planning Area.

A small portion of the Santa Clara River SEA overlaps with the San Gabriel – Castaic Connection. The Santa Clara River itself is a major connective area for the Antelope Valley Planning Area.

The Antelope Valley SEA covers the north-south connection between the San Gabriel Mountains and the Mojave Desert, which provides movement opportunities along the drainages, such as Big Rock Creek, into open area playas in Kern and San Bernardino Counties to the north. This proposed SEA contains a portion of the eastern section of the San Gabriel Mountains in Los Angeles County, most of the drainage of Big

Rock Creek and part of the drainage of Little Rock Creek, and playas on Edwards Air Force Base that are a major stopover on the Pacific Flyway when flooded.

The San Gabriel – San Bernardino Connection overlaps with the San Dimas Canyon and San Antonio Wash SEA in the Antelope Valley Planning Area along its southern branch. This Connection links the San Gabriel Mountains with the San Bernardino Mountains over Cajon Canyon, and links the Angeles National Forest with the San Bernardino National Forest in the vicinity of San Antonio Canyon, among other locations in the eastern San Gabriel Mountains.

In the part of the Antelope Valley Planning Area that extends across the San Gabriels to the south, the Antelope Valley Planning Area includes parts of the SEAs that are located in the coastal foothill area of the Mountains: Altadena Foothills and Arroyos SEA; San Gabriel Canyon SEA, San Dimas and San Antonio Canyons SEA, and the East San Gabriel Valley SEA. This foothill area, influenced by the coastal conditions of the Los Angeles Basin, is a very important connective area for coastal species and migrant species.

Coastal Islands Planning Area

Santa Catalina Island SEA is composed of 34 areas that make up the proposed SEA but regulated as CRA. The island's , isolation and largely natural area is very important in maintaining the genetic identity of endemic plants and animals living on it. The island is a stopover area for birds migrating on the Pacific Flyway and a destination for certain seabirds that breed there and on surrounding islets. The channels between the islands and the California coast are important links in the migration of the gray whale between its calving sites in the lagoons of Baja California and its fattening areas in the Bering Sea. Whales and other marine animals benefit from seasonal variations in incidence of prey species, and predators, such as flying fishes, yellowfin tuna, and barracuda, as well as their prey migrate to and from the waters of the Southern California Bight. Cues used for migration are unknown, but probably importantly include chemicals that can be sensed by smell in the islands' runoff. Control of island runoff and constituents is probably important to preserving the marine migrations.

East San Gabriel Valley Planning Area

The East San Gabriel Valley SEA is nearly all in this Planning Area. (A small northern area is in the Antelope Valley Planning Area.) This proposed SEA includes the following topographic connective areas: part of the foothills of the San Gabriel Mountains, part of the San Jose Hills, and parts of natural areas of tributaries to the San Gabriel River. Some of the smaller hills in the Puente Hills range are in the East San Gabriel Valley SEA. With its southern branch along the coastal foothill area, the San Gabriel – San Bernardino Connection laps into the East San Gabriel Valley SEA in the East San Gabriel Valley Planning Area. This Connection links the San Gabriel Mountains with the San Bernardino Mountains over Cajon Canyon, and links the Angeles National Forest with the San Bernardino National Forest in the vicinity of San Antonio Canyon.

The San Dimas Canyon and San Antonio Wash SEA overlaps with portions of the San Gabriel – San Bernardino Connection within the East San Gabriel Valley Planning Area. These proposed SEAs are significant resource areas on the southern side of the San Gabriel Mountains. The San Dimas Canyon is a tributary of the San Gabriel River; the San Antonio Wash is a tributary of the Santa Ana River.

Critical parts of the Puente Hills SEA are in this Planning Area. The Puente Hills SEA is a regionally important open space that connects the Puente Hills in Los Angeles County with the Chino Hills in Orange County and the Peninsular Ranges of Southern California. Significantly, the East San Gabriel Valley Planning Area extends to the Whittier Narrows part of the Puente Hills SEA where the Puente Hills wildlife movement area intersects with both the Rio Hondo and the San Gabriel River. The Whittier Narrows is a very important connective and crossroads area for the biodiversity of Los Angeles County.

Gateway Planning Area

The Alamitos Bay CRA is in this Planning Area, and is an important area for the Pacific Flyway.

Part of the Puente Hills SEA is in the northern part of this Planning Area, where the Puente Hills SEA disjunctively straddles the Whittier Narrows. This is the area where the San Gabriel River passes through the gap between the Puente Hills and Montebello Hills. (The Montebello Hills are in the Gateway Planning Area.) Whittier Narrows has connection to the Rio Hondo, which flows in part to the Los Angeles River. The San Gabriel River connects the coast with the Puente Hills and beyond with the San Gabriel Mountains. The San Gabriel River and Rio Hondo are important areas for the Pacific Flyway as well as for land-based connectivity.

The Rio Hondo College Wildlife Sanctuary SEA is adjacent to the Puente Hills SEA. It is important as the leading edge next to the gap formed by the San Gabriel River in the Whittier Narrows, and because its natural area is protected. It lies within a very important connective area for the endangered California gnatcatcher populations that reside in the Montebello Hills (western Puente Hills SEA section) and other critical habitat in the eastern section of the Puente Hills SEA. Other species of the Puente Hills also benefit from this linkage.

Metro Planning Area

Griffith Park SEA is the eastern terminus of the Santa Monica Mountains, and is located in the Metro Planning Area. With much urban development interspersed with some natural areas and interruption by two freeways, the Santa Monica Mountains is connective here to the Santa Monica Mountains SEA. Griffith Park SEA is two miles distant from another urban SEA, the Verdugo Mountains SEA that is in the San Fernando Valley Planning Area. This gap in connectivity is crossed by the Los Angeles River, which has a riparian natural habitat in this area because the concrete channel has no concrete floor in the Glendale Narrows. Trees and other native plants are able to grow here, and the area is naturally restoring itself. This area has great potential for connectivity in providing links to the two mountain ranges and the Los Angeles River.

San Fernando Valley Planning Area

Portions of the Santa Susana Mountains and Simi Hills SEA overlap with the Santa Monica – Sierra Madre Connection. A headwaters area of the Los Angeles River is in this proposed SEA. The Santa Susana Mountains and the Simi Hills are in this proposed SEA.

The Tujunga Valley and Hansen Dam SEA is in this Planning Area. This is the principal headwaters area of the Los Angeles River.

The Verdugo Mountains SEA is entirely in the San Fernando Valley Planning Area. The Verdugo Mountains SEA is only 2 miles from the Griffith Park SEA. The eastern side of the Verdugo Mountains (the San Rafael Hills) is not included in the SEA, but this connective area is partly in the San Fernando Valley Planning Area, partly in the West San Gabriel Valley Planning Area, and has a section in the Metro Planning Area. The area east of the Verdugo Mountains SEA tenuously connects across natural areas in the valley of Verdugo Creek, SR-2, the San Rafael Hills, and freeway crossings of the I-210 to the Altadena Foothills and Arroyos SEA. The Verdugo Mountains SEA connects to the north through vegetated areas and a golf course to the Tujunga Wash and Hansen Dam SEA.

Santa Clarita Valley Planning Area

The Cruzan Mesa SEA is in the Santa Clarita Valley Planning Area. This proposed SEA is part of the western section of the San Gabriel Mountains.

The Santa Felicia SEA overlaps with a portion of the Sierra Madre – Castaic Connection, which links habitat to the west in Ventura County. The Santa Felicia Canyon is a tributary of Piru Creek, which drains to the Santa Clara River. The Santa Felicia SEA is part of the western section of the San Gabriel Mountains.

The Santa Susana Mountains and Simi Hills SEA and the Santa Clara River SEA cover the majority of the Santa Monica – Sierra Madre Connection in this Planning Area. The Santa Susana Mountains and the Santa Clara River are important linear topographic connection areas for Los Angeles County.

The portion of the San Gabriel – Castaic Connection within the Santa Clarita Valley Planning Area borders the Agua Dulce Community area and connects across the Santa Clara River Valley for both the western section of the San Gabriel Mountains and the western section of the Angeles National Forest with the eastern sections of the San Gabriel Mountains and the Angeles National Forest.

The Valley Oaks Savannah SEA is in the Santa Clarita Valley Planning Area. It drains through channelization to the Santa Clara River. This proposed SEA is in the foothills on the northern slope of the Santa Susana Mountains.

Santa Monica Mountains Planning Area

The Simi Hills portion of the Santa Monica Mountains SEA covers the southern end of the Santa Monica – Sierra Madre Connection in Los Angeles County. Most of the Connection is in the Santa Monica Mountains North Area Plan area of the Santa Monica Mountains Planning Area. Both the southern part of the Simi Hills and the Santa Monica Mountains are connective topographic areas of this proposed SEA. Malibu Creek is a connective watercourse that originates in the Simi Hills and flows south, draining a large area of the Santa Monica Mountains to the Pacific Ocean.

The western part of the Santa Monica Mountains SEA is in this Planning Area. Connective topographic areas in this Planning Area are the Santa Monica Mountains and the drainages of the Mountains to the Pacific Ocean including the Arroyo Sequit, Zuma Creek, Malibu Creek, and Topanga Creek. In Los Angeles County, drainages from the northern slopes of the Santa Monicas are tributary to the Los Angeles River.

South Bay Planning AreaThe Harbor Lake Regional Park is a very important stopover point for migrants on the Pacific Flyway. The bird list for this park exceeds 300 species by including migrant non-residents. It has an important variety of habitats including freshwater marsh, freshwater lake, willow forest, vernal pool, and lawns. It is a remnant of freshwater marshes that formerly occurred along the north base of the Palos Verde Peninsula extending to the Madrona Marsh SEA, which is also in the South Bay Planning Area.

The Madrona Marsh SEA is an important stopover area for the Pacific Flyway. It is a remnant of freshwater marshes that formerly occurred along the north base of the Palos Verde Peninsula extending to the marsh of the Harbor Lake Regional Park SEA, also in the South Bay Planning Area.

The Palos Verdes Peninsula and Coastline SEA and CRA is a connective linkage for this Planning Area. The Coastline is a connective CRA for the marine and terrestrial sections of the Planning Area. The peninsula has important rest areas for the Pacific Flyway migrants, and is an important landmark for marine migrants.

The Terminal Island SEA is another important point on the Pacific Flyway. The endangered least terns use it for nesting, and other migrant nesting is reported.

West San Gabriel Valley Planning Area

The Altadena Foothills and Arroyos SEA is in this Planning Area and partly in the border area with the Antelope Valley Planning Area, which covers most of the San Gabriel Mountains on the eastern side. The Altadena Foothills SEA is a major connective east-west route along the coastal side of the Mountains. The westernmost section in the Hahamongna Park connects through natural areas and watercourses into the San Rafael Hills and the Verdugo Mountains SEA. The proposed SEA contains drainages that connect to the Los Angeles River and to the San Gabriel River via the Rio Hondo. A connective area for this proposed SEA is the San Rafael Hills. The Hills have a south-facing slope on the border with the Metro planning area, a western border with the San Fernando Valley Planning Area, and an eastern border with the West San Gabriel Valley Planning Area. The San Rafael Hills connect to The Verdugo Moutains SEA, which is in the San Fernando Valley Planning Area.

The San Gabriel Canyon SEA is on the eastern end of this Planning Area. It is an important canyon of the San Gabriel Mountains, and the proposed SEA is located in the area where the San Gabriel River exits from the Mountains onto the plain of the Los Angeles Basin. The River flows south through the Puente Hills SEA in the Whittier Narrows and connects via the Rio Hondo to the Los Angeles River, all within the West San Gabriel Valley Planning Area. The San Gabriel River is envisioned to be the major connection of the Peninsular Ranges through the Puente Hills to the San Gabriel Mountains of the Transverse Ranges. This would be realized through a plan called "the Emerald Necklace," a string of parks and open spaces along the River, which would be in this Planning Area.

Important parts of the Puente Hills SEA are in the southern tip area of the West San Gabriel Valley Planning Area. The Puente Hills wildlife movement area is involved as well as the watercourses of the San Gabriel River and Rio Hondo. These are very important connective routes for Los Angeles County.

West Side Planning Area

The Ballona Wetlands CRA has repeatedly been the terminus for the Los Angeles River previous to channelization in historic and prehistoric times. The River now exits to the ocean in the Gateway Planning Area. In historic times the Ballona Lagoon and wetlands covered about 10 square miles of area, and the remnant Ballona Wetlands and nearby beaches are still a good place to see a variety of migrant birds using the Pacific Flyway. The area that is now Venice Beach formed the seaward sand barrier for the Ballona Wetlands, and this was formerly part of a long dune system that stretched from Santa Monica to Malaga Cove on the Palos Verdes Peninsula. The Ballona Channel, Ballona Lagoon, and Marina del Rey channels are all part of a globally Important Bird Area because of Pacific Flyway use.

The El Segundo Dunes SEA is a reserve area for the endangered El Segundo Blue butterfly. This area is a remnant of the dune system that connected along the strand beaches of Santa Monica Bay from Malibu to the Palos Verdes Peninsula. Many migrant birds still use the strand and dune areas as a stopover or winter endpoint for their migrations.

The eastern side of the Santa Monica Mountains SEA borders the Westside Planning Area in the northwest and extends into the Westside Planning Area.

Jurisdictional Waters and Wetlands

Los Angeles County supports a number of major water bodies (e.g., Castaic Lake, Los Angeles River, San Gabriel River, and Santa Clara River) as well as smaller streams and tributaries throughout the region. These water bodies support riverine and riparian habitat that provide important resources to Los Angeles County.

Three key agencies regulate activities within inland streams, wetlands, and riparian areas in California. The USACE Regulatory Program regulates activities pursuant to Section 404 of the federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act of 1899 (RHA), the CDFW regulates activities under the Fish and Game Code Sections 1600 – 1616, and the RWQCB regulates activities under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act.

USACE jurisdictional waters are referred to as "Waters of the U.S.," the limits of which are generally defined by the ordinary high water mark (OHWM). Although RWQCB jurisdictional resources are considered "waters of the State," the extent of RWQCB jurisdiction generally defaults to USACE jurisdictional guidelines as no formal guidelines for RWQCB jurisdictional determinations currently exist. Isolated drainage features that have been evaluated by the USACE and determined not to support federal "Waters of the U.S." may still be subject to RWQCB and CDFW jurisdiction pursuant to the Porter-Cologne Water Quality Act and the California Fish and Game Code, respectively. The limits of CDFW jurisdictional streambed and associated riparian habitat are generally defined to the top-of-bank of a streambed and extend to include any associated native riparian habitat.

Regulated Trees

The County Oak Tree Ordinance was established to recognize oak trees as significant historical, aesthetic, and ecological resources and provide for their preservation and propagation. The Oak Tree Ordinance regulates any tree of the oak genus within the unincorporated areas that is (a) 25 inches or more in circumference

(8 inches in diameter) (or in the case of an oak with more than one trunk, whose combined circumference of any two trunks is at least 38 inches [12 inches in diameter]) as measured 4.5 feet above mean natural grade (i.e., diameter at breast height [DBH]), or (b) any tree that has been provided as a replacement or mitigation tree. Per the Ordinance, a person shall not cut, destroy, remove, relocate, inflict damage or encroach into a protected zone of any regulated oak tree without first obtaining an oak tree permit.[41]

In addition, to satisfy Public Resources Code Section 21083.4, which provides for the conservation of oak woodland habitats, the County adopted the Los Angeles County Oak Woodlands Conservation Management Plan (OWCMP) in 2012. The OWCMP develops a consistent policy for the management of oak woodlands by providing a voluntary conservation strategy in order to meet the requirements of the California Oak Woodlands Conservation Act (AB 242). The OWCMP extends CEQA consideration of impacts to oak woodlands comprised of oaks greater than 5 inches at DBH within an oak woodland habitat in the unincorporated areas.

5.4.2 Thresholds of Significance

According to Los Angeles County significance thresholds, consistent with and modified from Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

B-1 Development of the Project would impact, either directly or through habitat modifications, species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

B-2 Development of the Project would result in the loss of riparian habitat or sensitive natural communityies identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

B-3 The Project would impact on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

B-4 The Project would affect wildlife movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

B-5 The Project would require compliance with adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state policies or ordinances protecting biological resources.

[41] County of Los Angeles. Oak Tree Ordinance. Section 22.56.2050 et seq.

5.4.3 Relevant General Plan Goals and Policies

Conservation and Natural Resources Element

- **Policy C/NR 3.1:** Conserve and enhance the ecological function of diverse natural habitats and biological resources.

- **Policy C/NR 3.2:** Create and administer innovative County programs incentivizing the permanent dedication of SEAs and other important biological resources as open space areas.

- **Policy C/NR 3.3:** Restore significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function—acknowledging the importance of incrementally restoring ecosystem values when complete restoration is not feasible.

- **Policy C/NR 3.4:** Conserve and sustainably manage the County's forests and woodlands.

- **Policy C/NR 3.5:** Ensure compatibility of development in the National Forests in conjunction with the U.S. Forest Service Land and Resource Management Plan.

- **Policy C/NR 3.6:** Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

- **Policy C/NR 3.7:** Participate in inter-jurisdictional collaborative strategies that protect biological resources.

- **Policy C/NR 3.8:** Discourage development in areas with identified significant biological resources, such as SEAs.

- **Policy C/NR 3.9:** Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:

    - Preservation of biologically valuable habitats, species, wildlife corridors and linkages;

    - Protection of sensitive resources on the site within open space;

    - Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats;

    - Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources onsite);

    - Design required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity;

- Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows on site; and
- Consideration of the continuity of onsite open space with adjacent open space, in project design.

- **Policy C/NR 3.10:** Require environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanently preserve mitigation sites.
- **Policy C/NR 3.11:** Discourage development in riparian habitats, streambeds, and wetlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.
- **Policy C/NR 4.1:** Preserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with no net loss of existing woodlands.

Hillside Management Areas

The Hillside Management Area (HMA) Ordinance applies to all unincorporated areas that contain terrain with a natural slope of 25 percent or greater. The update to the Ordinance is a part of the Proposed Project. The goal of the Ordinance is to ensure that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character. Locating development outside of HMAs to the greatest extent feasible will be the first emphasis of sensitive hillside design. Where avoidance is not feasible, development of HMAs will be located in the lowest and flattest areas of the hillside in order to minimize impacts on steeper hillside areas. Last, development will utilize a variety of sensitive hillside design techniques to ensure compatability with the hillside and enhance community character.

5.4.4 Environmental Impacts

The scope of this assessment is at a programmatic level rather than a project-specific level; thus, this analysis of impacts to biological resources is discussed at a qualitative level. Project-level analyses are not required at this program level; however, development contemplated in the General Plan within the unincorporated areas will require subsequent project-by-project analysis to determine individual projects' impacts to biological resources, significance, any project-specific mitigation, and any subsequent discretionary permits or coordination with resource agencies (e.g., USFWS, USACE, CDFW, RWQCB) that may be required.

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.4-1: Development of the Proposed Project would impact, either directly or through habitat modifications, species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the CDFW or USFWS. [Threshold B-1]

Impact Analysis: Los Angeles County supports at least 159 special-status plant species and 133 special-status wildlife species (refer to Table 5.4-1, *Special-Status Plant Species*. and Table 5.4-2, *Special-Status Wildlife Species*.). The natural communities, as well as somewhat disturbed semi-natural communities, that are found throughout Los Angeles County have the potential to support one or more of these sensitive species.

The Proposed Project would incorporate the proposed SEAs, which are designed to identify Los Angeles County's most sensitive biological resources. In conjunction with the update to the SEA Ordinance, which is part of the Proposed Project, the most sensitive biological resources will be provided a level of protection through the planning process. Future proposed development should be sited and designed to ensure compatibility with the objectives for resource protection within each specific SEA. However, the SEAs do not guarantee preservation, nor do they protect all habitats potentially supporting special-status species. Rather, they are a planning tool to provide a higher level of scrutiny for those areas and resources of greatest biological concern within the County. The proposed SEAs would be implemented with adoption of the Draft SEA Ordinance. The update to the SEA Ordinance would replace the adopted Hillside Management and Significant Ecological Areas Ordinance that was adopted in 1982 (a separate proposed update to the Hillside Management Ordinance is also part of the Proposed Project). Currently, under the adopted Hillside Management and Significant Ecological Areas Ordinance, any development, with the exception of single-family residences and associated accessory uses,[42] on a lot or parcel which is in, or partly in, an area designated as an SEA is subject to the SEA program. However, the update to the SEA Ordinance varies from the existing ordinance in that, under the updated Ordinance, any development located entirely outside the SEA boundaries are exempt from the SEA review process. However, should the proposed development also be located within a designated Hillside Management Area (HMA), discretionary review would be evaluated for conformance with the HMA Ordinance.

The update to the SEA Ordinance incorporates development standards that would reduce potential direct and indirect impacts associated with proposed development. Landscaping standards would prohibit the use of invasive plant species. Outdoor lighting standards would conform to the regulations of the rural outdoor lighting districts. Fencing standards would limit the use of wildlife impermeable designs to developed areas. Fuel modification of habitable structures would limit vegetation removal in dedicated open space areas. Connectivity standards would prohibit the further constriction of wildlife linkages and corridors. Associated with approval of development entitlements within a designated SEA, a development project will be required to provide habitat preservation and opens space dedication in proportion to the area of SEA habitat to be developed and impacted. The updated SEA Ordinance development standards will also provide for preservation and protection of streams, drainages, wetlands and other water features.

Additionally, the Conservation and Natural Resources Element of the Proposed General Plan Update outlines the following policies for the protection of biological resources:

- **Policy C/NR 3.1:** Conserve and enhance the ecological function of diverse natural habitats and biological resources.

- **Policy C/NR 3.2:** Create and administer innovative County programs incentivizing the permanent dedication of SEAs and other important biological resources as open space areas.

[42] There is a unique exception to the single-family residence exemption in the Santa Monica Mountains North Area Plan when a parcel is located in a designated small-lot subdivision.

- **Policy C/NR 3.3:** Restore significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function—acknowledging the importance of incrementally restoring ecosystem values when complete restoration is not feasible.

- **Policy C/NR 3.4:** Conserve and sustainably manage the County's forests and woodlands.

- **Policy C/NR 3.5:** Ensure compatibility of development in the National Forests in conjunction with the U.S. Forest Service Land and Resource Management Plan.

- **Policy C/NR 3.6:** Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

- **Policy C/NR 3.7:** Participate in inter-jurisdictional collaborative strategies that protect biological resources.

- **Policy C/NR 3.8:** Discourage development in areas with identified significant biological resources, such as SEAs.

- **Policy C/NR 3.9:** Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:

  - Preservation of biologically valuable habitats, species, wildlife corridors and linkages;
  - Protection of sensitive resources on the site within open space;
  - Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats;
  - Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources onsite);
  - Design required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity;
  - Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows on site; and
  - Consideration of the continuity of onsite open space with adjacent open space, in project design.

- **Policy C/NR 3.10:** Require environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanently preserve mitigation sites.

- **Policy C/NR 3.11:** Discourage development in riparian habitats, streambeds, and wetlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.

- **Policy C/NR 4.1:** Preserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with no net loss of existing woodlands.

Implementation of all of these policies will have both direct and indirect beneficial effects for special-status species by emphasizing avoidance and minimization of impacts to habitats (e.g., by avoiding the most biologically sensitive areas and concentrating development in previously disturbed areas) and encouraging greater protection for habitat and resources. However, the buildout of the Proposed Project will result in impacts to various habitat types, which will result in the loss of special-status species through direct mortality or via indirect effects (e.g., through wildlife habitat loss and edge effects at the urban-wildland interface). As a consequence, buildout of the Proposed Project will have a significant adverse effect on special-status species.

Mitigation measure BIO–1 would ensure that, on a project-specific level, necessary surveys are conducted and a biological resources assessment is prepared to analyze project-specific impacts and propose appropriate mitigation measures to offset those impacts. Any project within an SEA will be subject to the SEA Program and, depending on the level of impact, review by the County Biologist or the SEA Technical Advisory Committee (SEATAC).[43] SEATAC is an advisory committee to the County Department of Regional Planning, which consists of experts who specialize in various areas of biology in Los Angeles County. SEATAC advises on the adequacy of analyses provide in biological reports; provides recommendations intended to help the applicant avoid, minimize, or mitigate biological impacts; and advises on a project's compatibility with the SEA. Additionally, for federal and state-listed species, consultation with regulatory agencies for compliance with state and federal Endangered Species Acts and species-specific permits and mitigation may be required with the intent that the information provided for the SEA Ordinance can also be used for other regulatory agency review. Furthermore, for waters, wetlands, and riparian habitat under the jurisdiction of the USACE, CDFW, and/or RWQCB, permits and mitigation may be required, subject to the approval of the regulatory agencies.

Mitigation measure BIO–2 would ensure that no direct mortality to special-status species would occur with implementation of construction activities by requiring pre-construction surveys (and construction monitoring where warranted) for special-status species as necessary; thus, with implementation of this mitigation measure, direct impacts to special-status species would be considered less than significant.

Although direct impacts to special-status species would be mitigated, there is no mitigation provided for the indirect impacts to special-status species through the loss of common (i.e., non-sensitive) habitats. Special-status species are dependent on a variety of habitat types (comprised of both common and sensitive habitats), and the conversion of common habitat types with the buildout of the Proposed Project would result in the overall reduction of habitat and resources to support special-status species. Thus, due to the loss of common habitats capable of supporting special-status species and diminished resource availability, impacts to special-status species remain significant at the General Plan level.

The Community Climate Action Plan (CCAP) includes policies that encourage the construction of new alternative renewable energy facilities. CCAP policy BE-4 encourages the implementation of pilot projects for

[43] The SEA Ordinance, Section 22.52.2940 requires all Type B SEA CUP applications to be subject to review by SEATAC. The SEA CUP Type shall be determined by the Director of Planning using the criteria listed in SEA Ordinance Section 22.52.2935.D. In all cases, the Cocunty Staff Biologist will conduct a site review to assess the onsite biological resources.

wind, geothermal, and other forms of alternative renewable energy. Construction of these facilities could potentially impact wildlife habitat. However, this policy would not lead to increased development beyond what is envisioned by the Proposed Project. Therefore, implementation of new alternative renewable energy projects under the CCAP would not result in additional impacts, either directly or indirectly, to candidate, sensitive, or special status species. Therefore the CCAP would not have a additional potentially significant impact on candidate, sensitive, or special status species.

Impact 5.4-2: Development of the Proposed Project would result in the loss of riparian habitat or sensitive natural communities identified in local or regional plans, policies, or regulations or by the CDFW or USFWS. [Threshold B-2]

Impact Analysis:

Los Angeles County supports 24 sensitive plant communities and four aquatic communities as reported in the CNDDB. The 24 terrestrial sensitive plant communities include California walnut woodland, canyon live oak ravine forest, island cherry forest, island ironwood forest, mainland cherry forest, maritime succulent scrub, Mojave riparian forest, open Engelmann oak woodland, Riversidean alluvial fan sage scrub, southern coast live oak riparian forest, southern coastal bluff scrub, southern coastal salt marsh, southern cottonwood willow riparian forest, southern dune scrub, southern foredunes, southern mixed riparian forest, southern riparian forest, southern riparian scrub, southern sycamore alder riparian woodland, southern willow scrub, valley needlegrass grassland, valley oak woodland, walnut forest, and wildflower field. The four aquatic communities include Southern California arroyo chub/Santa Ana sucker stream, Southern California coastal lagoon, Southern California steelhead stream, and Southern California threespine stickleback stream.

The Proposed Project would incorporate the proposed SEAs, which are designed to identify the County's most sensitive biological resources, including riparian habitat and sensitive plant communities. Future proposed development should be sited and designed to ensure consistency with the objectives for resource protection within each specific SEA. However, the SEAs do not guarantee preservation, nor do they protect all riparian habitat and sensitive plant communities found within Los Angeles County.

The update to the SEA Ordinance assigns habitat values to the various habitats contained within the proposed SEAs and requires greater habitat preservation ratios for proposed development within the highest value habitats, especially those associated with riparian communities. The update to the SEA Ordinance includes provisions for habitat preservation to be contiguous with other preserved areas and dedicated as natural open space areas in perpetuity. In a similar manner, the update to the HMA Ordinance is intended to minimize development of the steepest slopes, which often sustain valuable wildlife habitat. The discretionary review process for development entitlements will require compliance with the updates SEA and HMA Ordinances for those projects located such areas.

Additionally, the Conservation and Natural Resources Element of the Proposed General Plan Update outlines the following policies for the protection of riparian habitat and sensitive plant communities:

- **Policy C/NR 3.1:** Conserve and enhance the ecological function of diverse natural habitats and biological resources.

- **Policy C/NR 3.2:** Create and administer innovative County programs incentivizing the permanent dedication of SEAs and other important biological resources as open space areas.

- **Policy C/NR 3.3:** Restore significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function—acknowledging the importance of incrementally restoring ecosystem values when complete restoration is not feasible.

- **Policy C/NR 3.4:** Conserve and sustainably manage forests and woodlands.

- **Policy C/NR 3.6:** Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

- **Policy C/NR 3.7:** Participate in inter-jurisdictional collaborative strategies that protect biological resources.

- **Policy C/NR 3.8:** Discourage development in areas with identified significant biological resources, such as SEAs.

- **Policy C/NR 3.9:** Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:

    - Preservation of biologically valuable habitats, species, wildlife corridors and linkages;

    - Protection of sensitive resources on the site within open space;

    - Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats;

    - Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources onsite);

    - Design required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity;

    - Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows on site; and

    - Consideration of the continuity of onsite open space with adjacent open space, in project design.

- **Policy C/NR 3.10:** Require environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanently preserve mitigation sites.

- **Policy C/NR 3.11:** Discourage development in riparian habitats, streambeds, and wetlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.

- **Policy C/NR 4.1:** Preserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with no net loss of existing woodlands.

Implementation of all of these policies will have both direct and indirect beneficial effects for riparian habitat and sensitive plant communities by avoiding the most biologically sensitive areas, concentrating development in previously disturbed areas, and by emphasizing avoidance, minimization, and mitigation of impacts to habitats.

In addition, as part of the Implementation Programs outlined in the Conservation and Natural Resources Element, the intended programs to help achieve the goals and policies of the Proposed General Plan Update include the SEA Preservation Program, Mitigation Land Banking Program, OWCMP Implementation, Native Woodlands Conservation Management Plan, Habitat Conservation Plan, and Open Space Land Acquisition Strategy (as referenced in Chapter 16: General Plan Implementation Program).

However, the buildout of the Proposed Project will impact various habitat types, including riparian habitat and other sensitive plant communities. Thus, buildout of the Proposed Project will have a significant adverse effect on these resources.

Mitigation measure BIO–1 would ensure that, on a project-specific level, necessary surveys are conducted and a biological resources assessment is prepared to analyze project-specific impacts and propose appropriate mitigation measures to offset those impacts. Any projects within an SEA will be subject to the SEA Program and, depending on the level of impact, review by the County Biologist or the SEATAC. Additionally, for wetlands and riparian habitat under the jurisdiction of the USACE, CDFW, and/or RWQCB, permits and mitigation may be required, subject to the approval of the regulatory agencies. Furthermore, project sites containing plant communities considered sensitive by the CDFW must be analyzed under CEQA and evaluated for impacts to such sensitive resources.

Mitigation measure BIO–3 would ensure that unavoidable impacts to sensitive habitats are mitigated with the environmentally superior mitigation; thus, with implementation of this mitigation measure, impacts to sensitive habitat would be considered less than significant. Additionally, the update to the SEA Ordinance includes development standards that require that high value habitat types that may be impacted by approved development to be preserved at a 3:1 ratio of the same habitat type being developed. In addition, open space shall be provided at a ratio of up to 4:1 where a project will develop 20% or more of the total unincorporated SEA area. Thus, the compensatory provision of preserved habitat and open space for the entitlement approval of development would increase the amount of habitat dedicated as open space in perpetuity.

The Community Climate Action Plan does not include policies that lead to increased development in addition to what is envisioned by the Proposed Project and does not include any policies that would result in additional impacts to riparian habitat or other sensitive natural communities. Therefore the CCAP and would have no additional impact to riparian habitat or other sensitive natural communities.

Direct impacts to sensitive habitats will be compensated; there is feasible mitigation for the loss of or indirect impact to existing sensitive habitats through the implementation of infrastructure improvements for transportation and utilities within Los Angeles County. Conversion of sensitive habitat types with the

buildout of the Proposed Project would result in the reduction of common habitat. However, impacts to riparian habitat and sensitive natural communities would be less than significant at the General Plan level with mitigation.

Impact 5.4-3: The Proposed Project would impact federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. [Threshold B-3]

Impact Analysis: Los Angeles County supports a number of major water bodies (e.g., Castaic Lake, Los Angeles River, San Gabriel River, Santa Clara River) as well as smaller streams and tributaries that support important riverine and riparian habitat, including wetlands. Three key agencies regulate activities within inland streams, wetlands, and riparian areas in California: the USACE, CDFW, and RWQCB. Any project that involves permanently or temporarily impacting jurisdictional waters and/or wetlands through filling, stockpiling, construction access, conversion to a storm drain, channelization, bank stabilization, road or utility line crossings, geotechnical investigations, or any other modifications that involve the discharge of fill and/or alteration of a jurisdictional resource, will likely require permits from the USACE, CDFW, and/or RWQCB, before any land disturbance can commence. Both permanent and temporary impacts are regulated by the resource agencies.

The Proposed Project would incorporate the proposed SEAs, which are designed to identify the Project Area's most sensitive biological resources, inclusive of riparian habitats and wetland areas. Future proposed development should be sited and designed to ensure consistency with the objectives for resource protection within each specific SEA. However, the SEAs do not guarantee preservation, nor do they protect all wetland habitat occurring within Los Angeles County.

The update to the SEA Ordinance contains development standards for wetlands and water resources. Development within an SEA must demonstrate that runoff will not affect wetlands either by increasing or diminishing the supply of the water runoff or by adding pollutants. Additionally, setbacks of a minimum 75 feet from wetlands or water resources are required under the update to the SEA Ordinance to reduce both direct and indirect impacts to the resources.

Development of properties adjacent to riparian communities or other wetland habitats should be designed to protect water quality and the riverine biological ecological functions. It is not currently known where federally protected wetlands are located within Los Angeles County and potential development will be analyzed on a project by project basis. Protection of wetland habitats where they occur through Los Angeles County will assist in the preservation of these resources within Los Angeles County. Best management practices during construction to minimize erosion and sedimentation will contribute to the protection of water quality.

Additionally, the Conservation and Natural Resources Element of the Proposed General Plan Updateoutlines the following policies for the protection of biological resources, including wetlands:

- **Policy C/NR 3.1:** Conserve and enhance the ecological function of diverse natural habitats and biological resources.

- **Policy C/NR 3.2:** Create and administer innovative County programs incentivizing the permanent dedication of SEAs and other important biological resources as open space areas.

- **Policy C/NR 3.3:** Restore significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function—acknowledging the importance of incrementally restoring ecosystem values when complete restoration is not feasible.

- **Policy C/NR 3.4:** Conserve and sustainably manage the County's forests and woodlands.

- **Policy C/NR 3.5:** Ensure compatibility of development in the National Forests in conjunction with the U.S. Forest Service Land and Resource Management Plan.

- **Policy C/NR 3.6:** Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

- **Policy C/NR 3.7:** Participate in inter-jurisdictional collaborative strategies that protect biological resources.

- **Policy C/NR 3.8:** Discourage development in areas with identified significant biological resources, such as SEAs.

- **Policy C/NR 3.9:** Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:

    - Preservation of biologically valuable habitats, species, wildlife corridors and linkages;

    - Protection of sensitive resources on the site within open space;

    - Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats;

    - Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources onsite);

    - Design required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity;

    - Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows on site; and

    - Consideration of the continuity of onsite open space with adjacent open space, in project design.

- **Policy C/NR 3.10:** Require environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanently preserve mitigation sites.

- **Policy C/NR 3.11:** Discourage development in riparian habitats, streambeds, and wetlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.

- **Policy C/NR 4.1:** Preserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with no net loss of existing woodlands.

Implementation of all of these policies will have both direct and indirect beneficial effects for wetlands by avoiding the most biologically sensitive areas, concentrating development in previously disturbed areas, and by emphasizing avoidance, minimization, and mitigation of impacts to wetland areas.

In addition, as part of the Implementation Programs outlined in the Conservation and Natural Resources Element, the intended programs to help achieve the goals and policies of the Proposed General Plan Update include the SEA Preservation Program, Mitigation Land Banking Program, OWCMP Implementation, Native Woodlands Conservation Management Plan, Habitat Conservation Plan, and Open Space Land Acquisition Strategy (as referenced in Chapter 16: General Plan Implementation Program).

However, the buildout of the Proposed Project may impact wetland areas and these impacts may have a significant adverse effect on wetlands through hydromodification, filling, diversion or change in water quality.

Mitigation measure BIO–1 would ensure that, on a project-specific level, necessary surveys are conducted and a biological resources assessment is prepared to analyze project-specific impacts and propose appropriate mitigation measures to offset those impacts. These surveys will allow the County to monitor and inventory wetlands within Los Angeles County. Any projects within a SEA will be subject to the SEA program and reviewed by the County Biologist or SEATAC. In addition, for wetlands under the jurisdiction of the USACE, CDFW, and/or RWQCB, as well as waters and riparian habitat under their respective jurisdictions, permits and mitigation may be required, subject to the approval of the regulatory agencies. Furthermore, project locations with plant communities considered sensitive by the CDFW must be analyzed under CEQA. Thus, with implementation of these mitigation measures in combination with the requirements for regulatory permitting (e.g., Section 404 permitting and any associated mitigation requirements), impacts to wetlands would be considered less than significant.

The Community Climate Action Plan includes policies that encourage the construction of new alternative renewable energy facilities. CCAP policy BE-4 encourages the implementation of pilot projects for wind, geothermal, and other forms of alternative renewable energy. Construction of these facilities could potentially impact wetlands. However, this policy would not lead to increased development beyond what is envisioned by the Proposed Project. However, renewable energy projects affecting jurisdictional wetlands are subject to State and federal laws requiring consultation with the U.S. Army Corps of Engineers and compliance with the Clean Water Act. Implementation of the riparian and wetland protection policies would protect and preserve federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, etc.). Consequently, CCAP impacts are considered less than significant.

Impact 5.4-4: The Proposed Project would affect wildlife movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. [Threshold B-4]

Impact Analysis:

As discussed above, Los Angeles County supports seven regional wildlife linkages: San Gabriel – Castaic Connection, San Gabriel – San Bernardino Connection, Santa Monica – Sierra Madre Connection, Sierra Madre – Castaic Connection, Tehachapi Connection, Antelope Valley Connection, and the Puente Hills – Chino Hills Connection. There are 11 linkages along principal water courses, 9 linkages along ranges of mountains and hills, and an important linkage along the San Andreas Fault.

All of these regional wildlife linkages are at least partially within one or more SEA. The Proposed Project would incorporate the updated SEA boundaries, which are designed to identify Los Angeles County's most sensitive biological resources as well as provide linkages and corridors to promote regional species movement. Connectivity between biological resources was a basic foundation for the updated SEA boundaries. However, the SEAs do not guarantee preservation, and future proposed development should be sited and designed to ensure compatibility with the objectives for resource protection within each specific SEA.

The update to the SEA Ordinance development standards include provision for connectivity areas to be maintained through project design such that linkages and corridors will not be narrowed to less than 1,000 feet in width or less than 200 feet in constriction areas.

Additionally, the Conservation and Natural Resources Element of the Proposed General Plan Update outlines the following policies for the protection of biological resources:

- **Policy C/NR 3.1:** Conserve and enhance the ecological function of diverse natural habitats and biological resources.
- **Policy C/NR 3.2:** Create and administer innovative County programs incentivizing the permanent dedication of SEAs and other important biological resources as open space areas.
- **Policy C/NR 3.3:** Restore significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function—acknowledging the importance of incrementally restoring ecosystem values when complete restoration is not feasible.
- **Policy C/NR 3.4:** Conserve and sustainably manage the County's forests and woodlands.
- **Policy C/NR 3.5:** Ensure compatibility of development in the National Forests in conjunction with the U.S. Forest Service Land and Resource Management Plan.
- **Policy C/NR 3.6:** Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

- **Policy C/NR 3.7:** Participate in inter-jurisdictional collaborative strategies that protect biological resources.

- **Policy C/NR 3.8:** Discourage development in areas with identified significant biological resources, such as SEAs.

- **Policy C/NR 3.9:** Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:

  - Preservation of biologically valuable habitats, species, wildlife corridors and linkages;
  - Protection of sensitive resources on the site within open space;
  - Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats;
  - Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources onsite);
  - Design required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity;
  - Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows on site; and
  - Consideration of the continuity of onsite open space with adjacent open space, in project design.

- **Policy C/NR 3.10:** Require environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanently preserve mitigation sites.

- **Policy C/NR 3.11:** Discourage development in riparian habitats, streambeds, and wetlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.

Implementation of all of these policies will have both direct and indirect beneficial effects for protecting regional wildlife linkages and facilitating wildlife movement by avoiding the most biologically sensitive areas and concentrating development in previously disturbed areas.

However, the buildout of the Proposed Project will impact regional wildlife linkages and may impact nursery sites. Thus, buildout of the Proposed Project will have a significant adverse effect on wildlife movement and nursery sites.

Mitigation measure BIO–1 would ensure that, on a project-specific level, a biological resources assessment is prepared to analyze project-specific impacts, including impacts to wildlife movement and nursery sites, and propose appropriate mitigation measures to offset those impacts. Alternatively, non-discretionary projects would be subject to compliance with SEA development standards and review by the County Biologist. Such surveys will provide the County with the ability to monitor potential reductions in connectivity between core

habitats. Any projects within an SEA will be subject to the SEA program and, depending upon the level of impact, review by the County Biologist or SEATAC.

Mitigation measure BIO–1 and the update to the SEA Ordinance may provide some protection measures to avoid or minimize impacts to wildlife corridors and nursery sites; however, for those projects where avoidance or minimization of impacts is infeasible, the policies proposed in the Proposed Project do not provide for mitigation for loss of wildlife movement opportunities or nursery sites. If development impacts regional wildlife linkages and impedes wildlife movement, connectivity will be lost on a regional scale in these vital landscape corridors and linkages. Thus, impacts to wildlife movement remain significant at the General Plan level.

The Community Climate Action Plan includes policies that may lead to increased alternative renewable energy development, but not beyond what is envisioned by the Proposed Project. Therefore, alternative renewable energy projects implemented under the CCAP would not conflict with local policies or ordinances protecting biological resources, which would be considered potentially significant.

Impact 5.4-5: The Proposed Project would require compliance with adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state policies or ordinances protecting biological resources. [Thresholds B-5]

Impact Analysis:

The Oak Tree Ordinance regulates oak trees of 25 inches or more in circumference (8 inches in diameter), or in the case of an oak with more than one trunk, whose combined circumference of any two trunks is at least 38 inches (12 inches in diameter) DBH. An oak tree permit must be obtained in order to cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any regulated oak tree. Additionally, the County adopted the Oak Woodlands Conservation Management Plan (OWCMP) in 2012, which develops a consistent policy for the management of oak woodlands. The OWCMP extends CEQA consideration of impacts to oak woodlands comprised of oaks 5 inches or larger in DBH.

In 2012, the County adopted the Los Angeles County Oak Woodlands Conservation Management Plan to encourage the preservation of oak woodlands through Los Angeles County. It is the intent of the County to maintain and expand the oak woodland habitat by requiring development designs to avoid impacts to oak woodlands and require appropriate compensatory mitigation where oak woodland impacts disturb or remove such habitat.

In addition, the County has recently finished an Oak Woodlands Conversation Management Plan Guide, which details the process by which the County will determine the extent of oak woodland habitat, the requirement for the preparation of an oak woodland report, an analysis of impacts to the extant oak woodland and the need for mitigation for impacts to the oak woodland habitat. This discretionary review by the County will be in compliance with CEQA.

The Proposed Project will incorporate the proposed SEAs, which are designed to identify the County's most sensitive biological resources, including oak trees and oak woodlands. Additionally, the Conservation and

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BIOLOGICAL RESOURCES

Natural Resources Element of the Proposed General Plan Update outlines the following policies for the protection of biological resources:

- **Policy C/NR 3.1:** Conserve and enhance the ecological function of diverse natural habitats and biological resources.
- **Policy C/NR 3.2:** Create and administer innovative County programs incentivizing the permanent dedication of SEAs and other important biological resources as open space areas.
- **Policy C/NR 3.4:** Conserve and sustainably manage the County's forests and woodlands.
- **Policy C/NR 3.5:** Ensure compatibility of development in the National Forests in conjunction with the U.S. Forest Service Land and Resource Management Plan.
- **Policy C/NR 3.8:** Discourage development in areas with identified significant biological resources, such as SEAs.
- **Policy C/NR 4.1:** Preserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with no net loss of existing woodlands.

The buildout of the Proposed Project will impact oak trees and oak woodlands. However, the County Oak Tree Ordinance and OWCMP are applied on a project-specific level and consistency with these plans will be determined on a project-by-project basis. The policies of the Proposed Project support the conservation of oak trees and oak woodlands and do not conflict with the County Oak Tree Ordinance or OWCMP.

As detailed in the Conservation and Natural Resources Element of the Proposed General Plan Update, Los Angeles County's coastal zone contains valuable biological resources, including San Clemente Island, Santa Catalina Island, Marina del Rey, Ballona Wetlands and the Santa Monica Mountains. The study and management of these resource areas is more rigorous than other areas in Los Angeles County, and any land disturbance is regulated through coastal land use plans and local coastal programs (LCPs), in compliance with the California Coastal Act. Biological resource management and regulation within these areas are implemented through the Marina del Rey LCP, Santa Catalina Island LCP and the Malibu Local Coastal Land Use Plan. Island resources, such as SEAs, are identified in the LCP and are subject to restrictive development regulations. Any changes to the SEA boundaries or associated regulations require an amendment to the LCP and certification by the California Coastal Commission. Finally, resources within San Clemente Island and the Ballona Wetlands are managed by the U.S. Navy and California Department of Parks and Recreation, respectively. The policies of the Proposed General Plan Update do not conflict with these goals and policies of these plans and LCPs.

The West Mojave Plan (WEMO) is an HCP that encompasses most of California's western Mojave Desert and was adopted by the BLM in 2006. Portions of Los Angeles County are located within the WEMO. However, the plan applies only to BLM public lands, as other agencies did not adopt the habitat conservation plan proposed in the West Mojave Plan to cover their jurisdictions. Therefore, the plan provisions have not been adopted by the County.

The Desert Renewable Energy Conservation Plan (DRECP) is a proposed NCCP, HCP, and Land Use Plan Amendment for the Mojave and Colorado deserts, including portions of Los Angeles County. As a part of California's renewable energy planning efforts, the DRECP is intended to provide effective protection and conservation for desert ecosystems by providing binding, long-term endangered species permit assurances and to facilitate the review and approval of compatible renewable energy projects. The DRECP will include implementation of a scientifically based adaptive management and monitoring program as a part of its overall conservation strategy. However, the DRECP is still in draft form and has not been formally adopted.

The County Hillside Management Area (HMA) Ordinance applies to all unincorporated areas that contain Hillside Management Areas, which includes terrain with a natural slope of 25 percent or greater. The goal of the ordinance is to ensure that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character. The buildout of the Proposed Project will impact hillsides; however, the HMA Ordinance is applied on a project-specific level and consistency with these plans will be determined on a project-by-project basis. The policies of the Proposed Project are implemented through the updates to the HMA Ordinance, which is part of the Proposed Project.

The Community Climate Action Plan includes policies that may lead to increased alternative renewable energy development, but not beyond what is envisioned by the Proposed Project. CCAP policy LC-4 encourages the protection of existing land conservation areas. Therefore, the CCAP would not conflict with local policies or ordinances protecting biological resources, and the CCAP impacts are less than significant.

5.4.5 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project. CEQA deems a cumulative impact analysis to be adequate if a list of "related projects" is included in the EIR or the proposed project is consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(b)(1)(B)]. CEQA also states that no further cumulative impact analysis is necessary for impacts of a proposed project consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(d)].

For the purposes of this analysis, the cumulative impacts study area extends beyond the boundaries of Los Angeles County into the adjacent Tehachapi Mountains and Mojave Desert within Kern County to the north, the Mojave Desert and San Bernardino National Forest within San Bernardino County to the east, the Cleveland National Forest within Orange and Riverside Counties to the southeast, and Santa Monica Mountains and Los Padres National Forest within Ventura County to the west. It should also be noted that large-scale, regional HCPs, NCCPs, and local plans occur within the cumulative impacts study area, including the West Mojave Plan, the draft DRECP, the Central/Coastal NCCP within Orange County, Western Riverside County Multispecies Habitat Conservation Plan, and Land Management Plans for the Southern California National Forests (i.e., Angeles, Cleveland, Los Padres, and San Bernardino National Forests).

Although any direct impacts to special-status species and the loss of sensitive habitats would be mitigated, due to the loss of common habitats and diminished resource availability, impacts to special-status species remain significant at the General Plan level. It is presumed that direct impacts to special-status species and the loss of sensitive habitats would be similarly mitigated in other regions of the cumulative impacts study area. However, for the same reasons as analyzed at the General Plan level (i.e., loss of common habitats and diminished resource availability), cumulative impacts to special-status species would be cumulatively significant.

For impacts to riparian habitat and sensitive plant communities, mitigation would ensure that unavoidable impacts to sensitive habitat are mitigated 'in-kind'; thus, impacts to sensitive habitat would be considered less than significant. Additionally, wetlands and riparian habitat under the jurisdiction of the USACE, CDFW, and/or RWQCB are subject to permits and mitigation that may be required by the regulatory agencies. Furthermore, plant communities considered sensitive by the CDFW must be analyzed under CEQA. Presuming that impacts to riparian habitat and sensitive plant communities would be similarly mitigated in other regions of the cumulative impacts study area, cumulative impacts would be less than significant.

For impacts to wetlands, mitigation would ensure that unavoidable impacts to wetlands are mitigated with environmentally superior mitigation; thus, impacts to wetlands would be considered less than significant. Additionally, wetlands under the jurisdiction of the USACE, CDFW, and/or RWQCB are subject to permits and mitigation that may be required by the regulatory agencies. Furthermore, plant communities considered sensitive by the CDFW must be analyzed under CEQA. Presuming that impacts to wetlands would be similarly mitigated in other regions of the cumulative impacts study area, cumulative impacts would be less than significant.

For those projects where avoidance or minimization of impacts to wildlife movement corridors is infeasible, the policies proposed in the Proposed Project do not provide for mitigation for loss of wildlife movement opportunities or nursery sites. If development impacts regional wildlife linkages and impedes wildlife movement, impacts to wildlife movement would remain significant at the General Plan level. Similarly, it is presumed that cumulative impacts to wildlife movement would be cumulatively significant. Although there are studies, such as South Coast Missing Linkages,[44] which document important landscape linkages to facilitate wildlife movement throughout Southern California, there are few assurances or mitigation requirements to protect these areas, which may include broad areas that may cross the jurisdictions of multiple cities and counties and can be a mosaic of various public and private land ownership.

The policies of the Proposed Project do not conflict with local ordinances, LCPs, HCPs, or NCCPs, nor would it conflict on a cumulative level. Rather, the Proposed Project's policies are compatible with many of the goals and policies of other conservation plans within the cumulative study area.

[44] South Coast Wildlands. 2008. *South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion*. South Coast Wildlands, Idyllwild, CA. Available online at: www.scwildlands.org. March 2008.

5.4.6 Existing Regulations and Standard Conditions

Federal

- Federal Endangered Species Act
- Migratory Bird Treaty Act
- Federal Clean Water Act, Section 404
- Federal Clean Water Act, Section 401

State

- West Mojave Plan
- Desert Renewable Energy Conservation Plan
- California Endangered Species Act
- State of California Fish and Game Code, Sections 3503/3503.5/3511/3513
- State of California Fish and Game Code, Section 1602
- State of California Porter-Cologne Water Quality Control Act

5.4.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impact would be less than significant: 5.4–3, 5.4-5.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.4-1** Impacts to special-status species remain significant at the General Plan level due to the loss of common habitats and diminished resource availability.
- **Impact 5.4-2** Impacts to riparian habitat and sensitive plant communities.
- **Impact 5.4-3** Impacts to riparian habitat and wetlands.
- **Impact 5.4-4** Impacts to wildlife movement.

5.4.8 Mitigation Measures

Mitigation measures are recommended for those impacts to sensitive biological resources that are determined to be significant. Mitigation measures for impacts considered to be "significant" were developed in an effort to reduce such impacts to a level of "less than significant," while at the same time allowing the individual projects an opportunity to realize development goals. As stated in State CEQA Guidelines Section 15370, mitigation includes:

1. Avoiding the impact altogether by not taking a certain action or parts of an action.

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

3. Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

5. Compensating for the impact by replacing or providing substitute resources or environments.

The update to the SEA Ordinance endeavors to minimize potential conflicts between conservation and development within the SEAs by identifying and assessing the biological resources and potential impacts to such resources posed by development and through the use of environmentally sensitive development standards and design. Non-discretionary development such as individual single-family residences and associated accessory structures, including all related development will be subject to these development standards during the project entitlement process. Avoidance of development impacts to biological resources by locating development entirely within Developed Areas depicted on the SEA Development Map, while complying with the development standards, will minimize the significance of impacts to these resources.

The proposed SEA development standards include landscaping exclusion of invasive plant species, restricting outdoor lighting to areas proposed to be developed, fencing within an SEA shall be constructed with materials that are not harmful to wildlife, brush clearance sharing with fuel modification areas of those already cleared for existing structures and infrastructure, placing structures and infrastructure a minimum of 50 feet from the dripline of any mature tree on the Tree Species List provided in the SEA Program Guide, limiting runoff caused by the development to neither increase nor diminish the supply of the water resources, setting back development from identified water resources, and provision of Habitat Preservation Areas situated contiguous to existing SEA Habitats through use of a record covenant and conserved as natural open space in perpetuity. Combined with the mitigation measures identified below, the SEA development standards will reduce Proposed Project impacts to less than significant with the exception of impacts to the special-status species and wildlife movement.

Impact 5.4-1, 5.4–2, and 5.4-3

BIO–1 Biological resources shall be analyzed on a project-specific level by a qualified biological consultant. A general survey shall be conducted to characterize the project site, and focused surveys should be conducted as necessary to determine the presence/absence of special-status species (e.g., focused sensitive plant or wildlife surveys). A biological resources assessment report shall be prepared to characterize the biological resources on-site, analyze project-specific impacts to biological resources, and propose appropriate mitigation measures to offset those impacts. The report shall include site location, literature sources, methodology, timing of surveys, vegetation map, site photographs, and descriptions of biological resources on-site (e.g., observed and detected species as well as an analysis of those species with potential to occur onsite).

BIO–2 If there is potential for direct impacts to special-status species with implementation of construction activities, the project-specific biological resources assessment report (as

mentioned in Mitigation Measure BIO–1) shall include mitigation measures requiring pre-construction surveys for special-status species and/or construction monitoring to ensure avoidance, relocation, or safe escape of special-status species from the construction activities, as appropriate. If special-status species are found to be nesting, brooding, denning, etc. on-site during the pre-construction survey or monitoring, construction activity shall be halted until offspring are weaned, fledged, etc. and are able to escape the site or be safely relocated to appropriate offsite habitat areas. Relocations into areas of appropriate restored habitat would have the best chance of replacing/incrementing populations that are lost due to habitat converted to development. Relocation to restored habitat areas should be the preferred goal of this measure. A qualified biologist shall be on site to conduct surveys, to perform or oversee implementation of protective measures, and to determine when construction activity may resume.

Impact 5.4-4

BIO–3: No feasible mitigation measures are available that would reduce impacts to wildlife movement completely. However, corridors shall not be entirely closed by any development, and partial mitigation shall be mandatory for impact on wildlife corridors and wildlife nursery sites. This shall include provision of a minimum of half the corridor width. (The width shall be at least what is needed to remain connective for the top predators using the corridor.) Mitigation can include preservation by deed in perpetuity of other parts of the wildlife corridor connecting through the development area; it can include native landscaping to provide cover on the corridor. For nursery site impacts, mitigation shall include preservation by deed in perpetuity for another comparable nursery site of the same species.

5.4.9 Level of Significance After Mitigation

Impact 5.4-1 and 5.4–2

Development of the Proposed Project would impact, either directly or through habitat modifications, species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the CDFW or USFWS.

Although direct impacts to special-status species would be mitigated, there is no mitigation provided for the indirect impacts to special-status species through the loss of common (i.e., non-sensitive) habitats. Special-status species are dependent on a variety of habitat types (comprised of both common and sensitive habitats), and the conversion of common habitat types with the buildout of the Project would result in the overall reduction of habitat and resources to support special-status species. Thus, due to the loss of common habitats capable of supporting special-status species and diminished resource availability, impacts to special-status species and associated habitat remain significant and unavoidable at the general plan level.

Impact 5.4-3

The mitigation measures identified above and existing regulatory programs would reduce potential impacts associated with biological resources to a level that is less than significant for riparian habitat and wetlands. Therefore, no significant unavoidable adverse impacts relating to these biological resources remain.

Impact 5.4-4

The Proposed Project would affect wildlife movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Implementation of the Proposed Project will have both direct and indirect beneficial effects for protecting regional wildlife linkages and facilitating wildlife movement by avoiding the most biologically sensitive areas and concentrating development in previously disturbed areas. However, buildout of the Project will impact regional wildlife linkages and may impact nursery sites. Thus, buildout of the Project will have a significant adverse effect on wildlife movement and nursery sites.

5.4.10 References

Bureau of Land Management. 2005, January.Final Environmental Impact Report and Statement for the West Mojave Plan.

California Department of Fish and Wildlife. 2014, February. California Natural Diversity Database (available by subscription) and Rarefind. http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi.

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England and Nelson Environmental Consultants. 1976. Los Angeles County Significant Ecological Area Study.

PCR Services Corporation. 2000, November. Los Angeles County Significant Ecological Area Update Study.

South Coast Wildlands. 2008. South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion. www.scwildlands.org/reports/SCMLRegionalReport.pdf.

5.5 CULTURAL RESOURCES

Cultural resources include places, objects, and settlements that reflect group or individual religious, archaeological, architectural, or paleontological activities. Such resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Proposed Project to impact cultural resources in the unincorporated areas of Los Angeles County (Project Area). The analysis in this section is based, in part, upon information in the following report:

- *Cultural Resources Technical Report for the County of Los Angeles General Plan Environmental Impact Report,* Sapphos Environmental, Inc., December 30, 2009

A complete copy of this study is included as Appendix I to this DEIR.

In addition, historical and chronological information on prehistoric periods, Native American habitation in the region, and later settlements were compiled from Los Angeles County records, the 2014 Los Angeles County General Plan Public Review Draft, and the *Los Angeles Almanac*.

5.5.1 Environmental Setting

5.5.1.1 REGULATORY BACKGROUND

Federal and state regulations, plans, or guidelines that are potentially applicable to the Proposed Project are summarized below:

Federal Regulations

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites that are on federal lands and Native American lands.

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) authorized the National Register of Historic Places (NRHP) and coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The NRHP includes districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Section 106 (Protection of Historic Properties) of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. Section 106 Review refers to the federal review process that is designed to ensure that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, which is an independent federal agency, administers the review process with assistance from State Historic Preservation Offices.

National Register of Historic Places

Developed in 1981, the National Register of Historic Places (NRHP) is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance that have been documented and evaluated according to uniform standards and criteria. Authorized under the NHPA, the NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archeological resources. The NRHP is administered by the National Park Service, which is part of the U.S. Department of the Interior.

To be eligible for listing in the NRHP, a resource must meet at least one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of our history.
- Is associated with the lives of persons significant in our past.
- Embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.
- Has yielded, or may be likely to yield, information important in history or prehistory.

Ordinarily cemeteries, birthplaces, or graves of historic figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, and properties that are primarily commemorative in nature are not considered eligible for the NRHP, unless they satisfy certain conditions. In general, a resource must be 50 years old to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

National Historic Landmarks

The National Historic Landmarks Program, developed in 1982, identifies and designates National Historic Landmarks and encourages the long-range preservation of nationally significant properties that illustrate or commemorate the history and prehistory of the United States. National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Today, fewer than 2,500 historic places bear this national distinction.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony, to lineal descendants and culturally affiliated Native American tribes.

Secretary of the Interior's Standards for the Treatment of Historic Properties

Evolving from the *Secretary of the Interior's Standards for Historic Preservation Projects with Guidelines for Applying the Standards* that were developed in 1976, the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* was published in 1995 and codified as 36 CFR 67. Neither technical nor prescriptive, these standards are "intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources." Preservation acknowledges a resource as a document of its history over time and emphasizes stabilization, maintenance, and repair of existing historic fabric. Rehabilitation not only incorporates the retention of features that convey historic character, but also accommodates alterations and additions to facilitate continuing or new uses. Restoration involves the retention and replacement of features from a specific period of significance. Reconstruction, the least used treatment, provides a basis for recreating a missing resource. These standards have been adopted, or are used informally, by many agencies at all levels of government to review projects that affect historic resources.

Omnibus Lands Act

Originally known as the Paleontological Resources Preservation Act, Title VI Subtitle D, Paleontological Resources Preservation, of this Act provides protection for scientifically significant fossils on federal land. The Act defines a paleontological resource as "any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth." The Act promotes the inventory, monitoring, and scientific and educational use of paleontological resources on federal land and establishes rules for the collection and curation of paleontological materials. Penalties for illegal collection of paleontological resources are also strengthened by the Act.

State Regulations

California Coastal Act of 1976

Enacted in 1976, the California Coastal Act (PRC Section 30000-30265.5, Division 30116) specifies the protection of archaeological resources identified in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer (SHPO) into Land Conservation Plans that regulate land uses within the coastal zone. The California Coastal Act defines a "coastal zone" as the area of the State that extends from the Oregon border to the Mexican border and then extends 3 miles seaward and generally about 1,000 yards inland. In generally undeveloped areas, the coastal zone extends to a maximum of 5 miles inland from mean high tide line. In developed urban areas, the coastal zone extends substantially less than 1,000 yards inland. The Coastal Commission's jurisdiction does not extend into or around San Francisco Bay, where development is regulated by the San Francisco Bay Conservation and Development Commission.

California Register of Historic Resources

The State Historical Resources Commission (SHRC) has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical

resources. The California Register of Historic Resources (CRHR) is the authoritative guide to the state's significant historical and archeological resources. It encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. The CRHR was created to identify resources deemed worthy of preservation on a state level and was modeled closely after the NRHP. The criteria are nearly identical to those of the NRHP but focus upon resources of statewide, rather than national, significance. The CRHR automatically includes resources listed on the NRHP.

To be eligible for listing in the CRHR, a resource must meet at least one of the following criteria:

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- Associated with the lives of persons important to local, California or national history.
- Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

California Historical Landmarks

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical significance by meeting at least one of the criteria listed below. The landmark must also be approved for designation by the county board of supervisors or the city/town council in whose jurisdiction it is; be recommended by the SHRC; and be officially designated by the Director of California State Parks. The resource must meet at least one of these criteria:

- Be the first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Be associated with an individual or group having a profound influence on the history of California.
- Be a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

California Public Resources Code

Archaeological, paleontological, and historical sites are protected pursuant to a wide variety of state policies and regulations enumerated under the California Public Resources Code (PRC). In addition, cultural and

paleontological resources are recognized as nonrenewable resources and therefore receive protection under the California PRC and CEQA.

California Health and Safety Code Section 7050.5 requires that if human remains are discovered within the project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation and made recommendations to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, he or she shall contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. PRC Section 5097.98 mandates the process to be followed in the event of a discovery of any human remains and would mitigate all potential impacts.

PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the SHRC. The SHRC oversees the administration of the California Register of Historical Resources and is responsible for the designation of State Historical Landmarks and Historical Points of Interest.

PRC Sections 5079 to 5079.65 define the functions and duties of the Office of Historic Preservation (OHP). The OHP is responsible for the administration of federal- and state-mandated historic preservation programs in California and the California Heritage Fund.

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites and identify the powers and duties of the NAHC. It also requires notification to descendants of discoveries of Native American human remains and provides for treatment and disposition of human remains and associated grave goods.

California Points of Historical Interest

California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Points of Historical Interest designated after December 1997 and recommended by the SHRC also are listed in the CRHR. No historical resource may be designated as both a landmark and a point. If a point is subsequently granted status as a landmark, the point designation will be retired.

To be eligible for designation as a Point of Historical Interest, a resource must meet at least one of the following criteria:

- Be the first, last, only, or most significant of its type within the local geographic region (city or county).
- Be associated with an individual or group having a profound influence on the history of the local area.
- Be a prototype of, or an outstanding example of, a period, style, architectural movement, or construction, or be one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

State Historical Building Code

Created in 1975, the State Historical Building Code (SHBC) provides regulations and standards for the preservation, restoration, rehabilitation, or relocation of historic buildings, structures, and properties that have been determined by an appropriate local or state governmental jurisdiction to be significant in the history, architecture, or culture of an area. Rather than being prescriptive, the SHBC constitutes a set of performance criteria. The SHBC is designed to "help facilitate restoration or change of occupancy in such a way as to preserve original or restored elements and features of a resource; to encourage energy conservation and a cost-effective approach to preservation; and to provide for reasonable safety from earthquake, fire, or other hazards for occupants and users of such buildings, structures, and properties."

Codified in Health and Safety Code Sections 18950 through 18961, the SHBC provides alternative building regulations and building standards for the rehabilitation, preservation, restoration (including related reconstruction), or relocation of buildings or structures designated as historic buildings. Such alternative building standards and building regulations are intended to facilitate the restoration or change of occupancy so as to preserve their original or restored architectural elements and features, to encourage energy conservation and a cost-effective approach to preservation, and to provide for the safety of the building occupants. The SHBC also serves as a guide for providing reasonable availability, access, and usability by the physically disabled.

State Historic Preservation Officer

The State Historic Preservation Officer (SHPO) is responsible for the operation and management of the OHP, as well as long range preservation planning in California. The Governor appoints the SHPO, in consultation with the SHRC and the Director of the Department of Parks and Recreation. The SHPO assists the SHRC in accomplishing its goals and duties by developing and administering a program of public information, education, training, and technical assistance. The SHPO also serves as Executive Secretary to the SHRC and is responsible for developing an administrative framework for the SHRC and implementing the SHRC's preservation programs and priorities. The SHPO also oversees implementation of preservation laws regarding historic resources, and oversees the California Historic Resources Inventory, which serves as a listing of historic resources identified using national, state, and local criteria.

Native American Heritage Commission

Section 5097.91 of the PRC established the Native American Heritage Commission (NAHC), whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Section 5097.98 of the PRC specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

Government Code, Sections 6254(r) and 6254.10

These sections of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to

withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the NAHC." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the SHRC, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

Health and Safety Code, Sections 7050 and 7052

Health and Safety Code, Section 7050.5 declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground-disturbing activities must cease and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

California Senate Bill 18

Existing law provides limited protection for Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places. These places may include sanctified cemeteries; religious or ceremonial sites; shrines; burial grounds; prehistoric ruins; archaeological or historic sites; Native American rock art inscriptions; or features of Native American historic, cultural, and sacred sites.

Senate Bill 18 was signed into law in September 2004 and went into effect on March 1, 2005. It placed new requirements on local governments for developments within or near Traditional Tribal Cultural Places (TTCP). The law required local jurisdictions to provide opportunities for involvement of California Native Americans tribes in the land planning process for the purpose of preserving TTCPs. The Final Tribal Guidelines recommend that the NAHC provide written information as soon as possible but no later than 30 days after being notified to inform the Lead Agency if a proposed project is determined to be in proximity to a TTCP, and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review timeframe. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation, or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR. If the lead agency and the tribe agree that adequate mitigation or preservation measures cannot be taken, then neither party is obligated to take action.

Per SB 18, a city or county must consult with the NAHC and any appropriate Native American tribe before the adoption, revision, amendment, or update of a city's or county's general plan. Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, the Final Tribal Guidelines advise that SB 18 requirements extend to specific plans as well, since state planning law requires local governments to use the same process for amendment or adoption of specific plans as general plans (Government Code § 65453). In addition, SB 18 provides a new definition of TTCP requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies, or

the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 amended Civil Code Section 815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

Mills Act Ordinance and Historic Preservation

The Mills Act Ordinance, which was adopted by the County Board of Supervisors on November 26, 2013, implements the Mills Act in the Project Area. The Ordinance provides for reduced property taxes on eligible historic properties in return for the property owner's agreement to maintain and preserve the historic property. Preservation of properties is to be in accordance with the standards and guidelines set forth by the Secretary of the Interior. The County is accepting applications for the Mills Act historical property contract program through September 30, 2014. Currently, only properties listed on the NRHP or the California Register, and contributing properties located within a National Register or California Register historic district qualify as an eligible property. In conjunction with the Mills Act Ordinance, the County is developing a local Historic Preservation Ordinance to enable the designation of local historic landmarks and districts. Once adopted, local landmarks and districts will be eligible to participate.

County of Los Angeles Regulations

Cultural and historic sites or resources listed in the national, state, or local registers maintained by the County of Los Angeles (County) are protected through the Los Angeles County General Plan policies and regulations restricting alteration, relocation, and demolition of historical resources. Under Titles 21 (Subdivisions) and 22 (Planning and Zoning) of the Los Angeles County Code, all zoning ordinances, zone changes, subdivisions, capital improvement plans, and public works projects be consistent with the General Plan—this includes all cultural and historical sites and resources. Furthermore, the Los Angeles County Historical Landmarks and Records Commission is the acting local legislative body that reviews and recommends cultural heritage resources in the unincorporated areas for inclusion in the State Historic Resources Inventory.

5.5.1.2 EXISTING CONDITIONS

Cultural Setting

Prehistoric Cultural Setting

The archaeological record of Southern California is traditionally divided chronologically based on changes in artifact types and styles. The following chronology for Native American habitation in prehistoric Southern California is based on archaeological data and correlations with ethnographic data.

Native American occupation of Los Angeles County and neighboring regions can be divided into five cultural periods: Early or Proto-Archaic period (variously dated between ca. 9000–6000 and 6000–3000 B.C.); Middle Archaic Period (between ca. 6000–3000 and 4000–500 B.C.); and the Late Archaic (between ca. 4000–500 B.C. and 2000 B.C.–A.D. 1100), which ended in the ethnographic period (SCA, 2014).

The earliest historical records of human settlements in Los Angeles County date back to the Proto-Archaic period (8,000–6,000 B.C.) with the settlements of the Chumash people. A hunter-gatherer and fisher tribe, the Chumash occupied the coastal regions of southern California from present-day areas of San Luis Obispo to Santa Barbara, Ventura, and Los Angeles County.

During the Middle Archaic period (6,000–4,000 B.C.), the Chumash became known for their technological and craftsman advances in basketry, inventing the plank canoe, fishing and whaling, creating an early form of currency through olive snail (*Olivella biplicata*) bead manufacturing and trading (SBM 2014), and developing a form of tar used for waterproofing (*LA Almanac*).

By the Pacific Period, beginning around 2,000 B.C., large Chumash villages appeared along the Pacific coast. Trading alliances, warfare, and the division of labor and manufacturing further enhanced the Chumash's presence in the region (*LA Almanac*).

The Late Prehistoric period, around 200 to 500 A.D., ushered in the arrival of the Tongva tribe, who migrated west from the Mojave Desert area. Slowly, the Tongva began to displace the Chumash in Southern California. By 1500, an estimated 25 Tongva villages were in the area that would become Los Angeles County (*LA Almanac*). Similar to the Chumash, the Tongva were hunters and gatherers and traded goods extensively throughout the Southern California and Nevada region. Both the Chumash and the Tongva remained largely isolated until Spanish explorers arrived in Southern California under Portuguese explorer Juan Rodríguez Cabrillo in 1542. The Chumash and Tongva populations dwindled from the 1500s to the 1900s due to the arrival of Old World diseases, such as smallpox and influenza, introduced by the Spanish. Research estimates that the Chumash population was approximately 2,000 in 2010 (SDSU 2014), but many artifacts, cave paintings, and cultural elements remain extant today.

Ethnographic Setting

Following the arrival of Cabrillo's arrival in 1542, the Spanish continued to settle throughout the Southern California region. The first mention of Los Angeles is documented on August 2, 1769, by Father Crespi, a Franciscan monk and party member to a land expedition led by Fernando River y Moncado (*LA Almanac*). That same year, another expedition led by Gaspar de Portola settled along the Los Angeles River in the area that would become Los Angeles County (LACo, 2014).

In 1771, the San Gabriel Mission was founded as the fourth of 21 missions across California (called "Alta California" at the time). Ten years later, the Pueblo de la Reyna de Los Angeles (The Pueblo of the Queen of the Angeles) was founded near the present-day Los Angeles City Hall and County Headquarters. By 1797, Franciscan monk extended their presence north into the San Fernando Valley with the Mission Rey de España (LACo, 2014).

The Spanish remained the primary settlers the Los Angeles area until the early 1800s when the first American and British vessels arrived along the coast. Southern California remained under Spanish control until 1822, following the Mexican independence and jurisdictional control of California. Over the next two decades, trade relations with the United States increased, and by the 1840s, the Los Angeles County area was a regional economic leader. California remained under Mexican control until 1846, when the United States obtained the

land, following the Mexican-American war and the subsequent signing of the Treaty of Cahuenga in 1847 (LACo 2014).

During the 1840s, significant gold deposits were discovered throughout the Southern California area. The first discovery occurred in 1842 by Francisco Lopez in the Antelope Valley, followed by more famous discoveries such as Sutter's Mill in 1848, starting California's Gold Rush. Coinciding with this newfound wealth, the American Civil War depended heavily on gold, oil, and agriculture from California, bringing vast amounts of wealth and immigration into the Los Angeles County region throughout the 1850s and 1860s (LACo, 2014).

Historical Setting

The County was officially founded on February 18, 1850. The County was one of 27 original counties within the State of California. Later that year, the City of Los Angeles was founded as the first city in Los Angeles County—today there 88 cities.

Soon after, the Los Angeles County population grew to include original descendants of California's native tribes, Spanish-speaking Californios, Anglo-Americans, and former slaves of African descent. The late 1800s also welcomed greater immigration from Europe, Asia, and South America, especially the English, French, Spanish, Mexican, German, and Chinese. By the 1930s, Los Angeles County was home to distinct ethic communities of Japanese, Chinese, Russians, and Jews from Eastern Europe.

Population growth in Los Angeles County remained steady through the 1950s and was further expanded by the U.S. Immigration Act of 1965. According to the U.S. Census, Los Angeles County's population of foreign-born residents more than tripled, from 11.3 percent in 1970 to 36.2 percent in 2000. A 2000 survey by the Los Angeles Unified School District found that over 130 languages were spoken by its students. That year, Los Angeles replaced New York City as the nation's primary immigration port of entry (LACo, 2014).

Today, these cultural and historical influences shape Los Angeles County into one of the most dynamic and ethnically diverse counties in the United States.

Cultural Resources

Historical Resources

The County has many historical landmarks and points of historical interest in its jurisdiction, including the remnants of vast ranchos, routes of early explorers, historic railroad lines, and the homes of prominent people who shaped local history. Searches for historical resources in Los Angeles County were conducted through the National Register of Historic Places, California Historical Resources (Office of Historic Preservation), California Historical Landmarks, and California Points of Historic Interest. The State Historical Resources Commission lists 31 historic resources throughout the unincorporated areas. Many of the resources listed in the California Register are also of national significance and listed in the National Register of Historic Places.

Figure 5.5-1, *Historic Resource Sites Policy Map*, displays the locations of the historic resources in the unincorporated areas. Historic resources in the unincorporated areas are listed in the following federal and state databases:

- **National Register of Historic Places/ California Points of Historical Interest**

  The CRHR automatically includes resources listed on the NRHP. Resources in the unincorporated areas listed on the NRHP are described in Table 5.5-1.

- **National Historic Landmarks**

  Only one National Historic Landmark is located within unincorporated Los Angeles County: Well No. 4, Pico Canyon Oil Field, located 9.5 miles North of San Fernando, West of US 99.

- **California Historical Landmarks**

  Table 5.5-2 summarizes California Historical Landmarks in the unincorporated areas.

- **California Points of Historical Interest**

  Table 5.5-3, *California Points of Historical Interest in Unincorporated Areas*, itemizes listed Points of Historical Interest. Points designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR.

Table 5.5-1 NRHP Properties in the Unincorporated Areas

Property Name	Address/Location	Year Listed
Antelope Valley Indian Museum	15701 East Avenue, Lancaster	1987
Christmas Tree Lane	Santa Rosa Avenue between Woodbury Avenue and Altadena Drive, Altadena	1990
Crank House	2186 Crary Street, Altadena	1997
Dominguez Ranch Adobe	18127 S. Alameda Street, Compton	1976
Farnsworth, Gen. Charles S., County Park	568 E. Mt. Curve Avenue, Altadena	1997
Golden Gate Theater (CVS; East Los Angeles)	903 and 909 S. Atlantic Boulevard, Los Angeles	1982
Grey, Zane Estate	396 E. Mariposa Street, Altadena	2002
Keyes Bungalow	1337 E. Boston Street, Altadena	1978
McNally, Andrew, House	654 E. Mariposa Street, Altadena	2007
Mount Lowe Railway	North of Altadena Angeles National Forest, Altadena	1993
Pacific Electric Railway Company Substation No. 8	2245 North Lake Avenue, Altadena	1977
Pitzer House	4353 North Towne, Claremont	1986
Ridge Route, Old	Along Old Ridge Route (roughly bounded by Sandberg and Canton Canyon), Castaic	1997
Scripps Hall	209 East Mariposa Street, Altadena	1999
Vasquez Rocks (archaeological site)	Agua Dulce Road, Agua Dulce	1972
Well No. 4, Pico Canyon Oil Field	9.5 miles North of San Fernando, West of US-99, San Fernando	1966
Woodbury-Story House	2606 North Madison Avenue, Altadena	1993

Source: Sapphos Environmental, Inc. 2009; LA County DRP 2014.

Table 5.5-2 California Historical Landmarks in the Unincorporated Areas

Property Name	Address/Location	Listed in NRHP	Listed in CRHR
Dominguez Ranch House	18127 South Alameda, Compton	—	—
Oak of the Golden Dream	Placerita Canyon State and County Park, Placerita Canyon Road, 4.6 miles Northeast of Newhall, Los Angeles	—	—
Pomona Water Power Plant	Camp Baldy Road (P.M. 2.0), San Antonio Canyon, 8.1 miles North of State Highway 166, Claremont	—	—
Well, CSO 4 (Pico 4)	On West Pico Canyon Road, 3.3 miles West of I-5, Newhall	—	—
Mentryville	27201 West Pico Canyon Road, 2.8 miles West of I-5, Newhall	—	—
Rancho San Francisco	Southwest corner of "the Old Road" and Henry Mayo Drive, 0.2 miles South of I-5 and State Highway 126 Interchange, Valencia	—	—
Lang Southern Pacific Station	Soledad Canyon, Lang Station Road (0.4 miles South of State Highway 14 (P.M. 35.6), Shadow Pines Boulevard, 4.7 miles East of Canyon Country	—	—
Old Short Cut	Angeles National Forest, Chilao Visitor's Center, Angeles Crest Highway (State Hwy 2), 27 miles East of La Canada	—	—
The Angeles National Forest	San Gabriel Mountains, Clear Creek Vista Point, State Highway 2 (P.M. 32.8), 8.3 miles North of I-210, La Canada	—	—
St. Francis Dam Disaster Site	San Francisquito Power Plant No. 2, 32300 North San Francisquito Canyon, Road, 9.2 miles North of Saugus	—	Yes
Site of Llano Del Rio Cooperative Colony	On State Highway 138 (P.M. 64.1), Llano	—	Yes
Christmas Tree Lane	Santa Rose Avenue (both sides of street from Woodbury Avenue to Altadena Drive), Altadena	Yes	Yes
Maravilla Handball Court and El Centro Grocery (East Los Angeles)	4787 Hammel Street, Los Angeles	No	Yes
Beale's Cut Stagecoach Pass	Intersection of Sierra Highway and Clampitt Road, Santa Clarita	Yes	Yes

Source: Sapphos Environmental, Inc. 2009.

Table 5.5-3 California Points of Historical Interest in the Unincorporated Areas

Property Name	Address/Location	Year Constructed
Altadena Town and Country Club	2290 Country Club Drive, Altadena	1911
Antelope Valley Indian Museum	15701 East Avenue, Lancaster	1928
Bassett Elementary School	546 N. Vineland Avenue, Bassett	N/A
Pacific Electric Railway Grade Separation, Firestone	E. Firestone Boulevard, Florence	1949
Soledad-Acton Schoolhouse	32248 N. Crown Valley Road, Acton	1890
Sylvia Park Country Club Clubhouse	20421 Callon Drive, Topanga	1930
Topanga Christian Fellowship Church	269 Old Topanga Canyon Road, Topanga	1953
Woodbury-Story House	2606 N. Madison Avenue, Altadena	1882

Source: Sapphos Environmental, Inc. 2009.

HISTORIC RESOURCE SITES POLICY MAP

FIGURE 5.5-1

1. Altadena Town & Country Club
2. Andrew McNally House
3. Antelope Valley Indian Museum
4. Bassett Elementary School
5. Christmas Tree Lane
6. Clear Creek Vista Point
7. Crank House
8. Dominguez Adobe Ranch House
9. General Charles S. Farnsworth County Park
10. Golden Gate Theater
11. Keyes Bungalow
12. Lang Southern Pacific Station
13. Maravilla Handball Court and El Centro Grocery
14. Mentryville
15. Mount Lowe Railway
16. Oak of the Golden Dream
17. Old Ridge Route
18. Old Short Cut
19. Pacific Electric Railway Company Substation No. 8
20. Pico Canyon Oil Field Well No. 4
21. Pomona Water Powerplant
22. Rancho San Francisco
23. Scripps Hall
24. Site of Llano Del Rio Cooperative Colony
25. Soledad-Acton Schoolhouse
26. St. Francis Dam Disaster Site
27. Sylvia Park Country Club Clubhouse
28. Topanga Christian Fellowship Church
29. Vasquez Rocks
30. Woodbury Story House
31. Zane Grey Estate

Source: Department of Regional Planning, May 2014

PLACEWORKS

5. Environmental Analysis
CULTURAL RESOURCES

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Archaeological Resources

Archaeological resources are prehistoric or historic materials that reflect human activities and may be buried or surface objects or structural remains. The NRHP defines an "archaeological site" (or property) as "the place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains. Archaeological remains usually take the form of artifacts (e.g., fragments of tools, vestiges of utilitarian or non-utilitarian objects), features (e.g., remnants of walls, cooking hearths, or midden deposits), and ecological evidence (e.g., pollen remaining from plants that were in the area when the activities occurred)."

"Prehistoric archaeological sites" represent the material remains of Native American groups and their activities. These sites are generally thought to date to the period before European contact, but in some cases may contain evidence of trade contact with Europeans. "Historic archaeological sites" reflect the activities of nonnative populations during the historic period. Under CEQA, archaeological sites may be treated as historical resources, unique archaeological resources, isolates, or nonunique archaeological resources.

A "unique archaeological resource" is defined by CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated, without merely adding to the current body of knowledge, that there is a high probability that it meets any of the following criteria:

1. It contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.

2. It has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. It is directly associated with a scientifically recognized important prehistoric or historic event or person.

An "isolate" is defined as an isolated artifact or small group of artifacts that appear to reflect a single event, loci, or activity and may lack identifiable context, but has the potential to add important information about a region, culture, or person. Isolates are considered categorically ineligible for inclusion in the CRHR or the NRHP because their information potential has been exhausted by accurate recording or, when appropriate, by collecting. Isolates do not require avoidance or mitigation under CEQA. A "Native American sacred site" is defined as an area that has been and often continues to be of religious significance to Native American peoples, such as an area where religious ceremonies are practiced or an area that is central to their origins as a people. There are 85 Native American sacred sites considered under CEQA in association with archaeological resources or, in the case of burial locations, human remains.

Over 3,979 archaeological sites have been recorded in Los Angeles County. Due to the sensitive nature of archaeological sites and as required under state law, locations are not published. Archaeological materials have been found throughout the county, both in urbanized and undeveloped locations (LACo, 2009).

Paleontological Resources

Paleontological resources are fossils, or recognizable remains or evidence of past life on earth, including bones, shells, leaves, tracks, burrows, and impressions.

Paleontological resources are mapped based on the presence of known resources and the geologic sediments in the region. Over 1,000 fossil localities have been recorded, and in excess of a million specimens have been collected in Los Angeles County. Although numerous places countywide have yielded fossils, especially in the hills and in the vicinity of Rancho La Brea, 11 significant general fossil localities have been identified, as shown in Table 5.5-4. Fossils continue to be discovered in Los Angeles County in association with ground-disturbing activities in fossil-rich areas.

Table 5.5-4 Significant General Fossil Localities in Los Angeles County

Location	Fossil Type	Formations
La Brea Tar Pits	N/A	N/A
Palos Verdes Peninsula	Mastadon, mammoth, horse, camel, sloth	Palos Verdes Sand
Palos Verdes Peninsula	Grey whale	San Pedro
Palos Verdes Peninsula	Fish, birds, sea lion, plants, baleen whale, horse, sloth, sea otter, mammoth, mastodon, bison, camel, tapir	Monterey Shale
Palos Verdes Peninsula	Dolphin	Monterey Shale
Santa Monica Mountains (Topanga Canyon)	Cypraeid gastropod	Topanga
Santa Monica Mountains (Old Topanga Canyon Road, Piuma Road)	Multiple	Topanga
Mint Canyon	Oldest hawk in California	Tick Canyon
Mint Canyon	Horse, elephant, camel	Mint Canyon
Puente Hills (Hacienda Heights)	Fish	Puente
Puente Hills (Diamond Bar)	Fish and leaves	Puente

Source: Sapphos Environmental, Inc. 2009.

5.5.2 Thresholds of Significance

CEQA Guidelines Section 15064.5 provides direction on determining significance of impacts to archaeological and historical resources. Generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code §§ 5024.1, Title 14 CCR, Section 4852), including the following:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated the with lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, or is not included in a local register of historical resources, does not preclude a lead agency from determining that the resource may be an historical resource.

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

C-1 Cause a substantial adverse change in the significance of an historical resource pursuant to Section 15064.5.

C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

C-3 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

C-4 Disturb any human remains, including those interred outside of formal cemeteries.

5.5.3 Relevant General Plan Goals and Policies

The following are relevant policies of the Proposed Project that promote the protection of cultural resources in Los Angeles County.

Land Use Element

- **Policy LU 3.2:** Discourage development in areas with high environmental resources and/or severe safety hazards.
- **Policy LU 4.2:** Encourage the adaptive reuse of underutilized structures and the revitalization of older, economically distressed neighborhoods.
- **Policy LU 7.1:** Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.
- **Policy LU 10.4:** Promote environmentally-sensitive and sustainable design.
- **Policy LU 10.8:** Promote public art and cultural amenities that support community values and enhance community context.

Conservation and Natural Resources Element

Goal C/NR 14: Protected historic, cultural, and paleontological resources.

- **Policy C/NR 14.1:** Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.
- **Policy C/NR 14.2:** Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources.
- **Policy C/NR 14.3:** Support the preservation and rehabilitation of historic buildings.
- **Policy C/NR 14.4:** Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).
- **Policy C/NR 14.5:** Promote public awareness of historic, cultural, and paleontological resources.
- **Policy C/NR 14.6:** Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

Parks and Recreation Element

- **Policy P/R 5.1:** Preserve historic resources on County park properties, including buildings, collections, landscapes, bridges, and other physical features.
- **Policy P/R 5.2:** Expand the collection of historical resources under the jurisdiction of the County, where appropriate.
- **Policy P/R 5.3:** Protect and conserve natural resources on County park properties, including natural areas, sanctuaries, and open space preserves.
- **Policy P/R 5.4:** Insure maintenance, repair, rehabilitation, restoration, or reconstruction of historical resources in County parks and recreational facilities are carried out in a manner consistent with the most current Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.
- **Policy P/R 5.5:** Preserve and develop facilities that serve as educational resources that improve community understanding of and appreciation for natural areas, including watersheds
- **Policy P/R 5.7:** Integrate a range of cultural arts programs into existing activities, and partner with multicultural vendors and organizations.

5.5.4 Environmental Impacts

The following impact analysis addresses Appendix G thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.5-1: Development pursuant to the Proposed Project could impact historic resources. [Threshold C-1]

Impact Analysis:

As described previously, Los Angeles County has a variety of historic resources. Implementation of the Proposed Project would not directly demolish or materially alter historic resources. However, identified historic structures and sites that are eligible or potentially eligible for National Register of Historic Resources listing may be vulnerable to development activities in accordance with the Proposed General Plan Update. For example, redevelopment to enable a different or more intensive use of a site could result in the demolition of historic or potentially historic structures. Additionally, infrastructure or other improvements could result in damage to or demolition of other historic features. Although approximately 31 historical resources in the unincorporated areas have been designated, there may be other potential resources that have not been identified, researched, or evaluated for historical significance as defined in CEQA.

As detailed in the Regulatory Background (Section 5.5.1.1), there are a number of federal, state, and local policies, regulations, and institutions in place to protect historical resources in Los Angeles County. In addition, the Proposed General Plan Update contains numerous policies that specifically address sensitive historical resources and their protection. Conservation and Natural Resources Element Goal C/NR 14 states that the County should "Protected historic, cultural, and paleontological resources" while the Land Use Element states, the "intent of the General Plan is to protect the County's cultural heritage resources," including those of historical or architectural significance. Conservation and Natural Resources Element Policies C/NR 14.1 through C/NR 14.6 are in place to protect historically significant landmarks, sites, and structures. Policy C/NR 14.1 requires mitigation for all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible. Policy C/NR 14.6 ensures proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources. Policy C/NR 14.3 supports the preservation and rehabilitation of historic buildings. Parks and Recreation Element Policy P/R 5.2 expands the collection of historical resources under the jurisdiction of the County, where appropriate. P/R 5.4 ensures maintenance, repair, rehabilitation, restoration, or reconstruction of historical resources in County parks and recreational facilities are carried out in a manner consistent with the most current Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. In addition, the Los Angeles County Historical Landmarks and Records Commission reviews and recommends cultural heritage resources in the unincorporated areas for inclusion in the State Historic Resources Inventory.

Compliance with the goals, policies, and implementation measures of the Proposed Project would reduce impacts to historical resources. Project-level environmental compliance procedures would identify historic resources that could be affected by a proposed project and to encourage the avoidance of known historic resources to the extent feasible through project siting and design. When historic resources cannot be avoided, use of the Secretary of the Interior's Standards would be expected to mitigate impacts to a less than significant level. Implementation of the Proposed Project would not itself demolish or materially alter historic resources. General Plan policies, Title 22 of the County Code, and state and federal regulations

restricting alteration, relocation, and demolition of historical resources ensure impacts would be mitigated. In addition, the Department of Regional Planning is currently working with the Historical Landmarks and Records Commission and the Regional Planning Commission to draft a comprehensive historic preservation ordinance for the unincorporated areas. A historic preservation ordinance is local legislation that seeks to preserve, conserve and protect buildings, objects, landscapes or other artifacts of historical and cultural significance.

However, the above policies afford only limited protection to historic structures and would not ultimately prevent the demolition of a historic structure if preservation is determined to be infeasible. The determination of feasibility will occur on a case by case basis as future development applications on sites containing historic structures are submitted. Additionally, some structures that are not currently considered for historic value (as they must generally be at least 50 years or older) could become worthy of consideration during the planning period for the Proposed Project. While policies would minimize the probability of historic structures being demolished, these policies cannot ensure that the demolition of a historic structure would not occur in the future.

Impact 5.5-2: Buildout of the Proposed Project could destroy archaeological or paleontological resources or a unique geologic feature. [Threshold C2 and C-3]

Impact Analysis:

Archeological Resources

Development of projects pursuant to the Proposed Project could impact known and unknown archaeological sites. Locations of archaeological sites and types of resources in each site are kept confidential due to their sensitive nature. The Project Area is considered potentially sensitive for archaeological resources. Thus, ground disturbance has a high potential for uncovering archaeological resources.

Paleontological Resources

Ground disturbance from development projects pursuant to the Proposed Project could damage fossils buried in soils. Abundant fossils occur in several rock formations in the Project Area. These formations have produced numerous important fossil specimens. Therefore, the Project Area contains significant, nonrenewable, paleontological resources and are considered to have high sensitivity.

Conclusion

Implementation of the Proposed Project has the potential to impact archeological and paleontological resources. However, existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any development activity. The Conservation and Natural Resources Element in the

Proposed General Plan Update contains policies that address the management of artifacts (see Policy C/NR 14.1) and the notification and inventory of archeological and paleontological resources (Policies C/NR 14.6).

Review and protection of archaeological and paleontological resources is also afforded by CEQA for individual projects subject to discretionary actions that are implemented in accordance with the preferred land use plan. Per section 21083.2 of CEQA, the lead agency shall determine whether the project may have a significant effect on archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the EIR shall address the issue of those resources. The potential to uncover undiscovered archeological and paleontological resources is high. In the event of an unanticipated discovery of archaeological resources during grading and excavation of the site, a qualified archaeologist would assess the find and develop a course of action to preserve the find, as indicated in Mitigation Measures CUL-4 and CUL-5.

Impact 5.5-3: Grading activities pursuant to buildout of the Proposed Project could potentially disturb human remains. [Threshold C-4]

Impact Analysis: There are thousands of archaeological sites within Los Angeles County, and human habitation in Los Angeles County is known to date to at least approximately 7,000 years B.C. Therefore, human remains could be buried in soils. Excavation during construction activities by projects consistent with the Proposed Project has the potential to disturb human burial grounds, including Native American burials, in underdeveloped areas of Los Angeles County. Human burials have specific provisions for treatment in Section 5097 of the California Public Resources Code, which authorizes the Native American Heritage Commission to resolve any disputes related to the disposition of Native American burials. Public Resources Code Section 5097.98 mandates the process to be followed in the event of a discovery of any human remains and would mitigate all potential impacts. The California Health and Safety Code (Sections 7050.5, 7051, and 7054) also have provisions protecting human burial remains from disturbance, vandalism, or destruction. California Health and Safety Code Section 7050.5 requires that if human remains are discovered within the project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation and made recommendations to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Therefore, compliance with these regulations would ensure impacts to human burial grounds remain less than significant.

5.5.5 Cumulative Impacts

Historic, cultural, and paleontological resources are an important part of Los Angeles County's identity. These resources are nonrenewable and irreplaceable.

Cumulative projects located in the Southern California region would have the potential to result in a cumulative impact associated with the loss of historical resources through the physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. These projects are regulated by federal, state and local

regulations, including PRC Section 5097, the Mills Act, State Health and Safety Code 18950-1896, and the Secretary of the Interior's Standards for Rehabilitation and Standards for the Treatment of Historic Properties, and would be required to comply with these regulations. Additionally, even with regulations in place, individual historical resources would still have the potential to be impacted or degraded from demolition, destruction, alteration, or structural relocation as a result of new private or public development or redevelopment allowable under cumulative projects. Therefore, the cumulative destruction of significant historical resources from construction and development planned within the region would be considered to be a cumulatively significant impact. Therefore, the Proposed Project, in combination with cumulative projects, would have the potential to result in a significant cumulative impact associated with historical resources.

The Proposed Project aims to promote public awareness of their value, and their public enjoyment should be fostered whenever possible. To this end, the Proposed Project promotes cooperative efforts between public and private organizations to identify, restore, and conserve these resources (see Policy C/NR 14.5). In addition, the Proposed Project promotes an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources (see Policy C/NR 14.2). Conservation and Natural Resources Element policies in the Proposed General Plan Update address the management of artifacts (see Policy C/NR 14.1) and the notification and inventory of archeological and paleontological resources (Policies C/NR 14.6).

In the event of an unanticipated discovery of archaeological resources during grading and excavation of a site, Mitigation Measures CUL-4 and CUL-5 ensure that impacts are mitigated to a less than significant level. Public Resources Code and the California Health and Safety Code mandate processes to be followed in the event of a discovery of any human remains and would mitigate impacts to a less than significant level.

5.5.6 Existing Regulations and Standard Conditions

Federal

- United States Code, Title 16, Sections 470 et seq.: National Historic Preservation Act
- United States Code, Title 16, Sections 470aa et seq.: Archaeological Resources Protection Act
- United States Code, Title 25, Sections 3001 et seq.: Native American Graves Protection and Repatriation Act

State

- California Health and Safety Code Section 7050.5: Disturbance of Human Remains
- California Public Resources Code Sections 5020–5029.5: Authorized State Historical Resources Commission
- California Public Resources Code Sections 5079–5079.65: Authorized Office of Historic Preservation.

- California Public Resources Code Sections 5097.9–5097.99: Protections for Native American historical and cultural resources and sacred sites; authorized Native American Heritage Commission (NAHC); prescribes responsibilities respecting discoveries of Native American human remains.
- California Government Code Sections 65352.3 et seq. (Senate Bill 18): Native American consultation
- California Code of Regulations, Title 24, Part 8: 2010 California Historic Building Code
- California Government Code Sections 50280 et seq.: Mills Act

Local

Los Angeles County Historical Landmarks and Records Commission supplements the General Plan Policies as the acting local legislative body that reviews and recommends cultural heritage resources in the unincorporated areas for inclusion in the State Historic Resources Inventory.

5.5.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impact would be less than significant: 5.5-3.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.5-1** Development pursuant to the Proposed Project could impact historic resources.
- **Impact 5.5-2** Buildout of the Proposed Project could impact archaeological and paleontological resources.

5.5.8 Mitigation Measures

Impact 5.5-1

CUL-1 Provide incentives through the Mills Act to encourage the restoration, renovation, or adaptive reuse of historic resources.

CUL-2 Draft a comprehensive historic preservation ordinance for the unincorporated areas.

CUL-3 Prepare an Adaptive Reuse Ordinance within the context of, and in compliance with, existing building codes that considers the conversion of older, economically distressed or historically-significant buildings into multifamily residential developments, live-and-work units, mixed use developments, or commercial uses.

Impact 5.5-2

CUL-4 Prior to the issuance of any grading permit, applicants shall provide written evidence to the County of Los Angles that a County-certified archaeologist has been retained to observe

grading activities greater than six feet in depth and salvage and catalogue archaeological resources as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate.

If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project applicant, for exploration and/or salvage. Prior to the release of the grading bond the applicant shall obtain approval of the archaeologist's follow-up report from the County. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification.

Applicant shall offer excavated finds for curatorial purposes to the County of Los Angeles, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County or its designee, all in a manner meeting the approval of the County.

Unanticipated discoveries shall be evaluated for significance by a County-certified archaeologist. If the archaeological resources are found to be significant, then the project shall be required to perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; submit materials to the California State University Fullerton; and provide a comprehensive final report including appropriate records for the California Department of Parks and Recreation (Building, Structure, and Object Record; Archaeological Site Record; or District Record, as applicable).

CUL-5 Prior to the issuance of any grading permit, applicants shall provide written evidence to the County of Los Angles that a County-certified paleontologist has been retained to observe grading activities greater than six feet in depth and salvage and catalogue paleontological resources as necessary. The paleontologist shall be present at the pre-grade conference, shall establish procedures for paleontologist resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate.

If the paleontological resources are found to be significant, the paleontologist observer shall determine appropriate actions, in cooperation with the project applicant, for exploration and/or salvage. Prior to the release of the grading bond the applicant shall obtain approval of the paleontologist's follow-up report from the County. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification.

Applicant shall offer excavated finds for curatorial purposes to the County of Los Angeles, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County or its designee, all in a manner meeting the approval of the County.

Unanticipated discoveries shall be evaluated for significance by a County-certified a paleontologist. If the paleontological resources are found to be significant, then the project shall be required to perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; submit materials to the California State University Fullerton; and provide a comprehensive final report including appropriate records for the California Department of Parks and Recreation.

5.5.9 Level of Significance After Mitigation

Impact 5.51

Goals and policies have been incorporated into the Proposed Project to protect historic resources. However, the above policies afford only limited protection to historic structures and would not ultimately prevent the demolition of a historic structure if preservation is determined to be infeasible. The determination of feasibility will occur on a case by case basis as future development applications on sites containing historic structures are submitted. Additionally, some structures that are not currently considered for historic value (as they must generally be at least 50 years or older) could become worthy of consideration during the planning period for the Proposed Project. While policies would minimize the probability of historic structures being demolished, these policies cannot ensure that the demolition of a historic structure would not occur. This is considered a significant unavoidable adverse impact.

Impact 5.52 and 5.53

The mitigation measures identified above would reduce potential impacts associated with cultural resources to a less than significant level.

5.5.10 References

San Diego State University (SDSU). 2014, February 20. California Indians and Their Reservations: P. SDSU Library and Information Access.

Sapphos Environmental, Inc. 2009, December 30. Cultural Resources Technical Report for the County of Los Angeles General Plan Environmental Impact Report.

Society for California Archeology (SCA). 2014. "Chronological and Cultural Units: Archaic." www.scahome.org.

5. Environmental Analysis
CULTURAL RESOURCES

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5.6 GEOLOGY AND SOILS

This section of the Draft Environmental Impact Report (DEIR) provides an overview of existing geologic conditions within the unincorporated area of Los Angeles County (Project Area). This section also evaluates the potential for implementation of the Proposed Project to result in significant direct and indirect environmental impacts related to geology and soils.

The following analysis evaluates the potential impacts of the Proposed Project on geology and soils, more specifically, aspects of the revised Conservation and Natural Resources Element that pertain to mineral resource development and hillside development, and aspects of the revised Safety Element that relate to seismic and geotechnical hazards.

5.6.1 Environmental Setting

5.6.1.1 REGULATORY SETTING

State Regulations

The most relevant state laws that regulate geology and soils in the Project Area are the Alquist-Priolo Earthquake Fault Zoning Act, the Seismic Hazards Mapping Act, and the California Building Code, each of which is described below.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures used for human occupancy.[1] The main purpose of the Act is to prevent the construction of buildings used for human occupancy on top of the traces of active faults. Although the Act addresses the hazards associated with surface-fault rupture, it does not address other earthquake-related hazards, such as seismically induced ground shaking, liquefaction, or landslides.[2]

The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults, and to publish appropriate maps that depict these zones.[3] The maps are then distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. In general, construction within 50 feet of an active fault trace requires a fault investigation prior to issuing permits.

[1] Originally titled the Alquist-Priolo Special Studies Zones Act until renamed in 1993, Public Resources Code Division 2, Chapter 7.5, Section 2621.
[2] California Geological Survey, Alquist-Priolo Earthquake Fault Zones, http://www.consrv.ca.gov/cgs/rghm/ap/Pages/index.aspx, accessed on February 24, 2014.
[3] Earthquake Fault Zones are regulatory zones around active faults. The zones vary in width, but average about one-fourth mile wide. http://www.consrv.ca.gov/CGS/rghm/ap/Pages/index.htm, accessed on February 24, 2014.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was passed in 1990. It addresses earthquake hazards other than surface-fault rupture, including liquefaction and seismically induced landslides.[4] Under this Act, seismic-hazard zones have been mapped by the State Geologist to assist local governments in land use planning. The Act states that "it is necessary to identify and map seismic-hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land-use management policies and regulations to reduce and mitigate those hazards to protect public health and safety."[5] Section 2697(a) of the Act states that "cities and counties shall require, prior to the approval of a project located in a seismic-hazard zone, a geotechnical report defining and delineating any seismic hazard."[6]

California Building Code

The California Building Standards Code, also known as Title 24 of the California Code of Regulations, reflects various building criteria that have been derived from different sources.[7] One of these sources is the International Building Code (IBC), a model building code adopted across the United States that has been modified to suit conditions in the State, thereby creating what is known as the California Building Code (CBC), or Part 2 of CCR Title 24.

The CBC is updated every three years, and much of the CBC is adopted by reference in the Los Angeles County Code, Title 26, Chapters 2 through 35, and Appendices C, I, and J.[8] Through the CBC, the State provides a minimum standard for building design and construction. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

Local Regulations

Los Angeles County Code

In addition to the adoption of the CBC by reference, the Los Angeles County Code also contains rules and regulations that govern activities that could result in soil erosion or slope instability. These rules and regulations are organized as Title 26, Appendix J–Grading, where provisions for excavation, grading, and earthwork construction have been established; permitting procedures are set forth; and plan approval and grading inspection protocols and procedures have been identified.[9] Section J110 of this chapter also contains provisions for construction-related erosion control, including the preparation of cut-and-fill slopes and the implementation of erosion control measures such as check dams, cribbing, riprap, or other devices or methods.

[4] California Geological Survey, Alquist-Priolo Earthquake Fault Zones, http://www.conservation.ca.gov/CGS/rghm/ap/Pages/index.aspx, accessed on February 24, 2014.
[5] California Public Resources Code, Division 2, Chapter 7.8, Section 2691(c).
[6] California Public Resources Code, Division 2, Chapter 7.8, Section 2697(a).
[7] California Building Standards Commission, http://www.bsc.ca.gov/codes.aspx, accessed on February 24, 2014.
[8] Los Angeles County Code, Title 26, Chapters 2 through 35, and Appendices C, I, and J, http://library.municode.com/index.aspx?clientId=16274, accessed on February 24, 2014.
[9] Los Angeles County Code, Title 26, Appendix J–Grading, https://library.municode.com/index.aspx?clientId=16274, accessed on February 24, 2014.

The ordinances also include seismic safety requirements for certain building types, such as older concrete tilt-up buildings and unreinforced masonry bearing wall buildings (refer to Title 26, Chapters 95 and 96). The stated goal of these ordinances is to promote public safety and welfare by reducing the risk of death or injury that could result from earthquake damage to certain types of older buildings during moderate or strong earthquakes. Based on the findings of required structural analysis, deficient buildings may need to be strengthened or demolished.

5.6.1.2 EXISTING CONDITIONS AND REGIONAL SETTING

This section presents a discussion of the existing geological conditions and soil resources within the Project Area as well as their regional setting.

Topographic Setting

The Project Area is geographically expansive, and broad topographic information is best gleaned from U.S. Geological Survey's (USGS) Los Angeles, Long Beach, San Bernardino, and Santa Ana 1:250,000 scale topographic map sheets. This area is typified by diverse landforms and topography, ranging from flat-lying areas of very little relief, to rugged mountain terrain with prevailing slopes in excess of 50 percent. Elevations are similarly varied, ranging from near sea-level elevations to peaks in the San Gabriel Mountains that locally exceed 10,000 feet.

Geologic Setting

The surficial and bedrock geology underlying the Project Area has been mapped by a variety of agencies and organizations, including the USGS and the California Division of Mines and Geology, now, the California Geological Survey (CGS).

A significant portion of the Project Area lies in the Transverse Ranges geomorphic province, a band of east-west trending mountains and valleys that generally vary from 30 to 100 miles in width and span roughly 250 miles from Point Arguello on the west to the San Bernardino Mountains on the east.[10] The east-west orientation of this province marks a change from the general northwesterly trends of the Peninsular Ranges Province to the south and the northwesterly grain of the California Coast Ranges and the Great Valley to the north.

In many regards, the Transverse Ranges are an anomaly when compared to the general structural grain of the North American Continent. Although geologically recent tectonic activity (i.e., middle Miocene and younger) accounts for much of the present rock distribution, the distributions of different crystalline basement rocks point to older tectonic episodes. The distinctive physiography and structural geology of the Transverse Ranges province are overprinted on an older pattern of Precambrian through early Cretaceous igneous and metamorphic basement rocks, which generally occur as fault-bounded blocks. Major basement rock boundaries are not only found along the edges of the Transverse Ranges, but they are also encountered within the province. For example, the northwest-trending Verdugo Fault separates the Precambrian to

[10] USGS, 2005. Preliminary Geologic Map of the Los Angeles 30′ × 60′ Quadrangle, Southern California, Open-File Report Open-File Report 2005-1019, Compiled by Robert F. Yerkes and Russell H. Campbell.

Cretaceous crystalline basement of the San Gabriel Mountains from the Jurassic metamorphic basement of the Santa Monica Mountains.

The bedrock units of the Project Area can be discussed as two groups: 1) basement rocks–early Cretaceous and older, crystalline metamorphic and igneous rocks; and 2) the overlying sequence of late Cretaceous and Tertiary strata. The basement rocks of the San Gabriel Mountains are comprised of Precambrian, Paleozoic, and pre-middle-Cretaceous Mesozoic metamorphic and igneous rocks. These are the oldest rocks in the Project Area, and they appear to represent old continental crust at the west edge of the North American continent.

In the east part of the Los Angeles Basin, and in the Santa Monica Mountains, the basement rocks largely consist of metamorphosed sedimentary and volcanic rocks of Jurassic age that were probably deposited on oceanic crust, and later accreted to the continental margin. The basement rocks of the west part of the Los Angeles Basin also are associated with oceanic crust, although their metamorphic characteristics are suggestive of low-grade metamorphism in a subduction zone.

A sequence of Upper Cretaceous and Tertiary sedimentary and volcanic strata lies unconformably atop the basement rocks discussed above. Regional unconformities of Upper Cretaceous age have been mapped in the Santa Monica Mountains, as well as an unconformity at the base of the Paleogene section in the western Santa Monica Mountains and Simi Hills. The aforementioned sedimentary deposits are dominated by thick sections of marine Miocene- and Pliocene-age sediments in the Los Angeles Basin.

Previous mapping has often regarded the Los Angeles Basin boundaries as the extent of middle and upper Miocene marine deposition, so as to include sedimentary rocks found in the Santa Monica Mountains, San Fernando Valley, south edge of the San Gabriel Mountains, San Jose Hills, Puente-Chino Hills, Chino Basin, northern Santa Ana Mountains, San Joaquin Hills, and Palos Verdes Hills.[11, 12]

The Tertiary sedimentary units identified in the San Gabriel and San Fernando Valleys are the Topanga, Puente, Repetto, and Pico Formations, which range in age from Miocene to Pliocene.[13] With one exception, these formations are found underlying the unconsolidated alluvium that forms the chief aquifers in these basins.

The Topanga and Puente Formations are marine deposits of middle and upper Miocene age. They are composed of interbedded siltstones, sandstones, conglomerate, and shale with local volcanic horizons. These formations outcrop in places along the base of the San Gabriel Mountains and in the South Hills, and constitute a major part of the low hills, which form the basin boundary on the east, south, and west.

The Repetto Formation overlies the Topanga and Puente Formations in parts of the Repetto, Merced, Puente, and San Jose Hills. The sedimentary beds that form the Repetto Formation were laid down during early Pliocene time in the last and most extensive of the seas that invaded the San Gabriel Valley toward the

[11] USGS, 2006. Geologic Map of the San Bernardino and Santa Ana 30´ x 60´ Quadrangles, Southern California, Open-File Report 2006-1217, Compiled by Douglas M. Morton and Fred K. Miller.
[12] California Department of Water Resources, 1961. Planned Utilization of Ground Water Basins of the Coastal Plain of Los Angeles County, Bulletin 104.
[13] California Department of Water Resources, 1961. Planned Utilization of Ground Water Basins–San Gabriel Basin, Bulletin 104-2.

end of the Tertiary period. A typical section of the Repetto Formation, more than 2,000 feet thick, is exposed in the Repetto Hills, and consists of micaceous siltstone with lesser amounts of sandstone and conglomerate. Other outcrops of the Repetto Formation are found in the Puente and San Jose Hills.

The Pico Formation was deposited in shallow water during the late Pliocene Epoch as the sea receded from the area which now constitutes the San Gabriel Valley. It crops out in the Repetto, Merced, Puente, and San Jose Hills, where it overlies the lower Pliocene Repetto Formation. Small isolated outcrops of the Pico Formation are also exposed low on the south flank of the San Gabriel Mountains, north of the Santa Fe Dam.

Based on differences in lithology and paleontology, the Pico Formation can be divided into lower and upper members. The lower member consists of greenish-gray micaceous siltstone and fine-to-coarse, light-gray feldspathic sandstone interbedded with claystone and shale. The upper Pico Formation is generally composed of sand, silt, and clay interbedded with marine gravels. Beds of gravel and sand range in thickness from 20 to 100 feet and are locally separated by layers of siltstone and clay. The Pico Formation has been encountered in several oil wells drilled in the Whittier Narrows area north of the Merced Hills.

Soils

For more than 100 years, the soils in the Project Area have been periodically studied and mapped by various agencies and researchers, including the U.S. Department of Agriculture Natural Resource Conservation Service (formerly, the Soil Conservation Service). Soil surveys of the area have long recognized the diverse soil types and conditions in Los Angeles County. An early 20th century investigation identified as many as 17 different soil types in the region.[14] Most of the soils were comprised of sands, loams, sandy loams, and adobe, whereas granitic gravel was locally noted in soils found close to major drainages or along mountain fronts.

Previous countywide environmental studies have discussed soil types based on three geographic settings: Coastal Lowlands, Central Mountains, and Northern Desert areas.[15] The Coastal Lowlands, which are comprised of the Los Angeles Coastal Plain; the Santa Monica and Verdugo Mountains, the Repetto, San Rafael, Puente, and San Jose Hills; and the San Fernando, San Gabriel, and Santa Clarita Valleys, are reportedly dominated by soils that are generally amenable to urban development. Certain areas near the margins of the coastal plain reportedly pose problems with respect to such development. For example, in the Palos Verdes Hills, corrosive soils and soils with high expansion potential have been identified. Most of the San Gabriel Valley and the central San Fernando Valley are reportedly underlain by soils well-suited for urban development, although in the vicinity of the City of Calabasas, corrosive soils and soils with high expansion potential have been mapped. Portions of the Antelope Valley are reportedly underlain by soils that may be susceptible to hydrocollapse.

[14] USDA Bureau of Soils (now Natural Resource Conservation Service), 1903. Soil Survey of the Los Angeles Area, California, Mesmer, Louis B.
[15] Environmental Systems Research Institute, 1976. Land Capability/Suitability Study Natural Resources Inventory: Capability for Development Considering Interpretations of Soil Conditions" (Variable 22).

In recent years, the Los Angeles County Department of Public Works has compiled a GIS database for major soil types that have been mapped within the Project Area.[16] The information in that database describes nearly two dozen soil types, including loams; clayey, silty, and sandy loams; clay adobes; and various alluvial and mountain soil types, as shown on Figure 5.6-1. The prevailing soil types in each of the 11 Planning Areas are summarized in the following Table 5.6-1.

Table 5.6-1 Predominant Soil Types in the Planning Areas

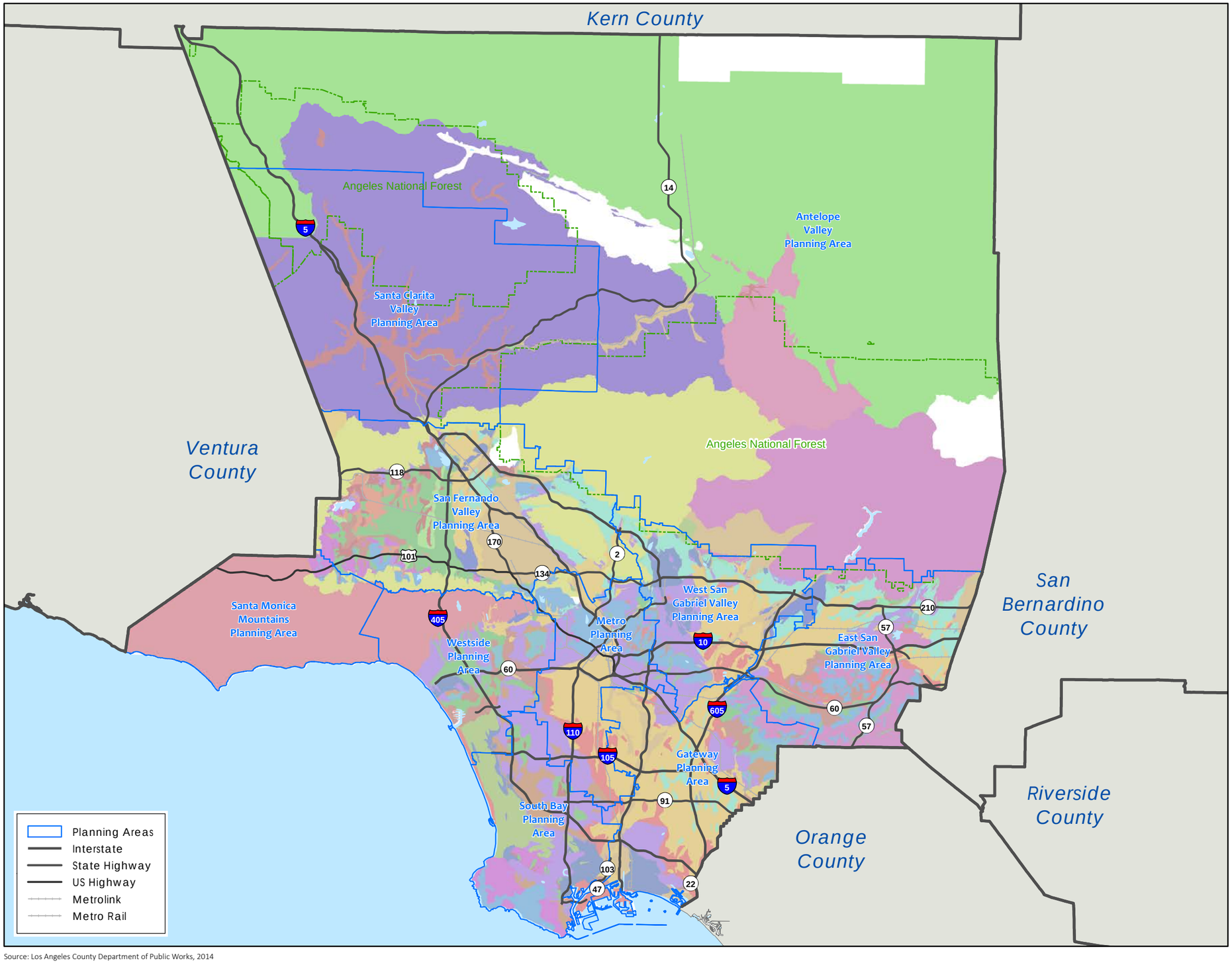
Planning Area	Predominant Soil Types*
Antelope Valley Planning Area	Antelope Valley Series (predominantly loam, gravelly loam, and sandy loam in area immediately northeast of San Andreas Fault[17])
Coastal Island Planning Area	Loam, clay loam, and gravelly loam, often derived from weathering of parental volcanic bedrock.[18]
East San Gabriel Valley Planning Area	Hanford Fine Sandy Loam Hanford Gravelly Sandy Loam Yolo Clay Loam
Gateway Planning Area	Hanford Fine Sandy Loam Chino Silt Loam
Metro Planning Area	Hanford Fine Sandy Loam Ramona Loam Altamont Clay Loam
San Fernando Valley Planning Area	Yolo Loam Tujunga Fine Sandy Loam Hanford Fine Sandy Loam
Santa Clarita Valley Planning Area	Yolo Sandy Loam Santa Clara River Series
Santa Monica Mountains Planning Area	Santa Monica Mountains Series
South Bay Planning Area	Yolo Loam Montezuma Clay Adobe Oakley Fine Sand
West San Gabriel Valley Planning Area	Hanford Fine Sandy Loam Chino Silt Loam Tujunga Fine Sandy Loam
Westside Planning Area	Ramona Loam Ramona Sandy Loam Yolo Loam

* Source: Los Angeles County Department of Public Works, GIS Data Portal, Soil Types, 2014.

[16] Los Angeles County Department of Public Works, Los Angeles County GIS Data Portal, Soil Types, http://egis3.lacounty.gov/dataportal/2011/01/27/soil-types/, accessed on February 25, 2014.
[17] Regional Water Management Group, 2007. Antelope Valley Integrated Regional Water Management Plan.
[18] USDA, Natural Resources Conservation Service, 2008. Soil Survey of Santa Catalina Island, California.

FIGURE 5.6-1

MAP OF PROMINENT SOIL TYPES IN LOS ANGELES COUNTY



- Altamont Clay Loam
- Antelope Valley
- Chino Silt Loam
- Diablo Clay Loam
- Hanford Fine Sandy Loam
- Hanford Gravelly Sandy Loam
- Hanford Silt Loam
- Little Rock Creek
- Montezuma Clay Adobe
- Oakley Fine Sand
- Placentia Loam
- Ramona Clay Loam
- Ramona Loam
- Ramona Sandy Loam
- Santa Clara River
- Santa Monica Mountains
- Tujunga Fine Sandy Loam
- Upper Los Angeles River
- Upper San Gabriel River
- Yolo Clay Loam
- Yolo Fine Sandy Loam
- Yolo Gravelly Sandy Loam
- Yolo Loam
- Yolo Sandy Loam

Source: Los Angeles County Department of Public Works, 2014

LOS ANGELES COUNTY GENERAL PLAN UPDATE EIR

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Regional Faulting and Seismic Setting

The Project Area is one of the most seismically active, urban settings in North America.[19] Assessments of the earthquake hazards in California have concluded that catastrophic earthquakes are inevitable in the Los Angeles region.[20] The probability that a large earthquake will occur sometime during the next 30 years along the nearby San Andreas Fault is currently estimated to be 40 percent or greater.[21] Projected losses of billions of dollars and estimated casualties of tens of thousands could surpass any previous natural disaster in the United States. A catastrophic earthquake would severely strain the emergency-response and recovery capabilities of federal, state, and local governments.

From a tectonic perspective, the San Andreas Fault system is a zone of relative motion between the North American and Pacific Plates. The tectonic-driven crustal deformation now taking place in Southern California is dominated by the intersection of the San Andreas and the Transverse Ranges fault systems. The manifestations of this intersection are varied, ranging from the considerable topographic relief along the south flank of the San Gabriel Mountains, or in transitory events, such as earthquakes. Although these fault systems are part of a long-term, ongoing tectonic process now more than five million years old, they are currently responding to strain related to motion of the Pacific and North American plates through horizontal slip (aka strike-slip) along the San Andreas Fault system or by vertical (aka thrust) slip on Transverse Ranges faults. Seismic hazards present within Los Angeles County are shown on Figure 5.6-2, *Map of Seismic Hazards Los Angeles County*.

Based on subsurface trenching and exploratory borings, surface observations, geomorphologic/topographic patterns, geophysical data, and other evidence, more than one dozen faults within the Project Area have been classified as "active faults" by the California Geological Survey. By definition, such faults must exhibit evidence of seismic failure within the past 11,000 years. Under the 1972 Alquist-Priolo Earthquake Fault Zoning Act, California law requires the State Geologist to identify such faults, establish protective regulatory zones known as "Earthquake Fault Zones" (or prior to 1991, "Special Studies Zones") about the traces of these faults, then publish and disseminate maps of these zones. Some of the more significant state-mapped active faults in the Project Area are listed in Table 5.6-2, along with the Planning Areas in which they are located. This table is not intended to be all-inclusive. Instead, its purpose is to highlight prominent earthquake faults that have been associated with significant Los Angeles-area seismic events.

[19] USGS, 1987. Evaluating Earthquake Hazards in the Los Angeles Region-An Earth-Science Perspective, Professional Paper 1360, J. I. Ziony, Editor.
[20] Federal Emergency Management Agency, 1980. An Assessment of the Consequences and Preparations for a Catastrophic California Earthquake.
[21] Wesson and Wallace, 1985. Predicting the Next Great Earthquake in California: Scientific American, v. 252, no. 2.

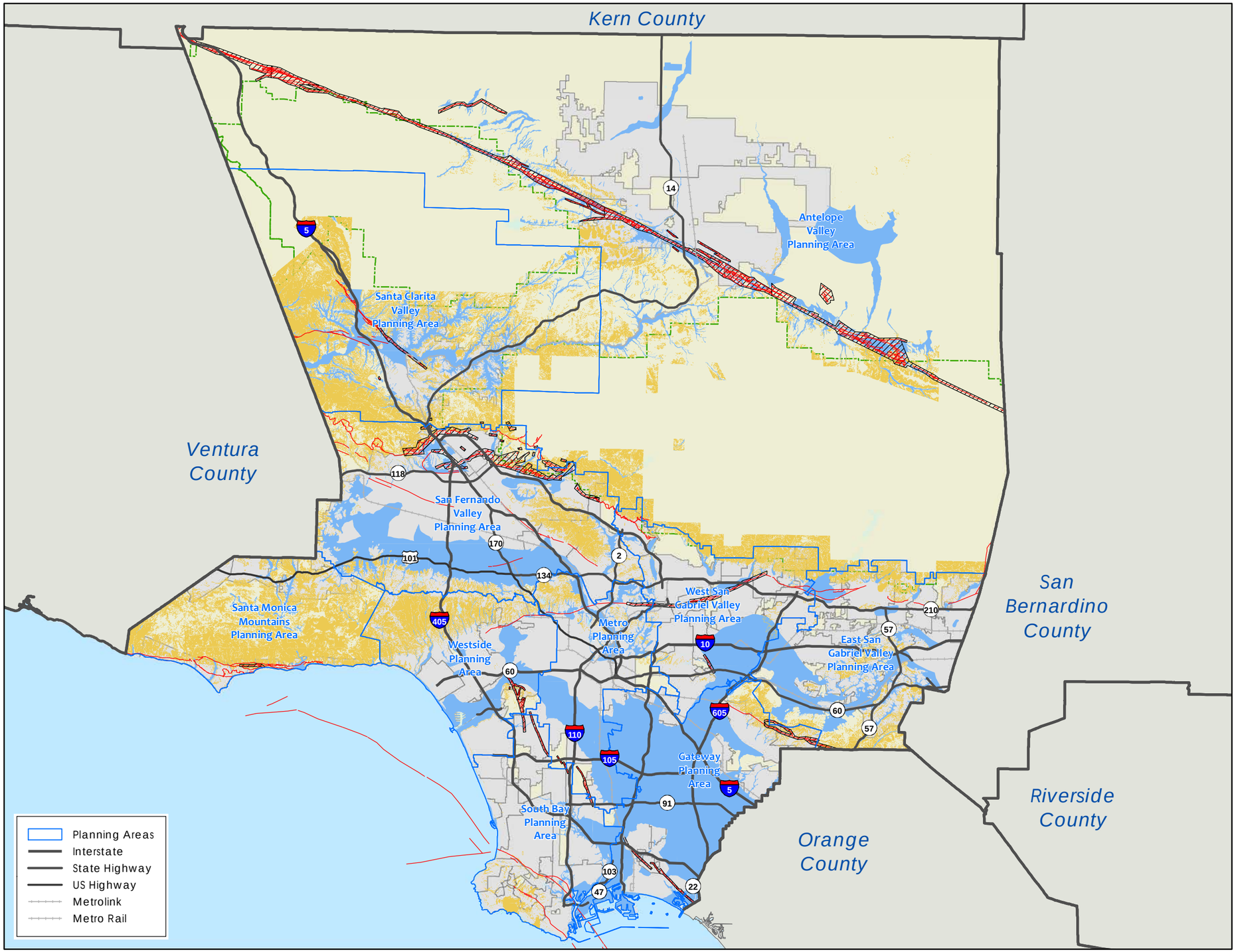
Table 5.6-2 Prominent Active Faults in the Planning Areas

Fault Name	Planning Area Location	Comments
Hollywood Fault	Westside Planning Area Metro Planning Area Santa Monica Mountains Planning Area	Composed of strands that flank the south flank of the Santa Monica Mountains, with a prevailing reverse to reverse-oblique movement. Heretofore not mapped as active, although recent observations during construction north of Hollywood Blvd. have prompted the publication of new draft earthquake fault zone maps.
Newport-Inglewood Fault	Westside Planning Area South Bay Planning Area	Includes Inglewood, Potrero, Avalon-Compton, Cherry Hill, and Reservoir Hill-Seal Beach segments. Predominantly right-lateral or right-oblique movement. Associated with 1933 magnitude (M_W) 6.4 Long Beach Earthquake.
Raymond Fault	West San Gabriel Valley Planning Area	Prevailing reverse and reverse-oblique movement. Associated with 1998 M_W 5.0 Pasadena Earthquake.
San Fernando Fault	San Fernando Valley Planning Area	Composed of Reservoir, Mission Wells, Sylmar, Tujunga, and Lake View segments. Prevailing reverse and left-oblique movement. Associated with 1972 M_W 6.5 San Fernando (Sylmar) Earthquake.
San Gabriel Fault	West San Gabriel Valley Planning Area Santa Clarita Valley Planning Area	Complex range of movement sense/offset, consisting of a zone of north-dipping, en-echelon fault segments.
Sierra Madre Fault System	West San Gabriel Valley Planning Area	Interconnected fault strands that occupy a zone as wide as one kilometer. Prevailing reverse displacement.
San Andreas Fault System	Antelope Valley Planning Area	Traversing the north part of the Project Area and as a tectonic plate boundary, it may represent the single most significant earthquake fault zone in California. Quiescent for many decades, it was the site of the 1857 Fort Tejon Earthquake with an estimated magnitude M_W 7.9 and surface rupture that extended more than 350 kilometers.

Source: Southern California Earthquake Data Center, 2014; US Geological Survey Earthquake Hazards Program, 2014.

FIGURE 5.6-2

MAP OF SEISMIC HAZARDS
LOS ANGELES COUNTY



Active Fault Trace
Aquist-Priolo Eartquake Fault Zone
Seismically Induced Landslide Zone
Seismically Induced Liquefaction Zone
Unincorporated Areas
Cities

Active Fault Trace and Alquist -Priolo Earthquake data represented in the this map is derived from to following;

1. California Geological Survey, Seismic Hazard Zone Maps, 1997 -2005.
2. Los Angeles County General Plan, Fault Rupture Hazards and Historic Seismicity Map, 1990. (USGS GIS data was used for refinement of mapped faults.)

Source: DRP,2013, Los Angeles County Department of Public Works, 2014

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Seismic Hazards

Active Faults

Slip along a fault may result in one or more geologic effects that can damage or destroy structures and injure their inhabitants. In general, ground shaking and surface fault rupture are the effects of greatest concern when an earthquake occurs along a fault in the Los Angeles region. A related effect, the possible generation of tsunamis by submarine earthquakes, may be of concern to coastal areas. For certain structures such as pipelines, canals, and coastal facilities, the regional scale uplift and subsidence that can result from some large earthquakes could pose a minor hazard.

Seismic records and data, particularly those dating from the mid-20th century, underscore the probability and severity of large earthquakes in the Project Area. Table 5.6-3 summarizes the most significant seismic events from 1930 to the present time. The listed earthquakes are those whose epicenters/hypocenters lay within the Project Area. Thus, some larger, recent events located outside of Los Angeles County, such as the June 1992 magnitude (M_w) 7.2 Landers Earthquake, have not been included. In total, the listed earthquakes resulted in more than $21 billion in damage and the loss of nearly 250 lives.

Table 5.6-3 Summary of Significant Earthquakes in the Project Area (post-1930)

Seismic Event	Date	Fault	Magnitude (M_w)	Damage/ Casualties
Northridge EQ	January 1994	Northridge Thrust Fault	6.5	$20B/57
Sierra Madre EQ	June 1991	Clamshell-Sawpit Canyon Fault	5.8	$40M/2
Pasadena EQ	December 1988	Raymond Fault	5.0	Minor/none
Whittier Narrows EQ	October 1987	Unnamed blind thrust fault	5.9	$358M/8
Sylmar/San Fernando EQ	February 1971	San Fernando Fault Zone	6.5	$500M/65
Long Beach EQ	March 1933	Newport-Inglewood Fault	6.4	$50M/120

Source: Southern California Earthquake Data Center.

Surface Fault Rupture

Surface fault rupture can occur during significant seismic events. The process generally involves the sudden failure and displacement of the earth's surface along a fault trace or fault zone. The magnitude and geometry of such ground displacement is highly variable. In general, strike-slip faults such as the San Andreas Fault are more likely to produce lateral offsets in the ground surface, with one side of the fault plane or zone "sliding" past the opposing side. Similarly, faults that generally fail under compressional stress, such as thrust or reverse faults, are more prone to vertical offsets in the ground surface. In either case, buildings or other man-made structures that lie atop the fault can experience serious damage or catastrophic failure during a strong earthquake.

Strong Seismic Ground Shaking

An earthquake of moderate to high magnitude generated within the Project Area could cause significant ground shaking within any of the 11 Planning Areas. The exact degree of shaking experienced at a given location would depend on a host of site-specific factors, such as: the magnitude of the seismic event, the duration of the seismic event, the distance from a given site to the zone of rupture (i.e., hypocenter), local

site-specific geologic conditions (i.e., nature, thickness, and extent of underlying soil and/or bedrock), and broader, often regional geologic factors such as basin geometry. In general, the severity of seismic ground shaking tends to abate with increasing distance from the event hypocenter. Seismic ground shaking, if sufficiently intense and sustained, can result in significant damage to, or catastrophic failure of buildings or other man-made structures.

Seismically Induced Slope Failure

An earthquake of moderate to high magnitude generated within the Project Area could result in slope failure such as landslides. Although landslides can manifest as a variety of earth movements, a recent study of earthquake-related slope failures found that the following were the most prevalent (in order of decreasing frequency): 1) rock falls, disrupted soil slides, and rock slides; 2) soil lateral spreads, soil slumps, soil block slides, and soil avalanches; and 3) soil falls, rapid soil flows, and rock slumps. The potential for such slope failure is often highly site-specific, and can be exacerbated where saturated soil/bedrock is present, steep and/or eroded slopes are noted, and evidence of historical slides or slide-prone soil or bedrock types.

Liquefaction

Liquefaction is a process whereby strong seismic shaking causes unconsolidated, water-saturated sediment to temporarily lose strength and behave as a fluid. This process can lead to near-surface or surface ground failure that can result in extensive damage to or catastrophic failure of buildings, roads, utility lines, and other man-made structures. Liquefaction can manifest as lateral ground spreading or flow, localized sand boils (i.e., eruptions of fluidized sediment), or rapid subsidence and an accompanying loss of bearing strength.

In order to preliminarily evaluate a region's susceptibility to liquefaction, several factors ought to be considered, including:

- The anticipated intensity and duration of ground shaking.

- The origin, texture, and composition of shallow sediments. In general, cohesionless, fine-grained sediments such as silts or silty sands, or areas of uncompacted or poorly compacted fills are more prone to liquefaction. By contrast, coarser grained, poorly sorted sediments such as coarse sands and gravels are less susceptible to liquefaction. Liquefiable sediments are found in a variety of depositional environments, including bays, estuaries, river floodplains and basins, lakes, and Aeolian deposits such as dunes and loess.

- The presence of shallow groundwater. Saturated sediments are necessary for seismically induced liquefaction to occur. In general, the highest liquefaction susceptibility is found in fine-grained sediments of late Holocene to late Pleistocene age (i.e., 1,000 to 15,000 years before present [B.P.]) in areas where the groundwater is shallower than about 50 feet below ground surface.

The above-referenced geological settings and conditions are not unusual and they are found in many parts of Southern California. A more detailed overview of the state-mapped seismic hazard zones in the 11 Planning Areas is presented in the following Table 5.6-4. In preparing this overview, descriptive terms such as "limited" are intended to provide a very generalized, qualitative way in which the Planning Areas might be compared to

one another. Comprehensive, project-specific or site-specific evaluations necessarily require more detailed information, beginning with quadrangle-level maps and ranging to invasive sampling and testing.

Table 5.6-4 Overview of Mapped Seismic Hazards in the Planning Areas

Planning Area	Seismic-Induced Landslide Zones	Seismic-Induced Liquefaction Zones
Antelope Valley Planning Area	Limited landslide hazard zones have been identified; most lie in foothills/mountain front areas south of San Andreas Fault.	Several liquefaction hazard zones have been identified. Most are associated with washes/arroyos that drain to Mojave Desert.
Coastal Island Planning Area	Not mapped by CGS.	Not mapped by CGS.
East San Gabriel Valley Planning Area	Several landslide hazard zones have been identified; most lie in foothill areas along south front of San Gabriel Mountains or hilly areas such as the San Jose, Puente, and Whittier Hills.	Several liquefaction hazard zones have been identified. Most are associated with existing drainages and alluvial valleys such as Walnut and San Jose Creeks.
Gateway Planning Area	Limited landslide hazard zones have been identified; most lie in hilly areas such as south flank of the Whittier Hills.	Large liquefaction hazard zones have been identified. The largest are associated with present-day and ancestral San Gabriel and Los Angeles Rivers.
Metro Planning Area	Limited landslide hazard zones have been identified; most lie in hilly areas such as Mount Washington, Silver Lake, and Griffith Park.	Limited liquefaction hazard zones have been identified. Most are associated with present-day and ancestral Los Angeles River.
San Fernando Valley Planning Area	Several landslide hazard zones have been identified; most lie in foothill areas along north front of Santa Monica Mountains, south front of Santa Susana Mountains, or hilly areas such as the Verdugo Mountains.	Large liquefaction hazard zones have been identified. The largest are associated with present-day and ancestral Los Angeles Rivers.
Santa Clarita Valley Planning Area	Numerous landslide hazard zones have been identified; most lie in steep-sloped terrain of the Santa Susana Mountains.	Largest liquefaction hazard zones have been identified. The largest are associated with present-day Santa Clara River and its tributary streams and canyons.
Santa Monica Mountains Planning Area	Numerous landslide hazard zones have been identified; most lie in steep-sloped terrain of the Santa Monica Mountains.	Limited liquefaction hazard zones have been identified. Most are associated with narrow canyons incised in the Santa Monica Mountains.
South Bay Planning Area	Limited landslide hazard zones have been identified; most lie in hilly areas such as the Palos Verdes Hills.	Limited liquefaction hazard zones have been identified. The most prominent lie northeast of the Baldwin Hills.
West San Gabriel Valley Planning Area	Limited landslide hazard zones have been identified; most lie in foothill areas along south front of San Gabriel Mountains or hilly areas such as the San Rafael, Montebello, and Monterey Hills.	Several liquefaction hazard zones have been identified. Most are associated with existing drainages such as Eaton Wash, Arroyo Seco, as well as present-day and ancestral San Gabriel River.
Westside Planning Area	Several landslide hazard zones have been identified; most lie in hilly areas such as the Santa Monica Mountains and Baldwin Hills.	Several liquefaction hazard zones have been identified. Most are associated with present-day and ancestral Ballona Creek.

Source: CA Geological Survey, Seismic Hazard Zonation Program, 2014.

Buildings Prone to Seismic Damage

Earthquake risks are not limited to ground shaking, fault rupture, or liquefaction, but also embrace the damage to inhabited buildings or sensitive, manmade infrastructure. Advances in the field of seismic engineering and strengthened building codes have significantly reduced the potential for catastrophic collapse in newly constructed buildings. Nevertheless, many older buildings were designed and constructed before

modern seismic design standards were incorporated into the building code. Certain building types are of particular concern:

- **Unreinforced Masonry Buildings:** In the late 1800s and early 1900s, unreinforced masonry was the most common type of construction for commercial buildings and multi-story apartments and hotels. These were recognized as a collapse hazard following the 1906 San Francisco Earthquake, the 1925 Santa Barbara Earthquake, and again, in the aftermath of the 1933 Long Beach Earthquake. These buildings are generally recognized as the most susceptible to seismic damage.

- **Precast Concrete Tilt-up Buildings:** This commercial/industrial building type gained popularity in the late 1950s and 1960s. Extensive damage to concrete tilt-up buildings during the 1971 San Fernando Earthquake revealed the need for seismic reinforcement, such as better anchoring of walls to the roof, floor, and foundation elements, as well as stronger roof diaphragms.

5.6.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

G-1 Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)

ii) Strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction.

iv) Landslides.

G-2 Result in substantial soil erosion or the loss of topsoil.

G-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

G-4 Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risks to life or property.

G-5 Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

5.6.3 Relevant General Plan Goals and Policies

Following is a list of the policies of the Proposed Project that are intended to reduce potentially significant adverse effects concerning geology or soils.

Conservation and Natural Resources Element

- **Policy C/NR 11.1:** Require mineral resource extraction and production activities and drilling for and production of oil and natural gas to comply with County regulations and state requirements, such as SMARA, and DOGGR regulations.

- **Policy C/NR 11.4:** Require that mineral resource extraction and production operations as well as activities related to the drilling for and production of oil and natural gas be conducted to protect other natural resources and prevent excessive grading in hillside areas.

- **Policy C/NR 13.5:** Encourage required grading to be compatible with the existing terrain.

- **Policy C/NR 13.8:** Manage development in (Hillside Management Areas) HMAs to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion, and landslides.

Safety Element

- **Policy S 1.1:** Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.

- **Policy S 1.2:** Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.

- **Policy S 1.3:** Require developments to mitigate geotechnical hazards, such as soil instability and landsliding in Hillside Management Areas through siting and development standards.

- **Policy S 1.4:** Support the retrofitting of unreinforced masonry structures to help reduce the risk of structural and human loss due to seismic hazards.

5.6.4 Environmental Impacts

The following impact analysis addresses thresholds according to Appendix G of the CEQA Guidelines of significance. The applicable thresholds are identified in brackets after the impact statement.

Increased Development Potential, Population, and Employment due to Project Buildout

Proposed Project buildout may result in the development of up to 368,432 additional residential units, approximately 1.3 million additional residents, and 225,201 additional jobs in the Project Area.

Impact 5.6-1: Project Area residents, occupants, or structures could potentially be exposed to seismic-related hazards. [Threshold G-1i, -1ii, -1iii, and -1iv]

Impact Analysis:

Rupture of a Known Earthquake Fault

As shown on previous Figure 5.6-2, several areas of the Project Area are within designated Alquist-Priolo Zones. Project implementation would result in the construction of new buildings, many of which are expected to be residential in nature. The siting of such buildings would have to comply with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act, the purpose of which is to prevent the construction of residential buildings on top of the traces of active faults. Adherence to this law, and the associated setbacks from active fault traces, would help would reduce the hazards associated with earthquake fault rupture to a less than significant level.

Strong Seismic Ground Shaking

Buildout of the Proposed Project would increase the numbers of residential units, non-residential structures, residents, and workers in the Project Area. Los Angeles County is in a seismically active region. Strong ground shaking is very likely to occur in Los Angeles County during the useful lives of structures that would be developed or redeveloped pursuant to the Proposed Project. The Project Area, and Los Angeles County in general, contain more than two dozen active earthquake faults, the most significant of which are listed in Tables 5.6-1 and 5.6-2, and illustrated in Figure 5.6-2. Of the faults listed, the southern section of the San Andreas Fault is estimated to be capable of generating the largest earthquake, potentially in excess of M_w 7.1. Although the maximum anticipated peak horizontal ground acceleration associated with these faults is approximately 0.50 g, the intensity of seismic shaking can be very location dependent. For example, accelerations associated with the 1994 Northridge Earthquake exceeded 1.00 g at certain monitoring stations.

Although strong seismic shaking is a risk throughout Southern California, the Project Area is not at greater risk of seismic activity or impacts than other areas. Additionally, the State regulates development through a variety of tools that reduce hazards from earthquakes and other geologic hazards. The California Building Code contains building design and construction requirements that are intended to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards.

The County building regulations are included in the County Code, Title 26, Chapters 2 through 35, and Appendices C, I, and J, where the County has adopted the most recent version of the CBC by reference. Future development projects pursuant to the Proposed Project would be required to adhere to the provisions of the CBC, which are imposed on project developments by the County during the building plan check and development review process. Each future development would be preceded by a detailed, site-specific geotechnical investigation. The geotechnical investigation would calculate seismic design parameters pursuant to CBC requirements, and would include foundation and structural design recommendations, as needed, to reduce hazards to people and structures arising from ground shaking. Compliance with the requirements of the CBC for structural safety during a seismic event would reduce the hazards associated with strong seismic ground shaking to a less than significant level.

Liquefaction

Implementation of the Proposed Project would increase numbers of residents, workers, and structures in the Project Area. Based on assessments of anticipated intensity and duration of seismic shaking; the origin, texture, and composition of shallow sediments, and the presence of shallow groundwater, several parts of the Project Area have been mapped by the State as areas prone to seismically induced liquefaction as summarized in Table 5.6-4. Future development projects considered for approval pursuant to the Proposed Project could subject persons or structures to potentially significant hazards arising from liquefaction.

Although liquefaction zones have been mapped within the Project Area, future development pursuant to the Proposed Project would not result in increased risk of or exposure to liquefaction or other seismic-related ground failures. Geotechnical investigations for future development projects considered for approval by the County pursuant to the Proposed Project would be required to evaluate the potential for liquefaction and other seismic ground failure such as lateral spreading, under the respective project sites. Geotechnical investigation reports would provide recommendations for grading and for foundation design to reduce hazards to people and structures arising from liquefaction and other seismic-related ground failure. Future development projects pursuant to the Proposed Project would be required to adhere to existing building and grading codes, and construction-related grading requires the preparation and submittal of site-specific grading plans and geotechnical reports that must be reviewed and approved by the County beforehand. Each future development project would be required to comply with the recommendations in the geotechnical investigation report and comply with the CBC, thereby reducing such hazards to a less than significant level.

Seismically Induced Landslides

Implementation of the Proposed Project at buildout would increase numbers of residents, workers, and structures in Los Angeles County. The propensity for earthquake-induced landslides is greatest in hilly areas, with steep slopes and bedrock or soils that are prone to mass movement. Very few areas of the Project Area have been mapped by the State as zones of seismically induced landslide hazards under the Seismic Hazard Zonation Program. Nevertheless, the existing County's building plan check and development review process provides meaningful safeguards against exposure to such hazards.

Several policies included in the Conservation and Natural Resources and Safety Elements of the Proposed Project have been developed to address potential seismic-related hazards such as ground shaking, liquefaction, and seismically induced landslides:

- **Policy S 1.1:** Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.
- **Policy S 1.2:** Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.
- **Policy S 1.4:** Support the retrofitting of unreinforced masonry structures to help reduce the risk of structural and human loss due to seismic hazards.

Compliance with existing state and county regulations, as well as goals and policies included as part of the Proposed Project would ensure that the impacts associated with exposure to strong seismic ground shaking, seismic-related ground failure including liquefaction, and landslides are reduced to a less than significant level.

Impact 5.6-2: Project implementation would result in substantial soil erosion, the loss of topsoil, or development atop unstable geologic units or soils, or expansive soils. [Thresholds G-2, G-3, and G-4]

Impact Analysis:

Erosion

Project buildout would involve construction-related ground disturbance in various parts of Los Angeles County, particularly in the Antelope Valley Planning Area, which is expected to accommodate approximately 69 percent of new residential units. During future development, soil would be graded and excavated, exposed, moved, and stockpiled. Construction and site grading of future development projects pursuant to the Proposed Project could cause substantial soil erosion without effective soil-erosion measures.

Most parts of the Project Area are typified by gentle to moderate topography and slopes, and are less susceptible to erosion and/or the loss of topsoil. However, in areas with steep slopes, particularly where grading has taken place, this potential is substantially increased. Grading temporarily increases the potential for erosion by removing protective vegetation, changing natural drainage patterns, and producing over-steepened slopes. Policies concerning development in Hillside Management Areas (HMAs) also provide protection against substantial soil erosion, particularly in areas dominated by steep slopes. In particular, the Draft HMA Ordinance, which amends Title 22, Planning and Zoning, of the Los Angeles County Code, encourages development in HMAs on less steep slopes, and incorporates sensitive hillside design through design measures such as site planning, grading and facilities, and road circulation design through a Conditional Use Permit (CUP) prior to development in most HMAs. The existing HMA Ordinance contains separate definitions for urban and non-urban (rural) HMAs. The proposed update to the Ordinance defines HMAs as any portion of a lot or parcel containing a terrain with a natural slope gradient of 25% or steeper. For the purposes of determining whether a CUP is required, isolated HMAs under a certain size are exempt. The Draft Ordinance also contains definitions for additional terms, including: constraints, development, Hillside Design Guidelines, Improved Open Space, Natural Open Space, Rural Land Use Designation, and Sensitive Design Techniques.

Adherence to the requirements of the County Code and the CBC, together with the safeguards afforded by the County's building plan check and development review process, would help ensure that appropriate erosion controls are devised and implemented during construction. Furthermore, construction activities on project sites larger than one acre would be subject to National Pollution Discharge Elimination System (NPDES) requirements. Under the state-administered NPDES, the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) would be required as well as deployment of approved erosion control best management practices (BMPs). Construction projects on sites one acre or larger are required to prepare and implement a SWPPP. The SWPPP is required to obtain coverage under the Statewide General Construction Activity permit issued by the State Water Resources Control Board. The SWPPP would

specify BMPs that would be used during the construction phase of each affected project to minimize water pollution, including pollution with sediment. Categories of BMPs used in SWPPPs are described in Table 5.6-5.

Table 5.6-5 Construction Best Management Practices

Category	Purpose	Examples
Erosion Controls	Cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind.	Mulch, geotextiles, mats, hydroseeding, earth dikes, swales.
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basin; cleaning measures such as street sweeping.
Wind Erosion Controls	The aims and methods of wind erosion control are similar to those of "Erosion Control," above.	See "Erosion Controls," above.
Tracking Controls	Minimize the tracking of soil offsite by vehicles.	Stabilized construction roadways and construction entrances/exits; entrance/outlet tire wash.
Nonstorm Water Management Controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize non-stormwater discharges and contamination of any such discharges.	BMPs specifying methods for: paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; concrete finishing.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Spill prevention and control, stockpile management, and management of solid wastes and hazardous wastes.

In addition to the requirement to prepare a SWPPP, grading during development is subject to erosion control measures in the County's Building Code, specifically Title 26, Appendix J. This code includes restrictions and practices that must be followed by developers in Los Angeles County. The faces of cut-and-fill slopes and development sites shall be prepared and maintained to control against erosion. Required erosion control measures may include temporary and/or permanent erosion control measures such as desilting basins, check dams, riprap or other devices or methods, as approved by the County. Consequently, impacts would be less than significant.

Unstable Geologic Units or Soils and Expansive Soils

Buildout of the Proposed Project would increase numbers of residents, workers, and structures in Los Angeles County. The Project Area is geographically expansive, embracing a variety of geologic settings and soil types. In most areas, unstable geologic units or soils, or expansive soils are not of concern. Nevertheless, areas of unstable geologic units or unstable or expansive soils are known to occur locally. Development considered for approval under the Proposed Project could expose structures or persons to potentially significant hazards due to unstable geologic units or soils.

Individual development projects would be required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also requires the preparation of site-specific grading plans, soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues. Such plans and reports must be tendered to the County for review and approval before the Proposed Project can commence. Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable.

Policies included in the Conservation and Natural Resources and Safety Elements of the Proposed Project have been developed to address these potential hazards:

- **Policy C/NR 13.5:** Encourage required grading to be compatible with the existing terrain.
- **Policy C/NR 13.8:** Manage development in (Hillside Management Areas) HMAs to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion, and landslides.
- **Policy S 1.3:** Require developments to mitigate geotechnical hazards, such as soil instability and landsliding in Hillside Management Areas through siting and development standards.

Compliance with existing state and county regulations, as well as the goals and policies included as part of the Proposed Project, would ensure that the impacts associated with erosion and topsoil loss, as well as development atop unstable geologic units and soil, or expansive soil are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant.

Impact 5.6-3: Soil conditions would adequately support proposed septic tanks. [Threshold G-5]

Impact Analysis:

Most new development that is anticipated in the Project Area would not require the use of septic tanks or alternative wastewater disposal systems. Wastewater would be discharged into the existing public sanitary sewer systems, where the wastes would be conveyed by pipes to plants for treatment. In those few cases where septic systems might be necessary, such as rural areas of the Santa Clarita Valley and Antelope Valley Planning Areas, the prevailing soil conditions in Los Angeles County are generally amenable to the use to such systems. In addition, all on-site wastewater treatment systems (OWTS) will be required to comply with County Code, Titles 11 and 28 and other regulations applicable to OWTS, including requirements for preparation and submittal of feasibility reports in order to obtain the Department of Public Health - Environmental Health approval for construction and installation of OWTS. As such, there would be no impact from implementation of the Proposed Project at sites where soils might otherwise not be capable of supporting the use of septic tanks or alternative wastewater disposal systems.

The impacts associated with the use of OWTS as a consequence of Proposed Project implementation would be less than significant.

5.6.5 Cumulative Impacts

Most of Southern California is located in an area of a relatively high seismic activity, including cumulative projects in Los Angeles County. All cumulative development, within the Project Area and adjacent cities would be subject to the CBC, which contains requirements for development in areas subject to Seismic Design Categories E and F. Additionally, cumulative projects would be subject to the AP Earthquake Fault Zone Act, which restricts development on active fault traces. Due to the site specific nature of geological conditions (i.e., soils, geological features, seismic features, etc), geology and soils impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis. Nonetheless, cumulative growth through project buildout would expose a greater number of people to seismic hazards. Future cumulative development under the Proposed Project and the surrounding area would be subject to the same local, state, and federal regulations pertaining to geology and soils, including CBC and Los Angeles County Building Code requirements (or city building code requirements, as appropriate). Therefore, cumulative development in the region would not result in a significant cumulative impact. The Proposed Project, in combination with other cumulative projects, would not contribute to a potentially significant cumulative impact.

5.6.6 Existing Regulations and Standard Conditions

State

- California Building Code (Title 24, California Code of Regulations, Part 2)
- California Health and Safety Code Sections 17953 et seq.: Geotechnical Investigations
- California Code of Regulations Title 24, Section 3724: Required Investigations in Seismic Hazard Zones
- California Public Resources Code Sections 2621 et seq.: Alquist-Priolo Earthquake Fault Zoning Act
- California Public Resources Code Section 2695: Seismic Hazard Mapping Act
- Order No. 2009-0009-DWQ, State Water Resources Control Board: General Construction Permit

Los Angeles County Code

- Title 26, Chapters 2 through 35, and Appendices C, I, and J (Adoption of California Building Code)
- Title 26, Appendix J, Section J110 (Construction-related erosion control, preparation of cut-and-fill slopes, and the implementation of erosion control measures)
- Title 26, Chapters 95 and 96 (Seismic safety requirements for older concrete tilt-up buildings and unreinforced masonry bearing wall buildings)

5.6.7 Level of Significance Before Mitigation

Assuming compliance with applicable regulatory requirements and conformance with standard conditions of approval, the following impacts would be less than significant: 5.6-1, 5.6-2, 5.6-3, 5.6–4, and 5.6–5.

5.6.8 Mitigation Measures

No mitigation measures are required.

5.6.9 Level of Significance After Mitigation

No significant impacts have been identified and no significant and unavoidable impacts would occur.

5.6.10 References

International Code Council and the California Building Standards Commission (2013). 2013 California Building Code Title 24. 2013.

California, State of, Department of Conservation. 2014. http://www.conservation.ca.gov/cgs/Pages/Index.aspx.

5.7 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Proposed General Plan Update and associated actions (Proposed Project) to cumulatively contribute to greenhouse gas (GHG) emissions impacts. Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (SCAQMD) and the Antelope Valley Air Quality Management District (AVAQMD). Transportation-sector impacts are based on average daily vehicle trips and vehicle miles traveled provided by Iteris (see Appendix L). Air quality and GHG emissions modeling for the Proposed Project is included in Appendix G of this DEIR.

5.7.1 Environmental Setting

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHGs, to the atmosphere. The primary source of these GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHGs identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[1,2] The major GHGs are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in landfills and water treatment facilities.

- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste.

[1] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant because it is considered part of the feedback loop of changing radiative forcing rather than a primary cause of change.

[2] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2014a). However, state and national GHG inventories do not include black carbon yet due to ongoing work related to resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.

Chlorofluorocarbons (CFCs) are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

Perfluorocarbons (PFCs) are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF4] and perfluoroethane [C2F6]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high GWP.

Sulfur Hexafluoride (SF6) is a colorless gas soluble in alcohol and ether, and slightly soluble in water. SF6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.

Hydrochlorofluorocarbons (HCFCs) contain hydrogen, fluorine, chlorine, and carbon atoms. Although they are ozone-depleting substances, they are less potent than CFCs. They have been introduced as temporary replacements for CFCs.

Hydrofluorocarbons (HFCs) contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; EPA 2012).

The GWP of GHG emissions are shown in Table 5.7-1, GHG Emissions and their Relative Global Warming Potential Compared to CO_2.

Table 5.7-1 GHG Emissions and their Relative Global Warming Potential Compared to CO_2

GHGs	Atmospheric Lifetime (Years)	Second Assessment Report Global Warming Potential Relative to CO_2[1]	Fourth Assessment Report Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	50 to 200	1	1
Methane[2] (CH_4)	12 (±3)	21	25
Nitrous Oxide (N_2O)	120	310	298
Hydrofluorocarbons:			
HFC-23	264	11,700	14,800
HFC-32	5.6	650	675
HFC-125	32.6	2,800	3,500
HFC-134a	14.6	1,300	1,430
HFC-143a	48.3	3,800	4,470
HFC-152a	1.5	140	124
HFC-227ea	36.5	2,900	3,220
HFC-236fa	209	6,300	9,810
HFC-4310mee	17.1	1,300	1,030
Perfluoromethane: CF_4	50,000	6,500	7,390
Perfluoroethane: C_2F_6	10,000	9,200	12,200
Perfluorobutane: C_4F_{10}	2,600	7,000	8,860
Perfluoro-2-methylpentane: C_6F_{14}	3,200	7,400	9,300
Sulfur Hexafluoride (SF_6)	3,200	23,900	22,800

Source: IPCC 2001 and IPCC 2007

Note: The IPCC has published updated global warming potential (GWP) values in its Fifth Assessment Report (2013) that reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2. However, GWP values identified in the Second Assessment Report are still used by SCAQMD to maintain consistency in GHG emissions modeling. In addition, the 2008 Scoping Plan was based on the GWP values in the Second Assessment Report.

1 Based on 100-year time horizon of the GWP of the air pollutant relative to CO_2 (IPCC 2001 and IPCC 2007).

2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

California's Greenhouse Gas Sources and Relative Contribution

California is the second largest emitter of GHG emissions in the United States, surpassed only by Texas, and is the tenth largest GHG emitter in the world (CEC 2005). However, California also has over 12 million more people than Texas. Because of more stringent air emission regulations, in 2001, California ranked fourth lowest in carbon emissions per capita and fifth lowest among states in CO_2 emissions from fossil fuel consumption per unit of Gross State Product (total economic output of goods and services)(CEC 2006a).

CARB's last update to the statewide GHG emissions inventory that utilized the Second Assessment Report GWPs was conducted in 2012 for year 2009 emissions.[3] In 2009, California produced 457 million metric tons (MMT) of CO_2-equivalent (CO_2e) GHG emissions. California's transportation sector is the single largest generator of GHG emissions, producing 37.9 percent of the State's total emissions. Electricity consumption is the second largest source, comprising of 22.7 percent. Industrial activities are California's third largest source of GHG emissions, comprising of 17.8 percent of the State's total emissions. Other major sectors of

[3] Methodology for determining the statewide GHG inventory is not the same as the methodology used to determine statewide GHG emissions under Assembly Bill 32 (AB 32) (2006).

GHG emissions include commercial and residential, recycling and waste, high global warming potential GHGs, agriculture, and forestry (CARB 2012a).[4]

In 2013, the statewide GHG emissions inventory was updated for 2000 to 2012 emissions that utilized the GWPs in IPCC's Fourth Assessment Report. Based on the Fourth Assessment Report GWPs, in 2012, California produced 459 $MMTCO_2e$ GHG emissions. California's transportation sector remains the single largest generator of GHG emissions, producing 36.5 percent of the State's total emissions. Electricity consumption is the second largest source, comprising of 20.7 percent. Industrial activities are California's third largest source of GHG emissions, comprising of 19.4 percent of the State's total emissions. Other major sectors of GHG emissions include commercial and residential, recycling and waste, high global warming potential GHGs, agriculture, and forestry (CARB 2014b).

Human Influence on Climate Change

For approximately 1,000 years before the Industrial Revolution, the amount of GHGs in the atmosphere remained relatively constant. During the 20th Century, however, scientists observed a rapid change in the climate and climate change pollutants that is attributable to human activities. The amount of CO_2 has increased by more than 35 percent since pre-industrial times and has increased at an average rate of 1.4 parts per million (ppm) per year since 1960, mainly due to combustion of fossil fuels and deforestation (IPCC 2007). These recent changes in climate change pollutants far exceed the extremes of the ice ages, and the global mean temperature is rising at a rate that cannot be explained by natural causes alone. Human activities are directly altering the chemical composition of the atmosphere through the buildup of climate change pollutants (CAT 2006).

Climate-change scenarios are affected by varying degrees of uncertainty. IPCC's "2007 IPCC Fourth Assessment Report" projects that the global mean temperature increase from 1990 to 2100, under different climate-change scenarios, will range from 1.4 to 5.8°C (2.5 to 10.4°F). In the past, gradual changes in the Earth's temperature changed the distribution of species, availability of water, etc. However, human activities are accelerating this process so that environmental impacts associated with climate change no longer occur in a geologic time frame but within a human lifetime (IPCC 2007).

Potential Climate Change Impacts for California

Like the variability in the projections of the expected increase in global surface temperatures, the environmental consequences of gradual changes in the Earth's temperature are also hard to predict. In California and western North America, observations of the climate have shown: 1) a trend toward warmer winter and spring temperatures; 2) a smaller fraction of precipitation falling as snow; 3) a decrease in the amount of spring snow accumulation in the lower and middle elevation mountain zones; 4) an advance snowmelt of 5 to 30 days earlier in the springs; and 5) a similar shift (5 to 30 days earlier) in the timing of spring flower blooms (CAT 2006). According to the California Climate Action Team, even if actions could be taken to immediately curtail climate change emissions, the potency of emissions that have already built up,

[4] CO_2-equivalence is used to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. The global warming potential of a GHG is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

their long atmospheric lifetimes (see Table 5.7-1), and the inertia of the Earth's climate system could produce as much as 0.6°C (1.1°F) of additional warming. Consequently, some impacts from climate change are now considered unavoidable. Global climate change risks to California are shown in Table 5.7-2, *Summary of GHG Emissions Risks to California*, and include public health impacts, water resources impacts, agricultural impacts, coastal sea level impacts, forest and biological resource impacts, and energy impacts.

Table 5.7-2 Summary of GHG Emissions Risks to California

Impact Category	Potential Risk
Public Health Impacts	Poor air quality made worse More severe heat
Water Resources Impacts	Decreasing Sierra Nevada snow pack Challenges in securing adequate water supply Potential reduction in hydropower Loss of winter recreation
Agricultural Impacts	Increasing temperature Increasing threats from pests and pathogens Expanded ranges of agricultural weeds Declining productivity Irregular blooms and harvests
Coastal Sea Level Impacts	Accelerated sea level rise Increasing coastal floods Shrinking beaches Worsened impacts on infrastructure
Forest and Biological Resource Impacts	Increased risk and severity of wildfires Lengthening of the wildfire season Movement of forest areas Conversion of forest to grassland Declining forest productivity Increasing threats from pest and pathogens Shifting vegetation and species distribution Altered timing of migration and mating habits Loss of sensitive or slow-moving species
Energy Demand Impacts	Potential reduction in hydropower Increased energy demand

Sources: CEC 2006b; CEC 2008.

Specific climate change impacts that could affect the Proposed Project include:

- **Increases in Ambient Temperatures.** On average, the Los Angeles region is expected to warm 4 to 5 degrees 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, the University of California, Los Angeles's (UCLA) high emissions modeling scenario predicts that mountain and inland areas may warm up to or greater than 4.5 degrees, and coastal and valley/urban areas warming up to 3.7 to 3.9 degrees (Los Angeles 2014).

- **Increases in Extreme Heat Conditions.** Heat waves and very high temperatures could last longer and become more frequent. Extreme heat days are 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 5 to 6 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, down to a 1.5- to 2-fold increase for the inland/valley areas (Los Angeles 2014).

- **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. Changes in snowfall could exacerbate drought-like conditions, reducing water supplies and water security for all end users throughout Los Angeles County (Los Angeles 2014).

- **Rising Sea Levels.** The Los Angeles County coastal land area vulnerable to a 100-year flood event is projected to increase by 46 percent by 2100, though these coastal land areas appear largely located within cities (shown in Figure 12.4, *Sea Level Rise Impact Areas*, in the General Plan) (Los Angeles 2014).

- Wildfire projections include slight increases in the amount of area burned in 2085 compared to the current (2010) risk, primarily in the northern and eastern portions of Los Angeles County (Los Angeles 2014).

5.7.1.1 REGULATORY BACKGROUND

Federal Laws

The U.S. Environmental Protection Agency (USEPA) announced on December 7, 2009 that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The USEPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements, but allow the USEPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

The USEPA's endangerment finding covers emissions of six key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world (the first three are applicable to the Proposed Project).

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the USEPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 metric tons (MT) or more of CO_2 per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2010/2012)

The current Corporate Average Fuel Economy (CAFE) standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon [mpg] by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017–2025, which will require a fleet average of 54.5 mpg in 2025.

USEPA Regulation of Stationary Sources Under the Clean Air Act (Ongoing)

Pursuant to its authority under the CAA, the USEPA has been developing regulations for new stationary sources such as power plants, refineries, and other large sources of emissions. Pursuant to the President's 2013 Climate Action Plan, the USEPA will be directed to also develop regulations for existing stationary sources.

State Laws

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-03-05, Assembly Bill 32 (AB 32), and Senate Bill 375 (SB 375).

Executive Order S-03-05

Executive Order S-3-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32, the Global Warming Solutions Act. AB 32 was passed by the California state legislature on August 31, 2006, to place the State on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-3-05.

AB 32 directed the California Resources Board (CARB) to adopt discrete early action measures to reduce GHG emissions and outline additional reduction measures to meet the 2020 target. Based on the GHG emissions inventory conducted for the Scoping Plan by CARB, GHG emissions in California by 2020 are anticipated to be approximately 596 $MMTCO_2e$. In December 2007, CARB approved a 2020 emissions limit

of 427 $MMTCO_2e$ (471 million tons) for the state. The 2020 target requires a total emissions reduction of 169 $MMTCO_2e$, 28.5 percent from the projected emissions of the business-as-usual (BAU) scenario for the year 2020 (i.e., 28.5 percent of 596 $MMTCO_2e$) (CARB 2008).[5]

In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 MT of CO_2e per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012..

CARB 2008 Scoping Plan

The final Scoping Plan was adopted by CARB on December 11, 2008. Key elements of CARB's GHG reduction plan that may be applicable to the Proposed Project include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards (adopted and cycle updates in progress).
- Achieving a mix of 33 percent for energy generation from renewable sources (anticipated by 2020).
- A California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system for large stationary sources (adopted 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets (several Sustainable Communities Strategies have been adopted).
- Adopting and implementing measures pursuant to state laws and policies, including California's clean car standards (amendments to the Pavley Standards adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (LCFS) (adopted 2009).[6]
- Creating target fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation (in progress).

Table 5.7-3, *Scoping Plan GHG Reduction Measures and Reductions Toward 2020 Target*, shows the proposed reductions from regulations and programs outlined in the 2008 Scoping Plan. Although local government operations were not accounted for in achieving the 2020 emissions reduction, CARB estimates that land use

[5] CARB defines BAU in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB's definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

[6] On December 29, 2011, the U.S. District Court for the Eastern District of California issued several rulings in the federal lawsuits challenging the LCFS. One of the court's rulings preliminarily enjoined the CARB from enforcing the regulation during the pendency of the litigation. In January 2012, CARB appealed the decision and on April 23, 2012, the Ninth Circuit Court granted CARB's motion for a stay of the injunction while it continued to consider CARB's appeal of the lower court's decision. On July 15, 2013, the State of California Court of Appeals held that the LCFS would remain in effect and that CARB can continue to implement and enforce the 2013 regulatory standards while it corrects certain aspects of the procedures by which the LCFS was adopted. Accordingly, CARB is continuing to implement and enforce the LCFS while addressing the court's concerns.

changes implemented by local governments that integrate jobs, housing, and services result in a reduction of 5 $MMTCO_2e$, which is approximately 3 percent of the 2020 GHG emissions reduction goal. In recognition of the critical role that local governments play in the successful implementation of AB 32, CARB is recommending GHG reduction goals of 15 percent of today's levels by 2020 to ensure that municipal and community-wide emissions match the State's reduction target.[7] [8] Measures that local governments take to support shifts in land use patterns are anticipated to emphasize compact, low-impact growth over development in greenfields, resulting in fewer vehicle miles traveled (VMT) (CARB 2008).

Table 5.7-3 Scoping Plan GHG Reduction Measures and Reductions Toward 2020 Target

Recommended Reduction Measures	Reductions Counted toward 2020 Target of 169 MMT CO_2e	Percentage of Statewide 2020 Target
Cap and Trade Program and Associated Measures		
California Light-Duty Vehicle GHG Standards	31.7	19%
Energy Efficiency	26.3	16%
Renewable Portfolio Standard (33 percent by 2020)	21.3	13%
Low Carbon Fuel Standard	15	9%
Regional Transportation-Related GHG Targets1	5	3%
Vehicle Efficiency Measures	4.5	3%
Goods Movement	3.7	2%
Million Solar Roofs	2.1	1%
Medium/Heavy Duty Vehicles	1.4	1%
High Speed Rail	1.0	1%
Industrial Measures	0.3	0%
Additional Reduction Necessary to Achieve Cap	34.4	20%
Total Cap and Trade Program Reductions	**146.7**	**87%**
Uncapped Sources/Sectors Measures		
High Global Warming Potential Gas Measures	20.2	12%
Sustainable Forests	5	3%
Industrial Measures (for sources not covered under cap and trade program)	1.1	1%
Recycling and Waste (landfill methane capture)	1	1%
Total Uncapped Sources/Sectors Reductions	**27.3**	**16%**
Total Reductions Counted toward 2020 Target	**174**	**100%**
Other Recommended Measures – Not Counted toward 2020 Target		
State Government Operations	1.0 to 2.0	1%
Local Government Operations[2]	To Be Determined	NA
Green Buildings	26	15%
Recycling and Waste	9	5%

[7] The Scoping Plan references a goal for local governments to reduce community GHG emissions by 15 percent from current (interpreted as 2008) levels by 2020, but it does not rely on local GHG reduction targets established by local governments to meet the state's GHG reduction target of AB 32.

[8] It should be noted that the 15 percent reduction target for local jurisdictions was based on 2008 Scoping Plan projections, not actual inventories conducted since the 2008 Scoping Plan. Using updated inventory data the reduction target for local governments is more like 10 – 11 percent. A more detailed discussion of the updated targets is provided in the Community Climate Action Plan (CCAP).

Table 5.7-3 Scoping Plan GHG Reduction Measures and Reductions Toward 2020 Target

Recommended Reduction Measures	Reductions Counted toward 2020 Target of 169 MMT CO_2e	Percentage of Statewide 2020 Target
Water Sector Measures	4.8	3%
Methane Capture at Large Dairies	1	1%
Total Other Recommended Measures – Not Counted toward 2020 Target	**42.8**	**NA**

Source: CARB 2008.

Notes: The percentages in the right-hand column add up to more than 100 percent because the emissions reduction goal is 169 $MMTCO_2e$ and the Scoping Plan identifies 174 $MTCO_2e$ of emissions reductions strategies.

$MMTCO_2e$: million metric tons of CO_2e

[1] Reductions represent an estimate of what may be achieved from local land use changes. It is not the SB 375 regional target.

[2] According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 million metric tons of CO_2e (or approximately 1.2 percent of the GHG reduction target). However, these reductions were not included in the Scoping Plan reductions to achieve the 2020 target.

Update to the Scoping Plan

Since release of the 2008 Scoping Plan, CARB has updated the statewide GHG emissions inventory to reflect GHG emissions in light of the economic downturn and of measures not previously considered in the 2008 Scoping Plan baseline inventory. The updated forecast predicts emissions to be 507 $MMTCO_2e$ by 2020. The new inventory identifies that an estimated 80 $MMTCO_2e$ of reductions are necessary to achieve the statewide emissions reduction of AB 32 by 2020, 15.7 percent of the projected emissions compared to Business As Usual (BAU) in year 2020 (i.e., 15.7 percent of 507 $MMTCO_2e$) (CARB 2012b).

CARB recently completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The final Update to the Scoping Plan was released in May and CARB adopted at the May 22, 2014 board hearing. The Update to the Scoping Plan defines CARB's climate change priorities for the next five years and lays the groundwork to reach post-2020 goals in Executive Orders S-3-05 and B-16-2012. The update includes the latest scientific findings related to climate change and its impacts, including short-lived climate pollutants. The GHG target identified in the 2008 Scoping Plan is based on IPCC's GWPs identified in the Second and Third Assessment Reports (see Table 5.7-1). IPCC's Fourth and Fifth Assessment Reports identified more recent GWP values based on the latest available science. CARB recalculated the 1990 GHG emission levels with the updated GWPs in the Fourth Assessment Report, and the 427 $MMTCO_2e$ 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher, at 431 $MMTCO_2e$ (CARB 2014a).

The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan. As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the Update to the Scoping Plan also addresses the State's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the State to adopt a mid-term target. According to the Update to the Scoping Plan, reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit (CARB 2014a).

Senate Bill 375

In 2008, Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010).

The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's existing transportation network. The proposed targets would result in 3 $MMTCO_2e$ of reductions by 2020 and 15 $MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

SCAG's 2012 RTP/SCS

SB 375 requires the MPOs to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plan. For the SCAG region, the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in April 2012 (SCAG 2012). In addition, the Gateway Cities Council of Governments (COG) has created its own SCS. Data and policies in this subregional SCS are incorporated into SCAG's 2012 RTP/SCS. The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency for governments and developers.

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavely I). Pavely I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavely I standards through a waiver granted to California by the USEPA. In 2012, the USEPA issued a Final Rulemaking that sets even more stringent fuel economy and

GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the CAFE standards under Federal Laws, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the State set a new low carbon fuel standard (LCFS) for transportation fuels sold within the State. Executive Order S-1-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Executive Order B-16-2012

On March 23, 2012, the State identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

Senate Bills 1078 and 107, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewable portfolio standard (RPS) established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. CARB has now approved an even higher goal of 33 percent by 2020. In 2011, the State legislature adopted this higher standard in SBX1-2. Executive Order S-14-08 was signed in November 2008, which expands the state's Renewable Energy Standard to 33 percent renewable power by 2020. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects because electricity production from renewable sources is generally considered carbon neutral.

California Building Code

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2008 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On May 31, 2012, the CEC adopted the 2013 Building and Energy Efficiency Standards, which went into effect on January 1, 2014. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (non-residential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as "CALGreen") was adopted as part of the California Building Standards Code (Title 24, CCR). CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[9] The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

5.7.1.2 LOCAL GHG REDUCTION PLANNING

Los Angeles County Energy and Environmental Program

In 2006, the County of Los Angeles (County) Board of Supervisors adopted an Energy and Environmental Program (EEP) for the development and enhancement of energy conservation and environmental programs for County departments. These programs contribute to the County's efforts to reduce community-wide GHGs and GHGs from County operations. The EEP consists of the following programs:

- **Energy and Water Efficiency:** The EEP establishes a reduction target of 20 percent by 2015 and implements conservation monitoring practices and water and energy shortage awareness programs for County buildings and departments.

- **Green Building Construction and Operations:** The County's Green Building Program consists of the Green Building, Low-Impact Development, and Drought Tolerant Ordinances.

[9] The green building standards became mandatory in the 2010 edition of the code.

- **Environmental Stewardship:** The Environmental Stewardship Program measures and reduces the County's environmental footprint, including the amount of GHGs produced through direct and indirect County operations, and develops climate change-related policies.

- **Public Outreach and Education:** The Public Outreach and Education Program utilizes the County's communication and outreach channels to share utility industry information, facilitate implementation of subsidy and assistance programs, and spread energy conservation practices throughout the region.

Community Climate Action Plan (CCAP)

The County has prepared a Community Climate Action Plan (CCAP) as part of the Proposed Project to address the County's local GHG reduction goals for 2020 pursuant to AB 32. The purpose of the CCAP is to: 1) establish a baseline emissions inventory and reduction needed to meet County goals; 2) identify specific actions that will measurably reduce GHG emissions consistent with AB 32; 3) establish a framework for implementing state and local level actions; and 4) provide a mechanism for ongoing tracking and updates to the CCAP.

As part of the CCAP, the County has identified a GHG reduction target of at least 11 percent below 2010 levels by 2020. The CCAP identifies 26 local actions to reduce community-wide GHG reductions in 2020 to reach the GHG reduction goal for the unincorporated areas of Los Angeles County (unincorporated areas). As identified in the CCAP, the community and statewide actions would reduce GHG emissions in the unincorporated areas by more than 1.95 million $MTCO_2e$ (see Table 5.7-4, *Unincorporated Areas CCAP GHG Reductions*).

Table 5.7-4 Unincorporated Areas CCAP GHG Reductions

Parameter	GHG Emissions ($MTCO_2e$)
LA County 2020 forecast	9,055,469
Target for 2020—at least 11% below 2010 levels	7,104,621
Total[1]: Reductions needed to reach interim target (2020 forecast minus 2020 target)	1,950,849
Total reductions from state level actions	1,571,658
Total reductions from local programs	380,857
Total[2]: GHG reductions achieved by the CCAP (state plus local reductions)	1,952,514
Exceeds reduction target by ($Total_2$ minus $Total_1$)	1,665

Source: Los Angeles, County of 2014. Based on the GWPs in IPCC's Fourth Assessment Report.

Existing Emissions

Table 5.7-5, *Existing Unincorporated Areas GHG Emissions Inventory*, identifies the existing GHG emissions inventory of the unincorporated areas. The inventory is based on existing land uses in the unincorporated areas. GHG emissions generated within the unincorporated areas were estimated using EMFAC2011 for on-road transportation emissions and data compiled for the CCAP 2020 for all other sectors.

Table 5.7-5 Existing Unincorporated Areas GHG Emissions Inventory (2010)

Sector	GHG Emissions $MTCO_2e$/Year	Percent of Emissions
Building Energy[1]	3,906,213	53%
Transportation[1,2]	2,751,579	37%
Waste Generation[1]	535,148	7%
Water and Wastewater[1]	126,074	2%
Agriculture[1]	30,290	<1%
Stationary Sources[1]	1,283	<1%
Total	**7,350,587**	**100%**
Service Population (SP)[3]	1,319,075	—
$MTCO_2e$/SP	5.6 $MTCO_2e$/SP	—

Source:
[1] Los Angeles County 2014.
[2] EMFAC2011-PL. Transportation emissions are based on VMT and trips provided by Iteris using SCAG's regional transportation model for the Proposed Project and modeled using EMFAC2011. Therefore, the transportation sector differs from that identified for the CCAP.
[3] Based on a population of 1,066,415 people and 252,660 employees in the unincorporated areas.

5.7.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the Proposed Project would have a significant effect on the environment with respect to GHG emissions if it would:

GHG-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

GHG-2 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

SCAQMD GHG Significance Thresholds

SCAQMD has adopted a significance threshold of 10,000 $MTCO_2e$ per year for permitted (stationary) sources of GHG emissions for which SCAQMD is the designated lead agency. To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD is proposing a "bright-line" screening-level threshold of 3,000 $MTCO_2e$ annually for all land use types or the following land-use-specific thresholds: 1,400 $MTCO_2e$ for commercial projects, 3,500 $MTCO_2e$ for residential projects, or 3,000 $MTCO_2e$ for mixed-use projects. This bright-line threshold is based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore less than cumulatively considerable impact on GHG emissions:

- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

SCAQMD has proposed an efficiency target for projects that exceed the screening threshold. The current recommended approach is per capita efficiency targets. SCAQMD is not recommending use of a percent emissions reduction target. Instead, SCAQMD proposes a 2020 efficiency target of 4.8 $MTCO_2e$ per year per service population ($MTCO_2e$/year/SP) for project-level analyses and 6.6 $MTCO_2e$/year/SP for plan level projects (e.g., program-level projects such as general plans). The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.[10] Because the Proposed Project is a revision of the Existing General Plan, project emissions are compared to the SCAQMD's plan-level efficiency threshold. However, because the Proposed Project goes beyond year 2020, horizon year 2035 emissions are compared to the efficiency threshold of 4.0 $MTCO_2e$/year/SP and post-2035 emissions are compared to the efficiency threshold of 1.3 $MTCO_2e$/year/SP, which are based on the long-term GHG reduction target for 2050 (i.e., 80 percent below 1990 levels) interpolated from Executive Order S-03-05. If projects exceed this per capita efficiency target, GHG emissions would be considered potentially significant in the absence of mitigation measures.

AVAQMD GHG Significance Thresholds

The analysis of the Proposed Project's air quality impacts follows the guidance and methodologies recommended in AVAQMD's *CEQA and Federal Conformity Guidelines* (2011). CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. AVAQMD has established GHG thresholds of significance of 100,000 (90,718 $MTCO_2e$/year). The thresholds are applied to both construction and operational phases of the project regardless of whether they are stationary or mobile sources, resulting in a conservative estimate of GHG emissions impacts of the Proposed Project. AVAQMD also has a daily threshold of 548,000 lbs/day for multi-phases projects with phases shorter than one year. However, this is not applicable to the Proposed Project.

[10] SCAQMD took the 2020 statewide GHG reduction target for land use only GHG emissions sectors and divided it by the 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

5.7.3 Relevant General Plan Goals and Policies

Following is a list of the goals and policies of the Proposed Project that are intended to reduce potentially significant adverse effects concerning air quality.

Land Use Element

- **Policy LU 1.5:** In the review of a project-specific amendment(s) to convert OS-C designated lands to other land use designations, ensure that the project-specific amendment(s) does not contribute to the overall loss of open space that protects water quality, provides natural habitats, and contributes to improved air quality.

- **Policy LU 1.6:** In the review of a project-specific amendment(s) to convert lands within the EPD Overlay to non-industrial land use designations, ensure that the project-specific amendment(s):

  - Is located on a parcel that adjoins a parcel with a comparable use, at a comparable scale and intensity;
  - Will not negatively impact the productivity of neighboring industrial activities;
  - Is necessary to promote the economic value and the long-term viability of the site; and
  - Will not subject future residents to potential noxious impacts, such as noise, odors or dust or pose significant health and safety risks.

- **Policy LU 2.4:** Coordinate with other local jurisdictions to develop compatible land uses.

- **Policy LU 2.5:** Support and actively participate in inter-jurisdictional and regional planning efforts to help inform community-based planning efforts.

- **Policy LU 2.9:** Utilize the General Plan Land Use Legend and the Hazard, Environmental and Resource Constraints Model to inform the development of land use policy maps.

- **Policy LU 3.1:** Encourage the protection and conservation of areas with natural resources, and SEAs.

- **Policy LU 3.2:** Discourage development in areas with high environmental resources and/or severe safety hazards.

- **Policy LU 3.3:** Discourage development in undeveloped areas where infrastructure and public services do not exist, or where no or where no major infrastructure projects are planned, such as state and/or federal highways.

- **Policy LU 4.1:** Encourage infill development in urban and suburban areas on vacant, underutilized, and/or brownfield sites.

- **Policy LU 4.2:** Encourage the adaptive reuse of underutilized structures and the revitalization of older, economically distressed neighborhoods.

- **Policy LU 4.3:** Encourage transit-oriented development in urban and suburban areas with the appropriate residential density along transit corridors and within station areas.

- **Policy LU 4.4:** Encourage mixed use development along major commercial corridors in urban and suburban areas.

- **Policy LU 5.1:** Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.

- **Policy LU 5.2:** Encourage a diversity of commercial and retail services, and public facilities at various scales to meet regional and local needs.

- **Policy LU 5.3:** Support a mix of land uses that promote bicycling and walking, and reduce VMTs.

- **Policy LU 5.4:** Encourage community-serving uses, such as early care and education facilities, grocery stores, farmers markets, restaurants, and banks to locate near employment centers.

- **Policy LU 5.7:** Direct resources to areas that lack amenities, such as transit, clean air, grocery stores, bikeways, parks, and other components of a healthy community.

- **Policy LU 5.10:** Encourage employment opportunities and housing to be developed in proximity to one another.

- **Policy LU 7.1:** Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.

- **Policy LU 7.2:** Protect industrial parks and districts from incompatible uses.

- **Policy LU 7.3:** Protect public and semi-public facilities, including but not limited to major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.

- **Policy LU 6.3:** Encourage low density and low intensity development in rural areas that is compatible with rural community character, preserves open space, and conserves agricultural land.

- **Policy LU 8.2:** Evaluate the potential impact of new structures within MOAs to ensure the safety of the residents on the ground and continued viability of military operations within the MOAs. In the review of development within MOAs, consider the following:

    - Uses that produce electromagnetic and frequency spectrum interference, which could impact military operations;

- Uses that release into the air any substance such as steam, dust and smoke, which impair pilot visibility;
- Uses that produce light emissions, glare or distracting lights, which could interfere with pilot vision or be mistaken for airfield lighting; and
- Uses that physically obstruct any portion of the MOA due to relative height above ground level.

- **Policy LU 9.1:** Promote community health for all neighborhoods.
- **Policy LU 10.4:** Promote environmentally-sensitive and sustainable design.
- **Policy LU 10.6:** Encourage pedestrian activity through the following:
  - Designing the main entrance of buildings to front the street;
  - Incorporating landscaping features;
  - Limiting masonry walls and parking lots along commercial corridors and other public spaces;
  - Incorporating street furniture, signage, and public events and activities; and
  - Using wayfinding strategies to highlight community points of interest.
- **Policy LU 10.7:** Promote public spaces, such as plazas that enhance the pedestrian environment, and, where appropriate, continuity along commercial corridors with active transportation activities.
- **Policy LU 11.1:** Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.
- **Policy LU 11.2:** Support the design of developments that provide substantial tree canopy cover, and utilize light colored paving materials and energy-efficient roofing materials to reduce the urban heat island effect.
- **Policy LU 11.3:** Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.
- **Policy LU 11.4:** Encourage subdivisions to utilize sustainable design practices, such as maximizing energy efficiency through lot configuration; preventing habitat fragmentation; promoting storm water retention; promoting the localized production of energy; promoting water conservation and reuse; maximizing interconnectivity; and utilizing public transit.
- **Policy LU 11.5:** Prohibit the use of private yards as required open space within subdivisions, unless such area includes active recreation or outdoor activity areas dedicated for common and/or public use.
- **Policy LU 11.7:** Encourage the use of design techniques to conserve natural resource areas.

- **Policy LU 11.8:** Encourage sustainable subdivisions that meet green neighborhood standards, such as Leadership in Energy and Environmental Design–Neighborhood Development (LEED-ND).

Mobility Element

- **Policy M 1.1:** Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.

- **Policy M 2.4:** Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible:

  - Designs that limit dead-end streets and dead-end sidewalks.
  - Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops.
  - Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA).
  - Perpendicular curb ramps at locations where it is feasible.
  - Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.)
  - Approved devices to extend the pedestrian clearance times at signalized intersections.
  - Accessible Pedestrian Signals (APS) at signalized intersections.
  - Pedestrian crossings at signalized intersections without double or triple left or right turn lanes.
  - Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections.
  - Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes.
  - Advance stop lines at signalized intersections.
  - Pedestrian Hybrid Beacons.
  - Medians or crossing islands to divide long crossings.
  - High visibility crosswalks.
  - Pedestrian signage.

- Advanced yield lines for uncontrolled crosswalks.
- Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic.
- Safe and convenient crossing locations at transit stations and transit stops located at safe intersections.

- **Policy M 2.5:** Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible:
  - Bicycle signal heads at intersections.
  - Bicycle signal detection at all signalized intersections.
  - Wayfinding signage.
  - Road diet techniques, such as lane narrowing, lane removal, and parking removal/restriction.
  - Appropriate lighting on all bikeways, including those in rural areas.
  - Designs, or other similar features, such as: shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.
- **Policy M 2.7:** Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.
- **Policy M 2.8:** Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.
- **Policy M 2.10:** Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.
- **Policy M 4.1:** Expand transportation options that reduce automobile dependence.
- **Policy M 4.2:** Expand shuttle services to connect major transit centers to community points of interest.
- **Policy M 4.3:** Maintain transit services within the unincorporated areas that are affordable, timely, cost-effective, and responsive to growth patterns and community input.
- **Policy M 4.4:** Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.

- **Policy M 4.6:** Support alternative LOS standards that account for a multimodal transportation system.
- **Policy M 4.11:** Improve the efficiency of the public transportation system with bus lanes, signal prioritization, and connections to the larger regional transportation network.
- **Policy M 4.12:** Work with adjacent jurisdictions to ensure connectivity and the creation of an integrated regional network.
- **Policy M 4.14:** Coordinate with Caltrans on mobility and land use decisions that may affect state transportation facilities.
- **Policy M 4.15:** Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting.
- **Policy M 4.16:** Promote mobility management practices, including incentives to change transit behavior and using technologies, to reduce VMTs.
- **Policy M 5.1:** Facilitate transit-oriented land uses and pedestrian-oriented design to encourage transit ridership.
- **Policy M 5.2:** Implement parking strategies that facilitate transit use and reduce automobile dependence.
- **Policy M 5.3:** Maintain transportation right-of-way corridors for future transportation uses, including bikeways, or new passenger rail or bus services.
- **Policy M 5.4:** Support and pursue funding for the construction, maintenance and improvement of roadway, public transit, and equestrian, pedestrian and bicycle transportation systems.
- **Policy M 6.4:** Minimize noise and other impacts of goods movement, truck traffic, deliveries, and staging in residential and mixed-use neighborhoods.
- **Policy M 7.3:** Encourage the use of sustainable transportation facilities and infrastructure technologies, such as liquid and compressed natural gas, and hydrogen gas stations, ITS, and electric car plug-in ports.

Air Quality Element

- **Policy AQ 1.1:** Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.
- **Policy AQ 1.2:** Encourage the use of low or no volatile organic compound (VOC) emitting materials.

- **Policy AQ 1.3:** Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.

- **Policy AQ 1.4:** Work with local air quality management districts to publicize air quality warnings, and to track potential sources of airborne toxics from identified mobile and stationary sources.

- **Policy AQ 2.1:** Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.

- **Policy AQ 2.2:** Participate in, and effectively coordinate the development and implementation of community and regional air quality programs.

- **Policy AQ 2.3:** Support the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.

- **Policy AQ 3.1:** Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals.

- **Policy AQ 3.2:** Reduce energy consumption in County operations by 20 percent by 2015.

- **Policy AQ 3.3:** Reduce water consumption in County operations.

- **Policy AQ 3.4:** Participate in local, regional and state programs to reduce greenhouse gas emissions.

- **Policy AQ 3.5:** Encourage energy conservation in new development and municipal operations.

- **Policy AQ 3.7:** Support and expand urban forest programs within the unincorporated areas.

Conservation and Natural Resources Element

- **Policy C/NR 3.4:** Conserve and sustainably manage forests and woodlands.

- **Policy C/NR 3.5:** Ensure compatibility of development in the National Forests in conjunction with the U.S. Forest Service Land and Resource Management Plan.

- **Policy C/NR 4.1:** Preserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with no net loss of existing woodlands.

- **Policy C/NR 9.2:** Support innovative agricultural practices that conserve resources and promote sustainability, such as drip irrigation, hydroponics, organic farming, and the use of compost.

- **Policy C/NR 12.1:** Encourage the production and use of renewable energy resources.

- **Policy C/NR 12.2:** Encourage the effective management of energy resources, such as ensuring adequate reserves to meet peak demands.

Parks and Recreation Element

- **Policy P/R 4.1**: Create multi-use trails to accommodate all users.
- **Policy P/R 4.2:** Develop staging areas and trail heads at strategic locations to accommodate multi-use trail users.
- **Policy P/R 4.3:** Develop a network of feeder trails into regional trails.
- **Policy P/R 4.5:** Collaborate with other public, non-profit, and private organizations in the development of a comprehensive trail system.
- **Policy P/R 4.6:** Create new multi-use trails that link community destinations including parks, schools and libraries.
- **Policy P/R 6.1:** Support the use of recycled water for landscape irrigation in County parks.
- **Policy P/R 6.2:** Support the use of alternative sources of energy, such as wind and solar sources to reduce the use of energy at existing parks.
- **Policy P/R 6.4:** Ensure that new buildings on County park properties are environmentally sustainable by reducing carbon footprints, and conserving water and energy.
- **Policy P/R 6.5:** Ensure the routine maintenance and operations of County parks and recreational facilities to optimize water and energy conservation.

Public Services and Facilities Element

- **Policy PS/F 2.1:** Support water conservation measures.
- **Policy PS/F 2.2:** Support educational outreach efforts that discourage wasteful water consumption.
- **Policy PS/F 3.1:** Increase the supply of water though the development of new sources, such as recycled water, gray water, and rainwater harvesting.
- **Policy PS/F 3.2:** Support the increased production, distribution and use of recycled water, gray water, and rainwater harvesting to provide for groundwater recharge, seawater intrusion barrier injection, irrigation, industrial processes and other beneficial uses.
- **Policy PS/F 5.3:** Discourage incompatible land uses near or adjacent to solid waste disposal facilities identified in the Countywide Integrated Waste Management Plan.

- **Policy PS/F 5.4:** Encourage solid waste management facilities that utilize conversion and other alternative technologies and waste to energy facilities.
- **Policy PS/F 5.5:** Reduce the County's waste stream by minimizing waste generation and enhancing diversion.
- **Policy PS/F 5.6:** Encourage the use and procurement of recyclable and biodegradable materials.
- **Policy PS/F 5.7:** Encourage the recycling of construction and demolition debris generated by public and private projects.
- **Policy PS/F 6.5:** Encourage the use of renewable energy sources in utility and telecommunications networks.
- **Policy PS/F 6.8:** Encourage projects that incorporate onsite renewable energy systems.

Economic Development Element

- **Policy ED 1.2:** Encourage and foster the development of the renewable energy economic sectors.
- **Policy ED 2.2:** Utilize adequate buffering and other land use practices to facilitate the compatibility between industrial and non-industrial uses.
- **Policy ED 2.3:** Ensure environmental justice in economic development activities.
- **Policy ED 2.4:** Ensure high standards of development and encourage environmentally sustainable practices in economic development activities.
- **Policy ED 2.5:** Encourage employment opportunities to be located in proximity to housing.
- **Policy ED 2.6:** Encourage community-serving uses, such as child care centers and personal services, to be located in proximity to employment centers.
- **Policy ED 4.7:** Support expedited permitting for green building retrofits.

5.7.4 Environmental Impacts

This air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant GHG emissions impacts are likely to occur in conjunction with future development that would be accommodated by the Proposed Project. Both the SCAQMD and the AVAQMD have published guidelines that are intended to provide local governments with guidance for analyzing and mitigating air quality impacts and which were used in this analysis. The County's GHG emissions inventory is consistent with ICLEI's *US Community GHG Emissions Protocol for Accounting and Reporting of Greenhouse Gas Emissions* (2012) includes the following mandatory sectors:

- **Transportation:** Transportation emissions forecasts were modeled using CARB's EMFAC2011-PL. Model runs were based on daily per capita VMT data provided by Iteris for 2010, 2035, and post-2035 conditions using the SCAG regional transportation demand model and 2010 (existing) and 2035 emission rates. The VMT provided in the model includes a 50 percent reduction in VMT for external-internal/internal-external trips in accordance with the recommendations of the Regional Transportation Advisory Committee (RTAC) (CARB 2008). It should be noted that there is no transportation data collected by SCAG for the Coastal Islands Planning Area, which includes the island City of Avalon. However, this would be expected to be a very small portion of the total emissions.

- **Energy:** Natural gas and electricity use for residential and non-residential land uses were modeled using data provided by ICF that was compiled for the CCAP. Data for the CCAP was based on aggregated energy use for residential and non-residential buildings compiled by the major utilities. However, this would be expected to be a very small portion of the total emissions. Building forecasts are adjusted for increases in residential units and employment in the unincorporated areas based on SCAG forecasts for 2035 and based on buildout of the Proposed Project post-2035.

- **Area Sources:** GHG emissions from areas sources, such as agricultural equipment, construction and mining equipment, entertainment equipment, industrial equipment, lawn and garden equipment, light commercial equipment, recreational equipment, rail yards and transport refrigeration units was based on data provided by ICF that was compiled for the CCAP. Forecasts are adjusted for increases in population and employment in the unincorporated areas based on SCAG forecasts for 2035 and based on buildout of the Proposed Project post-2035.

- **Water/Wastewater:** GHG emissions from water conveyance and fugitive emissions from the wastewater treatment process was based on data provided by ICF that was compiled for the CCAP. Total water-related energy could not be disaggregated from the total electricity consumption provided by the utilities. Therefore, it is likely that the water-related energy use is being double-counted and emissions estimates are conservative. Forecasts are adjusted for increases in population in the unincorporated areas based on SCAG forecasts for 2035 and based on buildout of the Proposed Project post-2035.

- **Solid Waste Generation:** GHG emissions from solid waste disposal are based on data provided by ICF that was compiled for the CCAP. Forecasts are adjusted for increases in population in the unincorporated areas based on the historic waste disposal rate for the unincorporated areas population identified by CalRecycle and based on SCAG forecasts for 2035 and based on buildout of the Proposed Project post-2035.

- **Agriculture:** GHG emissions from agriculture is based on data provided by ICF was compiled for the CCAP.

The following impact analysis addresses thresholds of significance for which the NOP disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.7-1 Buildout of the Proposed Project would generate GHG emissions that would have a significant impact on the environment. [Threshold GHG-1]

Impact Analysis: Development under the Proposed Project would contribute to global climate change through direct and indirect emissions of GHG from land uses within the unincorporated areas.

Proposed General Plan Update

SCAG RTP/SCS Horizon Year 2035

The increase in GHG emissions is based on the difference between existing land uses and an estimate of population and employment within the unincorporated areas in 2035 from SCAG forecasts (SCAG 2012). The community-wide GHG emissions inventory for the unincorporated areas in 2035 compared to existing conditions is included in Table 5.7-6, *SCAG RTP/SCS Horizon Year 2035 Unincorporated Areas GHG Emissions Inventory*. The horizon year 2035 inventory includes reductions from federal and state measures identified in CARB's Scoping Plan, including the Pavley fuel efficiency standards, LCFS for fuel use (transportation and off-road), and state reductions for non-transportation measures identified in the CCAP by 2020. Though local reductions are not included in the horizon year 2035 inventory because the CCAP is not yet adopted, these reductions are shown in Table 5.7-6. The analysis for non-transportation reductions is conservative because the state and local actions identified in the CCAP were quantified for 2020, not 2035. Therefore, the measures would continue to be implemented by the County, resulting in further GHG reductions by year 2035 than shown in the table.

Table 5.7-6 SCAG RTP/SCS Horizon Year 2035 Unincorporated Areas GHG Emissions Inventory

Sector	GHG Emissions $MTCO_2e$/Year				
	Existing 2010	State Reductions	Horizon Year 2035 With State Reduction	Change from 2010	Additional Local Reductions from the CCAP[1]
Building Energy[1]	3,906,213	- 427,505	4,704,281	798,068	-227,465
Transportation[1,2]	2,751,579	-1,331,010	2,366,360	-385,219	-125,876
Waste Generation[1]	535,148	0	696,829	161,681	-12,212
Water and Wastewater[1]	133,589	0	147,202	13,613	-15,280
Agriculture[1]	30,290	0	17,374	-12,916	0
Stationary Sources[1]	1,283	0	1,615	332	0
Total	**7,358,102**	**-1,578,515**	**7,933,661**	**575,559**	**-380,833**
Service Population (SP)*	1,319,075	—	4,185,286	—	—
$MTCO_2e$/SP	5.6 $MTCO_2e$/SP	—	4.6 $MTCO_2e$/SP	—	—
SCAQMD 2035 Target	NA	—	4.0 $MTCO_2e$/SP	—	—

Sources:
[1] Los Angeles County of, 2014.
[2] EMFAC2011-PL. Transportation emissions are based on VMT and trips provided by Iteris using SCAG's regional transportation model for the Proposed Project and modeled using EMFAC2011. Based on the GWPs in IPCC's Second Assessment Report for consistency with SCAQMD's efficiency metric. Therefore, the transportation sector differs from that identified for the CCAP.
Note: Existing is based on a population of 1,066,415 people and 252,660 employees in the unincorporated areas. Horizon 2035 is based on a population of 1,399,500 people and 318,100 employees in the unincorporated areas.
State and Local Reductions from the CCAP: This estimate is conservative because the CCAP would be implemented beyond 2020.
- Building Energy: Assumes 139,968 $MTCO_2e$ of energy reductions from implementation of Green Building and Energy Actions BE-1 through BE-7 and 86,371 $MTCO_2e$ reductions from implementation of Water Conservation and Wastewater Actions WAW-1 and WAW-2 (which is85% of the reductions associated with these actions are a result of reduced electricity and natural gas for hot water heating) for both the 2035 and P-2035 scenarios. The inventory includes an additional 1,126 $MTCO_2e$ energy reductions associated with shade trees from benefits of Policy LC-1. For statewide actions, assumes 336,466 $MTCO_2e$ from implementation of the RPS and 91,039 $MTCO_2e$ for implementation of Title 24 building energy standards.
- Transportation: State reductions for on-road vehicles are based on EMFAC2011-PL and include implementation of Pavely I and the LCFS (see the Transportation Sector Worksheet). Statewide actions include implementation of the LCFS and Pavely I fuel efficiency standards. Reductions from off-road vehicles include a 10 percent reduction from implementation of the LCFS. Land Use and Transportation Actions LUT-1 through LUT-12 would further reduce transportation-related GHG emissions. The local reductions for this sector are an estimate only as they are based on the transportation inventory developed for the CCAP.
- Waste: Assumes 12,212 $MTCO_2e$ of waste reductions from Waste Reduction, Reuse, and Recycling Action W-1.
- Water/Wastewater: Assumes 15,280 $MTCO_2e$ reductions from implementation of Water Conservation and Water Actions WAW-1 and WAW-2.

As identified in Table 5.7-6, the unincorporated areas would experience an increase of 575,559 $MTCO_2e$ of GHG emissions in 2035 compared to existing (2010) conditions. GHG emissions in the unincorporated areas would exceed 100,000 tons (90,718 $MTCO_2e$/year) during this time frame. In addition, the County would not achieve the SCAQMD per capita efficiency target for 2035, which is 4.0 $MTCO_2e$/SP and the Proposed Project would be 4.6 $MTCO_2e$/SP. Impacts would be significant for short-term growth anticipated under the Proposed Project. It should be noted that if the CCAP is adopted, the GHG emissions in the unincorporated areas would decrease by approximately 380,833 $MTCO_2e$. However, the County would still not achieve the interim 2035 efficiency target. Additional state and local actions are necessary to achieve the post-2020 GHG reduction goals for the State. CARB has released an update to the 2008 Scoping Plan to identify a path for the State to achieve additional GHG reductions. However, at this time, no additional GHG reductions programs have been outlined that get the State to the post-2020 targets recommended by CARB.

Post-2035: Proposed Project Buildout

The increase in GHG emissions is based on the difference between existing land uses and land uses associated with buildout of the Proposed Project. The community-wide GHG emissions inventory for the unincorporated areas at buildout (post-2035) compared to existing conditions is included in Table 5.7-7, *Post-2035 Unincorporated Areas GHG Emissions Inventory*. The post-2035 inventory includes reductions from federal and state measures identified in CARB's Scoping Plan, including the Pavley fuel efficiency standards, LCFS for fuel use (transportation and off-road), and state reductions for non-transportation measures identified in the CCAP by 2020. While local reductions are not included in the post- 2035 inventory because the CCAP is not yet adopted, these reductions are shown in Table 5.7-7. The analysis for reductions is conservative because the State and local actions identified in the CCAP would continue to be implemented by the County. In addition, it is likely that new federal and state programs would be adopted, resulting in further GHG reductions post-2035.

Table 5.7-7 Post-2035 Unincorporated Areas GHG Emissions Inventory

	GHG Emissions $MTCO_2e$/Year				
Sector	**Existing 2010**	**State Reductions**	**P-2035 Adjusted BAU**	**Change from 2010**	**Additional Local Reductions from the CCAP**
Building Energy[1]	3,906,213	- 427,505	7,383,957	3,477,744	- 227,465
Transportation[1,2]	2,751,579	-2,144,160	3,822,766	1,071,187	-125,876
Waste Generation[1]	535,148	0	1,160,801	625,653	-12,212
Water and Wastewater[1]	133,589	0	250,687	117,098	-15,280
Agriculture[1]	30,290	0	4,458	-25,832	0
Stationary Sources[1]	1,283	0	2,427	1,144	0
Total	**7,358,102**	**-2,571,665**	**12,625,096**	**5,266,994**	**-380,833**
Service Population (SP)*	1,319,075	—	1,717,600	—	—
$MTCO_2e$/SP	5.6 $MTCO_2e$/SP	—	4.2 $MTCO_2e$/SP	—	—
SCAQMD 2035 Target	NA	—	4.0 $MTCO_2e$/SP	—	—

Sources: [1] Los Angeles County of, 2014. [2] EMFAC2011-PL. Transportation emissions are based on VMT and trips provided by Iteris using SCAG's regional transportation model for the Proposed Project and modeled using EMFAC2011. Therefore, the transportation sector differs from that identified for the CCAP.
Note: Existing is based on a population of 1,066,415 people and 252,660 employees in the unincorporated areas. Horizon 2035 is based on a population of 1,399,500 people and 318,100 employees in the unincorporated areas.
State and Local Reductions from the CCAP: This estimate is conservative because the CCAP would be implemented beyond 2020.

- Building Energy: Assumes 139,968 $MTCO_2e$ of energy reductions from implementation of Green Building and Energy Actions BE-1 through BE-7 and 86,371 $MTCO_2e$ reductions from implementation of Water Conservation and Wastewater Actions WAW-1 and WAW-2 (which is 85% of the reductions associated with these actions are a result of reduced electricity and natural gas for hot water heating) for both the 2035 and P-2035 scenarios. The inventory includes an additional 1,126 $MTCO_2e$ energy reductions associated with shade trees from benefits of Policy LC-1. For statewide actions, assumes 336,466 $MTCO_2e$ from implementation of the RPS and 91,039 $MTCO_2e$ for implementation of Title 24 building energy standards.
- Transportation: State reductions for on-road vehicles are based on EMFAC2011-PL and include implementation of Pavely I and the LCFS (see the Transportation Sector Worksheet). Statewide actions include implementation of the LCFS and Pavely I fuel efficiency standards. Reductions from off-road vehicles include a 10 percent reduction from implementation of the LCFS. Land Use and Transportation Actions LUT-1 through LUT-12 would further reduce transportation-related GHG emissions. The local reductions for this sector are an estimate only as they are based on the transportation inventory developed for the CCAP.
- Waste: Assumes 12,212 $MTCO_2e$ of waste reductions from Waste Reduction, Reuse, and Recycling Action W-1.
- Water/Wastewater: Assumes 15,280 $MTCO_2e$ reductions from implementation of Water Conservation and Water Actions WAW-1 and WAW-2.

Buildout of the unincorporated areas is not linked to a development timeline and is based on reasonable worst-case buildout of the parcels as identified in the land use plan. Based on the historic rate of growth,[11] the amount of development that the unincorporated areas can is not likely to occur within the next 50 years, let alone within the 20-year planning horizon identified by SCAG. As a result, compared to the unincorporated areas' existing emissions inventory, the unincorporated areas would experience a substantial increase of 5,266,994 $MTCO_2e$ of GHG emissions at buildout. Consequently, GHG emissions in the unincorporated areas would exceed 100,000 tons (90,718 $MTCO_2e$/year) by full buildout of the Proposed Project. In addition, the County would not achieve the SCAQMD per capita efficiency target for post-2035 based on the goal of Executive Order S-03-05, which is to reduce GHG emissions to 80 percent below 1990 levels by 2050. Impacts would be significant for long-term growth anticipated under the Proposed Project.

It should be noted that with the Proposed Project, the GHG emissions in unincorporated areas would decrease by approximately 380,833 $MTCO_2e$ by 2020. However, the unincorporated areas would still experience a substantial increase in emissions and would not achieve the interim 2035 efficiency target of 4.0 $MTCO_2e$/SP or the target identified in Executive Order S-03-05, which would equate to 1.3 $MTCO_2e$/SP by 2050. Additional state and local actions are necessary to achieve the post-2020 GHG reduction goals for the State. CARB has released an update to the 2008 Scoping Plan to identify a path for the State to achieve additional GHG reductions. However, at this time, no additional GHG reductions programs have been outlined that get the State to the post-2020 targets identified in Executive Order S-03-05, which are an 80 percent reduction in 1990 emissions by 2050. As identified by the California Council on Science and Technology, the State cannot meet the 2050 goal without major advancements in technology (CCST 2012). Impacts from GHG emissions within the unincorporated areas would be significant for long-term growth anticipated under the Proposed Project.

Community Climate Action Plan

The County identified a GHG reduction target of at least 11 percent below 2010 levels by 2020. The CCAP identifies local actions to reduce community-wide GHG reductions in 2020 to reach the GHG reduction goal for the unincorporated areas. As identified in Table 5.7-4, *Unincorporated Areas CCAP GHG Reductions,* the community and statewide actions of the CCAP would reduce GHG emissions in the unincorporated areas by approximately 1.95 million $MTCO_2e$. Implementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur.

Impact 5.7-2 Implementation of a Community Climate Action Plan is necessary to achieve the GHG reduction targets for the unincorporated areas of Los Angeles by AB 32 target year 2020. [Threshold GHG-2]

Impact Analysis: The following plans have been adopted or are proposed and are applicable for development in the unincorporated areas.

[11] According to the California Department of Finance population counts for the unincorporated Los Angeles County, the County has experienced an average annual growth rate of 0.18 percent per year since 1980.

Proposed General Plan Update

CARB Scoping Plan

In accordance with AB 32, CARB developed the Scoping Plan to outline the State's strategy to achieve 1990 level emissions by year 2020. To estimate the reductions necessary, CARB projected statewide 2020 BAU GHG emissions and identified that the State as a whole would be required to reduce GHG emissions by 28.5 percent from year 2020 BAU to achieve the targets of AB 32 (CARB 2008). Since release of the 2008 Scoping Plan, CARB has updated the 2020 GHG BAU forecast to reflect GHG emissions in light of the economic downturn and measures not previously considered in the 2008 Scoping Plan baseline inventory. The revised BAU 2020 forecast shows that the State would have to reduce GHG emissions by 21.6 percent from BAU without Pavley and the 33 percent RPS or 15.7 percent from the adjusted baseline (i.e., with Pavley and 33 percent RPS) (CARB 2012c).

Since adoption of the 2008 Scoping Plan, state agencies have adopted programs identified in the plan, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the LCFS and changes in the corporate average fuel economy standards (e.g., Pavely I and 2017–2025 CAFE standards). The GHG emissions in Table 5.7-6 and 5.7-7 include reductions associated with the Pavley fuel efficiency improvements (adopted in 2009). Projects within the unincorporated areas would be required to adhere to the following programs and regulations identified by the Scoping Plan and implemented by state, regional, and local agencies to achieve the statewide GHG reduction goals of AB 32.

The Proposed Project is consistent with the statewide GHG reduction policies. Local actions identified in the Proposed Project include incorporating a multi-model transportation system into the Mobility Element and ensuring that the Land Use Policy Map for the unincorporated areas connects the transportation to land uses. Mobility management is an important component of a multi-modal transportation and a strategy for improving congestion and reducing VMT. Strategies include infrastructure to support liquid natural gas (LNG), compressed natural gas (CNG), and hydrogen vehicles; Intelligent Transportation Systems (ITS); and electric car plug-in ports. In addition, the County's transportation demand management (TDM) policies include strategies that encourage changes travel behavior and discourage single occupant drivers. TDM policies include congestion management pricing, offering employer-based transit passes or increasing transit availability; regional carpooling programs; and parking management. Consequently, impacts associated with development of the Proposed Project would be less than significant.

CCAP

To achieve the local goals identified in CARB's 2008 Scoping Plan, the Proposed Project included the CCAP. The CCAP identifies and evaluates feasible and effective policies to reduce GHG emissions in order to reduce energy costs, protect air quality, and improve the economy and the environment. The policies identified in the CCAP represent the County's actions to achieve the GHG reduction targets of AB 32 for target year 2020. A consistency analysis with the goals and actions of the Proposed General Plan Update to the community actions in the CCAP is shown in Table 5.7-8, *Consistency with the Unincorporated Areas Draft Community Climate Action Plan*.

Table 5.7-8 Consistency with the Unincorporated Areas Draft Community Climate Action Plan

#	Measure	Consistency
BE-1	**Green Building Development**. Promote and incentivize at least Tier 1 voluntary standards within CALGreen for all new residential and nonresidential buildings. Develop a heat island reduction plan and facilitate green building development by removing regulatory and procedural barriers.	**Consistent:** The 2013 Building and Energy Efficiency Standards are the current energy standards for new residential and non-residential buildings in the unincorporated areas. The 2013 Standards are approximately 25 percent more energy efficient than the 2008 Standards for residential buildings and 30 percent more energy efficient for non-residential buildings than the 2008 Standards. The 2008 Standards are approximately 15 percent more energy efficient than the 2005 Standards. The CEC is on a path toward net-zero-energy buildings. Throughout the buildout of the Proposed Project, future cycle updates to the Building and Energy Efficiency Standards would have increasingly more stringent energy standards, such that zero energy buildings may be likely in the lifetime of the Proposed Project buildout for the unincorporated areas. Sustainable practices are integrated throughout the Proposed Project, such as energy efficient design (e.g., optimizing the solar orientation of buildings to maximize passive and active solar design techniques, providing substantial tree canopy cover, and utilizing light colored paving materials and reflective roofing materials). **Applicable Proposed General Plan Update Policies**: LU 11.1, LU 11.2, LU 11.3, AQ 3.2. AQ 3.5, C/NR 12.1, C/NR 12.2, and ED 1.2
BE-2	**Energy Efficiency Programs**. Conduct energy efficiency retrofits for at least 25% of existing commercial buildings over 50,000 square feet and at least 5% of existing single family residential buildings.	**Consistent:** As identified above, the CEC is on a path toward zero-net-energy buildings for new construction in California. As a result, local programs that focus on incentives for energy retrofits for existing buildings will play an increasingly important role in local GHG reduction strategies. Several existing energy retrofit programs are available for the unincorporated area residents and businesses from SCE. In addition, there are several financing options for residents and business, including the Los Angeles Commercial Building Performance Partnership, the Affordable Multifamily Rental Housing Program and Home Improvement Program, and Energy Update California. To finance energy efficient retrofits, the Proposed Project directs the County establish a countywide property assessed clean energy (PACE) financing program to provide municipal financing for energy and water efficiency and renewable energy projects on private property pursuant to Assembly Bill 811. **Applicable Proposed General Plan Update Policies:** AQ 3.4 and ED 4.7
BE-3	**Solar Installations**. Promote and incentivize solar installations for new and existing homes, commercial buildings, carports and parking areas, water heaters, and warehouses.	**Consistent**: The current Building and Energy Efficiency Standards do not mandate that new homes have solar panel. Solar power is only viable as an energy alternative in areas where there is sufficient solar reflection (e.g., enough sunlight). While the current Building Standards do not require solar panels be installed, they require that new buildings be constructed to accommodate the rooftop load and wiring necessary to support solar panels. A list of solar installations in the County can be found at the following website: http://solarmap.lacounty.gov/. **Applicable General Plan Policies**: LU 11.1, C/NR 12.1, P/R 6.2, PS/F 6.5, PS/F 6.7, and ED 1.2

Table 5.7-8 Consistency with the Unincorporated Areas Draft Community Climate Action Plan

BE-4	**Alternative Renewable Energy Programs**. Implement pilot projects for currently feasible wind, geothermal, and other forms of alternative renewable energy.	**Consistent:** As identified in the General Plan Public Services and Facilities Element, the major contributor to the long-term energy independence of the County would be the increased production of energy from renewable sources. The County is a participant in the Statewide Renewable Energy Transmission Initiative (RETI), which identifies sites that are suitable for various types of renewable energy sources, including geothermal, solar, wind and biomass. **Applicable Proposed General Plan Update Policies:** LU 11.1, C/NR 12.1, P/R 6.2, PS/F 6.5, PS/F 6.7, and ED 1.2
BE-5	**Wastewater Treatment Plant. Biogas**. Encourage renewable biogas projects.	**Consistent:** Various rules and regulations require wastewater treatment plant operators to capture the biogas generated from the treatment of wastewater. The captured methane is routinely used to offset non-renewable energy use by installing biogas to energy projects when economically feasible. For example, the Sanitation Districts, which are not County departments, have installed a 250-kilowatt microturbine at the Lancaster Water Reclamation Plant fueled by digester gas. Sanitation Districts also operate a 35-megawatt biogas turbine combined-cycle power-generating facility at the Joint Water Pollution Control Plant. The system provides 95 percent of plant power needs, reducing GHG emissions. The County support-ongoing biogas projects by the Sanitation Districts. **Applicable Proposed General Plan Update Policies:** C/NR 12.1
BE-6	**Energy Efficiency Retrofits of Wastewater Equipment**. Encourage the upgrade and replacement of wastewater treatment and pumping equipment.	**Consistent:** Replacement of equipment slated for retirement with more energy-efficient equipment, as well as utilization of best management practices would reduce equipment energy consumption. The Sanitation Districts are actively engaged in pursuing energy efficiency projects at regional wastewater treatment facilities. Implementation of the CCAP would continue and potentially expand the Sanitation District's existing efforts, further reducing GHG emissions associated with wastewater processing and treatment. **Applicable Proposed General Plan Update Policies:** AQ 3.2, AQ 3.3, AQ 3.5, PS/F 4.1, and PS/F 4.2
BE-7	**Landfill Biogas**. Partner with the owners and operators of landfills with at least 250,000 tons of waste-in-place to identify incentives to capture and clean landfill gas to beneficially use the biogas to generate electricity, produce biofuels, or otherwise offset natural gas or other fossil fuels.	**Consistent:** Currently, all landfills serving the unincorporated areas with at least 250,000 tons of waste-in-place have installed methane capture systems. Methane captured by these systems can be used to generate electricity. For example, Puente Hills Landfill Gas-to-Energy Facility provides enough electricity to power about 70,000 homes in the County. Similar facilities have also been implemented by the Sanitation Districts at the Calabasas Landfill and Spadra Landfill. Additionally, a gas-to-energy facility is operational at the Chiquita Canyon Landfill, and construction of such a facility is underway at the Sunshine Canyon Landfill. Implementation of the CCAP would accelerate gas-to-energy facilities at landfills throughout Los Angeles County. The County would coordinate with the Sanitation Districts to further this goal. **Applicable Proposed General Plan Update Policies:** AQ 3.4 and PS/F 6.7

Table 5.7-8 Consistency with the Unincorporated Areas Draft Community Climate Action Plan

LUT-1	**Bicycle Programs and Supporting Facilities**. Construct and improve bicycle infrastructure to increase biking and bicyclist access to transit and transit stations/hubs. Increase bicycle parking and "end-of-trip" facilities offered through the unincorporated County.	**Consistent:** The Los Angeles County Bicycle Master Plan (2012) identifies bikeways and transportation systems that are available for use by bicyclists, such as roadways with bike lanes or designated bike routes, and dedicated off-road bike paths, such as bike paths along the flood control channels. The purpose of the Bicycle Master Plan is to: 1) guide the development of infrastructure, policies, and programs that improve the bicycling environment; 2) depict the general location of planned bikeway routes; and 3) provide for a system of bikeways that is consistent with the Proposed Project. In addition, the State Vehicle Code allows roadways to be used by bicyclists. **Applicable Proposed General Plan Update Policies:** LU 5.3, LU 5.7, M 1.1, M 2.1, M 2.2, M 2.3, M 2.5, M 2.6, M 2.7, M 2.8, M 2.10, M 2.11, M. 4.1, M 5.3, M 5.4, and ED 3.2
LUT-2	**Pedestrian Network**. Construct and improve pedestrian infrastructure to increase walking and pedestrian access to transit and transit stations/hubs. Program the construction of pedestrian projects toward the goal of completing 15,000 linear feet of pedestrian improvements/amenities per year.	**Consistent:** There are a number of trails and paths that are available for use by pedestrians, such as sidewalks, hiking trails, over- and underpasses, and skywalks. The County is committed to improving the environment to allow for increased alternative transportation uses. The Proposed Project includes a program to prepare community pedestrian plans for the unincorporated areas that would set standards for sidewalks, street crossings, sidewalk continuity, street connectivity, and topography. The community pedestrian plans would emphasize the connectivity of pedestrian paths to and from public transportation, major employment centers, shopping centers, and government buildings. In the addition, the Proposed Project includes a Safe Routes to School Program that addresses pedestrian and bicycle safety for a two-mile radius around all elementary, middle, and high school facilities. **Applicable Proposed General Plan Update Policies:** LU 10.6, LU 10.7, M 1.1, M 2.1, M 2.2, M 2.3, M 2.4, M 2.6, M 2.7, M 2.8, M 2.10, M 2.11, M 4.1, M 5.1, M 5.4, and ED 3.2
LUT-3	**Transit Expansion**. Collaborate with the Los Angeles County Metropolitan Transportation Authority (Metro) on a transit program that prioritizes transit by creating bus priority lanes, improving transit facilities, reducing transit-passenger time, and providing bicycle parking near transit stations. Construct and improve bicycle, pedestrian and transit infrastructure to increase bicyclist and pedestrian access to transit and transit stations/hubs.	**Consistent:** Metro operates the rail system within Los Angeles County. The system consists of the Red, Purple, Blue, Green, Gold, and Expo lines. The Metro lines that primarily serve the unincorporated areas are the Metro Blue, Green, and Gold Lines. The Metro Blue Line stations that serve the unincorporated areas include: Slauson, Florence, Firestone, Willowbrook, and Del Amo. The Aviation/LAX, Vermont, Hawthorne, and Rosa Parks stations along the Metro Green Line also serve the unincorporated areas. The Gold Line has five stations that serve the unincorporated areas: Indiana, Maravilla, East LA Civic Center, Atlantic, and Sierra Madre Villa. Bus services are provided by several regional and municipal operates. Examples of these operators include Torrance Transit, Foothill Transit, Santa Clarita Transit, and the Antelope Valley Transit Authority. Bus service is available within the unincorporated Los Angeles County. **Applicable Proposed General Plan Update Policies:** LU 5.7, LU 10.7, LU 11.4, M 1.1, M 2.4, M 2.6, M 2.10, M 4.1, M 4.3, M 4.4, M 4.15, M 4.16, M 5.2, M 5.3, M 5.4, and ED 3.2

Table 5.7-8 Consistency with the Unincorporated Areas Draft Community Climate Action Plan

LUT-4	**Travel Demand Management**. Encourage ride- and bike-sharing programs and employer sponsored vanpools and shuttles. Encourage market-based bike sharing programs that support bicycle use around and between transit stations/hubs. Implement marketing strategies to publicize these programs and reduce commute trips.	**Consistent:** The County's TDM policies include strategies that encourage changes travel behavior and discourage single occupant drivers. TDM policies include congestion management pricing, offering employer-based transit passes or increasing transit availability; regional carpooling programs; and parking management. The Proposed Project encourages mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting. **Applicable Proposed General Plan Update Policies**: M 4.1, M 4.2, M 4.15, M 5.4, and ED 3.2
LUT-5	**Car-Sharing Program**. Implement a car-sharing program to allow people to have on demand access to a shared fleet of vehicles.	**Consistent**: The County encourages ride- and bike-sharing programs and employer-sponsored vanpools and shuttles. Transit station-based programs that focus on providing the last-mile solution and link transit with commuters' final destinations. Residential-based programs that can work to substitute entire household based trips. Employer-based programs provide a means for business/day trips for alternative mode commuters and provide a guaranteed ride home option. The County would continue to support these efforts. **Applicable Proposed General Plan Update Policies:** LU 5.4, M 4.1, M 4.4, M 4.15, and ED 3.2
LUT-6	**Land Use Design and Density**. Promote sustainability in land use design, including diversity of urban and suburban developments.	**Consistent**: The County's land use plan incorporates several key strategies, including use of Transit-Oriented-Districts (TODs) coupled with the County's multi-modal transportation system, to align the Proposed Project policies with the goals of SCAG's 2012 RTP/SCS. The Proposed Project includes TOD Implementation Program that requires the preparation of future TOD specific plans, or similar mechanisms, for land uses near transit. Important goals of a TOD specific plan include increasing walking, bicycling, and transit ridership and reduce VMT. **Applicable Proposed General Plan Update Policies:** Policies LU 1.11 through LU 1.15, M 1.5, ED 2.5, ED 2.7, ED 3.1, and ED 4.4
LUT-7	**Transportation Signal Synchronization Program**. Improve the network of traffic signals on the major streets throughout Los Angeles County.	**Consistent**: The Transportation Signal Synchronization Program (TSSP) implements innovative, low-cost operational improvements to the network of traffic signals on the major streets throughout LA County. Upgrading traffic signals improves mobility on congested roadways and reduces GHG emissions through reduced vehicle idle time. The County would continue implementation of its TSSP with a goal of completing 38 additional routes (16 new and 22 to be redone) between 2010 and 2020. **Applicable Proposed General Plan Update Policies:** M 2.3, M 2.4, M 2.5, M 4.3, M 4.11, M 4.15, and ED 3.2

Table 5.7-8 Consistency with the Unincorporated Areas Draft Community Climate Action Plan

LUT-8	**Electric Vehicle Infrastructure**. Install 500 electric vehicle (EV) charging facilities at County owned public venues (e.g., hospitals, beaches, stand-alone parking facilities, cultural institutions, and other facilities) and ensure that at least one-third of these charging stations will be available for visitor use.	**Consistent**: The County has established a goal to install 500 electric vehicle (EV) charging facilities at County-owned public venues (e.g., hospitals, beaches, stand-alone parking facilities, cultural institutions, and other facilities) and ensure that at least one-third of these charging stations would be available for visitor use. Expanding the number of EV charging opportunities for the public would help the County meet and exceed future projections for anticipated plug-in electric vehicle (PEV) registrations. The County encourages the use of sustainable transportation facilities and infrastructure technologies, such as liquid and compressed natural gas, and hydrogen gas stations, ITS, and electric car plug-in ports. **Applicable Proposed General Plan Update Policies:** M 7.3 and ED 3.2
LUT-9	**Idling Reduction Goal**. Encourage idling limits of 3 minutes for heavy-duty construction equipment, as feasible within manufacturer's specifications.	**Consistent**: The current idling limit adopted by CARB and local air district regulations is 5 minutes. The CCAP has an action to encourage an idling limit of 3 minutes and encourage contractors to submit a construction vehicle management plan that includes the following information: idling time goals; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all onsite equipment. **Applicable Proposed General Plan Update Policies:** AQ 1.4 and AQ 3.4
LUT-10	**Efficient Goods Movement**. Support regional efforts to maximize the efficiency of the goods movement system throughout the unincorporated areas.	**Consistent**: The ports of Long Beach and Los Angeles are heavily investing in infrastructure to handle a projected doubling of container volumes. However, the ports have also been identified as one of the largest sources of air pollution in the region. In addition, terminal operations and supporting infrastructure are consumptive land uses and are often characterized as having heavily polluting activities. The ports have created a Clean Air Action Plan in conjunction with the USEPA, CARB, and SCAQMD to reduce emissions related to port operations. SCAG's 2012 RTP/SCS also includes strategies to address goods movement, including the Regional Clean Freight Corridor System, East-West Freight Corridor, and bottleneck relief strategies for trucks on the freeway/ramps. The County supports these regional efforts. **Applicable Proposed General Plan Update Policies:** M 6.1, M 6.3, M 6.5, and ED 3.2
LUT-11	**Sustainable Pavements Program**. Reduce energy consumption and waste generation associated with pavement maintenance and rehabilitation.	**Consistent**: The Sustainable Pavements Program maintains and rehabilitates aging roadways throughout the County. The program uses a three-pronged sustainable approach where 1) roads in good condition are actively maintained, 2) recycled materials are used in treatment selections, and 3) existing materials are reutilized for reconstruction projects. These actions reduce GHG emissions through vehicle fuel savings and materials reduction. CCAP action LUT-11 would continue implementation of the sustainable pavements program. **Applicable Proposed General Plan Update Policies:** M 7.1 and ED 3.2

Table 5.7-8 Consistency with the Unincorporated Areas Draft Community Climate Action Plan

LUT-12	**Electrify Construction and Landscaping Equipment**. Utilize electric equipment wherever feasible for construction projects. Reduce the use of gas-powered landscaping equipment.	**Consistent**: Electric equipment goals for construction equipment are incorporated into the CCAP and are being considered for inclusion within the discretionary requirement process for new development projects in Los Angeles County. The County may also need to work with construction contractors to determine the components of their fleets. Landscaping equipment requirements could be included as part of the discretionary requirement process for new development projects in Los Angeles County. Pursuant to the California Building Code (Title 24), buildings are now required to include electrical outlets on the exterior of buildings to support the use of electric landscaping equipment. SCAQMD also implements a lawnmower exchange program so that residents in Los Angeles County can exchange gas lawnmowers for electric lawnmowers. **Applicable Proposed General Plan Update Policies:** AQ 2.2 and AQ 3.5
WAW-1	**Per Capita Water Use Reduction Goal**. Meet the State established per capita water use reduction goal, as identified by SB X7-7 for 2020.	**Consistent:** The County Board of Supervisor's adopted a Countywide Water Supply and Conservation Alert resolution (2008), which urges residents, businesses, and water purveyors to intensify water conservation efforts and directs all County departments to implement measures to achieve a 15 to 20 percent reduction in overall water demand. As part of the General Plan Implementation Program, the County would continually review and update the County's water conservation ordinance with appropriate enforcement procedures, such as instituting a water conservation hotline and other measures. In addition, the County is planning on studying the feasibility of instituting a conservation water rate structure for the Los Angeles County Waterworks Districts that supply water to the unincorporated areas. **Applicable Proposed General Plan Update Policies:** AQ 3.3, AQ 3.4, C/NR 9.2, C/NR 6.1, PS/F 2.1, PS/F 2.2, PS/F 3.1, and PS/F 3.2

Table 5.7-8 Consistency with the Unincorporated Areas Draft Community Climate Action Plan

WAW-2	**Recycled Water Use, Water Supply Improvement Programs, and Storm Water 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.	**Consistent:** Recycled water is used primarily for recharging groundwater aquifers through regional groundwater recharge operations and injection at seawater barriers. Other uses of recycled water include irrigating landscaping and supplying industrial processes. The Proposed Project identifies conservation of the water supply as a key strategy. To reduce the County's dependence on imported water, County agencies are establishing various water conservation programs (e.g., the Department of Water and Power's [DWP] water reclamation facilities and groundwater recharge facilities). The County Department of Parks and Recreation has implemented recycled water programs, including the Rimgrove Recycled Water Project and the Pathfinder Recycled Water Project. Several water agencies throughout Southern California, such as the Metropolitan Water District (MWD), Castaic Lake Water Agency, and City of Los Angeles DWP, are also taking steps to add desalinated water to their list of water supplies. The Proposed Project supports water conservation efforts that focus on curbing demand by reducing consumption through technological advances, such as aerators and motion sensors on low flush toilets and stalls; onsite gray water reclamation and dual plumbing; promoting xeriscaping; and organizing educational campaigns to discourage wasteful water consumption. **Applicable Proposed General Plan Update Policies:** P/R 6.1, PS/F 2.1, PS/F 2.2, PS/F 3.1, PS/F 3.2, PS/F 4.1, PS/F 4.2, and PS/F 4.4
SW-1	**Waste Diversion Goal**. For the County's unincorporated areas, adopt a waste diversion goal to comply with all state mandates associated with diverting from landfill disposal at least 75% of the waste by 2020.	**Consisten**t: The County has the largest solid waste management system in the country. There are seven major solid waste landfills, four minor solid waste landfills, and two waste-to-energy facilities. The County's Department of Public Works is responsible for preparing and administering an integrated waste management plan that achieves the statewide waste diversion goals of Assembly Bill 939. The County's comprehensive waste collection and recycling system is designed to reduce the amount of trash that is sent to regional landfills. This system incorporates a variety of programs that collectively divert over 50 percent of the waste generated in Los Angeles County. Implementation of the CCAP would increase the amount of diverted waste to at least 75 percent. **Applicable Proposed General Plan Update Policies:** PS/F 5.1, PS/F 5.2, PS/F 5.4, PS/F 5.5, PS/F 5.6, PS/F 5.7, PS/F 5.8, and PS/F 5.9
LC-1	**Develop Urban Forests**. Support and expand urban forest programs within the unincorporated areas.	**Consisten**t: The County Fire's Urban Forestry Programs distribute over 22,422 seedlings to unincorporated area residents and businesses each year. The County would expand existing efforts by requiring a minimum number of new trees to be planted in urban areas under the CCAP. This action requires an evaluation of the feasibility of substantially expanding tree planting in the unincorporated areas, including evaluation of potential carbon sequestration from different tree species, potential reductions of building energy from shading, and GHG emissions associated with pumping water used for irrigation. The Proposed Project includes a policy to support and expand urban forest programs within the unincorporated areas. **Applicable Proposed General Plan Update Policies**: M 2.9 and AQ 3.7

Table 5.7-8 Consistency with the Unincorporated Areas Draft Community Climate Action Plan

LC-2	**Create New Vegetated Open Space**. Restore and re-vegetate previously disturbed land and/or unused urban and suburban areas.	**Consisten**t: The CCAP builds on existing initiatives for County resource conservation and expansion of open space and encourages the restoration and revegetation of previously disturbed land in order to promote carbon sequestration in the unincorporated areas. It also promotes the conversion of unused urban and suburban areas to parks and forests. New vegetated open spaces should be designed and maintained to minimize the spread of invasive species. **Applicable Proposed General Plan Update Policies:** C/NR 1.3, C/NR 1.5, C/NR 1.6, C/NR 2.1, C/NR 2.2, and C/NR 2.4
LC-3	**Promote the Sale of Locally Grown Foods and/or Products**. Establish local farmers markets and support locally grown food.	**Consistent**: The CCAP would expand the Healthy Design Ordinance to encourage and support farmers markets at community parks. Establishing local farmer's markets has the potential to provide community residents with a local source of food, protect local agricultural lands, and support local agricultural jobs. Co-benefits associated with locally grown foods include reduced vehicle miles traveled, as well as displaced carbon-intensive food production practices (if the food is grown organically). The Proposed Project includes policies to support farmers markets, farm stands, and community-supported agriculture. **Applicable Proposed General Plan Update Policies:** C/NR 8.1, C/NR 8.2, C/NR 8.3, C/NR 9.3, C/NR 9.4, and ED 2.9
LC-4	**Protect Conservation Areas**. Encourage the protection of existing land conservation areas.	**Consistent**: Forested, oak woodland, hillsides, ridgelines, wetland areas, and some community parks and open spaces can provide carbon sink benefits by sequestering atmospheric CO_2. Conservation areas can also provide a diverse suite of community benefits, including recreation, economic, and aesthetics. Accordingly, the County will prioritize these conservation areas that benefit multiple end uses. **Applicable Proposed General Plan Update Policies:** LU 3.1, LU 3.3, C/NR 1.1, C/NR 1.2, C/NR 1.5, C/NR 2.1, C/NR 2.3, C/NR 2.4, and C/NR 4.1

Source: County of Los Angeles, 2014.

The following Proposed Project policy would ensure that the County is on track to achieving the local GHG reduction targets for the unincorporated areas.

- **Policy AQ 3.1:** Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals.

As identified in the table above, the Proposed Project would include policies and actions consistent with the CCAP. While the CCAP identifies that the County would achieve the local GHG reduction goals under AB 32, the CCAP has not yet been adopted. Since the local actions identified in the CCAP are necessary to meet the GHG reduction target for the County in 2020, GHG emissions impacts are conservatively considered significant for the Proposed Project.

SCAG's 2012 RTP/SCS

SCAG adopted its 2012 RTP/SCS on April 4, 2012, pursuant to the requirements of SB 375. SCAG's RTP/SCS is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light duty trucks in the Southern California region. It incorporates the Gateway Cities COG's SCS. The 2012 RTP/SCS also incorporates local land use projections and circulation networks in the cities' and counties' general plans. The projected regional development pattern—including the location of land uses and residential densities in local general plans—when integrated with the proposed regional transportation network in the 2012 RTP/SCS—would reduce per capita vehicular travel-related GHG emissions and achieve the subregional GHG reduction per capita targets for the SCAG region, which are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035. Key strategies identified in the SCAG 2012 RTP/SCS were identified in Table 5.10-2, *Consistency with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy Goals*, in Section 5.10, *Land Use and Planning*.

The Proposed Project incorporates several key strategies, including establishment of Transit Oriented Districts (TODs) coupled with the multi-modal transportation system in Los Angeles County, to align with the goals of SCAG's 2012 RTP/SCS. The following TODs are within the unincorporated areas and are within a half-mile radius of a major transit stop:

- Aviation/LAX Station TOD (Metro Green Line)
- Hawthorne Station TOD (Metro Green Line)
- Vermont Station TOD (Metro Green Line)
- Rosa Parks Station TOD (Metro Green Line/Blue Line)
- Slauson Station TOD (Metro Blue Line)
- Florence Station TOD (Metro Blue Line)
- Firestone Station TOD (Metro Blue Line)
- Del Amo Station TOD (Metro Blue Line)
- Sierra Madre Villa Station TOD (Metro Gold Line)
- Third Street TOD Corridor (Metro Gold Line)
- 110 Freeway/Carson Station TOD (connection to Metro Silver Line)

The Proposed Project includes a TOD Implementation Program that requires the preparation of future TOD specific plans, or similar mechanisms for land uses near transit. An important goal of a TOD specific plan includes increasing walking, bicycling, and transit ridership and reducing VMT (Policies LU 1.11 through LU 1.15, M 1.5, ED 2.5, ED 2.7, ED 3.1, and ED 4.4). Consequently, the impacts from consistency with SCAG's 2012 RTP/SCS are less than significant.

Community Climate Action Plan

Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions. Table 5.7-8 presents a consistency evaluation of the

Proposed General Plan Update policies with the CCAP measures. Implementation of the CCAP would not conflict with plans adopted for the purpose of reducing GHG emissions and would result in a beneficial impact with regard to GHG emissions; therefore, no impact would occur.

5.7.5 Cumulative Impacts

Climate change is a global phenomenon that is cumulative by nature, as it is the result of combined worldwide contributions of GHGs to the atmosphere over many years. Therefore, significant direct impacts associated with the Proposed Project, as discussed above, also serve as the Proposed Project's cumulative impact.

The CCAP would ensure that GHG emissions from buildout of the Proposed Project would be minimized. However, additional statewide measures would be necessary to reduce GHG emissions under the Proposed Project to meet the long-term GHG reduction goals under Executive Order S-03-05, which identified a goal to reduce GHG emissions to 80 percent of 1990 levels by 2050. Based on SCAQMD's 2020 efficiency target, this would equate to 1.3 $MTCO_2e$/SP by 2050. The post-2035 unincorporated areas GHG emissions inventory in would generate 4.2 $MTCO_2e$/SP and would exceed this long-term goal by 2.9◦$MTCO_2e$/SP CARB is currently updating the Scoping Plan to identify additional measures to achieve the long-term GHG reduction targets. At this time, there is no plan past 2020 that achieves the long-term GHG reduction goal established under S-03-05. As identified by the California Council on Science and Technology, the State cannot meet the 2050 goal without major advancements in technology (CCST 2012). Since no additional statewide measures are currently available cumulative GHG emissions impacts would remain significant and unavoidable.

5.7.6 Existing Regulations and Standard Conditions

State

- California Global Warming Solutions Act (AB 32)
- Sustainable Communities and Climate Protection Act (SB 375)
- Greenhouse Gas Emission Reduction Targets (Executive Order S-3-05)
- Clean Car Standards – Pavely (AB 1493)
- Renewable Portfolio Standards (SB 1078)
- California Integrated Waste Management Act of 1989 (AB 939)
- California Mandatory Commercial Recycling Law (AB 341)
- California Advanced Clean Cars CARB (Title 13 CCR)
- Low-Emission Vehicle Program – LEV III (Title 13 CCR)
- Heavy-Duty Vehicle Greenhouse Gas Emissions Reduction Measure (Title 17 CCR)
- Low Carbon Fuel Standard (Title 17 CCR)
- California Water Conservation in Landscaping Act of 2006 (AB 1881)
- California Water Conservation Act of 2009 (SBX7-7)

- Statewide Retail Provider Emissions Performance Standards (SB 1368).
- Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools (13 CCR 2480)
- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

Local

- Low Impact Development Standards (County Code Chapter 12.84)
- Construction and Demolition Debris Recycling and Reuse (County Code Chapter 20.87)
- Carryout Bags (County Code Chapter 12.85)
- Green Building Standards Code (County Code Chapter 31)

5.7.7 Level of Significance Before Mitigation

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.7-1** Buildout of the Proposed Project would generate GHG emissions that would have a significant impact on the environment.

- **Impact 5.7-2** Implementation of a Community Climate Action Plan is necessary to achieve the GHG reduction targets for the unincorporated areas for AB 32 target year 2020

5.7.8 Mitigation Measures

Impact 5.7-1

Implementation of the CCAP identifies key strategies that would be implemented to reduce GHG emissions to achieve the AB 32 target for the unincorporated areas. The following mitigation measure would ensure that the County would continue to implement its GHG reduction programs post-2020 to ensure progress toward meeting the long-term GHG reduction goals of Executive Order S-03-05:

GHG-1 The County shall monitor GHG emissions by updating its GHG emissions inventory every five years. Upon the next update to the CCAP, the inventory, GHG reduction measures, and GHG reductions should be forecasted to 2035 to ensure progress toward achieving an interim target that aligns with the long-term GHG reduction goals of Executive Order S-03-05. The CCAP update should take into account the reductions achievable due to federal and state action as well as ongoing work by the County government and the private sector. The 2035 CCAP update shall be complete by January 1, 2021 with a plan to achieve GHG reductions for 2035 or 2040 provided the state has an actual plan to achieve reductions for 2035 or 2040. New reduction programs in similar sectors as the proposed

CCAP (building energy, transportation, waste, water, wastewater, agriculture and others) will likely be necessary. Future targets should be considered in alignment with state reduction targets, as feasible, but it is premature at this time to determine whether or not such targets can be feasibly met through the combination of federal, state, and local action given technical, logistical and financial constraints. Future updates to the CCAP should account for the horizon beyond 2035 as the state adopts actual plans to meet post-2035 targets.

5.7.9 Level of Significance After Mitigation

Impact 5.7-1

The CCAP would ensure that GHG emissions from buildout of the Proposed Project would be minimized. However, additional statewide measures would be necessary to reduce GHG emissions under the Proposed Project to meet the long-term GHG reduction goals under Executive Order S-03-05, which identified a goal to reduce GHG emissions to 80 percent of 1990 levels by 2050. CARB is currently updating the Scoping Plan to identify additional measures to achieve the long-term GHG reduction targets. At this time, there is no plan past 2020 that achieves the long-term GHG reduction goal established under S-03-05. As identified by the California Council on Science and Technology, the state cannot meet the 2050 goal without major advancements in technology (CCST 2012). Since no additional statewide measures are currently available, Impact 5.7-1 would remain significant and unavoidable.

Impact 5.7-2

Implementation of the CCAP would be necessary to ensure that the local GHG reduction goals for the County under AB 32 would be met. Adoption and implementation of the CCAP in its entirety would reduce GHG emissions to less than significant levels. However, in the absence of an adopted CCAP, consistency with plans adopted for the purpose of reducing GHG emissions toward the short-term target of AB 32 could be significant. Impact 5.7-2 would remain significant and unavoidable.

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5. Environmental Analysis
GREENHOUSE GAS EMISSIONS

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5.8 HAZARDS AND HAZARDOUS MATERIALS

This section discusses the environmental setting and evaluates the potential impacts that could result from implementation of the Proposed General Plan Update (Proposed Project) related to hazardous materials, airport hazards, emergency response plans, and wildland fires. Appropriate mitigation measures or standard conditions are included as necessary.

5.8.1 Environmental Setting

5.8.1.1 TERMINOLOGY

Hazardous materials refer generally to hazardous substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (e.g., household cleaners, industrial solvents, paint, pesticides, etc.) and in the manufacturing of products (e.g., electronics, newspapers, plastic products, etc.). Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; and households. Accidental releases of hazardous materials have a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents.

The term "hazardous materials" as used in this section include all materials defined in the California Health and Safety Code (H&SC):

> "A material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. 'Hazardous materials' include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment."

The term includes chemicals regulated by the United States Department of Transportation (DOT), the United States Environmental Protection Agency (US EPA), the California Department of Toxic Substances (DTSC), the California Governor's Office of Emergency Services, and other agencies as hazardous materials, wastes, or substances. "Hazardous waste" is any hazardous material that has been discarded, except those materials specifically excluded by regulation. Hazardous materials that have been intentionally disposed of or inadvertently released fall within the definition of "discarded" materials and can result in the creation of hazardous waste. Hazardous wastes are broadly characterized by their ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity. Federal and state hazardous waste definitions are similar, but contain enough distinctions that separate classifications are in place for federal Resource Conservation and Recovery Act (RCRA) hazardous wastes and state non-RCRA hazardous wastes. Hazardous wastes require special handling and disposal because of their potential to impact public health and the environment. Some materials are designated "acutely" or "extremely" hazardous under relevant statutes and regulations.

5.8.1.2 REGULATORY FRAMEWORK

Hazardous materials and wastes can pose a significant actual or potential hazard to human health and the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Many federal, state, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste are in place to prevent these unwanted consequences. These regulatory programs are designed to reduce the danger that hazardous substances may pose to people and businesses under normal daily circumstances and as a result of emergencies and disasters.

Resource Conservation and Recovery Act (RCRA) of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

Federal hazardous waste laws are generally promulgated under RCRA. These laws provide for the "cradle to grave" regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. DTSC is responsible for implementing the RCRA program as well as California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency (CUPA) program, the California Environmental Protection Agency (Cal/EPA) has in turn delegated enforcement authority to the County of Los Angeles (County) for state law regulating hazardous waste producers or generators.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) of 1986

Congress enacted CERCLA, commonly known as Superfund, on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. SARA amended the CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to $8.5 billion.

Emergency Planning Community Right-to-Know Act (EPCRA)

The EPCRA, also known as SARA Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. EPCRA Sections 301 through 312 are administered by EPA's Office of Emergency Management. EPA's Office of Information Analysis and Access implements the EPCRA Section 313 program. In California, SARA Title III is implemented through CalARP.

Hazardous Materials Transportation Act

DOT regulates hazardous materials transportation under Title 49 CFR. State agencies that have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation. Title 49 CFR reflects laws passed by Congress as of January 2, 2006.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that: 1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; 2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and 3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency.

California Health and Safety Code and Code of Regulations

California Health and Safety Code Chapter 6.95 and 19 California Code of Regulations Section 2729 set out the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site. A business that uses hazardous materials or a mixture containing hazardous materials must establish and implement a business plan if the hazardous material is handled in certain quantities.

California Education Code (CEC)

The CEC establishes the law for California public education. CEC requires that the DTSC be involved in the environmental review process for the proposed acquisition and/or construction of school properties that will use state funding. The CEC requires a Phase I Environmental Site Assessment be completed prior to acquiring a school site or engaging in a construction project. Depending on the outcome of the Phase I Environmental Site Assessment, a Preliminary Environmental Assessment and remediation may be required. The CEC also requires potential, future school sites that are proposed within two miles of an airport to be reviewed by Caltrans Division of Aeronautics. If Caltrans does not support the proposed site, no state or local funds can be used to acquire the site or construct the school.

California State Aeronautics Act

The State Aeronautics Act is implemented by Caltrans Division of Aeronautics. The purpose of this Act is to: 1) foster and promote safety in aeronautics; 2) ensure the State provides laws and regulations relating to aeronautics are consistent with federal aeronautics laws and regulations; 3) assure that persons residing in the vicinity of airports are protected against intrusions by unreasonable levels of aircraft noise; and 4) develop informational

programs to increase the understanding of current air transportation issues. Caltrans Division of Aeronautics issues permits for and annually inspects hospital heliports and public-use airports, makes recommendations regarding proposed school sites within two miles of an airport runway, and authorizes helicopter landing sites at/near schools.

California Building Code

The State of California provided a minimum standard for building design through the 2010 California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations (CCR). The 2010 CBC is based on the 1997 Uniform Building Code, but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Fire Code (2010)

California Code of Regulations, Title 24, also known as the California Building Standards Code, contains the California Fire Code (CFC), included as Part 9 of that title. Updated every three years, the CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. The Los Angeles County Fire Department (LACoFD) provides fire protection services for the unincorporated areas of Los Angeles County (Project Area) and as such, implements and enforces the CFC in the Project Area.

Asbestos-Containing Materials (ACM) Regulations

State-level agencies, in conjunction with the USEPA and OSHA, regulate removal, abatement, and transport procedures for asbestos-containing materials. Releases of asbestos from industrial, demolition, or construction activities are prohibited by these regulations and medical evaluation and monitoring is required for employees performing activities that could expose them to asbestos. Additionally, the regulations include warnings that must be heeded and practices that must be followed to reduce the risk for asbestos emissions and exposure. Finally, federal, state, and local agencies must be notified prior to the onset of demolition or construction activities with the potential to release asbestos.

Polychlorinated Biphenyls (PCBs)

The US EPA prohibited the use of PCBs in the majority of new electrical equipment starting in 1979, and initiated a phase-out for much of the existing PCB-containing equipment. The inclusion of PCBs in electrical equipment and the handling of those PCBs are regulated by the provisions of the Toxic Substances Control Act, 15 U.S.C. § 2601 et seq. (TSCA). Relevant regulations include labeling and periodic inspection requirements for certain types of PCB-containing equipment and outline highly specific safety procedures for their disposal. The State likewise regulates PCB-laden electrical equipment and materials contaminated above

a certain threshold as hazardous waste; these regulations require that such materials be treated, transported, and disposed accordingly. At lower concentrations for non-liquids, regional water quality control boards may exercise discretion over the classification of such wastes.

Lead-Based Paint (LBP)

Cal OSHA's Lead in Construction Standard is contained in Title 8, Section 1532.1 of the California Code of Regulations. The regulations address all of the following areas: permissible exposure limits (PELs); exposure assessment; compliance methods; respiratory protection; protective clothing and equipment; housekeeping; medical surveillance; medical removal protection (MRP); employee information, training, and certification; signage; record keeping; monitoring; and agency notification.

5.8.1.3 REGULATORY AGENCIES

United States Environmental Protection Agency

The US EPA is the primary federal agency that regulates hazardous materials and waste. In general, the US EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs and delegates to states and Native American tribes the responsibility for issuing permits and for monitoring and enforcing compliance. US EPA programs promote handling hazardous wastes safely, cleaning up contaminated land, and reducing waste volumes through such strategies as recycling. California falls under the jurisdiction of US EPA Region 9. Under the authority of RCRA and in cooperation with state and tribal partners, the US EPA Region 9 Waste Management and Superfund Divisions manage programs for site environmental assessment and cleanup, hazardous and solid waste management, and underground storage tanks.

California Environmental Protection Agency

The Cal/EPA was created in 1991 by Governor Executive Order W-5-91. Several state regulatory boards, departments, and offices were placed under the Cal/EPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of state resources. Among those responsible for hazardous materials and waste management are the DTSC, Department of Pesticide Regulation, and Office of Environmental Health Hazard Assessment (OEHHA). Cal/EPA also oversees the unified hazardous waste and hazardous materials management regulatory program (Unified Program), which consolidates, coordinates and makes consistent the following six programs:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- Underground Storage Tank Program
- Aboveground Petroleum Storage Tank Act
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Inventory Statements
- California Accidental Release Prevention (CalARP) Program.

California Department of Toxic Substances Control

DTSC, which is a department of Cal/EPA, is authorized to carry out the federal RCRA hazardous waste program in California to protect people from exposure to hazardous wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California, primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (California H&SC Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (Title 22, California Code of Regulations (CCR), Divisions 4 and 4.5). Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Certified Unified Program Agency

A Certified Unified Program Agency (CUPA) is a local agency that has been certified by Cal/EPA to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority. A participating agency is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A designated agency is a local agency that has not been certified by Cal/EPA to become a CUPA, but is the responsible local agency that would implement the six Unified Programs until they are certified. Currently, there are 83 CUPAs in California. The LACoFD is the certified CUPA for the Project Area as well as many cities throughout Los Angeles County. The Unified Program consolidates, coordinates, and makes consistent the following six existing programs:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- California Accidental Release Prevention (CalARP) Program
- Underground Storage Tank Program
- Aboveground Petroleum Storage Act
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs
- California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Material Inventory Statements

5.8.1.4 HAZARDOUS MATERIALS SITES

California Government Code Section 65962.5 requires the Cal/EPA to compile, maintain, and update specified lists of hazardous material release sites. CEQA Guidelines (California Public Resources Code Section 21092.6) require the lead agency to consult the lists compiled pursuant to Government Code Section 65962.5 to determine whether the project and any alternatives are identified on any of the following lists:

- **EPA NPL (National Priorities List):** Lists all sites under the US EPA's Superfund program, which was established to fund cleanup of contaminated sites that pose risk to human health and the environment.

- **EPA CERCLIS and Archived Sites:** Comprehensive Environmental Response, Compensation, and Liability Information System. List contains 15,000 sites nationally identified as hazardous sites. This would also involve a review for archived sites that have been removed from CERCLIS due to No Further Remedial Action Planned (NFRAP) status.

- **EPA RCRIS (RCRAInfo):** Resource Conservation and Recovery Act Information System (RCRIS or RCRAInfo) is a national inventory system about hazardous waste handlers. Generators, transporters, handlers, and disposers of hazardous waste are required to provide information for this database.

- **DTSC Cortese List:** The DTSC maintains the Hazardous Waste and Substances Sites (Cortese) List as a planning document for use by the State and local agencies to comply with the CEQA requirements in providing information about the location of hazardous materials release sites. This list includes the Site Mitigation and Brownfields Reuse Program Database (CalSites).

- **DTSC HazNet:** DTSC uses this database to track hazardous waste shipments.

- **SWRCB LUSTIS:** Leaking Underground Storage Tank Information System. The State Water Resources Control Board (SWRCB) maintains an inventory of USTs and leaking USTs, which tracks unauthorized releases.

The required lists of hazardous material release sites are commonly referred to as the "Cortese List" after the legislator who authored the legislation. Because the statute was enacted more than 20 years ago, some of the provisions refer to agency activities that were conducted many years ago and are no longer being implemented and, in some cases, the information to be included in the Cortese List does not exist. Those requesting a copy of the Cortese Lists are now referred directly to the appropriate information resources contained on internet websites hosted by the boards or departments referenced in the statute, including DTSC's online EnviroStor database and the State Water Resources Control Board's (SWRCB's) online GeoTracker database. These two databases include hazardous material release sites, along with other categories of sites or facilities specific to each agency's jurisdiction. A search of commonly accessed online databases on March 7, 2014 identified the following information potentially relevant to proposed land uses changes due to adoption and implementation of the Proposed Project.

EnviroStor

The EnviroStor database, maintained by the DTSC, identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes federal Superfund sites (National Priorities List); state response sites, voluntary cleanup sites; school investigation and cleanup sites; corrective action sites; and tiered California permit sites. It also includes sites that are being investigated for suspected but unconfirmed contamination. A search of this database, using zip codes within the Project Area, found a

number of these facilities in the 11 Planning Areas designated by the Proposed Project, as shown in Table 5.8-1.

Table 5.8-1 EnviroStor Cleanup Program Sites in 11 Planning Areas Designated in the Proposed Project

Status	Antelope Valley	Coastal Islands	East San Gabriel Valley	Gateway	Metro	San Fernando Valley	Santa Clarita Valley	Santa Monica Mountains	South Bay	West San Gabriel Valley	Westside	TOTAL
School Investigation and School Cleanup Sites												
Certified or No Further Action	42	0	11	4	10	3	14	2	11	1	2	**100**
Active, Inactive, or Referred to Other Agency	4	0	5	2	1	2	0	0	3	0	0	**17**
Subtotal	**46**	**0**	**16**	**6**	**11**	**5**	**14**	**2**	**14**	**1**	**2**	**117**
Evaluation, Border Zone/Hazardous Waste Evaluation, or Military Evaluation Sites												
Certified, No Further Action, or Delisted	0	0	6	6	26	1	0	0	1	0	0	**40**
Active, Backlog, Inactive, or Referred to Other Agency	4	1	22	28	55	3	4	0	8	1	1	**127**
Subtotal	**4**	**1**	**28**	**34**	**81**	**4**	**4**	**0**	**9**	**1**	**1**	**167**
Federal Superfund, Corrective Action, State Response, or Voluntary Cleanup Sites												
Completed, Certified, No Further Action, or De-Listed	1	0	11	8	11	6	2	0	10	3	3	**55**
Active, Backlog, Inactive, or Referred to Other Agency	4	1	14	28	23	10	2	1	16	5	6	**110**
Subtotal	**5**	**1**	**25**	**36**	**34**	**16**	**4**	**1**	**26**	**8**	**9**	**165**
Historical or Tiered Permit Sites												
Certified or No Further Action	0	0	7	6	7	8	1	0	2	0	1	**32**
Active, Backlog, Inactive, or Referred to Other Agency	3	1	38	24	24	21	0	1	12	2	1	**127**
Subtotal	**3**	**1**	**45**	**30**	**31**	**29**	**1**	**1**	**14**	**2**	**2**	**159**
Hazardous Waste Facilities												
Permitted – Operating, Interim Operating Permitted, and Post-Closure Permitted	2	0	2	0	1	0	1	0	10	1	1	**18**
Historical – Non-Operating	2	0	0	0	0	0	1	1	5	2	0	**11**
Subtotal	**4**	**0**	**2**	**0**	**1**	**0**	**2**	**1**	**15**	**3**	**1**	**29**
TOTAL	**62**	**3**	**116**	**106**	**158**	**54**	**25**	**5**	**78**	**15**	**15**	**637**

GeoTracker

The GeoTracker database, maintained by the SWRCB, lists a range of types of hazardous materials sites that could affect groundwater quality, including leaking underground storage tank (LUST) sites, cleanup program sites, land disposal sites, and military sites. A search of this database found, using zip codes within the Project Area. These facilities are shown in Table 5.8-2 by Planning Area.

Table 5.8-2 GeoTracker Sites in 11 Planning Areas Designated in the Proposed Project

Status	Antelope Valley	Coastal Islands	East San Gabriel Valley	Gateway	Metro	San Fernando Valley	Santa Clarita Valley	Santa Monica Mountains	South Bay	West San Gabriel Valley	Westside	TOTAL
Leaking Underground Storage Tank (LUST) Sites												
Open – Site Assessment or Open – Assessment and Interim Remedial Action	15	0	60	30	21	8	7	7	13	11	6	**178**
Open – Remediation or Open – Verification Monitoring	5	3	17	29	15	4	3	7	14	1	13	**111**
Open – Eligible for Closure or Open - Inactive	15	0	41	26	17	4	2	5	8	3	3	**124**
Completed – Case Closed	211	12	505	388	227	75	41	81	108	110	97	**1,855**
Subtotal	**246**	**15**	**623**	**473**	**280**	**91**	**53**	**100**	**143**	**125**	**119**	**2,268**
Cleanup Program Sites												
Open – all open statuses	9	1	113	47	41	10	4	1	29	35	14	**304**
Completed – Case Closed	3	1	42	32	17	3	5	5	11	6	21	**146**
Subtotal	**12**	**2**	**155**	**79**	**58**	**13**	**9**	**6**	**40**	**41**	**35**	**450**
Land Disposal Sites												
Open – all open statuses	10	2	27	6	10	5	5	1	2	5	2	**75**
Completed – Case Closed	1	0	1	3	2	1	0	0	0	1	0	**9**
Subtotal	**11**	**2**	**28**	**9**	**12**	**6**	**5**	**1**	**2**	**6**	**2**	**84**
Military Sites: Military Cleanup Sites, Military Privatized Sites, and Military UST Sites												
Open – all open statuses	1	0	2	1	0	0	0	0	0	2	0	**6**
Subtotal	1	0	2	1	0	0	0	0	0	2	0	**6**
Registered Underground Storage Tank (UST) Sites												
Subtotal	**159**	**6**	**401**	**330**	**162**	**85**	**42**	**56**	**78**	**91**	**97**	**1,507**
TOTAL	**429**	**25**	**1,209**	**892**	**512**	**195**	**109**	**163**	**263**	**265**	**253**	**4,315**

Hazardous Waste Generators

Large quantity generators are those that generate 1,000 kilograms per month or more of hazardous waste, or more than 1 kilogram per month of acutely hazardous waste. Small quantity generators generate from 100 to 999 kilograms per month of hazardous waste. A search of the RCRA Info database, maintained by the US EPA, using zip codes within the Project Area, found a number of hazardous waste generators in each of the 11 Planning Areas, as shown in Table 5.8-3.

Table 5.8-3 Hazardous Waste Generators in 11 Planning Areas Designated by the Proposed Project

Planning Area	Large Quantity Generators	Small Quantity Generators	Total
Antelope Valley	29	310	**339**
Coastal Islands	2	8	**10**
East San Gabriel Valley	114	1,050	**1,164**
Gateway	81	669	**750**
Metro	93	592	**685**
San Fernando Valley	49	322	**371**
Santa Clarita Valley	7	87	**94**
Santa Monica Mountains	10	71	**81**
South Bay	36	277	**313**
West San Gabriel Valley	28	253	**281**
Westside	36	237	**273**
Total	**485**	**3,876**	**4,361**

Source: US EPA 2014

5.8.1.5 AIRPORT HAZARDS

There are 15 public use airports within the boundaries of Los Angeles County Airport Land Use Commission's (ALUC's) jurisdiction, which is conterminous with Los Angeles County.[1] Five are County-owned, nine are owned by other public entities, and one is privately-owned. Of these, only two airports in Los Angeles County are located within the Project Area: Aqua Dulce Airport in Santa Clarita Valley and Catalina Airport. Los Angeles International Airport, Palmdale Regional Airport, and William J. Fox Airfield in Lancaster also have airport influence areas that include portions of the unincorporated areas. Additionally, there are 11 private-use airstrips, one private-use seaplane base, and 138 heliports registered with the Federal Aviation Administration in Los Angeles County.

Assembly Bill 2776, which went into effect January 1, 2004, defines an "airport influence area" as the area where airport-related factors "may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission." The California Public Utilities Code establishes airport land use commissions in every county to provide for the orderly development of air transportation and ensure compatible land uses around airports that are open to public use. According to the State Division of Aeronautics, the airport influence area is usually the planning area designated by an airport land use commission for each airport.

The Los Angeles County ALUCP provides guidance related to the placement of land uses near the aforementioned airports. These recommendations are based on a variety of factors, including those related to noise, safety, and aircraft movement. In addition to the identification of land use compatibility issues, the ALUCP identifies notification disclosure areas around each airport.

[1] Airport Land Use Commission (ALUC), Los Angeles County. http://planning.lacounty.gov/aluc.

5.8.1.6 EMERGENCY RESPONSE PLANS

Emergency response plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information. Emergency response plans are maintained at the federal, state and local level for all types of disasters, including human-made and natural. It is the responsibility of government to undertake an ongoing comprehensive approach to emergency management in order to avoid or minimize the effects of hazardous events. Local governments have the primary responsibility for preparedness and response activities.

The Los County Office of Emergency Management (OEM) maintains the Los Angeles County Operational Area Emergency Response Plan and the County of Los Angeles All-Hazard Mitigation Plan. OEM leads and coordinates disaster plans and disaster preparedness exercises for all cities and 288 special districts in Los Angeles County.

5.8.1.7 WILDFIRE HAZARDS

Fire Hazard Severity Areas in Los Angeles County are designated by the California Department of Forestry and Fire Prevention, and by the LACoFD within cities. Fire hazard severity zone levels range from Moderate to Very High. Fire hazard severity zones are designated in three types of areas based on what level of government is financially responsible for preventing and suppressing wildfires:

- **Federal Responsibility Areas (FRAs):** The federal government is financially responsible for wildfire suppression. Within the District, the Angeles National Forest and federal land in the Santa Monica Mountains National Recreation Area are FRAs.

- **State Responsibility Areas (SRAs):** The state is financially responsible for wildfire suppression. Within the District, SRAs are in outlying areas such as the Santa Susana Mountains, foothills of the San Gabriel Mountains, and parts of the Santa Monica Mountains.

- **Local Responsibility Areas (LRAs):** Cities or the County are financially responsible for wildfire suppression. LRAs in Los Angeles County include foothills of the Santa Susana and San Gabriel Mountains, and in the Verdugo Mountains, Santa Monica Mountains, Hollywood Hills, San Rafael Hills, Puente Hills, and in other hills in the central Los Angeles area (see Figure 5.8-1, Fire Hazard Severity Zones).

5.8.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

H-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.

H-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

H-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard for people residing or working in the Project Area.

H-6 For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the Project Area.

H-7 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

H-8 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands.

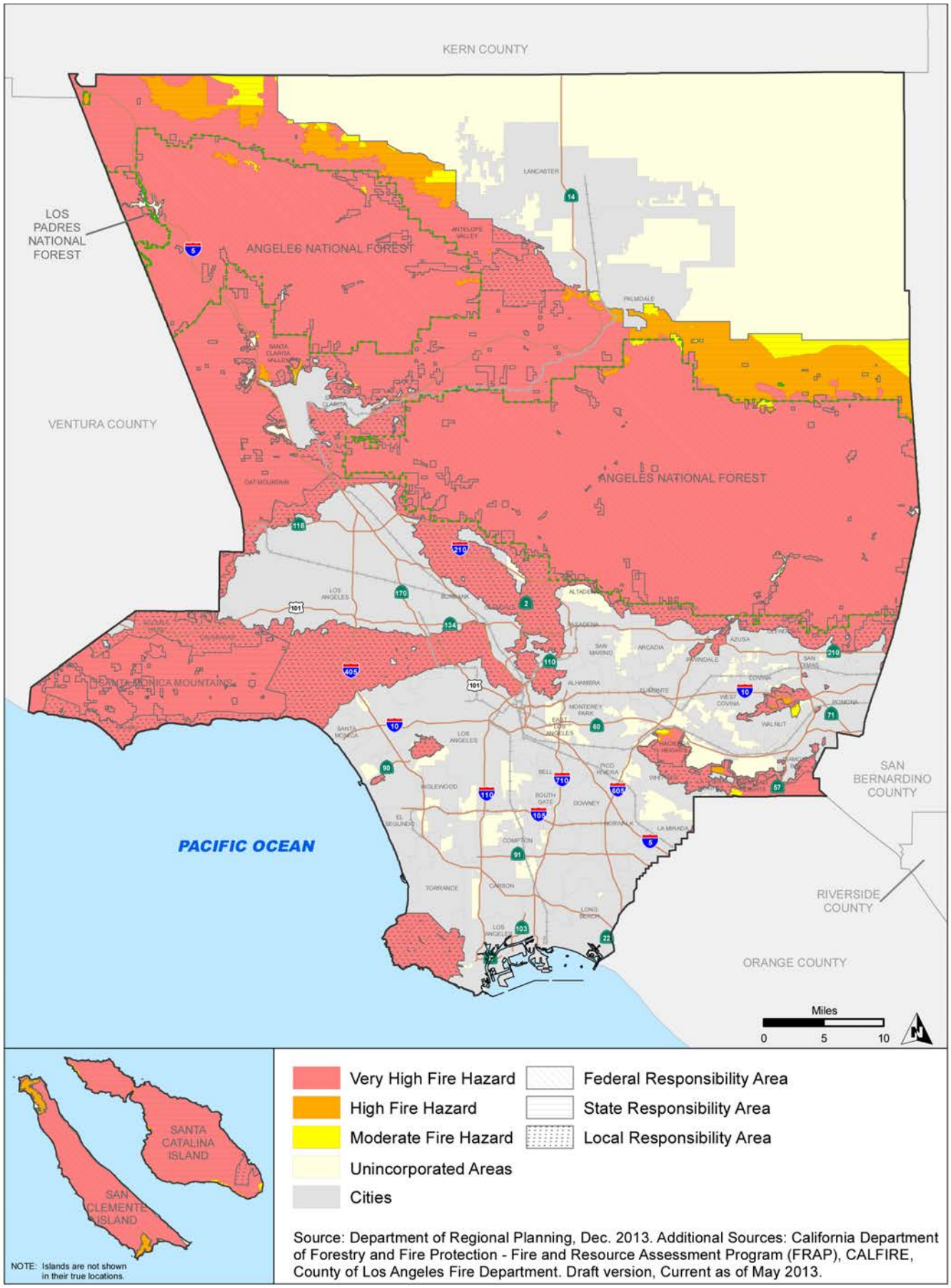
5.8.3 Relevant General Plan Goals and Policies

LAND USE ELEMENT

- **Policy LU 1.6:** In the review of a project-specific amendment(s) to convert lands within the EPD Overlay to non-industrial land use designations, ensure that the project-specific amendment(s):
  - Is located on a parcel that adjoins a parcel with a comparable use, at a comparable scale and intensity;
  - Will not negatively impact the productivity of neighboring industrial activities;
  - Is necessary to promote the economic value and the long-term viability of the site; and
  - Will not subject future residents to potential noxious impacts, such as noise, odors or dust or pose significant health and safety risks.
- **Policy LU 2.9:** Utilize the General Plan Land Use Legend and the Hazard, Environmental and Resource Constraints Model to inform the development of land use policy maps.
- **Policy LU 3.2:** Discourage development in areas with high environmental resources and/or severe safety hazards.
- **Policy LU 4.1:** Encourage infill development in urban and suburban areas on vacant, underutilized, and/or brownfield sites.

FIRE HAZARD SEVERITY ZONES

FIGURE 5.8-1



Source: Department of Regional Planning, Dec. 2013. Additional Sources: California Department of Forestry and Fire Protection - Fire and Resource Assessment Program (FRAP), CALFIRE, County of Los Angeles Fire Department. Draft version, Current as of May 2013.

5. Environmental Analysis
HAZARDS AND HAZARDOUS MATERIALS

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- **Policy LU 7.3**: Protect public and semi-public facilities, including, but not limited to, major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.
- **Policy LU 7.6:** Ensure airport operation compatibility with adjacent land uses through airport land use plans.
- **Policy LU 11.6:** Ensure that subdivisions in VHFHSZs site open space to minimize fire risks, as feasible.

SAFETY ELEMENT

- **Policy S 3.1:** Discourage high density and intensity development in VHFHSZs.
- **Policy S 3.2:** Consider climate change implications in planning for FHSZs.
- **Policy S 3.3:** Ensure that the mitigation of fire related property damage and loss in FHSZs limits impacts to biological and other resources.
- **Policy S 3.4:** Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire resistant building materials and vegetation.
- **Policy S 3.5:** Encourage the use of fire resistant vegetation that is compatible with the area's natural vegetative habitats in fuel modification activities.
- **Policy S 3.6:** Ensure adequate infrastructure, including ingress, egress, and peak load water supply availability for all projects located in FHSZs.
- **Policy S 3.7:** Consider siting and design for developments located within FHSZs, particularly in areas located near ridgelines and on hilltops, to reduce the wildfire risk.
- **Policy S 3.8:** Support the retrofitting of existing structures in FHSZs to help reduce the risk of structural and human loss due to wildfire.
- **Policy S 3.9:** Adopt by reference the County of Los Angeles Fire Department Strategic Fire Plan, as amended.
- **Policy S 4.1:** Ensure that residents are protected from the public health consequences of natural or man-made disasters through increased readiness and response capabilities, risk communication, and the dissemination of public information.
- **Policy S 4.2:** Support County emergency providers in reaching their response time goals.
- **Policy S 4.3:** Coordinate with other County and public agencies, such as transportation agencies, and health care providers on emergency planning and response activities, and evacuation planning.
- **Policy S 4.4:** Encourage the improvement of hazard prediction and early warning capabilities.

- **Policy S 4.5:** Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.

5.8.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.8.1: Buildout in accordance with the Proposed Project would involve the transport, use, and/or disposal of hazardous materials. [Threshold H-1, H-2, and H-3]

Impact Analysis: Implementation of the Proposed Project would result in land uses in the Project Area that typically involve the use, storage, disposal and transportation of hazardous materials, such as fuels, lubricants, solvents and degreasers, and paints. Hazardous materials in various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Many products containing hazardous chemicals are also used and stored in homes routinely. Varying quantities of hazardous materials are manufactured, used, or stored at facilities in the Project Area, from manufacturing facilities to local dry cleaning establishments or gardening supply stores. Hazardous materials come in the form of explosives, corrosives, flammable and combustible substances, poisons, and radioactive materials.

Additionally, the transportation of hazardous materials/waste may increase as a direct result of increased hazardous materials/waste usage within Los Angeles County. As shown in Table 5.8.1, there are 18 hazardous waste facilities that service the Project Area. Hazardous materials/waste sources are located in all of the Planning Areas as shown in Tables 5.8.1 and 5.8.2. The transportation of hazardous materials/waste occurs mostly along major roadways in Los Angeles County; however, because hazardous materials/waste sources could occur anywhere in the geographic area, any Los Angeles County roadway could be used to transport hazardous materials/waste. Therefore, it is likely that the transportation of hazardous materials/waste would cross through or pass by all land use types in Los Angeles County, including residential and other sensitive land uses. An increase in hazardous materials usage and transport could result in adverse environmental effects.

Numerous federal, state and local regulations exist that require strict adherence to specific guidelines regarding the use, transportation, and disposal of hazardous materials. Regulations that would be required of those transporting, using or disposing of hazardous materials include RCRA, which provides the 'cradle to grave' regulation of hazardous wastes; CERCLA, which regulates closed and abandoned hazardous waste sites; the Hazardous Materials Transportation Act, which governs hazardous materials transportation on U.S. roadways; IFC, which creates procedures and mechanisms to ensure the safe handling and storage of hazardous materials; Title 22, which regulates the generation, transportation, treatment, storage and disposal of hazardous waste; CCR Title 27, which regulates the treatment, storage and disposal of solid wastes; and the County Consolidated Fire Code, which regulates hazardous materials and hazardous substance releases. For development within the State of California, Government Code Section 65850.2 requires that no final certificate of occupancy or its substantial equivalent be issued unless there is verification that the owner or

authorized agent has met, or is meeting, the applicable requirements of the Health and Safety Code, Division 20, Chapter 6.95, Article 2, Sections 25500 through 25520.

LACoFD is the Certified Unified Program Agency (CUPA) for the County, and is responsible for enforcing Chapter 6.95 of the Health and Safety Code. As the CUPA, LACoFD is required to regulate hazardous materials business plans and chemical inventory, hazardous waste and tiered permitting, underground storage tanks, and risk-management plans. The Hazardous Materials Business Plan is required to contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of on development sites. The plan also contains an emergency-response plan, which describes the procedures for mitigating a hazardous release, procedures, and equipment for minimizing the potential damage of a hazardous materials release, and provisions for immediate notification of the HMD, the Office of Emergency Services, and other emergency-response personnel, such as the local Fire Agency having jurisdiction. Implementation of the emergency response plan facilitates rapid response in the event of an accidental spill or release, thereby reducing potential adverse impacts. Furthermore, the LAFCD is required to conduct ongoing routine inspections to ensure compliance with existing laws and regulations; to identify safety hazards that could cause or contribute to an accidental spill or release; and to suggest preventative measures to minimize the risk of a spill or release of hazardous substances.

The County, in conjunction with its many emergency services partners, has prepared a Local All-Hazards Mitigation Plan that sets strategies for coping with the natural and man-made hazards faced by residents. The plan is a compilation of information from County departments correlated with known and projected hazards that face Southern California. The plan complies with, and has been approved by, FEMA and the Governor's Office of Emergency Services (OES). The plan has been formally adopted by the Los Angeles County Board of Supervisors for use in the development of specific hazard mitigation proposals that have a high cost-benefit ratio.

Implementation of the Proposed Project would involve an increase in the transport, use, and disposal of hazardous materials. However, any future development and use of land uses, as designated under the Proposed Project, would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant.

Impact 5.8-2: Some areas within the Project Area are included on a list of hazardous materials sites. [Threshold H-4]

Impact Analysis: As depicted in Tables 5.8.1 and 5.8.2, numerous sites within the Project Area are listed on hazardous materials databases complied pursuant to Government Code Section 65962.5. Some of the sites are listed as closed, indicating that they have been investigated and/or remediated to the satisfaction of the lead responsible agency (i.e., RWQCB, DTSC, ACDEH, ACWD) based on land use at the time of closure. The Proposed Project would facilitate new development, including residential, mix-use, commercial, parks, and recreational open spaces, within Los Angeles County. Some of the new development could occur on properties that are likely contaminated. Construction of new buildings during site grading and excavation operation. Demolition of existing structures likewise could potentially result in the release hazardous building

materials (e.g., asbestos, lead paint, etc.) into the environment. Use of hazardous materials on newly developed properties after construction could potentially include cleaning solvents, fertilizers, pesticides, and other materials used in the regular maintenance and operation of the proposed uses.

Federal and state regulations exist that prevent or reduce hazards to the public and environment from existing hazardous materials sites. These include, but are not limited to, the following: 1) CERCLA, which regulates closed and abandoned hazardous waste sites; 2) PRGs, which establishes tools for evaluating and cleaning up contaminated sites; 3) Cortese List, which provides information about the location of hazardous materials release sites; and 4) CHHSLs, which evaluates sites with potential human health concerns.

In addition, the Proposed Project includes several policies within the Land Use Element that would reduce the potential for the public and the environment to be exposed to hazardous materials from existing site contamination:

- **Policy LU 1.6:** In the review of a project-specific amendment(s) to convert lands within the EPD Overlay to nonindustrial land use designations, ensure that the project-specific amendment(s):
  - Is located on a parcel that adjoins a parcel with a comparable use, at a comparable scale and intensity;
  - Will not negatively impact the productivity of neighboring industrial activities;
  - Is necessary to promote the economic value and the long-term viability of the site; and
  - Will not subject future residents to potential noxious impacts, such as noise, odors or dust or pose significant health and safety risks.
- **Policy LU 3.2:** Discourage development in areas with high environmental resources and/or severe safety hazards.
- **Policy LU 7.3:** Protect public and semipublic facilities, including, but not limited to, major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.

Under implementation of the Proposed Project, land uses and development may be located on a site such as those pursuant to Government Code 65962.5, burn dump sites, active, abandoned or closed landfills, areas with historic or current agriculture, or areas with petroleum contamination. However, compliance with applicable existing regulations and processes would ensure that the Proposed Project would not result in a significant hazard to the public or the environment from future development on existing hazardous materials sites. Therefore, the Proposed Project would have a less than significant impact associated with existing hazardous materials sites.

Impact 5.8-3: Some areas within the Project Area are located in the vicinity of an airport or within the jurisdiction of an Airport Land Use Plan. [Thresholds H-5 and H-6]

Impact Analysis: As discussed in Section 5.8.1.5 under Environmental Setting, there are 15 public use airports within the boundaries of the ALUC's jurisdiction, which is conterminous with Los Angeles County.

Five are County-owned, nine are owned by other public entities, and one is privately owned. Of these, only two airports in Los Angeles County are located within the Project Area: Aqua Dulce Airport in Santa Clarita Valley and Catalina Airport. Los Angeles International Airport, Palmdale Regional Airport, and the William J. Fox Airfield in Lancaster also have airport influence areas that include portions of the Project Area. Additionally, there are 11 private-use airstrips, one private-use seaplane base, and 138 heliports registered with the Federal Aviation Administration in Los Angeles County.

The County's ALUCP provides guidance related to the placement of land uses near the aforementioned airports. These recommendations are based on a variety of factors, including those related to noise, safety, and aircraft movement. In addition to the identification of land use compatibility issues, the ALUCP identifies notification disclosure areas around each airport. These ALUCPs are largely based on requirements provided by the California Airport Land Use Planning Handbook, which was developed using FAA regulations that establish compatible land use and density criteria from recorded crash patterns. However, each ALUCP is unique to the airport it serves.

Some land uses designated under the Proposed Project would be more likely to result in public airport safety hazards than others. For example, areas designated as residential and commercial would be likely to continually contain high concentrations of persons. If land uses containing high concentrations of persons are located in areas adjacent to public airport operations, public airport hazards would be considered potentially significant. In contrast, open space recreation or open space conservation land use designations would generally not accommodate high density populations. Therefore, impacts from public airport hazards in areas with open space land use designations would generally not occur.

Federal and state regulations exist that prevent hazards to the public and environment near public airports. These include FAA regulations, which establish safety standards for civil aviation, and the State Aeronautics Act, which establishes air safety standards. In addition, the County requires that development projects near public airports comply with any applicable ALUCP.

Implementation of the Proposed Project may result in land use designations that allow development within two miles of a public airport, private airstrip, or heliport. However, existing FAA regulations, County policies and regulations, and Proposed Project goals and policies are intended to identify and properly address potential airport hazards prior to implementation of specific projects within the Project Area. Therefore, potential impacts associated with public airports, private airstrips, and heliports are less than significant.

Impact 5.8-4: The Proposed Project could affect the implementation of an emergency response or evacuation plan. [Threshold H-7]

Impact Analysis: Continued growth and development associated with implementation of the Proposed Project has the potential to strain the emergency response and recovery capabilities of federal, state, and local governments. Coordination among various County departments is necessary to ensure adequate emergency response.

The Office of Emergency Management is responsible for organizing and directing the preparedness efforts of the Emergency Management Organization of Los Angeles County. The OEM is the day-to-day Los

Angeles County Operational Area coordinator for the County. The emergency response plan for the Project Area is the Operational Area Emergency Response Plan (OAERP), which is prepared by OEM. The OAERP strengthens short and long-term emergency response and recovery capability, and identifies emergency procedures and emergency management routes in Los Angeles County.

LACoFD provides fire, safety, and emergency medical services to the Project Area. Additionally, many cities within Los Angeles County utilize LACoFD services. LACoFD operates multiple divisions including Air and Wildland, Fire Prevention, and Forestry. In addition, the Health Hazardous Materials Division's mission is to "protect the public health and the environment...from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, emergency response, enforcement, and site mitigation oversight."

The Los Angeles County Sheriff's Department (LASD) is the largest sheriff's department in the country. In addition to specialized services, the LASD is divided into 10 divisions, including the Office of Homeland Security, which focuses on potential threats related to local homeland security issues, such as terrorism or bioterrorism. The LASD provides law enforcement services to more than one million people living within 90 unincorporated communities, as well as to more than four million residents living within 40 contract cities. In addition, LASD provides law enforcement services to nine community colleges, Metro, and 48 Superior Courts. In addition to proactive enforcement of criminal laws, the LASD also provides investigative, traffic enforcement, accident investigation, and community education functions.

The Los Angeles region's first responders currently use a patchwork of often incompatible radio technologies and frequencies. This uncoordinated system means that neighboring agencies and systems cannot easily communicate with one another. The Los Angeles Regional Interoperable Communication System (LA-RICS) is a modern, integrated wireless voice and data communication system designed and built to serve law-enforcement, fire-service and health-service professionals throughout Los Angeles County. The new system will provide day-to-day communications within agencies and allow seamless interagency communications for responding to routine, emergency and catastrophic events. LA-RICS will replace the patchwork system with a single countywide network, improve overall traffic capacity and coverage, and provide a dedicated broadband network for first responders.

Continued growth and development in Los Angeles County will significantly affect the LACoFD and LASD operations. Coordination among various County departments is necessary to ensure adequate emergency response. Collaboration can also ensure that development occurs at a rate that keeps pace with service needs. In addition, several proposed policies of the Safety Element of the Proposed Project have been developed to address this potential hazard:

- **Policy S 4.1:** Ensure that residents are protected from the public health consequences of natural or manmade disasters through increased readiness and response capabilities, risk communication, and the dissemination of public information.

- **Policy S 4.3:** Coordinate with other County and public agencies, such as transportation agencies, and health-care providers on emergency planning and response activities, and evacuation planning.

- **Policy S 4.5:** Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.

- **Policy S 4.6:** Ensure that essential public facilities are maintained during natural disasters, such as flooding.

Compliance with applicable regulations and implementation of the Proposed Project goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant.

Impact 5.8-5: Portions of the Project Area are within moderate, high, and very high fire hazard zones and could expose structures and/or residences to fire danger. [Threshold H-8]

Impact Analysis: Los Angeles County faces major wildland fire threats due to its hilly terrain, dry weather conditions, and the nature of its plant coverage. The at-risk areas are designated as Fire Hazard Severity Zones (FHSZs) per Government Code Sections 51175–51189. FHSZs in the Project Area are classified as Very High, High, and Moderate in State Responsibility Areas and Very High in Local and Federal Responsibility Areas. The Forestry Division of the LACoFD designates the VHFHSZs in the local responsibility areas.

In an effort to reduce the threats to lives and property, the LACoFD has instituted a variety of regulatory programs and standards for vegetation management, pre-fire management and planning, fuel modification, and brush clearance. In addition to these programs, the LACoFD and the County Department of Public Works enforce fire and building codes related to development in VHFHSZs. The Fire Department has access requirements for single family residential uses built in VHFHSZs. Access requirements for all other uses built within VHFHSZs are determined on a case-by-case basis.

The State Board of Forestry and the California Department of Forestry and Fire Protection (CDF) have drafted a comprehensive document for wildland fire protection in California. The Fire Plan Unit of LACoFD is in charge of implementing the California Fire Plan in Los Angeles County. The Strategic Fire Plan prepared by LACoFD identifies and prioritizes pre- and post-fire management strategies and tactics to reduce loss of life, property, and natural resources. The plan is updated annually.

Fuel modification plans are required for projects within areas designated as FHSZs within the State Responsibility Areas or VHFHSZs within the Local Responsibility areas, as described in Title 32, Fire, Section 4908. The fuel modification plan identifies specific zones within a property that is subject to fuel modification. Vegetation management, as it relates to wildland fire, refers to the total or partial removal of high-fire-hazard grasses, shrubs, or trees. This includes thinning to reduce the amount of fuel and modification of vegetation arrangement and distribution to disrupt fire progress. The Vegetation Management Program (VMP) is a cost-sharing program that focuses on the use of prescribed fire, hand crews, mechanical, biological and chemical means, for addressing wildland fire fuel hazards, habitat restoration, and other resource management issues on State Responsibility Area (SRA) and Local Responsibility Area (LRA) lands.

Although fires are a natural part of the wildland ecosystem, development in wildland areas increases the danger of wildfires to residents, property, and the environment. Although multiple regulations are in place to ensure that adequate infrastructure, such as peak load water supplies and necessary disaster routes are incorporated into new developments, older communities with aging and substandard infrastructure may face greater risks from wildland fires. In addition, current regulations cannot ensure that all developments that locate in VHFHSZs are protected from wildland fire threats.

- **Policy S 3.1:** Discourage high density and intensity development in VHFHSZs.
- **Policy S 3.4:** Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire-resistant building materials and vegetation.
- **Policy S 3.5:** Encourage the use of fire-resistant vegetation that is compatible with the area's natural vegetative habitats in fuel modification activities.
- **Policy S 3.6:** Ensure adequate infrastructure, including ingress, egress, and peak load water supply availability for all projects located in FHSZs.
- **Policy S 3.7:** Consider siting and design for developments located within FHSZs, particularly in areas located near ridgelines and on hilltops, to reduce the wildfire risk.

The Proposed Project policies and conditions of approval for future development projects within the Project Area, in addition to compliance with applicable regulations, will minimize Proposed Project impacts related to wildland fires. Consequently, the overall associated impacts would be less than significant.

5.8.5 Cumulative Impacts

In general, cumulative impacts related to hazards and hazardous materials are more prevalent for commercial or industrial land uses. Hazardous material use or hazardous emissions would be cumulatively significant when the combined activities of individual industrial or commercial businesses that use, transport, or dispose of hazardous materials result in hazardous conditions. Cumulative impacts may also occur when multiple development projects disrupt existing hazardous materials sites in adjacent areas. Additionally, the transportation of hazardous materials may increase as a direct result of increased hazardous materials usage within Los Angeles County. Continued growth and development in Los Angeles County will significantly affect the LACoFD and LASD operations. Any future development would be required to comply with applicable federal, state and local regulations related to hazardous materials, emergency response, wildland fires, and public airports, private airstrips, and heliports. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, would be less than significant. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, emergency response, wildland fires, and airports would be less than significant. Therefore, impacts related to hazards and hazardous materials would not be cumulatively considerable.

5.8.6 Existing Regulations and Standard Conditions

- Resource Conservation and Recovery Act (RCRA) of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) of 1986
- Emergency Planning Community Right-to-Know Act (EPCRA)
- Hazardous Materials Transportation Act
- Government Code Section 65962.5 (a), Cortese List
- California Health & Safety Code (H&SC), Hazardous Materials Release Response Plans and Inventory
- Title 14 Division 1.5 of the California Code of Regulations
- Title 22 of the California Code of Regulations & Hazardous Waste Control Law, Chapter 6.5
- Title 23 of the California Code of Regulations (CCR), Underground Storage Tank (UST) Act
- Title 27 of the CCR, Solid Waste
- California Health and Safety Code §25270 etc., Aboveground Petroleum Storage Act
- SB 1889, Accidental Release Prevention Law/California Accidental Release Prevention Program (CalARP)
- The Certified Uniform Program of Los Angeles County
- AQMD Rule 1403 (Asbestos Emission From Demolition/Renovation Activities)

5.8.7 Level of Significance Before Mitigation

Upon implementation of and compliance with applicable requirements and standard conditions of approval, Impacts 5.8.1 through 5.8.5 would all be less than significant.

5.8.8 Mitigation Measures

No mitigation measures are required.

5.8.9 Level of Significance After Mitigation

No significant unavoidable adverse impacts relating to hazards and hazardous materials have been identified.

5.8.10 References

Los Angeles County, 2014, Public Review Draft General Plan, Land Use Element and Safety Element.

5.9 HYDROLOGY AND WATER QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts to hydrology and water-quality conditions in the unincorporated areas of Los Angeles County (Project Area) from implementation of the Proposed Project. Hydrology deals with the distribution and circulation of water, both on land and underground. Water quality deals with the quality of surface and groundwater. Surface water is aboveground and includes lakes, rivers, streams, and creeks. Groundwater is below the surface of the earth.

5.9.1 Environmental Setting

5.9.1.1 REGULATORY SETTING

Safe Drinking Water Act

The Federal Safe Drinking Water Act (SDWA) provides regulations on drinking water quality in San Bernardino. The SDWA gives the U.S. Environmental Protection Agency (USEPA) the authority to set drinking water standards, such as the National Primary Drinking Water regulations (NPDWRs or primary standards). The NPDWRs protect drinking water quality by limiting the levels of specific contaminants that are known to occur or have the potential to occur in water and can adversely affect public health. All public water systems that provide service to 25 or more individuals are required to satisfy these legally enforceable standards. Water purveyors must monitor for these contaminants on fixed schedules and report to the USEPA when a Maximum Contaminant Level (MCL) has been exceeded. MCL is the maximum permissible level of a contaminant in water that is delivered to any user of a public water system. Drinking water supplies are tested for a variety of contaminants, including organic and inorganic chemicals (e.g., minerals), substances that are known to cause cancer (e.g., carcinogens), radionuclide (e.g., uranium and radon), and microbial contaminants (e.g., coliform and Escherichia coli). Changes to the MCL list are typically made every three years, as the USEPA adds new contaminants or, based on new research or new case studies, revised MCLs for some contaminants are issued. The California Department of Health Services, Division of Drinking Water and Environmental Management, is responsible for implementation of the SDWA in California.

Clean Water Act

The federal Water Pollution Control Act (also known as the Clean Water Act [CWA]) is the principal statute governing water quality. The CWA establishes the basic structure for regulating discharges of pollutants into the Waters of the United States and gives the USEPA the authority to implement pollution control programs, such as setting wastewater standards for industry. The statute's goal is to end all pollutant discharges entirely and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires states to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funded the construction of sewage treatment plants and recognized the need for planning to address nonpoint sources of pollution. Section 402 of the CWA requires a permit for all

point source (a discernible, confined, and discrete conveyance, such as a pipe, ditch, or channel) discharges of any pollutant (except dredge or fill material) into waters of the United States.[1]

Under the CWA, an applicant for a federal license or permit to conduct any activity that may result in a discharge to Waters of the United States must provide the federal agency with a Section 401 certification. The certification, made by the state in which the discharge originates, declares that the discharge will comply with applicable provisions of the Act, including water quality standards. A state's water quality standards specify the designated use of a stream or lake (e.g., for water supply or recreation), pollutant limits necessary to protect the designated use, and policies to ensure that existing water uses will not be degraded by pollutant discharges.

National Pollutant Discharge Elimination System

Under the National Pollutant Discharge Elimination System (NPDES) program promulgated under Section 402 of the CWA, all facilities that discharge pollutants from any point source into Waters of the United States are required to obtain an NPDES permit. The term pollutant broadly includes any type of industrial, municipal, and agricultural waste discharged into water. Point sources are discharges from publicly owned treatment works (POTWs), discharges from industrial facilities, and discharges associated with urban runoff. While the NPDES program addresses certain specific types of agricultural activities, the majority of agricultural facilities are defined as nonpoint sources and are exempt from NPDES regulation. Pollutant contributors come from direct and indirect sources. Direct sources discharge directly to receiving waters, whereas indirect sources discharge wastewater to POTWs, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only to direct point source discharges. The National Pretreatment Program addresses industrial and commercial indirect dischargers. Municipal sources are POTWs that receive primarily domestic sewage from residential and commercial customers. Specific NPDES program areas applicable to municipal sources are the National Pretreatment Program, the Municipal Sewage Sludge Program, Combined Sewer Overflows (CSOs), and the Municipal Storm Water Program. Nonmunicipal sources include industrial and commercial facilities. Specific NPDES program areas applicable to these industrial/commercial sources are: Process Wastewater Discharges, Non-Process Wastewater Discharges, and the Industrial Storm Water Program. NPDES issues two basic permit types: individual and

[1] Waters of the United States consist of: a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(b) All interstate waters, including interstate "wetlands";
(c) All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
(3) Which are used or could be used for industrial purposes by industries in interstate commerce;
(d) All impoundments of waters otherwise defined as waters of the United States under this definition;
(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
(f) The territorial sea; and
(g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

general. Also, the USEPA has recently focused on integrating the NPDES program further into watershed planning and permitting.[2]

The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 50,000 or more, as well construction sites one acre or more in size, must file for and obtain an NPDES permit. Another measure for minimizing and reducing pollutant discharges to a publicly owned conveyance or system of conveyances (including roadways, catch basins, curbs, gutters, ditches, manmade channels and storm drains, designed or used for collecting and conveying stormwater) is the USEPA's Storm Water Phase II Final Rule. The Phase II Final Rule requires an operator (such as a city) of a regulated small municipal separate storm sewer system (MS4) to develop, implement, and enforce a program (e.g., Best Management Practices [BMPs], ordinances, or other regulatory mechanisms) to reduce pollutants in post-construction runoff to storm drain systems from new development and redevelopment projects that result in the land disturbance of greater than or equal to one acre.

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act (Water Code Sections 13000 et seq.) is the basic water-quality control law for California. Under this Act, the State Water Resources Control Board (SWRCB) has ultimate control over state water rights and water-quality policy. In California, the USEPA has delegated authority to issue NPDES permits to the SWRCB. The State is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine Regional Water Quality Control Boards (RWQCBs) carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a Water Quality Control Plan or Basin Plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local, water-quality conditions and problems. Los Angeles County is in the Los Angeles Water Quality Control Board Region, Region 4 and the Lahontan Water Quality Control Board Region, Region 6. A small part of the northwest corner of Los Angeles County is in the Central Valley Region, Region 5. The Water Quality Control Plan for Region 4 was adopted in 1994; for Region 6 in 1995. These Basin Plans give direction on the beneficial uses of the state waters within the two regions, describe the water quality that must be maintained to support such uses, and provide programs, projects, and other actions necessary to achieve the standards established in the Basin Plans. Waste discharge requirements for discharges to municipal storm drain systems in the Los Angeles Water Board Region are set forth in Order No. R4-2012-0175 ("MS4 Permit") issued by the Los Angeles Regional Water Quality Control Board in 2012.[3]

County of Los Angeles

County of Los Angeles Grading Code

Requirements for erosion control and water quality for grading operations are set forth in Title 26 of the County Code. NPDES compliance is required for all projects within the Project Area.

[2] Source: USEPA, <http://www.epa.gov/npdes/pubs/101pape.pdf>, September 2004.
[3] Order No. R4-2012-0175 applies to the part of Los Angeles County in the Los Angeles RWQCB.

For small residential construction sites with a disturbed, graded area less than one acre, stormwater pollution control measures/best management practices (BMP's) must be incorporated on the site during construction.

For all new non-residential projects consisting of a disturbed, graded area less than one acre, an Erosion and Sediment Control Plan (ESCP), which should include specific best management practices to minimize the transport of sediment and protect public and private property from the effects of erosion, flooding, or the deposition of mud, debris, or construction-related pollutants, is required prior to issuance of a grading permit by the County.

In addition to an ESCP, for construction sites with a disturbed, graded area of one acre or greater, a State Storm Water Pollution Prevention Plan (State SWPPP) must be prepared and a Notice of Intent (NOI) filed with the State Water Resources Board. Filing of a NOI and attainment of a Waste Discharge Identification number from the State is necessary for projects of this magnitude prior to issuance of a grading permit by the County. State SWPPP's prepared in accordance with the Construction General Permit can be accepted as ESCP's.

All active grading projects with grading proposed within the rainy season, October 15 to April 15 of each calendar year, must update the ESCP on file with the County annually and have all BMP's installed prior to the beginning of the rainy season or as determined by the County's building official.

Los Angeles County Flood Control District Code

Chapter 21 of the County Flood Control District Code, *Stormwater and Runoff Pollution Control*, sets forth requirements regulating discharges to Los Angeles County Flood Control District (LACFCD) storm drains. The following discharges to County storm drains are prohibited:

- Discharges of stormwater containing pollutant concentrations that exceed or contribute to the exceedance of a water-quality standard.
- Nonstorm water discharges unless authorized by an NPDES Permit and by a permit issued by the Chief Engineer.
- Discharges of sanitary or septic waste or sewage from any property or residence, any type of recreational vehicle, camper, bus, boat, holding tank, portable toilet, vacuum truck or other mobile source, or any waste holding tank, container or device.
- Pollutants, leaves, dirt, or other landscape debris (County Flood Control District Code Sections 21.07 and 21.09).

Applicable Plans and Programs

Storm Water Pollution Prevention Plans

Pursuant to the CWA, in 2012, the SWRCB issued a statewide general NPDES Permit for stormwater discharges from construction sites (Order No. 2012-0006-DWQ; NPDES No. CAS000002). Under this

Statewide General Construction Activity permit, discharges of stormwater from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or to be covered by the General Permit. Coverage by the General Permit is accomplished by completing and filing a Notice of Intent with the SWRCB and developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Each applicant under the General Construction Activity Permit must ensure that a SWPPP is prepared prior to grading and is implemented during construction. The SWPPP must list BMPs implemented on the construction site to protect stormwater runoff, and must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a monitoring plan if the site discharges directly to a water body listed on the State's 303(d) list of impaired waters.

Low Impact Development (LID) Standards Manual

The County has prepared the 2014 Low Impact Development Standards Manual (LID Standards Manual) to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4-2012-0175), henceforth referred to in this document as the 2012 MS4 Permit. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges.

The project applicant must submit an LID Plan for review and approval by the Director of Public Works that provides a comprehensive, technical discussion of how the proposed project will comply with the requirements of the LID Ordinance and LID Standards Manual. The LID Plan must include the following information:

- Identification of whether the proposed project is a Designated or Non-Designated Project. If the proposed project is a Designated Project, identification of the project category;
- Feasibility of infiltration including a percolation report as part of a geotechnical report prepared by a geotechnical engineer;
- Source control measure(s) proposed to be implemented
- Calculation of the Stormwater Quality Design Volume (SWQDv);
- Discussion on whether stormwater runoff harvest and use is feasible;
- Stormwater quality control measure(s) proposed to be implemented;
- Discussion of how the applicable water quality standards and total maximum daily loads (TMDLs) will be addressed (off-site mitigation projects only);

- Proposed hydromodification controls and calculations (if necessary); and
- Proposed maintenance plan (if necessary).

The LID Plan will be:

- A section of or appendix to the Hydrology Report that must be submitted to the Land Development Division;
- A section of or appendix to the Grading Report submitted to the Building and Safety Division; or
- A separate plan.

If the proposed project intends to implement privately-maintained stormwater quality control measure(s), the specific BMPs will be reviewed during the grading stage. If the proposed project intends to implement publicly-maintained stormwater quality control measure(s), the specific BMPs will be shown on water quality plans that are submitted separate from but concurrently with the storm drain plans.

National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards. FEMA provides Flood Insurance Rate Maps (FIRMs) for local and regional planners to promote sound land use and floodplain development, identifying potential flood areas based on the current conditions. To delineate a FIRM, FEMA conducts engineering studies referred to as Flood Insurance Studies (FISs). The most recent FIS and FIRM was completed and published for Los Angeles County on September 26, 2008. Using information gathered in these studies, FEMA engineers and cartographers delineate Special Flood Hazard Areas (SFHAs) on FIRMs.

The Flood Disaster Protection Act (FDPA) requires owners of all structures in identified SFHAs to purchase and maintain flood insurance as a condition of receiving federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. Community members within designated areas are able to participate in the National Flood Insurance Program (NFIP) afforded by FEMA. The NFIP is required to offer federally subsidized flood insurance to property owners in those communities that adopt and enforce floodplain management ordinances that meet minimum criteria established by FEMA. The National Flood Insurance Reform Act of 1994 further strengthened the NFIP by providing a grant program for state and community flood mitigation projects. The act also established the Community Rating System (CRS), a system for crediting communities that implement measures to protect the natural and beneficial functions of their floodplains, as well as managing erosion hazards.

The County, under NFIP, has created standards and policies to ensure flood protection. These policies address development and redevelopment, compatibility of uses, required predevelopment drainage studies, compliance with discharge permits, enhancement of existing waterways, cooperation with the U.S. Army Corps of Engineers (Corps) and the LACFCD for updating, and method consistency with the RWQCB and proposed BMPs.

5.9.1.2 EXISTING CONDITIONS

Hydrologic Regions

California is divided into 10 hydrologic regions by the California Department of Conservation. A hydrologic region is the area drained by a river system or a segment of a river system, a closed basin(s), or a group of streams forming a coastal drainage area. Los Angeles County spans parts of three hydrologic regions (see Figure 5.9-1, *Hydrologic Regions*).

The South Coast Region consists of the watersheds of coastal rivers and streams extending from Ventura County to the Mexican Border. The South Lahontan Region spans part of eastern California from San Bernardino County and northern Los Angeles County on the south to Mono County on the north. The South Lahontan Region consists of several desert and mountain watersheds that drain into desert basins and do not outlet to the ocean.

A small part of the northwest corner of Los Angeles County is in the Tulare Lake Hydrologic Region, which consists of the southern half of the San Joaquin Valley. The Tulare Lake Hydrologic Region is tributary to the San Joaquin River, which discharges into the Pacific Ocean via the Sacramento-San Joaquin Delta and San Francisco Bay.

Watersheds

A watershed is the area of land where all of the water that is under it or drains off of it goes into the same place. Los Angeles County includes part or all of six major watersheds described below and shown on Figure 5.9-2, *Major Watersheds*. Please refer to Appendix E of the Proposed General Plan Update for a complete description of the watersheds in Los Angeles County.

Antelope Valley Watershed

The Antelope Valley Watershed occupies 3,363 square miles in northern Los Angeles County, southeast Kern County, and the west end of San Bernardino County. The watershed includes the Antelope Valley; the northern slopes of the San Gabriel Mountains and part of the Northern Transverse Ranges; the southeast-facing slopes of the Tehachapi Mountains; and the El Paso Mountains. Numerous streams drain from the mountain ranges along the rim of the watershed into the Antelope Valley. The watershed has no outlet to the ocean. Surface water either infiltrates into groundwater or enters three dry lakes in the center of the watershed: Rogers Dry Lake, Rosamond Dry Lake, and Buckhorn Dry Lake, all within Edwards Air Force Base. The Antelope–Fremont Valleys Watershed spans most of the Antelope Valley Planning Area.

Los Angeles River Watershed

The Los Angeles River Watershed spans 830 square miles of western, central, and southern Los Angeles County and some small areas of eastern Ventura County. The watershed extends from the San Gabriel Mountains on the northeast, to the Santa Susana Mountains and Santa Monica Mountains on the northwest and west, respectively, and extending south to the mouth of the Los Angeles River in the City of Long Beach. The watershed includes all of the San Fernando Valley, much of central Los Angeles, and parts of south Los

Angeles. The Los Angeles River, the primary stream in the watershed, extends 48 miles from the confluence of Bell Creek and the Arroyo Calabasas in the southwest San Fernando Valley to the Pacific Ocean at the City of Long Beach. The Los Angeles River Watershed includes the following planning areas, from north to south:

- Antelope Valley (southwest part)
- Santa Clarita Valley (small part of southern portion)
- San Fernando Valley
- Santa Monica Mountains (small part of northeastern portion)
- Metro (most of area)
- West San Gabriel Valley (almost all)
- Gateway (west part)

Dominguez Channel and Los Angeles Harbor Watershed

The Dominguez Watershed spans 133 square miles of southwest Los Angeles County, extending from just north and east of Los Angeles International Airport at its north end to Los Angeles Harbor in the Community of Wilmington in the City of Los Angeles at its south end, where the Dominguez Channel ends. Most of the watershed is in the Los Angeles Basin; the watershed also encompasses north-facing slopes of the Palos Verdes Hills. The Dominguez Channel, the primary drainage channel in the watershed, extends 15 miles from the City of Hawthorne to the Los Angeles Harbor.

The Dominguez Watershed includes parts of the following planning areas, from north to south:

- Westside (south end)
- South Bay (most)
- Gateway (southwest corner)

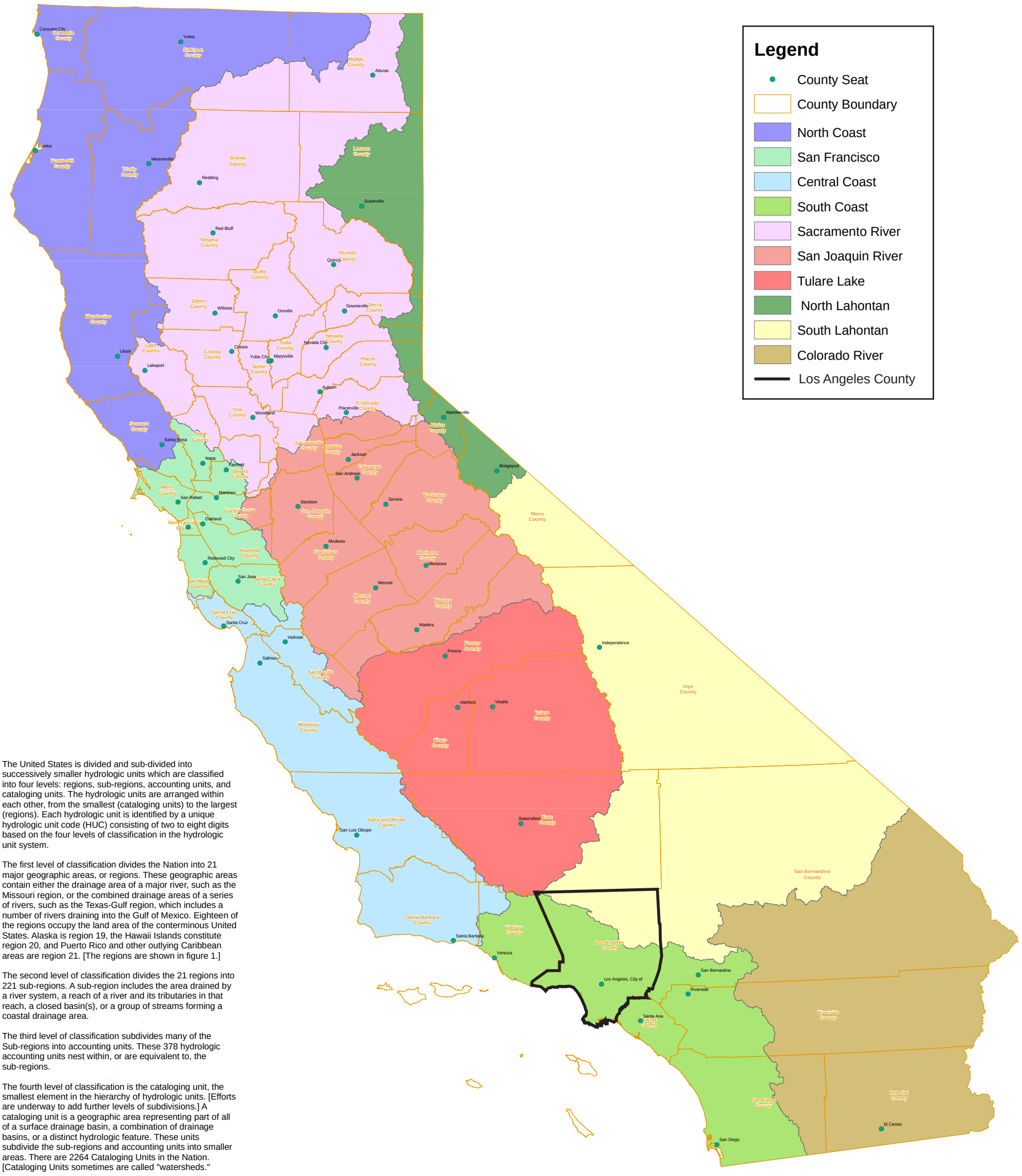
San Gabriel River Watershed

The San Gabriel River Watershed spans 905 square miles of east-central and southeast Los Angeles County and part of northwest Orange County. The watershed extends from the San Gabriel Mountains on the north, encompasses the east half of the San Gabriel Valley, the Puente Hills, and much of the southeast Los Angeles Basin, and extends south to the mouth of the San Gabriel River in the City of Seal Beach on the Orange County-Los Angeles County boundary. The Los Angeles River, the primary stream in the watershed, extends about 61 miles from the San Gabriel Mountains to the ocean. The San Gabriel River Watershed includes the following planning areas, from north to south:

- Antelope Valley (southeast part)
- East San Gabriel Valley
- West San Gabriel Valley (east end)
- Gateway (east part)

HYDROLOGIC REGIONS

FIGURE 5.9-1



The United States is divided and sub-divided into successively smaller hydrologic units which are classified into four levels: regions, sub-regions, accounting units, and cataloging units. The hydrologic units are arranged within each other, from the smallest (cataloging units) to the largest (regions). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two to eight digits based on the four levels of classification in the hydrologic unit system.

The first level of classification divides the Nation into 21 major geographic areas, or regions. These geographic areas contain either the drainage area of a major river, such as the Missouri region, or the combined drainage areas of a series of rivers, such as the Texas-Gulf region, which includes a number of rivers draining into the Gulf of Mexico. Eighteen of the regions occupy the land area of the conterminous United States. Alaska is region 19, the Hawaii Islands constitute region 20, and Puerto Rico and other outlying Caribbean areas are region 21. [The regions are shown in figure 1.]

The second level of classification divides the 21 regions into 221 sub-regions. A sub-region includes the area drained by a river system, a reach of a river and its tributaries in that reach, a closed basin(s), or a group of streams forming a coastal drainage area.

The third level of classification subdivides many of the Sub-regions into accounting units. These 378 hydrologic accounting units nest within, or are equivalent to, the sub-regions.

The fourth level of classification is the cataloging unit, the smallest element in the hierarchy of hydrologic units. [Efforts are underway to add further levels of subdivisions.] A cataloging unit is a geographic area representing part of all of a surface drainage basin, a combination of drainage basins, or a distinct hydrologic feature. These units subdivide the sub-regions and accounting units into smaller areas. There are 2264 Cataloging Units in the Nation. [Cataloging Units sometimes are called "watersheds."

A Watershed Protection Approach is a strategy for effectively protecting and restoring aquatic ecosystems and protecting human health. This strategy has, as its premise, that many water quality and ecosystem problems are best solved at the watershed level rather than at the individual water body or discharger level. Major features of a Watershed Protection Approach are: targeting priority problems, promoting a high level of stakeholder involvement, integrated solutions that make use of the expertise and authority of multiple agencies, and measuring success through monitoring and other data gathering.

Spatial and tabular data compiled by the California Department of Conservation, Division of Land Resource Protection. Source for Hydrological Unit Code boundary coverage is the United States Geological Survey. County lines provided by the Department of Conservation, Farmland Mapping and Monitoring Program from United States Geological Survey 1:100,000 scale topographic maps.

Source: California Department of Conservation, 2007

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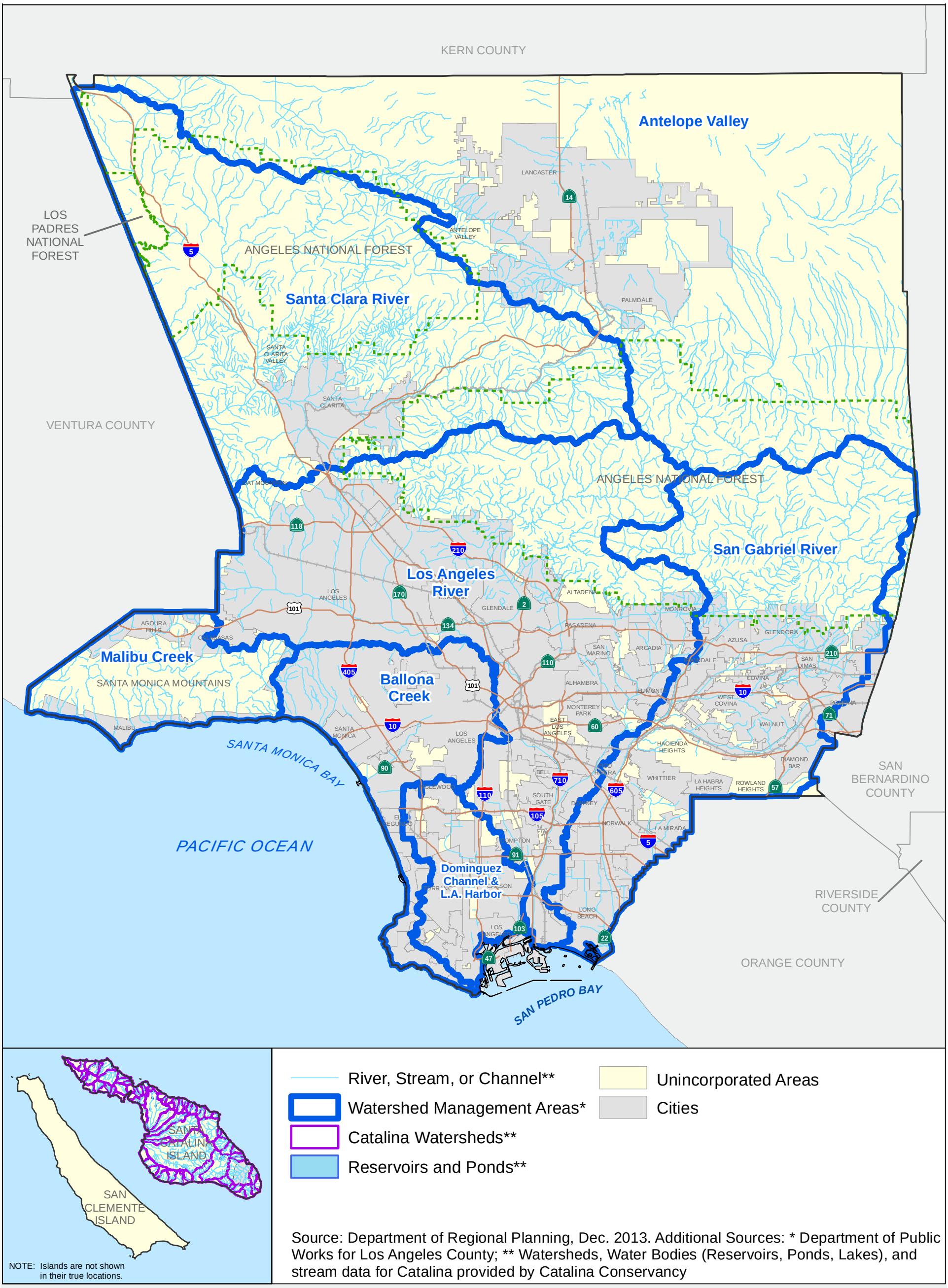
MAJOR WATERSHEDS

FIGURE 5.9-2



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Santa Clara River Watershed

The Santa Clara River Watershed spans 1,624 square miles in northwest Los Angeles County and Ventura County. The watershed includes part of the northern Transverse Ranges; the Santa Clarita Valley in Los Angeles County; the Santa Clara River Valley and Oxnard Plain in Ventura County; and the northwest part of the Santa Monica Mountains in Ventura County. The Santa Clara River, the principal stream in the watershed, extends 83 miles from northwest Los Angeles County to its mouth on the Pacific Ocean at the south end of the City of Ventura. The Santa Clara River Watershed includes almost all of the Santa Clarita Valley Planning Area; parts of the western portion of the Antelope Valley Planning Area; and a small part of the San Fernando Valley Planning Area.

Santa Monica Bay Watershed (Malibu Creek and Ballona Creek)

The Santa Monica Bay Watershed spans 673 square miles, ranging from the west end of the Santa Monica Mountains in Ventura County to parts of the western Los Angeles Basin and south to the coastal side of the Palos Verdes Peninsula; the southeast corner of the watershed is in the San Pedro neighborhood in the City of Los Angeles. Many streams in the Santa Monica Mountains, Palos Verdes Hills, and Los Angeles Basin provide drainage in the watershed, and drainage in the watershed is not dominated by one stream as with the Los Angeles Watershed. Ballona Creek is the major drainage route for much of the part of the watershed in the Los Angeles Basin. The Santa Monica Bay Watershed includes parts of the following planning areas, from north to south:

- Santa Monica Mountains (nearly all)
- Westside (nearly all)
- Metro (west part)
- South Bay (narrow strip along Santa Monica Bay; and coastward side of Palos Verdes Hills)

Drainage Facilities

Los Angeles River Watershed

The Los Angeles River and the Rio Hondo are the primary drainage channels in the Watershed; the Rio Hondo connects the San Gabriel River at Whittier Narrows Dam to the Los Angeles River in the City of South Gate. Major flood control dams in the watershed include Pacoima Dam, Tujunga Dam, Devil's Gate Dam, Eaton Wash Dam, Santa Anita Dam, Sepulveda Dam, Hansen Dam, and several retention basins near the Sylmar neighborhood in the City of Los Angeles. These dams serve a vital role in flood protection and most of them also serve a vital water conservation role in the region.

San Gabriel River Watershed

The San Gabriel River is the principal drainage channel in the watershed. Major flood control dams in the Watershed include Whittier Narrows Dam near the City of Pico Rivera, Santa Fe Dam in the City of Irwindale, and Morris and San Gabriel dams; the latter two are in the San Gabriel Mountains. Other important dams in this watershed include the Big Dalton Dam, San Dimas Dam, Live Oak Dam,

Puddingstone Dam, Puddingstone Diversion Dam, and Thompson Creek Dam. These dams serve a vital role in flood protection and most of them also serve a vital water conservation role in the region.

Dominguez Watershed

Dominguez Channel is the main drainage channel in this Watershed.

Santa Clara River Watershed

The Santa Clara River is the main drainage channel in this watershed. The two largest reservoirs in the part of the Santa Clara Watershed in Los Angeles County, Castaic Lake and Pyramid Lake, are water storage reservoirs rather than flood control dams. The two reservoirs are southern terminals for the California Aqueduct, which is a major component of the State Water Project.

Antelope–Fremont Valleys Watershed

Most storm drains in the Antelope Valley Watershed discharge to vacant desert land (DPW 2014).[4]

Surface Water Quality

The 2010 Section 303(d) List of Water Quality Limited Segments lists 127 water bodies in Los Angeles County.[5] Total maximum daily loads, that is, the maximum amount of a pollutant that a water body can receive and still safely meet water-quality standards, have either been completed, or are under preparation or are planned, for each of the listed water bodies. Coastal shorelines comprise 51 of the listed water bodies; 10 are bays; 40 are rivers or streams; 18 are lakes; three are tidal wetlands; and five are estuaries. The full list is included as Appendix J of this DEIR.

Groundwater Basins

South Coast Region

Coastal Plain of Los Angeles Groundwater Basin

The Coastal Plain of Los Angeles Groundwater Basin underlies nearly all of the part of the Los Angeles Basin in Los Angeles County south of the Puente Hills and Repetto Hills.[6] This groundwater basin spans about 491 square miles in the portions of the Westside, South Bay, Metro, and Gateway Planning Areas in the Los Angeles Basin. Most of this Basin is divided into two sub-basins: the Central Basin in the northeast half of the Basin, and the West Coast subbasin in the southwest half. The major groundwater recharge basins in the Central Basin are the Rio Hondo and San Gabriel Coastal Spreading Grounds along the Rio Hondo and San Gabriel Rivers, in the City of Montebello and City of Pico Rivera. Groundwater recharge in the West Coast Basin is done mostly through injection wells.

[4] Based on spot checks of 10 locations on the *Los Angeles County Storm Drain System* map maintained by the Los Angeles County Department of Public Works; accessed February 28, 2014.
[5] Water bodies with different names—for instance, Los Angeles River and Los Angeles River Estuary—were considered different water bodies. Rivers and streams are divided into segments called *reaches* for the purpose of water-quality management. Multiple reaches of one river or stream were counted as one water body.
[6] The Santa Monica Mountains, Hollywood Hills, and San Fernando Valley are outside of the Los Angeles Basin.

San Fernando Valley Groundwater Basin

The San Fernando Valley Groundwater Basin underlies 227 square miles–all of the San Fernando Valley–and all of the valley areas in the San Fernando Valley Planning Area.

Raymond Groundwater Basin

The Raymond Groundwater Basin extends about 41 square miles beneath the northwestern San Gabriel Valley, in the northwest part of the West San Gabriel Valley Planning Area.

Main San Gabriel Valley Groundwater Basin

The Main San Gabriel Valley Groundwater Basin, which is approximately 199 square miles in area, underlies most of the San Gabriel Valley and the Puente Valley, in much of the West San Gabriel Valley Planning Area, and in the northern and central parts of the East San Gabriel Valley Planning Area. The major groundwater recharge facilities for the Main San Gabriel Valley Groundwater Basin are reservoirs in and just upstream of the Basin: Cogswell Reservoir, San Gabriel Reservoir, Morris Reservoir, Santa Fe Reservoir, and Whittier Narrows Reservoir.

Santa Clara River Valley East Groundwater Basin

The Santa Clara River Valley East Groundwater Basin underlies about 104 square miles in the Santa Clarita Valley in the Santa Clarita Valley Planning Area.

Upper Santa Ana Valley Groundwater Basin

The Upper Santa Ana River Valley Groundwater Basin underlies about 242 square miles of the Upper Santa Ana River Valley in southwest San Bernardino County, near the northwest edge of Riverside County, and near the east boundary of Los Angeles County. The portion of this Basin in Los Angeles County is in the East San Gabriel Valley Planning Area.

South Lahontan Region

Antelope Valley Groundwater Basin

The Antelope Valley Groundwater Basin spans 1,585 square miles in the Antelope Valley in northern Los Angeles County, southeast Kern County, and westernmost San Bernardino County. The portion of this groundwater basin in Los Angeles County is in the Antelope Valley Planning Area.

El Mirage Valley and Middle Mojave River Valley Groundwater Basins

Each of these two groundwater basins—in the south-central and central Mojave Desert, respectively—underlie small areas along the northeast edge of Los Angeles County; the bulk of each Basin is in San Bernardino County to the east. El Mirage Valley Groundwater Basin spans 119 square miles, and the Middle Mojave River Valley Groundwater Basin 332 square miles. The portions of these two Basins in Los Angeles County are in the Antelope Valley Planning Area.

Groundwater Quality

Coastal Plain of Los Angeles Groundwater Basin

The Coastal Plain of Los Angeles Groundwater Basin is divided into several subbasins; the two largest of which are the West Coast subbasin and the Central Basin. Overall, the groundwater in the Central subbasin and West Coast subbasin continues to be of high quality, suitable for potable and nonpotable uses.[7] Wellhead treatment is used in certain places in the Central subbasin to remove TCE, PCE, iron, manganese, arsenic, and carbon tetrachloride from groundwater.[8]

A groundwater treatment facility, the Water Quality Protection Project, treats groundwater for volatile organic compound (VOC) contamination in the City of Pico Rivera in the Central subbasin; the contamination is a plume originating from the San Gabriel Valley to the north. The facility uses granular-activated carbon and has capacity of 2,000 gallons per minute.[9]

A 2,400 acre foot per year (afy) capacity desalination facility in the City of Torrance operated by the West Basin Municipal Water District removes chloride from groundwater impacted by seawater.[10]

These groundwater basins include the numerous dams, reservoirs and spreading grounds of the LACFCD that are instrumental in capturing water and recharging the basins. The region's flood protection channels also play a key role in delivering water to spreading grounds. In addition, the seawater barriers play a replenishment role in the Central Basin.

San Fernando Valley Groundwater Basin

Half of the Los Angeles Department of Water and Power (LADWP)'s 115 groundwater wells in the San Fernando Valley are inactive due to groundwater contamination. Major contaminants include volatile organic compounds (VOCs; especially TCE [trichloroethylene], PCE [perchloroethylene], and carbon tetrachloride); nitrates, and perchlorate.[11]

Groundwater treatment systems in the San Fernando Valley include the Tujunga Wellfield Joint Project, which uses liquid-phase granular activated carbon; the North Hollywood Operable Unit, which uses air to remove VOCs; and the Pollock Wells Treatment Plant, with four liquid-phase granular activated carbon units.[12]

[7] Water Replenishment District of Southern California (WRD). 2013, March. Regional Groundwater Monitoring Report Water Year 2011-2012. www.wrd.org/engineering/reports/2011_12_RGWMR_Final_Web.pdf.
[8] Water Replenishment District of Southern California (WRD). 2013, October 15. Safe Drinking Water Program. http://www.wrd.org/safe_drinking_water_2013_10_15.pdf.
[9] Central Basin Municipal Water District (CBMWD). 2011, March. Draft 2010 Urban Water Management Plan. http://www.centralbasin.org/press_releases/Draft-2010-Urban-Water-Management-Plan.pdf.
[10] One acre foot per year is about 892 gallons per day.
[11] Los Angeles Department of Water and Power (LADWP). 2011, May. 2010 Urban Water Management Plan. http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Los%20Angeles%20Department%20of%20Water%20and%20Power/LADWP%20UWMP_2010_LowRes.pdf.
[12] Ibid. LADWP 2011.

Main San Gabriel Valley Groundwater Basin

Groundwater delivered to customers continues to be of high quality and always meets state and federal drinking water standards. However, several contaminants include a variety of industrial solvents referred to as Volatile Organic Compounds, or VOCs, are present in areas of the Basin. Another common contaminant found in the basin is nitrate, primarily from fertilizers used during the Valley's agricultural period.

Since 1997, additional contaminants have been detected: perchlorate, a solid rocket fuel ingredient; N-nitrosodimethylamine (NDMA), associated with liquid rocket fuel; 1,2,3-trichloropropane (1,2,3-TCP), a degreasing agent; and 1,4-dioxane, a stabilizer for chlorinated solvents (MSGVW 2013). Thirty groundwater treatment sites were operating in the service area of the Upper San Gabriel Valley Municipal Water District, whose service area spans more than half the Main San Gabriel Valley Groundwater Basin in the western part of the Valley, in 2008-2009 (USGBMWD 2011).

- http://upperdistrict.org/wp-content/uploads/2012/11/UD-Urban-Water-Management-Plan-Part-I.pdf
- http://watermaster.org/Final.5YR_10_28_13_1018pm_LR.All.pdf

Raymond Groundwater Basin

Portions of the Monk Hill Treatment System treats groundwater for perchlorate using ion exchange resin, for organic chemicals using liquid-phase granular activated carbon, and have a capacity of 7,000 gallons per minute (gpm).

Development of a perchlorate treatment system at the Sunset Treatment Plant is underway. A disinfection facility, scheduled for completion in December 2014, will have a capacity of 2,300 gpm.

Santa Clarita River Valley East Groundwater Basin

All groundwater meets drinking water standards (Kennedy-Jenks 2011).

Antelope Valley Groundwater Basin

Groundwater quality in the Antelope Valley is excellent within the principal aquifer, but degrades toward the northern portion of the dry lakes areas.

Arsenic is closely monitored in the region. It is a naturally occurring inorganic contaminant often found in groundwater and occasionally found in surface water. Anthropogenic sources of arsenic include agricultural, industrial and mining activities. Arsenic can be toxic in high concentrations, and is linked to increased risk of cancer when consumed for a lifetime at or above the regulated Maximum Contaminant Level (MCL; that is, the highest concentration allowed in drinking water). Arsenic levels above the MCL of 10 parts per billion (ppb) have been observed in the Antelope Valley Region. Water from wells with arsenic above the MCL is blended with water from other wells to yield water with arsenic below the MCL.

An emerging contaminant of concern is hexavalent chromium or chromium-6. Chromium-6 can occur naturally in the environment from the erosion of natural chromium deposits, but can also be produced by industrial processes where it is used for chrome plating, dyes and pigments, and leather and wood preservation. This element has been known to cause cancer when inhaled and has also been linked to cancer when ingested. California has proposed an MCL of 10 ppb. Twelve wells belonging to various agencies within the southern portion of the Antelope Valley have tested in excess of this proposed MCL within the last 10 years; these wells require continued monitoring (AVEKWA 2012).

Flood Hazards

Designated Flood Zones

One-hundred-year flood zones in the Project Area are described below by Planning Area and shown on Figure 5.9-3, *Flood Hazard Zones Policy Map*.

- **Antelope Valley Planning Area.** About 120 square miles of 100-year flood zones are located east and north of the City of Palmdale and City of Lancaster, mainly along Big Rock Wash, Rock Creek, and Little Rock Wash. Some areas between SR-138 and the Kern County boundary are 100-year flood zones. Smaller areas along several tributaries of the Santa Clara River; along several streams extending out of the San Gabriel Mountains into the Antelope Valley; and along several small desert washes east of the City of Lancaster and tributary to Big Rock Wash are also designated 100-year flood zones.

- **Santa Clarita Valley Planning Area.** One-hundred-year flood zones totaling approximately 14.8 square miles in area are mapped along the Santa Clara River, and several of its tributaries extending north, east, and south from the River's main stem.

- **Santa Monica Mountains Planning Area.** Approximately 487 acres of 100-year flood zones are in and immediately surrounding several streams, including Malibu Creek, Topanga Creek, and Malibu Lake.

- **San Fernando Valley Planning Area.** One-hundred-year flood zones are in Encino Reservoir, and along Pacoima Creek, Kagel Canyon, Little Tujunga Canyon, and Tujunga Canyon.

- **West San Gabriel Valley Planning Area.** Part of a 100-year flood zone is mapped in the Whittier Narrows Flood Control Basin.

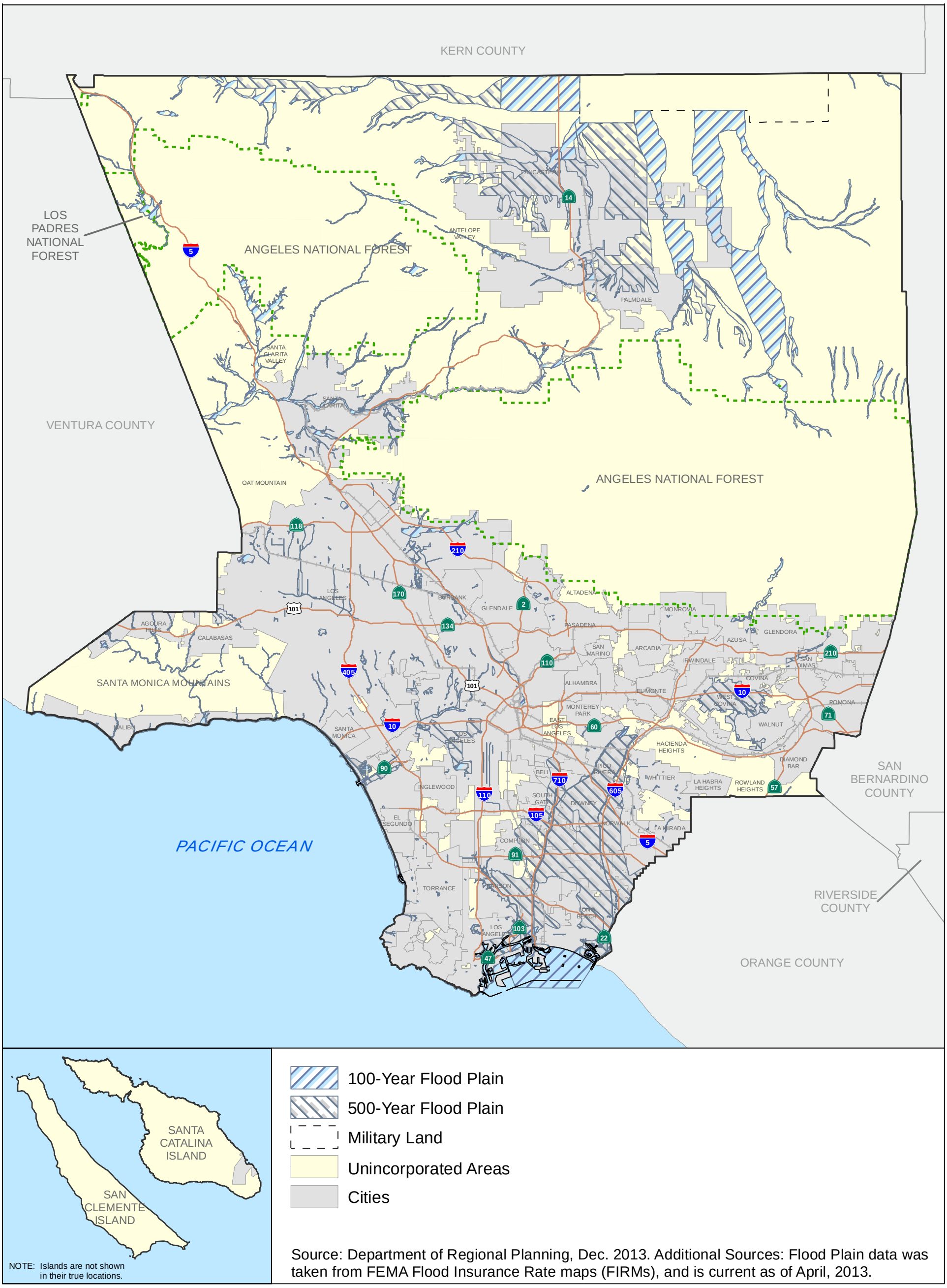
- **East San Gabriel Valley Planning Area.** A small area in Tonner Canyon in the Puente Hills, and a segment of the San Gabriel River, are mapped as 100-year flood zones.

- **Westside Planning Area.** A small area of a 100-year flood zone is mapped in the Baldwin Hills next to the east side of La Cienega Boulevard.

- **Metro Planning Area.** No 100-year flood zones are mapped in unincorporated areas of the Metro Planning Area.

FLOOD HAZARD ZONES POLICY MAP

FIGURE 5.9-3



Source: Department of Regional Planning, Dec. 2013. Additional Sources: Flood Plain data was taken from FEMA Flood Insurance Rate maps (FIRMs), and is current as of April, 2013.

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- **South Bay Planning Area.** Two small areas in West Carson are mapped as 100-year flood zones.
- **Gateway Planning Area.** A segment of the Los Angeles River just south of its confluence with the Rio Hondo is mapped as a 100-year flood zone.
- **Coastal Islands Planning Area.** No 100-year flood zones are mapped in unincorporated areas of Santa Catalina Island and San Clemente Island.

Seismically Induced Dam Inundation

Dam inundation areas are mapped by dam owners and submitted to the California Office of Emergency Services (Cal/OES). Dams in Los Angeles County with dam inundation areas affecting unincorporated areas are listed in Table 5.9-1 below. Most of the dams in Table 5.9-1 are flood control dams that do not impound substantial reservoirs for most of the year. After flood flows on an affected stream, water is released from a flood control dam at a controlled rate to create flood control capacity for the next storm. Released water from several flood control dams is used downstream of the dams for groundwater recharge.

Castaic Lake and Pyramid Lake are major water storage reservoirs; each is part of the State Water Project.

All dams in Table 5.9-1 must meet safety requirements and are inspected annually by the Division of Safety of Dams of the California Department of Water Resources.

Table 5.9-1 Dams with Inundation Areas Including Unincorporated Areas

Planning Area[1]	Watershed	Dam or Reservoir	Nearest City or Community[2]
Antelope Valley	Antelope – Fremont Valleys	Fairmont Reservoir	Lake Hughes [Los Angeles County]
		Lake Palmdale (Harold Reservoir)	Palmdale
		Littlerock Reservoir	Palmdale
	Santa Clara	Pyramid Lake*	Castaic [Los Angeles County]
	San Gabriel River	Big Dalton Dam	Glendora
		Cogswell Dam	San Gabriel Mountains: West Fork, San Gabriel River
		San Gabriel Dam*	San Gabriel Mountains: San Gabriel River, north of Azusa
		Morris Dam*	San Gabriel Mountains: San Gabriel River, north of Azusa
Santa Clarita Valley	Santa Clara	Bouquet Canyon	Palmdale
		Castaic Lake	Castaic [Los Angeles County]
		Pyramid Lake	Castaic [Los Angeles County]
Santa Monica Mountains	Santa Monica Bay	Century Reservoir	Agoura Hills
San Fernando Valley	Los Angeles River	Big Tujunga Reservoir	Lake View Terrace [Los Angeles]
		Hansen Dam	Pacoima [Los Angeles]
		Pacoima Reservoir	Sylmar [Los Angeles]
		Sepulveda Dam*	Encino [Los Angeles] and Lake Balboa [Los Angeles]
West San Gabriel Valley	Los Angeles River	Morris S. Jones Reservoir	Pasadena
	San Gabriel River	San Gabriel Dam	San Gabriel Mountains: San Gabriel River, north of Azusa
		Morris Dam	San Gabriel Mountains: San Gabriel River, north of Azusa
		Santa Fe Dam	Irwindale
East San Gabriel Valley	San Gabriel River	Puddingstone Reservoir	San Dimas
		San Dimas Reservoir	San Dimas
		San Gabriel Dam	San Gabriel Mountains: San Gabriel River, north of Azusa
		Thompson Creek Reservoir	Claremont
Westside	Santa Monica Bay	Stone Canyon Reservoir	Bel Air [Los Angeles]
Metro	Los Angeles River	Sepulveda Dam	Encino [Los Angeles] and Lake Balboa [Los Angeles]
Gateway	Los Angeles River and San Gabriel River	Whittier Narrows Dam	Pico Rivera
Coastal Islands	San Pedro Channel Islands	Wrigley Reservoir (Santa Catalina Island)	Avalon

Source: Cal/EMA 2007.
* Dam inundation area spans two or more planning areas.
1 There are no dam inundation areas mapped by the California Emergency Management Agency within unincorporated parts of the South Bay Planning Area.
2 Abbreviations of areas: Communities in the City of Los Angeles are abbreviated as San Pedro [Los Angeles], and communities in unincorporated areas are abbreviated as West Athens [Los Angeles County].

Seiches

A seiche is a surface wave created when an inland water body is shaken, usually by an earthquake. Reservoirs and aboveground water storage tanks can generate seiches posing substantial flood hazards. Dams with dam inundation areas including unincorporated areas are listed above in Table 5.10-1.

There are numerous aboveground water storage tanks in Los Angeles County. Flooding can occur if strong ground shaking causes structural damage to aboveground water tanks. Sloshing water can lift a water tank off its foundation or break the pipes leading to the tank.

Standards for steel and reinforced concrete tank design are issued by the American Water Works Association and the California Department of Public Health. About 40 steel water tanks were rendered nonfunctional during the 1994 Northridge earthquake; one tank in the Santa Clarita area failed, flooding several houses below. New standards for steel water tank design adopted in 1994 include flexible joints at the inlet/outlet connections to accommodate movement in any direction.

Tsunamis

A tsunami is a sea wave caused by a sudden displacement of the ocean floor, most often due to earthquakes. The West Coast and Alaska Tsunami Warning Center, part of the National Oceanic and Atmospheric Administration (NOAA) issues tsunami warnings and tsunami watches for the Pacific. A Tsunami Warning Bulletin is a warning message issued throughout the Pacific based on confirmation that a tsunami has been generated that poses a threat to the population in part or all of the Pacific Coast regions. Tsunami Warnings are issued for a region when a tsunami is estimated to arrive within zero to three hours; Tsunami Watches are issued for a region when a tsunami is estimated to arrive within three to six hours (LACoFD 2014).

Tsunami inundation areas are mapped by the California Geological Survey in the following unincorporated areas:

- **Santa Monica Mountains Planning Area.** The tsunami inundation area is limited to within about 200 feet from the shoreline, as the Santa Monica Mountains rise steeply from the coast. Two areas within the Malibu Local Coastal Land Use Plan area are in tsunami-hazard zones: 1) Topanga State Beach and Topanga County Beach, east and west of the intersection of Pacific Coast Highway with Topanga Canyon Boulevard; and, 2) Leo Carrillo State Beach at the west end of Los Angeles County.

- **Westside Planning Area**. The tsunami inundation area extends to just inland of the inland end of the marina in Marina del Rey, which is approximately 1.6 miles inland from the shoreline. No other unincorporated areas in the Westside Planning Area are within tsunami inundation areas.

  Existing land use designations in Marina del Rey, set forth in the Marina del Rey Land Use Plan certified by the California Coastal Commission in 1996, include residential (Residential III, IV, and V with maximum densities of 35, 45, and 75 units per acre, respectively); several categories of commercial land uses (hotel, office, marine commercial, and visitor serving-convenience commercial); boat storage, public facilities, parking, open space, and water.

- **South Bay and Gateway Cities Planning Areas.** There are no tsunami inundation areas in unincorporated areas in these two Planning Areas; the entire coastline in these Planning Areas consist of cities only.

Mudflows

Mudflow is a combination of water, rock, debris and soil resulting from surface erosion. LACFCD's reservoirs receive large volumes of sediment due to mudflows from their tributary watersheds, which impact the reservoirs' flood protection and water conservation capacities. LACFCD also has numerous debris basins and debris inlets above many foothill communities. Cleanouts of these facilities are necessary to allow them the serve their flood protection function. Cleanouts of the reservoirs are also needed to maintain their water conservation function, which is becoming more critical for the region's water supply.

Areas of Los Angeles County that are susceptible to mudflows include canyon areas and areas along the bases of mountain slopes. Mudflow hazard increases dramatically in burned areas after major wildfires. There are slopes that could generate mudflows in, or immediately upgrade from, all Planning Areas except for the Gateway Planning Area.

5.9.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

HYD-1 Violate any water-quality standards or waste-discharge requirements.

HYD-2 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted.

HYD-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.

HYD-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

HYD-5 Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

HYD-6 Otherwise substantially degrade water quality.

HYD-7 Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

HYD-8 Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

HYD-9 Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

HYD-10 Be subject to inundation by seiche, tsunami, or mudflow.

5.9.3 Relevant General Plan Goals and Policies

Following is a list of the goals and policies of the Proposed Project that are intended to reduce potentially significant adverse effects concerning hydrology and water quality.

Safety Element

- **Policy S 2.1:** Discourage development in Los Angeles County's Flood Hazard Zones.
- **Policy S 2.2:** Discourage development from locating downslope from aqueducts.
- **Policy S 2.3:** Consider climate change implications in planning for flood and inundation hazards.
- **Policy S 2.4:** Ensure that developments located within Los Angeles County's Flood Hazard Zones are sited and designed to avoid isolation from essential services and facilities in the event of flooding.
- **Policy S 2.5:** Ensure that the mitigation of flood related property damage and loss limits impacts to biological and other resources.
- **Policy S 2.6:** Work cooperatively with public agencies with responsibility for flood protection and with stakeholders in planning for flood and inundation hazards.
- **Policy S 2.7:** Locate essential public facilities, such as hospitals and fire stations, outside of Flood Hazard Zones, where feasible.

Conservation and Natural Resources Element

- **Policy C/NR 5.1:** Support the LID philosophy, which seeks to plan and design public and private development with hydrologic sensitivity, including limits to straightening and channelizing natural flow paths, removal of vegetative cover, compaction of soils, and distribution of naturalistic BMPs at regional, neighborhood, and parcel-level scales.
- **Policy C/NR 5.2:** Require compliance by all County departments with adopted Municipal Separate Storm Sewer System (MS4), General Construction, and point source NPDES permits.

- **Policy C/NR 5.3:** Actively engage with stakeholders in the formulation and implementation of surface water preservation and restoration plans, including plans to improve impaired surface water bodies by retrofitting tributary watersheds with LID types of BMPs.

- **Policy C/NR 5.4:** Actively engage in implementing all approved Enhanced Watershed Management Programs/Watershed Management Programs and Coordinated Integrated Monitoring Programs/Integrated Monitoring Programs or other County-involved TMDL implementation and monitoring plans.

- **Policy C/NR 5.5:** Manage the placement and use of septic systems in order to protect nearby surface water bodies.

- **Policy C/NR 5.6:** Minimize point- and nonpoint- source water pollution.

- **Policy C/NR 5.7:** Actively support the design of new and retrofit of existing infrastructure to accommodate watershed protection goals, such as roadway, railway, bridge, and other–particularly–tributary street and greenway interface points with channelized waterways.

- **Policy C/NR 6.1:** Support the LID philosophy, which incorporates distributed, post-construction, parcel-level stormwater infiltration as part of new development.

- **Policy C/NR 6.2:** Protect natural groundwater recharge areas and regional spreading grounds.

- **Policy C/NR 6.3:** Actively engage in stakeholder efforts to disperse rainwater and stormwater infiltration BMPs at regional, neighborhood, infrastructure, and parcel-level scales.

- **Policy C/NR 6.4:** Manage the placement and use of septic systems in order to protect high groundwater.

- **Policy C/NR 6.5:** Prevent stormwater infiltration where inappropriate and unsafe, such as in areas with high seasonal groundwater, on hazardous slopes, within 100 feet of drinking water wells, and in contaminated soils.

- **Policy C/NR 7.1:** Support the LID philosophy, which mimics the natural hydrologic cycle using undeveloped conditions as a base, in public and private landuse planning and development design.

- **Policy C/NR 7.2:** Support the preservation, restoration and strategic acquisition of available land for open space to preserve watershed uplands, natural streams, drainage paths, wetlands, and rivers, which are necessary for the healthy function of watersheds.

- **Policy C/NR 7.3:** Actively engage with stakeholders to incorporate the LID philosophy in the preparation and implementation of watershed and river master plans, ecosystem restoration projects, and

other related natural resource conservation aims, and support the implementation of existing efforts, including Watershed Management Programs and Enhanced Watershed Management Programs.

- **Policy C/NR 7.4:** Promote the development of multiuse regional facilities for stormwater quality improvement, groundwater recharge, detention/attenuation, flood management, retaining nonstormwater runoff, and other compatible uses.

5.9.4 Environmental Impacts

The following impact analysis addresses Appendix G thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.9-1 Implementation of the Proposed Project would comply with water quality standards and waste discharge requirements and would not substantially degrade water quality. [Threshold H-1]

Impact Analysis: Proposed Project buildout would involve soil disturbance, construction, and operation of developed land uses that could each generate pollutants affecting stormwater. Proposed Project buildout would result in a total of about 669,000 housing units, and nearly 730 million square feet of non-residential land uses, in the Project Area. There were about 300,000 housing units in the Project Area in 2013; thus, the Proposed Project would involve a net increase of about 369,000 housing units, which is more than double the existing number. There were about 365 million square feet of non-residential building area in the Project Area in 2013; thus, the Proposed Project would double the total building area of non-residential land uses in the Project Area.

Discharges from Construction Sites to Stormwater

Pollutants of Concern from Construction Projects

Pollutants associated with stormwater include sediment, nutrients, bacteria and viruses, oil and grease, metals, organics, oxygen-demanding substances, pesticides, and trash and debris.

Bacteria and Viruses

Bacteria and viruses are microorganisms that thrive under certain environmental conditions. Water contamination by animal or human fecal waste and contamination by excess organic waste are common causes of proliferation of these microorganisms. Water containing excessive bacteria and viruses can alter the aquatic habitat and harm humans and aquatic life.

Metals

Metals of concern as water contaminants include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors; metals are also raw materials used in nonmetal products such as fuels, adhesives, and paints. At low concentrations naturally occurring in soil, metals may not be toxic. However, certain metals at higher concentrations can be harmful to aquatic life and to humans. Humans can be impacted from groundwater contaminated with metals. Metals can become concentrated in

fish and shellfish, and can subsequently harm humans who consume those animals. Environmental concerns have already led to restrictions on some uses of metals.

Nutrients

Nutrients are inorganic substances such as nitrogen and phosphorous; the primary sources of these substances in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams causes eutrophication, where over growth of aquatic plants and algae can lead to excessive decay of organic matter in the water, loss of oxygen in the water, and eventual death of aquatic organisms.

Pesticides

Relatively low concentrations of the active ingredients in pesticides can be toxic in water. Excessive or improper use of pesticides can cause toxic contamination in runoff.

Organic Compounds

Organic compounds are carbon based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds at certain concentrations can be hazardous to life or health. Toxic levels of solvents and cleaning compounds can be discharged to storm drains during cleaning and rinsing operations.

Oxygen-Demanding Substances

Microbial biodegradation of organic compounds such as proteins, carbohydrates, and fats, causes increased oxygen demand in water. A second category of oxygen-demanding substances is chemicals—such as ammonia and hydrogen sulfide—that react with dissolved oxygen in water to form other compounds. The oxygen demand of a substance can deplete dissolved oxygen in a water body and possibly develop septic conditions. A reduction of dissolved oxygen is harmful to aquatic life and can generate hazardous compounds such as hydrogen sulfides.

Sediments

Sediments are solid materials that are eroded from the land surface. Sediments can increase the turbidity (cloudiness) of water, clog fish gills, reduce spawning habitat, lower survival rates of young aquatic organisms, smother bottom-dwelling organisms, and suppress aquatic vegetation growth. Due to the erosive nature of the mountains in Los Angeles County, sediment is a natural component of flows in the County. Sediment loads will be especially heavy in flows from burned watersheds.

Trash and Debris

Trash and debris, such as paper, plastic, polystyrene foam, aluminum, and biodegradable organic matter such as leaves, grass cuttings, and food waste, may significantly impair aquatic habitat and the recreational value of a water body. In addition, trash impacts water quality by increasing biochemical oxygen demand.

Oil and Grease

Oil and grease in water bodies decrease the aesthetic value of the water bodies, as well as water quality; one of the most significant sources of oil and grease is leakage from motor vehicles.

Water-Quality Requirements for Construction Projects

Los Angeles and Central Valley Water Quality Control Board Regions

Construction projects of one acre or more in area in each of the three aforementioned Water Board regions would be required to comply with the General Construction Permit, Order No. 2012-0006-DWQ, issued by the State Water Resources Control Board (SWRCB) in 2012. Projects obtain coverage by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP) estimating sediment risk from construction activities to receiving waters, and specifying Best Management Practices (BMPs) that would be used by the project to minimize pollution of stormwater. Categories of BMPs used in SWPPPs are described below in Table 5.9-2.

Table 5.9-2 Construction BMPs

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	Cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind.	Mulch, geotextiles, mats, hydroseeding, earth dikes, swales.
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basin; cleaning measures such as street sweeping.
Tracking Controls	Minimize the tracking of soil offsite by vehicles.	Stabilized construction roadways and construction entrances/exits; entrance/outlet tire wash.
Nonstorm Water Management Controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize nonstorm water discharges and contamination of any such discharges.	BMPs specifying methods for: paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; concrete finishing.
Waste Management and Controls (i.e., good-housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Spill prevention and control, stockpile management, and management of solid wastes and hazardous wastes.

Lahontan Water Board Region

All grading operations in Los Angeles County must comply with Sections J110 and J111 of Title 26 of the County Code, and with Chapter 21 of the County Flood Control District Code.

Discharges from Developed Land Uses (Postconstruction) to Stormwater

Operation of developed land uses can generate the same categories of pollutants that construction projects can.

Water Quality Requirements for Operation of Developed Land Uses

Los Angeles RWQCB Region

Water quality requirements for operation of developed land uses in the Project Area are in the LID Standards Manual issued by the County Department of Public Works in 2013.

Lahontan RWQCB Region

Unauthorized waste discharges to Waters of the State are prohibited. Such waste discharges may be authorized under an Individual Permit.

Impacts would be less than significant upon compliance with regulatory requirements and Proposed Project policies.

Impact 5.9-2 Future development pursuant to the Proposed Project would interfere with groundwater recharge

Impact Analysis:

Increase in Impervious Areas

Antelope Valley Planning Area

The Proposed Project buildout based on the existing Antelope Valley Area Plan would substantially increase impervious areas in the Antelope Valley Planning Area. Estimated net increases in residential units and non-residential square footage in the unincorporated areas of the Antelope Valley Planning Area due to the Proposed Project are shown below in Table 5.9-3. As shown, the number of residential units would increase to more than 10 times the current number, and non-residential square footage would increase to nearly four times the current amount.

While substantial impervious areas would be added in the Antelope Valley Planning Area, the increase in impervious areas would still be a small fraction of the Planning Area. About 97.6 percent of the Planning Area is designated for either Open Space or Rural uses; the maximum permitted density in the Rural designation is one residential unit per acre. Therefore, buildout of the Antelope Valley Area Plan would not substantially interfere with groundwater recharge due to increase in impervious areas.

Table 5.9-3 Net Increases in Residential Units and Non-Residential Square Feet due to the Proposed Project, Antelope Valley Planning Area

	Residential Units	Non-Residential Square Feet
Project Buildout	278,158	46,870,000
Existing Conditions (2013)	24,739	12,525,000
Net Increase	253,419	34,345,000

Santa Clarita Valley Planning Area

Impacts of buildout of the existing Santa Clarita Valley Area Plan in the Santa Clarita Valley Planning Area on groundwater recharge were identified as less than significant in the 2012 Certified EIR for that Area Plan.

Santa Monica Mountains Planning Area

About 97 percent of the existing Santa Monica Mountains North Area Plan in the Santa Monica Mountains Planning Area is designated either for public and open-space uses or for rural development. Thus, while buildout of this Area Plan would cause an increase in impervious areas, the increase would be minor compared to the over 20,000-acre Area Plan area and impacts would be less than significant.

The balance of the Planning Area is located within the Santa Monica Mountains Coastal Zone. The Santa Monica Mountains Coastal Zone consists of approximately 52,000 acres and is the unincorporated portion of the Santa Monica Mountains west of the City of Los Angeles, east of Ventura County, and south of the coastal zone boundary, excluding the City of Malibu. The County is currently in the process of updating the Santa Monica Mountains Local Coastal Program (LCP). The Santa Monica Mountains LCP consists of the Land Use Plan (LUP) and implementing actions including the Local Implementation Program (LIP), a new series of ordinance sections proposed to be added to the Zoning Ordinance, Title 22 of the County Code. Implementing actions also include a few additional amendments to Title 22, and a zoning consistency program. The LUP, which is a component of the Los Angeles County General Plan, will replace the Malibu Land Use Plan, which was certified by the Coastal Commission in 1986 and is currently the basic planning tool for the Santa Monica Mountains Coastal Zone.

More than half of the Santa Monica Mountains Coastal Zone is in public ownership due to the unified efforts of the County, California State Parks, the Santa Monica Mountains Conservancy, and the National Park Service and is not available for development. The Santa Monica Mountains LCP prohibits development in the most sensitive habitat areas. In addition, the LCP sets an absolute maximum residential building site area of 10,000 square feet for parcels exceeding an acre or 25 percent of parcels less than an acre. Thus, while some development could occur, the increase in impervious areas would be minor compared to the 52,000 acre area Therefore, impacts would be less than significant.

Other Planning Areas

Developments in the unincorporated areas of other Planning Areas–Coastal Islands, East San Gabriel Valley, Gateway, Metro, San Fernando Valley, South Bay, West San Gabriel Valley, and Westside–would be mostly limited to redevelopments and reuses of currently developed areas. Thus, redevelopments in those Planning Areas would result in relatively minor increases in impervious areas. Consequent impacts on groundwater recharge would be less than significant.

Facilities for Intentional Groundwater Recharge

Major facilities for intentional groundwater recharge include Cogswell Reservoir, San Gabriel Reservoir, and Morris Reservoir in the San Gabriel Mountains in the Antelope Valley Planning Area; Santa Fe Flood Control Basin in the San Gabriel Valley; and Whittier Narrows Flood Control Basin in the Gateway Planning Area.

Cogswell Reservoir, San Gabriel Reservoir, and Morris Reservoir are all in the Angeles National Forest, and Santa Fe Flood Control Basin is in the City of Irwindale. Whittier Narrows Flood Control Basin is in the unincorporated area; proposed land-use designations for that Flood Control Basin are Public and Semi-Public (P) Water (W) and Open Space–Public Recreation (OS-PR). All the dam facilities mentioned in this subsection are owned and operated by the LACFCD. The LACFCD is administered by the County of Los Angeles Department of Public Works. LACFCD's dams and reservoirs play a major role in groundwater recharge in the region by capturing storm flows (when flood safety allows) for later release to water spreading facilities. The LACFCD owns or operates over 25 spreading facilities.

These facilities are needed for flood control and for groundwater recharge; none of the facilities are designated for development with uses other than their current uses. Implementation of the Proposed Project would not interfere with intentional groundwater recharge at the aforementioned facilities, and no impact would occur.

Impact 5.9-3: Buildout of the Proposed Project would not substantially alter drainage patterns in Los Angeles County and would not result in substantial erosion or siltation. [Threshold HYD-3].

Impact Analysis:

Los Angeles Water Board Region

Implementation of the Proposed Project would not substantially change drainage patterns in the watersheds in the Los Angeles Water Board Region: the Los Angeles River, San Gabriel River, Santa Monica Bay, Santa Clara, and Calleguas watersheds.

Under the MS4 Permit certain categories of development and redevelopment projects are required to mimic predevelopment hydrology through infiltration, evapotranspiration, and rainfall harvest and use. Projects in the unincorporated areas within the Los Angeles RWQCB Region and for which LID Plan are required must limit post-development, peak, stormwater-runoff discharge rates to no greater than the estimated predevelopment rate for developments where the increased peak, stormwater discharge rate will result in increased potential for downstream erosion.

Construction projects in the Los Angeles Water Board Region of one acre or more in area must implement BMPs for erosion control and sediment control pursuant to the General Construction Permit (construction BMPs are discussed further under Impact 5.9-1).

Lahontan Water Board Region

Implementation of the Proposed Project would not substantially change drainage patterns in the Antelope Valley Watershed in the Lahontan Water Board Region. Requirements for erosion control and sediment control for construction projects and grading operations in the Lahontan Water Board Region are described above under *Regulatory Framework* in Section 5.9-1. Projects developed under the Proposed Project would comply with existing regulations for avoiding or minimizing erosion and sedimentation from such projects, and impacts would be less than significant.

Central Valley Water Board Region

The part of Los Angeles County in the Central Valley Water Board region is designated N-1 (Non-Urban 1) and C (Commercial) in the existing Antelope Valley Area Plan. Considering the small size of the portion of Los Angeles County in the Central Valley Water Board Region, Proposed Project buildout would not substantially change drainage patterns in that area. Any construction projects of one acre or more would be required to comply with the Statewide General Construction Permit. Impacts would be less than significant.

Impact 5.9-4: Development pursuant to the Proposed Project would not substantially change drainage patterns in Los Angeles County. While such developments could substantially increase rates or volumes of surface runoff, the developments would not result in flooding. [Threshold HYD-4]

Impact Analysis: Implementation of the Proposed Project would not change drainage patterns in Los Angeles County or in parts of adjoining counties in watersheds extending from Los Angeles County into those counties. Under the MS4 Permits in the Los Angeles and Central Valley Water Board regions, certain categories of development and redevelopment projects are required to mimic predevelopment hydrology through infiltration, evapotranspiration, and rainfall harvest and use. Projects within the LARWQCB Region and subject to LID requirements are required must limit post-development peak stormwater runoff discharge rates to no greater than the estimated pre-development rate for developments where the increased peak stormwater discharge rate will result in increased potential for downstream erosion. Developments pursuant to the Proposed Project would not substantially increase runoff rates or volumes and substantial consequent flood hazard would occur. Impacts would be less than significant.

Impact 5.9-5: Implementation of the Proposed Project could place housing within 100-year flood hazard areas. [Thresholds HYD-7 and HYD-8]

Impact Analysis:

Antelope Valley Planning Area

Existing Antelope Valley Community Plan land-use designations within 100-year flood zones are shown below in Table 5.9-4, *Land-Use Designations in 100-Year Flood Zones, Antelope Valley Area Plan*. About 6,459 acres, or 8.4 percent of the 100-year flood zones in the Antelope Valley Area Plan area, are designated as open space. The remainder of the 100-year flood zones is designated for development; mostly for residential development at maximum densities of 0.5 units per acre or higher.

Buildout of the existing Antelope Valley Area Plan would result in a net population increase of about 977,000, and a net increase in employment of about 19,000 jobs. Total population and employment estimates for land-use designations at Area Plan buildout are shown below in Table 5.9-4 based on population and employment estimates per acre in previous Table 3-7.

Table 5.9-4 Land-Use Designations in 100-Year Flood Zones, Antelope Valley Area Plan

Land-Use Designation	Acres	Area Plan Buildout Estimates	
		Population	Employment
Airport	4,633	Not available	Not available
C - Commercial	114	0	4,844
M – Industry	26	0	433
N1 - Non-Urban 1 (0.5 du/ac)	63,046		
N2 - Non-Urban 2 (1.0 du/ac)	1,181	124,001	167
O - Open Space	1,217	0	0
O-BLM - Open Space, Bureau of Land Management	266	0	0
O-NF - National Forest	2,124	0	0
O-W - Water Body	2,853	0	0
P - Public Service Facilities	723	0	33
TC - Transportation Corridor	323	0	12
U1 – Urban 1 (1.1 to 3.3 du/ac)	113		
U2 – Urban 2 (3.4 to 6.6 du/ac)	128	2,729	21
Total	**76,745**	**126,730**	**5,510**

Source: DRP 2013

Although portions of the Antelope Valley Planning Area within the current 100-year floodplain are proposed for development, future development within 100-year flood zones would require improvements to flood control facilities, and issuance of Letters of Map Revision by FEMA showing changes to 100-year flood zones reflecting such improvements; or that the floor beams of the lowest floor of the structure be raised above the 100-year base flood elevation. Flood insurance available through the NFIP would also be required.

Santa Clarita Valley Planning Area

Existing Santa Clarita Valley Area Plan land use designations within 100-year flood zones are listed below in Table 5.9-5, *Land Use Designations in 100-Year Flood Zones, Santa Clarita Valley Area Plan.* Buildout of the Santa Clarita Area Plan would place an estimated 6,267 residents and 30,805 jobs in 100-year flood zones.

Buildout of the existing Santa Clarita Valley Area Plan would place an estimated 6,267 residents and 30,805 jobs within 100-year flood zones, as shown below in Table 5.9-6. Although portions of the Santa Clarita Valley Planning Area within the current 100-year floodplain are proposed for development, future development within 100-year flood zones would require improvements to flood control facilities, and issuance of Letters of Map Revision by FEMA showing changes to 100-year flood zones reflecting such improvements; or that the floor beams of the lowest floor of the structure be raised above the 100-year base flood elevation. Flood insurance available through the NFIP would also be required.

Table 5.9-5 Land Use Designations in 100-Year Flood Zones, Santa Clarita Valley Area Plan

Land Use Designation	Acres
CG - General Commercial	96
CM - Major Commercial	210
Freeway right-of-way	18
H18 - Residential 18	26
H2 - Residential 2	77
H30 - Residential 30	6
H5 - Residential 5	170
IL - Light Industrial	131
IO - Industrial Office	347
OS-BLM - Bureau of Land Management	7
OS-C - Conservation	24
OS-NF - National Forest	1,012
OS-PR - Parks and Recreation	277
OS-W - Water	2,961
P - Public and Semi-Public	648
RL1 - Rural Land 1	214
RL10 - Rural Land 10	404
RL2 - Rural Land 2	1,021
RL20 - Rural Land 20	313
RL5 - Rural Land 5	272
SP - Specific Plan	1,213
Total	**9,448**

Source: DRP 2013.

Table 5.9-6 Estimated Population and Employment in 100-Year Flood Zones at Buildout, Santa Clarita Valley Area Plan

Land Use Designation	Area Plan Total			100-Year Flood Zones		
	Acres	Population	Employment	Acres	Population	Employment
Residential[1]	18,717	237,638	None	494	6,267	None
Employment-Generating[2]	3,279	None	105,881	954	None	30,805

[1] Residential designations include H2, H5, H18, H30, and RL1.
[2] Employment-generating designations include CG, CM, and P.

Santa Monica Mountains Planning Area

Existing Santa Monica Mountains North Area Plan land use designations in 100-year flood zones are listed in Table 5.9-7, *Land Use Designations in 100-Year Flood Zones, Santa Monica Mountains North Area Plan.* About one-third of the 100-year flood zones, that is, 144 acres, are designated for residential development with density over one unit per five acres, or commercial use. The remainder is designated as open space or as mountain lands with densities of one unit per five acres or less.

Table 5.9-7 Land Use Designations in 100-Year Flood Zones, Santa Monica Mountains North Area Plan

Land Use Designation	Acres	Area Plan Buildout Projections	
		Population	Employment
CR - Commercial Recreation - Limited Intensity	5	0	1792
N1 - Rural Residential 1 (1 du/ac max)	46	1481	0
N10 - Mountain Lands 10 (1 du/10 ac max)	25		0
N2 - Rural Residential 2 (1 du/2 ac max)	92		0
N20 - Mountain Lands 20 (1 du/20 ac max)	73		0
N5 - Mountain Lands 5 (1 du/5 ac max)	75		0
OS - Open Space	2	0	0
OS-P – Open-Space Parks	129	0	0
OS-W – Open-Space Water	39	0	0
TC - Transportation Corridor	1	0	0
Total	**487**	**148**	**179**

Source: DRP 2013.
[1] The average population per acre for rural land designations in buildout statistics, about 0.48 persons per acre, is here applied to the total of 311 acres of the three Mountain Lands and two Rural Residential designations.
[2] The estimated employment per acre used here is that for the commercial designation in buildout statistics, 35.9 jobs per acre. This is assumed to be an overestimate, as the CR designation here specifies low intensity.

Developments within 100-year flood zones would require improvements to flood control facilities, and issuance of Letters of Map Revision by FEMA showing changes to 100-year flood zones reflecting such improvements; or that the floor beams of the lowest floor of the structure are raised above the 100-year flood elevation. Flood insurance available through the NFIP would also be required. Impacts would be less than significant after compliance with flood-safety regulations.

The balance of the Planning Area is located within the Santa Monica Mountains Coastal Zone. The Santa Monica Mountains Coastal Zone consists of approximately 52,000 acres and is the unincorporated portion of the Santa Monica Mountains west of the City of Los Angeles, east of Ventura County, and south of the coastal zone boundary, excluding the City of Malibu. Small portions of the Santa Monica Mountains Coastal Zone are located within the 100-year floodplain including Topanga Creek, Malibu Creek, Las Virgenes Creek, and Arroyo Sequit Creek. However, development would not be allowed within the 100-year floodplain of these creeks. Therefore, impacts would be less than significant.

Proposed Land Use Designations within 100-Year Flood Zones in Remaining Planning Areas

Within the balance of the Project Area, only 319 acres are located in a 100-year flood zones. Of this 319 acres, only 21 acres are designated for development. However, development within 100-year flood zones would require improvements to flood control facilities, and issuance of Letters of Map Revision by FEMA showing changes to 100-year flood zones reflecting such improvements; or that the floor beams of the lowest floor of the structure are raised above the 100-year flood elevation. Flood insurance available through the

NFIP would also be required. Therefore, buildout of the Proposed Project would not place substantial numbers of people or structures at risk of flooding in 100-year flood zones, and impacts would be less than significant.

Impact 5.9-6: Parts of the Project Area are within dam inundation areas. [Threshold HYD-9]

Impact Analysis: Dam inundation areas span some unincorporated areas of all of the Planning Areas except the South Bay Planning Area; and parts of the Antelope – Fremont Valleys, Santa Clara, San Gabriel River, Santa Monica Bay, Los Angeles River, and San Pedro Channel Islands watersheds. Most of the dams listed above in Table 5.9-1 are flood control dams that do not impound substantial reservoirs for most of the year. After flood flows on an affected stream, water is released from a flood control dam at a controlled rate to create flood control capacity for the next storm.

Castaic Lake and Pyramid Lake are major water storage reservoirs; each is part of the State Water Project, and impound large reservoirs year-round.

All dams in Table 5.9-1 must meet safety requirements of, and are inspected annually by, the Division of Safety of Dams of the California Department of Water Resources.

About 74 percent of the net increase in population due to the Proposed Project would be in the Antelope Valley Planning Area. The dams in that Planning Area that have dam inundation areas spanning many square miles are Pyramid Lake in the Santa Clara Watershed; and San Gabriel Dam and Morris Dam in the San Gabriel River Watershed. The dam inundation areas for Fairmont Reservoir, Lake Palmdale, and Littlerock Reservoir each encompass limited areas directly below the respective dams. Thus, buildout of the existing Antelope Valley Area Plan would not subject large numbers of people to flood hazards from dam failure.

About half the remaining net increase in population due to the Proposed Project, and about one-third of the total employment growth due to the Proposed Project, would be in the Santa Clarita Valley Planning Area based on the existing Santa Clarita Valley Area Plan.

Net increases in population and employment in Planning Areas other than Antelope Valley and Santa Clarita Valley due to the Proposed Project would be relatively minor compared to the total numbers of residents and workers in those nine Planning Areas (in cities and unincorporated areas). The total net increases in population and employment in those nine Planning Areas would be about 205,000 residents and 120,000 workers. Considering the relatively small proportional net increases in numbers of residents and workers that would be put at potential risk from dam inundation; the operation of most of the dams as flood control dams, not impounding large reservoirs most of the time; and safety requirements and inspections by the Division of Safety of Dams, impacts would be less than significant.

Impact 5.9-7: Parts of the Project Area are subject to inundation by seiche, tsunami, or mudflow. [Threshold HYD-10]

Impact Analysis:

Seiche

Hazards from dam inundation resulting from seiches are addressed above in Impact 5.9-5.

Aboveground Water Tanks

The County would require risk assessments of flooding from failure of aboveground water storage tanks for projects downgrade from such storage tanks. Where such assessments determined that a proposed building would be affected by such flooding, either the building pad for the proposed development would be required to be raised above the flood elevation determined by the risk assessment; or improvements shall be made to the water tank to reduce the probability and/or consequence of tank failure, where the owner and/or manager of an aboveground storage tank is willing to allow such improvements. Impacts would be less than significant.

Tsunami

Santa Monica Mountains Planning Area

Most of the unincorporated areas within the coastal zone of the Santa Monica Mountains Planning Area that is in tsunami inundation areas is designated Parks in the Malibu Local Coastal Land Use Plan. Therefore, buildout of the Proposed Project would not subject substantial additional numbers of people or structures to tsunami flood hazards.

Westside Planning Area

Marina del Rey is largely built out except for one vacant lot, about 4.1 acres in area, at the northeast corner of Via Marina and Tahiti Way, and designated for hotel use in the Marina del Rey Coastal Land Use Plan. Any hotel developed on that lot would prepare and maintain a hotel evacuation plan conforming with Los Angeles County Fire Department requirements. Therefore, buildout of the Proposed Project would not subject substantially increased numbers of people or structures to tsunami flood hazards. Impacts would be less than significant.

Mudflow

Antelope Valley Planning Area

About 74 percent of the net increase in population due to the Proposed Project buildout would be in the Antelope Valley Planning Area. Canyons in the northern slopes of the San Gabriel Mountains, and alluvial fans at the foot of the San Gabriel Mountains, are susceptible to mudflows.[13] Such areas are mostly designated N-1 (Non-Urban; maximum density 0.5 residential unit per acre).

[13] *San Gabriel Mountains* here also includes north-facing slopes of the Northern Transverse Ranges from SR-14 to the west County boundary; the northwest edge of the San Gabriel Mountains is at Soledad Canyon (SR-14).

Santa Clarita Valley Planning Area

About half the remaining net increase in population due to the Proposed Project, and about one-third of the total employment growth due to the Proposed Project, would be in the Santa Clarita Valley Planning Area. Canyons and areas along the bases of mountain slopes are susceptible to mudflows. Much of such areas in the Santa Clarita Valley Planning Area are designated Open Space or Rural Land by the existing Santa Clarita Valley Area Plan; thus, most new development in this Planning Area would be directed away from such areas.

Geotechnical investigations would be required for the development of structures for human occupancy pursuant to the Proposed Project. Where such geotechnical investigations identified mudflow hazard areas in or next to the sites of proposed structures or other improvements, the geotechnical investigations would include recommendations for minimizing such hazards. Compliance with recommendations of geotechnical investigations is required under the County Grading Code, Title 26, Appendix J of the County Code. Impacts would be less than significant after compliance with recommendations in geotechnical investigations.

Other Planning Areas

Development in the remaining nine Planning Areas would largely be limited to redevelopment or reuse of existing developed land. Only about 16 percent of the population growth due to the Proposed Project, and 54 percent of the employment growth would occur in these nine Planning Areas. Major employment-generating land uses are not located in canyons, and are rarely located immediately below the bases of mountain slopes. Thus, redevelopments in these nine Planning Areas would not place substantial numbers of people at risk from mudflows.

5.9.5 Cumulative Impacts

Cumulative projects are those that would be developed in cities in Los Angeles County, along with buildout of the Proposed Project. Projections of numbers of housing units and jobs in unincorporated areas at 2035 and at buildout of the Proposed Project; and corresponding 2035 projections for cities in Los Angeles County and the entirety of Los Angeles County, are shown in Section 4.4, *Assumptions Regarding Cumulative Impacts*. Cumulative projects in Los Angeles County could cause significant cumulative impacts if they did any of the following:

- Substantially degrade water quality.
- Violate water-quality requirements of any of the four Regional Water Quality Control Boards having jurisdiction in various parts of Los Angeles County.
- Substantially interfere with groundwater recharge.
- Substantially change drainage patterns.
- Result in erosion, siltation, or flooding.

- Place housing, or structures changing flood flows, within 100-year flood zones.
- Result in flood hazards arising from dam inundation, seiche, tsunami, or mudflow.

As with projects in unincorporated areas, projects in cities in Los Angeles County would have the following environmental effects:

- Generate water pollutants.
- Increase impervious areas, thus decreasing groundwater recharge and increasing runoff rates and/or volumes.
- Some project sites would be in 100-year flood zones; there are approximately 109,971 acres (172 square miles) of 100-year flood zones in Los Angeles County, about 21 percent of which (36 square miles) is in cities.
- Some project sites would be in areas subject to flooding due to dam inundation, seiche, tsunami, and/or mudflow.

Projects in cities would be subject to similar requirements to those applicable to projects in unincorporated areas:

- Water Quality:
  - Project Construction:
    - Los Angeles RWQCB region: preparation and implementation of SWPPPs pursuant to the Statewide General Construction Permit
    - Lahontan RWQCB: Sections J110 and J111 of Title 26 of the County Code and Chapter 21 of the Los Angeles County Flood Control District Code
  - Project Design and Project Operation
    - Los Angeles RWQCB region: Order No. R4-2012-0175 ("MS4 Permit") issued by LARWQCB
    - Lahontan RWQCB region: Unauthorized waste discharges to Waters of the State are prohibited. Such waste discharges may be authorized under an Individual Permit.
- Impervious Areas, Groundwater Recharge, and Surface Runoff:
  - Los Angeles region: Order No. R4-2012-0175 ("MS4 Permit") issued by LARWQCB
  - Lahontan RWQCB: Sections J110 and J111 of Title 26 of the County Code and Chapter 21 of the County Flood Control District Code
- Developments in 100-Year Flood Zones

- Improvements to flood control facilities, and issuance of Letters of Map Revision by FEMA showing changes to 100-year flood zones reflecting such improvements, and/or
- The floor beams of the lowest floor of the structure be raised above the 100-year base flood elevation.

- Developments on Sites Subject to Mudflows
  - Compliance with recommendations in project geotechnical reports respecting minimizing mudflow hazards.

As cumulative projects would be required to comply with the above-listed water-quality, drainage, and flood-safety requirements, significant cumulative impacts would not occur. Therefore, the Proposed Project would not contribute to significant cumulative hydrology and water-quality impacts.

5.9.6 Existing Regulations and Standard Conditions

5.9.6.1 FEDERAL

- United States Code, Title 33, Sections 1251 et seq.: Clean Water Act
- United States Code Title 42, Sections 300f et seq.: Safe Drinking Water Act
- Code of Federal Regulations Title 40 Parts 122 et seq.: National Pollutant Discharge Elimination System (NPDES)

5.9.6.2 STATE

- California Water Code Sections 13000 et seq.: Porter-Cologne Water Quality Act

5.9.6.3 REGIONAL

- Order No. R4-2012-0175 ("MS4 Permit"), Los Angeles Regional Water Quality Control Board

5.9.6.4 COUNTY OF LOS ANGELES

- Low Impact Development (LID) Standards Manual, County Department of Public Works.
- County Code Sections:
  - **J110:** Slope Planting and Erosion Control
  - **J111:** National Pollutant Discharge Elimination System Compliance
- Los Angeles County Flood Control District Code: Chapter 21

5.9.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.9-1, 5.9-2, 5.9-3, 5.9-4, 5.9-6, and 5.9-7.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.9-5** Buildout of the Proposed Project would place housing or structures that would redirect flood flows in 100-year flood zones (Santa Clarita Valley Area Plan only).

5.9.8 Mitigation Measures

HYD-1 Prior to approval of a tentative map, future project applicants/developers shall provide proof to the Department of Public Works that all structures are located outside the 100-year floodplain.

5.9.9 Level of Significance After Mitigation

Compliance with existing regulatory programs and the mitigation measure identified above would reduce potential impacts to hydrology and water quality to a level that is less than significant.

5.9.10 References

Antelope Valley – East Kern Water Agency (AVEKWA). 2012, September 18. 2010 Urban Water Management Plan. http://www.avek.org/files/mnu_menu_1.pdf.

Della Valle, Mary (Environmental Scientist). 2014, March 21. Phone conversation. Lahontan Regional Water Quality Control Board.

Los Angeles County Department of Public Works. 2014, February. Low Impact Development Standards Manual.

Los Angeles County Fire Department (LACoFD). 2014, March 24. Help and FAQs. http://www.watchthewater.org/help.cfm.

5.10 LAND USE AND PLANNING

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts to land use in unincorporated areas of Los Angeles County (Project Area) from implementation of the Proposed Project. This section is based on the proposed land uses described in detail in Section 3, *Project Description*, shown in Figure 3-5, *Areas with Proposed Land Use Changes,* and DEIR Appendix C. The proposed goals and policies have been evaluated to determine their consistency with other relevant sections of the Proposed Project. In addition, compatibility of proposed land use changes with existing land uses in the surrounding area is discussed in this section. The Proposed Project is also evaluated for consistency with the Southern California Association of Governments (SCAG) 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Land use impacts can be direct or indirect. Direct impacts result in land use incompatibilities, the division of neighborhoods or communities, or interference with other land use plans, including habitat or wildlife conservation plans. This section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation, such as an increase in demand for public utilities or services, or increased traffic on roadways. Indirect impacts are addressed in other topical sections of this DEIR.

5.10.1 Environmental Setting

5.10.1.1 REGULATORY SETTING

State and regional laws, regulations, plans, or guidelines that are potentially applicable to the Proposed Project are summarized below.

State

State Planning Law and Complete Streets Act

State planning law (California Government Code Section 65300) requires every city and county in California to adopt a comprehensive, long-term general plan for the physical development of the jurisdiction and of any land outside its boundaries that, in the planning agency's judgment, bears relation to its planning (sphere of influence). A general plan should consist of an integrated and internally consistent set of goals and policies grouped by topic into a set of elements and guided by a jurisdiction-wide vision. State law requires that a general plan address seven elements or topics (land use, circulation, housing, conservation, open space, noise, and safety), but allows some discretion on the arrangement and content. Additionally, each of the specific and applicable requirements in the state planning law should be examined to determine if there are environmental issues within the community that the general plan should address, such as hazards or flooding.

Additionally, Assembly Bill 1358 (AB 1358), the California Complete Streets Act, became effective January 1, 2011. AB 1358 places the planning, designing, and building of complete streets into the larger planning framework of the general plan by requiring jurisdictions to amend their circulation elements to plan for multimodal transportation networks.

The Proposed Project's consistency with state planning law and the California Complete Streets Act is provided in the analysis for Impact 5.10-2.

Regional

Southern California Association of Governments

See Section 4.2.1.1, *Regional Planning Considerations*, for an introduction to SCAG, the 2012–2035 RTP/SCS, the Compass Growth Vision (CGV), and High Quality Transit Areas (HQTAs).

The Proposed Project is considered a project of regional significance according to the criteria in SCAG's Intergovernmental Review Procedures Handbook (November 1995) and Section 15206 of the California Environmental Quality Act (CEQA) Guidelines. As of April 2012, the adopted regional plan to be referring to for consistency analysis is the 2012–2035 RTP/SCS (Brandenburg 2013). The SCS part of the 2012 RTP/SCS is essentially consistent with the older CGV, and therefore a separate consistency analysis with the previous and advisory CGV policies is not required. The Proposed Project's consistency with the applicable RTP/SCS goals is analyzed in detail in Table 5.8-1, *Consistency with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy Goals*.

Unique to the SCAG region is the option for subregions to create their own SCS. The SCAG region includes the following subregions and subregional governmental bodies:

- Arroyo Verdugo
- City of Los Angeles
- Gateway Cities Council of Governments
- Los Virgenes Malibu Council of Governments
- North Los Angeles County
- San Fernando Valley Council of Governments
- San Gabriel Valley Council of Governments
- South Bay Cities Council of Governments
- Westside Cities Council of Governments

Of these nine subregions, only the Gateway Cities Council of Governments has created its own SCS. Data and policies in this subregional SCS are incorporated into the regional SCS.

Airport Land Use Plans

There are 15 public-use airports/airfields within the boundaries of the Los Angeles County Airport Land Use Commission's (ALUC's) jurisdiction, which is coterminous with Los Angeles County. Information for the 15 public-use airports/airfields, including applicable General Plan Planning Areas, is shown below in Table 5.10-1. Airports in Los Angeles County are also shown in Figure 7.4, *Airports/Airfields*, of the Proposed General Plan Update.

Table 5.10-1 Public-Use Airports/Airfields in Los Angeles County

Airport/Airfield	IATA Airport Code	Type	Location	Planning Area
Agua Dulce Airport	—	General Aviation	Unincorporated	Santa Clarita Valley
Bob Hope/Burbank Airport	BUR	Commercial	Burbank, Los Angeles	San Fernando Valley
Brackett Field Airport	POC	General Aviation	La Verne (Influence Area also includes portions of Pomona and San Dimas)	East San Gabriel Valley
Catalina Airport	CIB	General Aviation	Unincorporated	Coastal Islands
Compton/Woodley Airport	CPM	General Aviation	Compton	Gateway
El Monte Airport	EMT	General Aviation	El Monte	West San Gabriel Valley
General William J. Fox Airfield	WJF	General Aviation	Lancaster	Antelope Valley
Hawthorne Municipal/Jack Northrop Field Airport	HHR	General Aviation	Hawthorne	South Bay
Long Beach Municipal/Daugherty Field Airport	LGB	Commercial	Long Beach, Lakewood	Gateway
Los Angeles International Airport	LAX	Commercial	Los Angeles (Influence Area includes portions of El Segundo, Hawthorne, Inglewood, and unincorporated areas)	Westside
Palmdale Regional Airport	PMD	Commercial	Palmdale (Influence Area includes portions of Lancaster and unincorporated areas)	Antelope Valley
Santa Monica Municipal Airport	SMO	General Aviation	Santa Monica, Los Angeles	Westside
Torrance/Zamperini Field Airport	TOA	General Aviation	Torrance (Influence Area includes portion of Lomita)	South Bay
Van Nuys Airport	VNY	General Aviation	Los Angeles	San Fernando Valley
Whiteman Airport	WHP	General Aviation	Los Angeles	San Fernando Valley

Source: County of Los Angeles 2014.
IATA = International Air Transport Association

An Airport Land Use Compatibility Plan (ALUCP) is a planning document that contains policies for promoting safety and compatibility between airports and the communities that surround them. In 1991, the Los Angeles County ALUC adopted a comprehensive Los Angeles County ALUCP that covers all airports within its jurisdiction except for General William J. Fox Airfield in Lancaster, which has its own ALUCP. The ALUC has commenced the process to eventually develop individual ALUCPs for each airport in Los Angeles County. As shown in Table 5.10-1, only two airports in Los Angeles County are located within unincorporated areas: Agua Dulce Airport and Catalina Airport. Two additional airports, Los Angeles International Airport and Palmdale Regional Airport, have airport influence areas that include portions of the Project Area.

The Los Angeles County ALUCP provides guidance related to the placement of land uses near the aforementioned airports. These recommendations are based on a variety of factors, including those related to

noise, safety, and aircraft movement. In addition to the identification of land use compatibility issues, the ALUCP identifies notification/disclosure areas around each airport.

Habitat Conservation Plans

There are three habitat conservation plan areas within Los Angeles County: the Draft Desert Renewable Energy Conservation Plan Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP), the Palos Verdes Peninsula NCCP/HCP, and the West Mojave Plan HCP. These plans are summarized below and in Section 5.4, *Biological Resources*, of this DEIR.

Draft Desert Renewable Energy Conservation Plan NCCP/HCP

The Draft Desert Renewable Energy Conservation Plan NCCP/HCP covers approximately 22.5 million acres of federal and nonfederal lands in the California deserts and adjacent lands in Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego counties. It is a collaboration between state (e.g., California Energy Commission, CDFW) and federal (e.g., BLM, USFWS) agencies, with input from local governments, environmental organizations, industry, and other interested parties to provide effective protection, conservation, and management of desert ecosystems, while allowing for appropriate development and timely permitting of renewable energy projects.

Once approved, the NCCP/HCP would result in an efficient and effective biological mitigation and conservation program providing renewable energy project developers with binding, long-term endangered species permit assurances, while facilitating the review and approval of solar thermal, utility-scale solar photovoltaic, wind, and other forms of renewable energy and associated infrastructure, such as electric transmission lines necessary for renewable energy development within the Mojave and Colorado desert regions of California.

The Antelope Valley portion of Los Angeles County is within the plan area of the NCCP/HCP.

Palos Verdes Peninsula NCCP/HCP

The Palos Verdes Peninsula NCCP/HCP covers the entirety of the City of Rancho Palos Verdes, which is approximately 8,600 acres. The Rancho Palos Verdes City Council adopted the NCCP/HCP in 2004. The purpose of the plan is to allow future economic development in the City, while conserving natural wildlife habitat. The plan established a 1,514-acre habitat preserve through the dedication of City-owned open space parcels, acquisition of key privately owned parcels, and placement of habitat management conditions on other privately-owned parcels. The NCCP/HCP covers eight sensitive species, including eight plant species, two butterfly species, and two species of birds.

The Palos Verdes Peninsula NCCP/HCP is located in the South Bay Planning Area. However, it does not overlap with the Project Area and would not be affected by the Proposed Project.

West Mojave Plan HCP

The West Mojave Plan HCP covers approximately 9.3 million acres of the western portion of the Mojave Desert in California, including parts of Inyo, Los Angeles, Kern, and San Bernardino counties. The West Mojave Plan is an interagency HCP that was prepared by the Bureau of Land Management (BLM) in collaboration with federal and state agencies. The County is a participating agency for the HCP.

The purpose of the HCP is to conserve and protect the desert tortoise (Gopherus agassizii) and nearly 100 other sensitive plant and wildlife species as well as the habitats on which these species depend, while providing developers of public and private projects with a streamlined program for compliance with FESA and CESA by reducing delays and expenses, eliminating uncertainty, and applying the costs of compensation and mitigation equitably to all agencies and parties. The HCP allows incidental take of covered species and is consistent with the resource management plans adopted by each of the region's five military bases as well as with the Desert Tortoise Recovery Plan. The term of the WMP is 30 years.

The HCP was adopted by BLM in 2006; the U.S. Fish and Wildlife Service (USFWS) issued an amended Biological Opinion to the WMP in 2007. In Los Angeles County, the HCP plan area is coterminous with that of the Draft Desert Renewable Energy Conservation Plan and applies to the Antelope Valley.

5.10.1.2 EXISTING LAND USE

The subsections below summarize existing land uses within each Planning Area. Each subsection begins with a description of the overall Planning Area and then describes the existing land uses in the Project Area. Mention of "islands" refers to small groups of parcels in the Project Area that are surrounded, either partially or entirely, by a city or cities.

Antelope Valley Planning Area

The Antelope Valley Planning Area is located in the northern portion of Los Angeles County and is the largest Planning Area. It borders San Bernardino County to the east, Ventura County to the west, and Kern County to the north. The northern portion of the planning is dominated by the Antelope Valley, but also contains the Sierra Pelona Mountains and the southern end of the Tehachapi Mountains. The southern portion of the Planning Area consists of the San Gabriel Mountains, which is largely within the Angeles National Forest. The unincorporated portion of the Planning Area covers 1,800 square miles, or 44 percent of Los Angeles County. The cities in the Planning Area are the City of Lancaster and City of Palmdale.

The Planning Area is predominately rural and either undeveloped or occupied by government uses (such as National Forests). A smaller portion of land in this area is occupied by single-family uses, military facilities, farmland, and regional parks. The remaining land uses each occupy less than one percent each of total land area. They include multi-family residential, commercial, office, industrial, golf courses, schools, and miscellaneous uses.

Unincorporated areas in the Antelope Valley are primarily undeveloped, except near Lancaster and Palmdale. Rural residential communities in this portion of the community include those surrounded by Lancaster and Palmdale (Desert View Highlands, Quartz Hill, and White Fence Farms), adjacent to those cities (Leona

Valley and Little Rock) and a few that are more isolated (Antelope Acres, Gorman, Lake Los Angeles, Pearblossom). These areas include commercial and other nonresidential uses, but primarily contain parcels that are residential or undeveloped. Notable recreational uses in the Antelope Valley included the Antelope Valley California Poppy Preserve and Saddleback Butte State Park. The Antelope Valley Planning Area contains the majority of active agricultural land uses in Los Angeles County. A substantial portion of land in the northern portion of the Planning Area is used for military operations. Figure 6.2 of the Land Use Element in the Proposed General Plan Update identifies Military Installations and Operation Areas in Los Angeles County, which are primarily located in the Antelope Valley Planning Area. In particular, portions of Edwards Air Force Base in Los Angeles County are located within the Project Area.

A vast majority of unincorporated areas in the San Gabriel Mountains is within the Angeles National Forest and is undeveloped.

Coastal Islands Planning Area

This Planning Area includes San Clemente Island and Santa Catalina Island. San Clemente Island is owned and operated by the U.S. Navy, and the Navy regulates all land use activities on the island. However, the island is almost entirely undeveloped.

Santa Catalina Island is the only significantly inhabited island near the California coast. Outside of the City of Avalon, the island is largely undeveloped. A notable exception is the community of Two Harbors, which contains minor recreational and residential land uses.

East San Gabriel Valley Planning Area

This Planning Area includes the eastern San Gabriel Valley, along with adjacent areas to the south in the Puente Hills and to the north at the southern edge of the San Gabriel Mountains. It borders San Bernardino County to the east and Orange County to the south. Most of the Planning Area consists of cities; however, it also includes large unincorporated islands. The largest of these are Hacienda Heights and Rowland Heights. Other major County islands include those that surround the City of Covina.

The Eastern San Gabriel Valley Planning Area includes the following unincorporated islands:

- Avocado Heights
- Charter Oak
- Citrus/Covina Islands
- East Azusa Islands
- East Irwindale
- East San Dimas
- Glendora Islands
- Hacienda Heights
- North Claremont
- Northeast La Verne
- Northeast San Dimas Islands
- North Pomona
- Rowland Heights
- South Diamond Bar
- South San Jose Hills
- South Walnut
- Valinda
- Walnut Islands
- West Claremont
- West Puente Valley
- West San Dimas

Unincorporated areas contain a wide range of urban land uses. Hacienda Heights and Rowland Heights, in particular, are dense, populous communities. Although these communities are largely suburban in character and dominated by single-family residential uses, they also contain concentrations of multifamily, commercial, industrial, institutional, and landfill uses.

Unincorporated islands in the central portion of the Planning Area include 11 large groups of parcels. These predominantly feature single-family residential uses. Notable exceptions include major transportation corridors that feature commercial uses (Arrow Highway and Grand Avenue) or commercial and industrial uses (Valley Boulevard). Major institutional uses within unincorporated areas of the Planning Area include California Polytechnic State University, Pomona, Forest Lawn Memorial Park, and Rose Hills Memorial Park and Cemetery.

Unincorporated areas in the northern portion of the Planning Area are generally located adjacent to the San Gabriel Mountains in the Angeles National Forest and are primarily undeveloped.

Gateway Planning Area

This Planning Area is located in the southeastern portion of Los Angeles County and is almost entirely located within the Los Angeles Basin. The eastern border of the Planning Area is adjacent to Orange County. The region is almost entirely built out and has a large percentage of industrial land compared to other areas of Los Angeles County.

This Planning Area includes the following unincorporated islands:

- Bandini Islands
- Cerritos Islands
- La Habra Heights Islands
- Long Beach Island
- Lynwood Island
- Rancho Dominguez
- South Whittier-Sunshine Acres
- West Whittier-Los Nietos

Unincorporated areas in this Planning Area are located within three large clusters. Two communities, South Whittier-Sunshine Acres and West Whittier-Los Nietos, are large suburban communities with a wide range of land uses, including residential, commercial, industrial, and recreational uses. Their pattern of land uses is consistent with that of surrounding cities, which include City of Downey, City of La Mirada, City of Norwalk, City of Pico Rivera, and City of Whittier. Although these areas are predominantly single-family residential neighborhoods, they also feature scattered multifamily and nonresidential uses. The community of Rancho Dominguez south of the City of Compton is the third major unincorporated area in this Planning Area. Rancho Dominguez is a heavily urbanized, built-out community that is predominantly industrial except for two, large, mobile-home communities. The Gateway Planning Area also contains a few small County islands that are either dominated by single-family residential uses (Cerritos Islands, La Habra Heights Islands, and Long Beach Island) or are mostly undeveloped (Lynwood Island).

Metro Planning Area

The Metro Planning Area is located in the geographic center of Los Angeles County. It contains Downtown Los Angeles, industrial areas, and many of the City of Los Angeles' most densely populated neighborhoods.

Like the Gateway Planning Area, it is almost entirely built out. Most of the Planning Area is occupied by the City of Los Angeles.

Unincorporated islands in the Planning Area include:

- East Los Angeles
- East Rancho Dominguez
- Florence-Firestone
- Walnut Park
- West Athens-Westmont
- West Rancho Dominguez-Victoria
- Willowbrook

Unincorporated areas of the Metro Planning Area are located in four, large concentrations. West of I-710, it is dominated by multifamily residential uses; east of I-710, it is dominated by a mixture of single-family and multifamily residential uses. These residential uses are divided by commercial corridors. Major streets, including Atlantic Boulevard, Cesar E. Chavez Boulevard, Olympic Boulevard, and Whittier Boulevard are generally fronted by commercial uses on both sides. Other major land uses in the Planning Area include industrial uses north of I-10, a cluster of cemeteries near the center of the Planning Area (including Beth Israel, Calvary Catholic, Chinese, Mount Zion, and Serbian cemeteries and Home of Peace Memorial Park), and community parks (including Belvedere and East Los Angeles County parks).

The other three unincorporated areas are located in the middle of the Los Angeles Basin. The first of these contains the Florence-Firestone and Walnut Park communities. Its predominant land use is multifamily residential land uses. Individual residential neighborhoods are separated by major arterial street corridors that contain commercial and/or industrial uses. Corridors featuring commercial land uses include Central Avenue, Compton Avenue, Firestone Boulevard, and Florence Avenue. Industrial uses are generally located adjacent to Alameda Street, Slauson Avenue, and the Metro Blue Line right-of-way, which traverses the community in a north-south direction. The community features scattered park, public, and single-family residential uses. Adjacent to the Florence-Firestone community is Walnut Park. This unincorporated community is dominated by single-family residential uses with scattered multifamily residential uses throughout. Notable exceptions to this land use pattern are commercial uses along Pacific Boulevard and Sevilla Avenue.

East Rancho Dominguez, located east of the City of Compton, is built out. It consists of single-family and multifamily residential neighborhoods that are bisected from east to west by Atlantic Avenue and from north to south by Compton Boulevard. Commercial uses are located along these two streets. The adjacent West Rancho Dominguez-Victoria and Willowbrook communities are south of I-105 and east of I-110. The City of Los Angeles neighborhood of Watts is to the north and the City of Compton is directly to the south and southeast. The southern and western portions of the West Rancho Dominguez-Victoria community consist mainly of industrial uses. The northern portion of the community is mainly single-family residential uses except for commercial uses at major intersections and scattered multifamily residential and public uses. Willowbrook is largely residential, with a mixture of single-family and multifamily residential uses. Notable exceptions include the Martin Luther King, Jr. Medical Center, retail commercial uses located diagonally across 119th Street and Wilmington Avenue from the medical center, and industrial uses oriented to Alameda Street and the adjacent railroad right-of-way.

The fourth unincorporated area is the West Athens-Westmont community. This community primarily consists of residential uses. The northeast quadrant consists almost entirely of multifamily residential land uses and the remainder of the community is dominated by single-family residential uses. Notable exceptions include the Chester Washington Golf Course south of I-105 and the campus of Los Angeles Southwest Community College north of I-105. The community also includes scattered parks and other public uses.

San Fernando Valley Planning Area

The San Fernando Valley Planning Area is south of the Santa Clarita Valley, north the Santa Monica Mountains, and west of the San Gabriel Mountains. The Ventura County line is the western border of the Planning Area. Most of the Planning Area consists of the following cities: the City of Burbank, City of Glendale, City of La Cañada Flintridge, City of Los Angeles, and City of San Fernando. Only a small portion of the planning area is unincorporated. These are areas located at the periphery of the San Fernando Valley Planning Area.

This Planning Area includes the following unincorporated areas:

- Kagel Canyon
- La Crescenta-Montrose
- Lopez Canyon
- Oat Mountain
- Sylmar Island
- Twin Lakes
- University City
- West Chatsworth
- West Hills

These communities are primarily low-density, single-family residential communities, with the exception of the Universal Studios Specific Plan area. In the western portion of the valley, the communities of Oat Mountain, Twin Lakes, West Chatsworth, and West Hills largely consist of rural residential uses and undeveloped open space. Oat Mountain also includes a large undeveloped area used for oil extraction and the Sunshine Canyon Landfill. On the northern edge of the valley, the Kagel Canyon, Lopez Island, and Sylmar Island communities are primarily undeveloped hillsides and canyons, but include scattered parcels currently used for residential, commercial, or public uses. The most developed community in the Planning Area is La Crescenta-Montrose. It primarily consists of single-family residential uses, but also includes commercial uses along Foothill Boulevard and multifamily uses along Montrose Avenue.

Santa Clarita Valley Planning Area

The Santa Clarita Valley Planning Area is the second largest after the Antelope Valley Planning Area. It includes the City of Santa Clarita, the residential communities at the city's periphery, and mountainous areas surrounding the valley.

Although most of the unincorporated area in the Planning Area consists of vacant mountainous areas, unincorporated areas near the City of Santa Clarita include a wide variety of land uses. The wide valleys east of the City of Santa Clarita include the communities such as Agua Dulce. These areas consist primarily of single-family residential and farming uses. However, parcels used for industrial and utility uses are scattered throughout these areas. Areas directly north and west of the City of Santa Clarita feature a range of urbanized land uses, including single-family uses, major commercial retail centers along I-5 (including Six

Flags Magic Mountain), utilities, and a large concentration of industrial uses west of I-5 and north of SR-126. Rural canyon neighborhoods such as Val Verde are primarily single-family uses surrounded by mountainous undeveloped land.

Santa Monica Mountains Planning Area

The Santa Monica Mountains Planning Area covers the Santa Monica Mountains, the Pacific coastline to the south, and the Conejo Valley to the north. To the north and west, the planning area borders Ventura County. To the east, it borders the San Fernando Valley and Westside Planning Areas. The Conejo Valley and adjacent areas are mostly cities, including the City of Agoura Hills, City of Calabasas, City of Hidden Hills, and City of Westlake Village. The coastal portion of the Planning Area is largely within the City of Malibu. However, the majority of the Planning Area is unincorporated.

Most land in the unincorporated areas of the Santa Monica Mountains Planning Area is undeveloped, including land preserved as the Santa Monica Mountains National Recreation Area and areas within Leo Carrillo, Malibu Creek, Point Mugu, and Topanga State Parks. Existing land uses also include scattered single-family residential and small-scale agricultural uses. These land uses are not heavily concentrated; rather, they are widely distributed and generally located in the small canyons and valleys that punctuate the mountains that cover most of the Planning Area. Notable exceptions include Calabasas Landfill near the City of Agoura Hills, Pepperdine University near the City of Malibu, and commercial uses along US Highway 101 north across the freeway from the City of Calabasas.

South Bay Planning Area

The South Bay Planning Area covers the southwestern portion of the Los Angeles Basin, the Palos Verdes Peninsula, and the Port of Los Angeles. The Planning Area consists mostly of cities (City of El Segundo, City of Gardena, City of Hermosa Beach, City of Inglewood, City of Lawndale, City of Lomita, City of Manhattan Beach, City of Palos Verdes Estates, City of Rancho Palos Verdes, City of Redondo Beach, City Rolling Hills, City of Rolling Hills Estates, and City of Torrance). The Planning Area also includes the San Pedro and Wilmington neighborhoods of the City of Los Angeles.

Unincorporated islands of this Planning Area include:

- Alondra Park
- Del Aire
- Hawthorne Island
- La Rambla
- Lennox
- West Carson
- Westfield

In the northern portion of the Planning Area, the unincorporated areas are generally built out and dominated by residential uses. The Lennox community is primarily low-rise multifamily residential uses except for industrial uses adjacent to LAX and commercial uses along Hawthorne Boulevard and Inglewood Avenue. Hawthorne Island is a similarly built-out neighborhood dominated by low-rise multifamily residential uses. Spanning both sides of I-405 southeast of LAX, the Del Aire community is primarily single-family residential

uses. A notable exception is the Pacific Concourse commercial center directly southwest of the I-105/I-405 interchange, which includes commercial and multifamily residential uses.

In the middle portion of the Planning Area, Alondra Park has three distinct land use patterns. North of Marine Avenue, it is consists primarily of multifamily apartment complexes. Between Marine Avenue and Manhattan Beach Boulevard, it consists almost entirely of single-family residential uses. South of Manhattan Beach Boulevard, it features recreational uses (Alondra Golf Course and Alondra Park) and public uses (El Camino Community College).

South of I-405 and west of I-110 is the largest unincorporated area in the South Bay Planning Area. West Carson contains a wide range of land uses, including single-family, multifamily, commercial, and industrial uses. Commercial and industrial uses are largely concentrated along major commercial corridors. A large concentration of medical uses, including Harbor-UCLA Medical Center, is located near the center of the community.

The two final unincorporated areas of the South Bay Planning Area are located on the Palos Verdes Peninsula. La Rambla is a built out neighborhood adjacent to the San Pedro neighborhood of the City of Los Angeles. It contains a range of single-family, multifamily residential, commercial, and public uses. Westfield is located between the City of Rolling Hills and City of Rolling Hills Estates. It contains single-family residential uses, a private school campus (Chadwick School), the South Coast Botanic Garden, and a multifamily residential complex.

West San Gabriel Valley Planning Area

The West San Gabriel Valley Planning Area covers the western San Gabriel Valley. The Metro and San Fernando Valley Planning Areas are to the west and the East San Gabriel Valley Planning Area is located to the east. Like the latter, it is almost entirely built out and mostly comprised of cities. The Planning Area features four large concentrations of unincorporated parcels. The unincorporated islands include:

- Altadena
- East Pasadena-East San Gabriel
- Kinneloa Mesa
- South Monrovia Islands
- South San Gabriel-San Pasqual
- Whittier Narrows

The first large unincorporated area in the Planning Area is Altadena, which is north of the City of Pasadena. It is an older suburban community of nearly nine square miles. The community is predominantly comprised of single-family residential neighborhoods, but also includes vacant portions of the lower San Gabriel Mountains. Commercial uses are concentrated along Lake, Lincoln, and Fair Oaks Avenues. The community also features scattered parcels used for multifamily residential, commercial, and public uses. East of Altadena is Kinneloa Mesa, which features mostly single-family residential uses and vacant hillside open space.

In the central portion of the Planning Area are two, large unincorporated areas that are nearly built out. The South Monrovia Islands are largely single-family residential uses except for a commercial corridor along Live Oak Avenue. To the west is the community of East Pasadena-East San Gabriel. This area is largely single-

family residential neighborhoods except for commercial corridors along Rosemead and Colorado Boulevards. Utility uses also traverse the community in the form of overhead electric lines.

Last are the adjacent communities of South San Gabriel and Whittier Narrows. South San Gabriel is dominated by single-family residential uses, but also features scattered multifamily residential, commercial, and utility uses. Whittier Narrows is primarily recreational and vacant open space areas. These include Whittier Narrows Golf Course, the Alhambra Wash, and Whittier Narrows Natural Area.

Westside Planning Area

The Westside Planning Area is located between Downtown Los Angeles and the Pacific Coast. It is heavily urbanized and includes many of Los Angeles' densest neighborhoods. It also includes the following cities: City of Beverly Hills, City of Culver City, City of Santa Monica, and City of West Hollywood. The northern portion of the Planning Area consists of the eastern Santa Monica Mountains, which are almost entirely within the City of Los Angeles. The Westside Planning Area also includes Los Angeles International Airport (LAX).

This Planning Area includes the following unincorporated islands:

- Ballona Wetlands
- Franklin Canyon
- Gilmore Island
- Ladera Heights-Viewpark-Windsor Hills
- Marina del Rey
- West Fox Hills
- West Los Angeles (Sawtelle Veteran's Administration Center)

Although there are few unincorporated areas in the Westside Planning Area, they are widely dispersed and contain a diverse range of land uses. The largest unincorporated area in the Planning Area is located at it southern boundary, directly south of the City of Culver City. Commonly referred to as the Baldwin Hills, it is centered on the recreational uses of Kenneth Hahn State Recreational Area and includes the communities of Ladera Heights and Viewpark/Windsor Hills. Ladera Heights and Viewpark/Windsor Hills consist primarily of single-family residential uses. However, commercial and multifamily residential uses are oriented along Slauson Avenue and the major arterial connecting it and downtown Inglewood to the south. Major institutional uses are located in the northwest portion of the Baldwin Hills: Holy Cross Catholic Cemetery and West Los Angeles College. Approximately one mile to the west, a small unincorporated island includes single family and public uses.

The second largest unincorporated area in the Westside Planning Area consists of Marina del Rey and a portion of the adjacent Ballona Wetlands. Marina del Rey is one of the largest, manmade, small-boat harbors in the country, with 19 marinas that have room for roughly 5,300 boats.[1] This area contains recreational, residential, and commercial uses. Lastly, this Planning Area contains an unincorporated area bisected by I-405

and Wilshire Boulevard that is dominated by government uses. It contains the Veteran's Administration Medical Center, Los Angeles, and Los Angeles National Cemetery.

5.10.2 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For purposes of this EIR, implementation of the Proposed Project may have a significant adverse impact on land use and planning if it would result in any of the following:

LU-1 Physically divide an established community.

LU-2 Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

LU-3 Conflict with any applicable habitat conservation plan or natural community conservation plan.

5.10.3 Relevant General Plan Goals and Policies

The following is a list of the goals and policies of the Proposed General Plan Update that would reduce adverse effects concerning land use and planning.

Land Use Element

Goal LU 1: A General Plan that serves as the constitution for development, and a Land Use Policy Map that implements the General Plan's Goals, Policies and Guiding Principles.

- **Policy LU 1.1:** Support comprehensive updates to the General Plan, area plans, community plans, coastal land use plans and specific plans.
- **Policy LU 1.2:** Discourage project-specific amendments to the text of the General Plan, including but not limited to the Guiding Principles, Goals, and Policies.
- **Policy LU 1.3:** In the review of project-specific amendments to the General Plan, ensure that they support the Guiding Principles.
- **Policy LU 1.4:** In the review of a project-specific amendment(s) to the General Plan, ensure that the project-specific amendment(s):
  - Is consistent with the goals and policies of the General Plan;
  - Shall benefit the public interest and is necessary to realize an unmet local or regional need.
- **Policy LU 1.5:** In the review of a project-specific amendment(s) to convert OS-C designated lands to other land use designations, ensure that the project-specific amendment(s) does not contribute to the

overall loss of open space that protects water quality, provides natural habitats, and contributes to improved air quality.

- **Policy LU 1.6:** In the review of a project-specific amendment(s) to convert lands within the EPD Overlay to non-industrial land use designations, ensure that the project-specific amendment(s):
  - Is located on a parcel that adjoins a parcel with a comparable use, at a comparable scale and intensity;
  - Will not negatively impact the productivity of neighboring industrial activities;
  - Is necessary to promote the economic value and the long-term viability of the site; and
  - Will not subject future residents to potential noxious impacts, such as noise, odors or dust or pose significant health and safety risks.
- **Policy LU 1.7:** In the review of a project-specific amendment(s) to convert lands within the ARAs, ensure that the project-specific amendment(s):
  - Is located on a parcel that adjoins another parcel with a comparable use, at a comparable scale and intensity; and
  - Will not negatively impact the productivity of neighboring agricultural activities.
- **Policy LU 1.8:** Limit the amendment of each mandatory element of the General Plan to four times per calendar year, unless otherwise specified in Section 65358 of the California Government Code.
- **Policy LU 1.9:** Allow adjustments to the General Plan Land Use Policy Map to follow an adjusted Highway Plan alignment without a General Plan amendment, when the following findings can be met:
  - The adjustment is necessitated by an adjusted Highway Plan alignment that was approved by the Los Angeles County Interdepartmental Engineering Committee (IEC) in a duly noticed public meeting;
  - The adjustment maintains the basic relationship between land use types; and
  - The adjustment is consistent with the General Plan.
- **Policy LU 1.10:** Require the intensity, density, and uses allowed in a new specific plan to be determined using the General Plan, including the Land Use Policy Map and Land Use Legend.
- **Policy LU 1.11:** Require a General Plan amendment for any deviation from the intensities, densities, and uses allowed by the General Plan (to apply the appropriate designation from the General Plan Land Use Legend), unless allowances for flexibility are specified in the specific plan.
- **Policy LU 1.12:** Require development regulations and zoning for new specific plans to be consistent with their corresponding General Plan land use designation.

- **Policy LU 1.13:** Allow specific plans to include implementation procedures for flexibility, such as development phasing, and redistribution of intensities and uses, as appropriate.

- **Policy LU 1.14:** Require a specific plan amendment for any deviation from the procedures and policies established by a specific plan.

- **Policy LU 1.15:** For existing specific plans, which are depicted with an "SP" land use designation, the General Plan Land Use Policy Map shall be amended as part of a comprehensive area planning effort, to identify existing specific plans using the Specific Plan Overlay.

Goal LU 2: Community-based planning efforts that implement the General Plan and incorporate public input, and regional and community level collaboration.

- **Policy LU 2.1:** Ensure that all community-based plans are consistent with the General Plan.

- **Policy LU 2.2:** Ensure broad outreach, public participation, and opportunities for community input in community-based planning efforts.

- **Policy LU 2.3:** Consult with and ensure that applicable County departments, adjacent cities and other stakeholders are involved in community-based planning efforts.

- **Policy LU 2.4:** Coordinate with other local jurisdictions to develop compatible land uses.

- **Policy LU 2.5:** Support and actively participate in inter-jurisdictional and regional planning efforts to help inform community-based planning efforts.

- **Policy LU 2.7:** Set priorities for Planning Area-specific issues, including transportation, housing, open space, and public safety as part of community-based planning efforts.

- **Policy LU 2.8:** Coordinate with the Los Angeles County Department of Public Works and other infrastructure providers to analyze and assess infrastructure improvements that are necessary for plan implementation.

- **Policy LU 2.9:** Utilize the General Plan Land Use Legend and the Hazard, Environmental and Resource Constraints Model to inform the development of land use policy maps.

- **Policy LU 2.10:** Ensure consistency between land use policy and zoning by undergoing a comprehensive zoning consistency analysis that includes zoning map changes and Zoning Code amendments, as needed.

- **Policy LU 2.11:** Update community-based plans on a regular basis.

- **Policy LU 2.12:** Community-based plans and existing specific plans shall be updated, as needed, to reflect the General Plan Land Use Legend as part of a comprehensive area planning effort. An exception

to this is for coastal land use plans, which are subject to the California Coastal Act and to review by the California Coastal Commission.

Goal LU 3: A development pattern that discourages sprawl, and protects and conserves areas with natural resources and SEAs.

- **Policy LU 3.1:** Encourage the protection and conservation of areas with natural resources, and SEAs.
- **Policy LU 3.2:** Discourage development in areas with high environmental resources and/or severe safety hazards.
- **Policy LU 3.3:** Discourage development in undeveloped areas where infrastructure and public services do not exist, or where no major infrastructure projects are planned, such as state and/or federal highways.

Goal LU 4: Infill development and redevelopment that strengthens and enhances communities.

- **Policy LU 4.1:** Encourage infill development in urban and suburban areas on vacant, underutilized, and/or brownfield sites.
- **Policy LU 4.2:** Encourage the adaptive reuse of underutilized structures and the revitalization of older, economically distressed neighborhoods.
- **Policy LU 4.3:** Encourage transit-oriented development in urban and suburban areas with the appropriate residential density along transit corridors and within station areas.
- **Policy LU 4.4:** Encourage mixed use development along major commercial corridors in urban and suburban areas.

Goal LU 5: Vibrant, livable and healthy communities with a mix of land uses, services and amenities.

- **Policy LU 5.1:** Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.
- **Policy LU 5.2:** Encourage a diversity of commercial and retail services, and public facilities at various scales to meet regional and local needs.
- **Policy LU 5.3:** Support a mix of land uses that promote bicycling and walking, and reduce VMTs.
- **Policy LU 5.4:** Encourage community-serving uses, such as early care and education facilities, grocery stores, farmers markets, restaurants, and banks to locate near employment centers.
- **Policy LU 5.5:** Ensure that all households have access to a sufficient supply of quality early care and education and supervised school-age enrichment options for children from birth to age 13.

- **Policy LU 5.6:** Reduce regulatory and other barriers to early care and education facilities.
- **Policy LU 5.7:** Direct resources to areas that lack amenities, such as transit, clean air, grocery stores, bikeways, parks, and other components of a healthy community.
- **Policy LU 5.8:** Encourage farmers markets, community gardens, and proximity to other local food sources that provide access to healthful and nutritious foods.
- **Policy LU 5.9:** Preserve key industrially designated land for intensive, employment-based uses.
- **Policy LU 5.10:** Encourage employment opportunities and housing to be developed in proximity to one another.

Goal LU 6: Protected rural communities characterized by living in a non-urban or agricultural environment at low densities without typical urban services.

- **Policy LU 6.1:** Protect rural communities from the encroachment of incompatible development that conflict with existing land use patterns and service standards.
- **Policy LU 6.2:** Encourage land uses and developments that are compatible with the natural environment and landscape.
- **Policy LU 6.3:** Encourage low density and low intensity development in rural areas that is compatible with rural community character, preserves open space, and conserves agricultural land.

Goal LU 7: Compatible land uses that complement neighborhood character and the natural environment.

- **Policy LU 7.1:** Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.
- **Policy LU 7.2:** Protect industrial parks and districts from incompatible uses.
- **Policy LU 7.3:** Protect public and semi-public facilities, including but not limited to major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.
- **Policy LU 7.4:** Ensure land use compatibility in areas adjacent to military installations and where military operations, testing, and training activities occur.
- **Policy LU 7.5:** Ensure land use compatibility in areas adjacent to mineral resources where mineral extraction and production, as well as activities related to the drilling for and production of oil and gas, may occur.

- **Policy LU 7.6:** Ensure airport operation compatibility with adjacent land uses through airport land use plans.

Goal LU 8: Land uses that are compatible with military operations and military readiness, and end enhance for military personnel and persons on the ground.

- **Policy LU 8.1:** Facilitate the early exchange of project-related information that is pertinent to military operations with the military for proposed actions within MOAs and within 1,000 ft. of a military installation.

- **Policy LU 8.2:** Evaluate the potential impact of new structures within MOAs to ensure the safety of the residents on the ground and continued viability of military operations within the MOAs. In the review of development within MOAs, consider the following:

    - Uses that produce electromagnetic and frequency spectrum interference, which could impact military operations;

    - Uses that release into the air any substance such as steam, dust and smoke, which impair pilot visibility;

    - Uses that produce light emissions, glare or distracting lights, which could interfere with pilot vision or be mistaken for airfield lighting; and

    - Uses that physically obstruct any portion of the MOA due to relative height above ground level.

Goal LU 9: Land use patterns and community infrastructure that promote health and wellness.

- **Policy LU 9.2:** Encourage patterns of development that promote physical activity.

- **Policy LU 9.3:** Encourage patterns of development that increase convenient, safe access to healthy foods, especially fresh produce, in all neighborhoods.

Goal LU 10: Well-designed and healthy places that support a diversity of built environments.

- **Policy LU 10.2:** Design development adjacent to natural features in a sensitive manner to complement the natural environment.

- **Policy LU 10.4:** Promote environmentally sensitive and sustainable design.

- **Policy LU 10.6:** Encourage pedestrian activity through the following:

    - Designing the main entrance of buildings to front the street;
    - Incorporating landscaping features;
    - Limiting masonry walls and parking lots along commercial corridors and other public spaces;

- Incorporating street furniture, signage, and public events and activities; and
- Using wayfinding strategies to highlight community points of interest.

- **Policy LU 10.7:** Promote public spaces, such as plazas that enhance the pedestrian environment, and, where appropriate, continuity along commercial corridors with active transportation activities.

- **Policy LU 10.9:** Encourage land uses and design that stimulate positive and productive human relations and foster the achievement of community goals.

- **Policy LU 10.10:** Promote architecturally distinctive buildings and focal points at prominent locations, such as major commercial intersections and near transit stations or open spaces.

- **Policy LU 10.11:** Facilitate the use of streets as public space for activities that promote civic engagement, such as farmers markets, parades, etc.

- **Policy LU 10.12:** Discourage gated entry subdivisions ("gated communities") to improve neighborhood access and circulation, improve emergency access, and encourage social cohesion.

- **Policy LU 10.13:** Discourage flag lot subdivisions unless designed to be compatible with the existing neighborhood character.

Goal LU 11: Development that utilizes sustainable design techniques.

- **Policy LU 11.1:** Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.

- **Policy LU 11.2:** Support the design of developments that provide substantial tree canopy cover, and utilize light colored paving materials and energy-efficient roofing materials to reduce the urban heat island effect.

- **Policy LU 11.3:** Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.

- **Policy LU 11.4:** Encourage subdivisions to utilize sustainable design practices, such as maximizing energy efficiency through lot configuration; preventing habitat fragmentation; promoting storm water retention; promoting the localized production of energy; promoting water conservation and reuse; maximizing interconnectivity; and utilizing public transit.

- **Policy LU 11.5:** Prohibit the use of private yards as required open space within subdivisions, unless such area includes active recreation or outdoor activity areas dedicated for common and/or public use.

- **Policy LU 11.6:** Ensure that subdivisions in VHFHSZs site open space to minimize fire risks, as feasible.

- **Policy LU 11.7:** Encourage the use of design techniques to conserve natural resource areas.

- **Policy LU 11.8:** Encourage sustainable subdivisions that meet green neighborhood standards, such as Leadership in Energy and Environmental Design–Neighborhood Development (LEED-ND).

Mobility Element

Goal M 1: Street designs that incorporate the needs of all users.

- **Policy M 1.1:** Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.

- **Policy M 1.2:** Ensure that streets are safe for sensitive users, such as seniors and children.

- **Policy M 1.3:** Utilize industry standard rating systems to assess sustainability and effectiveness of street systems for all users.

Goal M 2: Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.

- **Policy M 2.1:** Provide transportation corridors/networks that accommodate pedestrians, equestrians and bicyclists, and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.

- **Policy M 2.2:** Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following street designs, whenever appropriate and feasible:

    - Lane width reductions to 10 or 11 feet in low speed environments with a low volume of heavy vehicles.

    - Wider lanes may still be required for lanes adjacent to the curb, and where buses and trucks are expected.

    - Low-speed designs.

    - Access management practices developed through a community-driven process.

    - Back in angle parking at locations that have available roadway width and bike lanes, where appropriate.

- **Policy M 2.3:** Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following intersection designs, whenever appropriate and feasible:

- Right angle intersections that reduce intersection skew.
- Smaller corner radii to reduce crossing distances and slow turning vehicles.
- Traffic calming measures, such as bulb-outs, sharrows, medians, roundabouts, and narrowing or reducing the number of lanes (road diets) on streets.
- Crossings at all legs of an intersection.
- Shorter crossing distances for pedestrians.
- Right-turn channelization islands. Sharper angles of slip lanes may also be utilized.
- Signal progression at speeds that support the target speed of the corridor.
- Pedestrian push buttons when pedestrian signals are not automatically recalled.
- Walk interval on recall for short crossings.
- Left-turn phasing.
- Prohibit right turn on red.
- Signs to remind drivers to yield to pedestrians.

- **Policy M 2.4:** Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible:
  - Designs that limit dead-end streets and dead-end sidewalks.
  - Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops.
  - Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA).
  - Perpendicular curb ramps at locations where it is feasible.
  - Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e. near senior housing, rehabilitation centers, etc.)
  - Approved devices to extend the pedestrian clearance times at signalized intersections.
  - Accessible Pedestrian Signals (APS) at signalized intersections.
  - Pedestrian crossings at signalized intersections without double or triple left or right turn lanes.

- Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections.
- Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes.
- Advance stop lines at signalized intersections.
- Pedestrian Hybrid Beacons.
- Medians or crossing islands to divide long crossings.
- High visibility crosswalks.
- Pedestrian signage.
- Advanced yield lines for uncontrolled crosswalks.
- Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic.
- Safe and convenient crossing locations at transit stations and transit stops located at safe intersections.

- **Policy M 2.5:** Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible:
  - Bicycle signal heads at intersections.
  - Bicycle signal detection at all signalized intersections.
  - Wayfinding signage.
  - Road diet techniques, such as lane narrowing, lane removal, and parking removal/restriction.
  - Appropriate lighting on all bikeways, including those in rural areas.
  - Designs, or other similar features, such as: shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.
- **Policy M 2.6:** Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible.
- **Policy M 2.7:** Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.

- **Policy M 2.8:** Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.

- **Policy M 2.9:** Encourage the planting of trees along streets and other forms of landscaping to enliven streetscapes by blending natural features with built features.

- **Policy M 2.10:** Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.

- **Policy M 2.11:** In urban and suburban areas, promote the continuity of streets and sidewalks through design features, such as limiting mid-block curb cuts, encouraging access through side streets or alleys, and promoting shorter block lengths.

Goal M 3: Streets that incorporate innovative designs.

- **Policy M 3.1:** Facilitate safe roadway designs that protect users, preserve state and federal funding, and provide reasonable protection from liability.

- **Policy M 3.2:** Consider innovative designs when part of an accepted standard, or when properly vetted through an appropriate engineering/design review, in compliance with all state and federal laws.

- **Policy M 3.3:** Complete the following studies prior to the implementation of innovative design concepts:

    - An analysis of the current and future context of the community and neighborhood in which they are proposed;

    - A balanced assessment of the needs of all users and travel modes (i.e. pedestrian, bicycle, transit, vehicular, and equestrian, where appropriate);

    - A technical assessment of the operational and safety characteristics for each mode; and

    - A consistency check with transportation network plans, including the Highway Plan, Bicycle Master Plan, and Community Pedestrian Plans.

Goal M 4: An efficient multimodal transportation system that serves the needs of all residents.

- **Policy M 4.1:** Expand transportation options that reduce automobile dependence.

- **Policy M 4.2:** Expand shuttle services to connect major transit centers to community points of interest.

- **Policy M 4.3:** Maintain transit services within the unincorporated areas that are affordable, timely, cost-effective, and responsive to growth patterns and community input.

- **Policy M 4.4:** Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.

- **Policy M 4.5:** Encourage continuous, direct routes through a connected system of streets, with small blocks and minimal dead ends (cul-de-sacs), as feasible.

- **Policy M 4.6:** Support alternative LOS standards that account for a multimodal transportation system.

- **Policy M 4.7:** Maintain a minimum LOS D, where feasible; however, allow LOS below D on a case by case basis in order to further other General Plan goals and policies, such as those related to environmental protection, infill development, and active transportation.

- **Policy M 4.8:** Provide and maintain appropriate signage for streets, roads and transit.

- **Policy M 4.9:** Ensure the participation of all potentially affected communities in the transportation planning and decision-making process.

- **Policy M 4.10:** Support the linkage of regional and community-level transportation systems, including multimodal networks.

- **Policy M 4.11:** Improve the efficiency of the public transportation system with bus lanes, signal prioritization, and connections to the larger regional transportation network.

- **Policy M 4.12:** Work with adjacent jurisdictions to ensure connectivity and the creation of an integrated regional network.

- **Policy M 4.13:** Coordinate with adjacent jurisdictions in the review of land development projects near jurisdictional borders to ensure appropriate roadway transitions and multimodal connectivity.

- **Policy M 4.14:** Coordinate with Caltrans on mobility and land use decisions that may affect state transportation facilities.

- **Policy M 4.15:** Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting.

- **Policy M 4.16:** Promote mobility management practices, including incentives to change transit behavior and using technologies, to reduce VMTs.

Goal M 5: Land use planning and transportation management that facilitates the use of transit.

- **Policy M 5.1:** Facilitate transit-oriented land uses and pedestrian-oriented design to encourage transit ridership.

- **Policy M 5.2:** Implement parking strategies that facilitate transit use and reduce automobile dependence.
- **Policy M 5.3:** Maintain transportation right-of-way corridors for future transportation uses, including bikeways, or new passenger rail or bus services.
- **Policy M 5.4:** Support and pursue funding for the construction, maintenance and improvement of roadway, public transit, and equestrian, pedestrian and bicycle transportation systems.
- **Policy M 5.5:** Encourage financing programs, such as congestion pricing, bonding, increasing parking costs, fair share programs for each community, to implement local and state transportation systems and facilities.

Goal M 6: The safe and efficient movement of goods.

- **Policy M 6.1:** Maximize aviation and port system efficiencies for the movement of people, goods and services.
- **Policy M 6.2:** Support the modernization of aviation systems, including LAX.
- **Policy M 6.3:** Designate official truck routes to minimize the impacts of truck traffic on residential neighborhoods and other sensitive land uses.
- **Policy M 6.4:** Minimize noise and other impacts of goods movement, truck traffic, deliveries, and staging in residential and mixed-use neighborhoods.
- **Policy M 6.5:** Support infrastructure improvements and the use of emerging technologies that facilitate the clearance, timely movement, and security of trade.
- **Policy M 6.6:** Preserve property for planned roadway and railroad rights-of-way, marine and air terminals, and other needed transportation facilities.

Goal M 7: Transportation networks that minimizes negative impacts to the environment and communities.

- **Policy M 7.1:** Minimize roadway runoff through the use of permeable surface materials, and other low impact designs, wherever feasible.
- **Policy M 7.2:** Encourage the creation of wildlife underpasses and overpasses, fencing, signage, and other measures to minimize impacts to wildlife at junctures where transit infrastructure passes through or across sensitive habitats.
- **Policy M 7.3:** Encourage the use of sustainable transportation facilities and infrastructure technologies, such as liquid and compressed natural gas, and hydrogen gas stations, ITS, and electric car plug-in ports.

- **Policy M 7.4:** Where the creation of new or the retrofit of roadways or other transportation systems is necessary in areas with sensitive habitats, particularly SEAs, use best practice design to encourage species passage and minimize genetic diversity losses.

- **Policy M 7.5:** In rural areas, require rural highway and street standards that minimize the width of paving and the placement of curbs, gutters, sidewalks, street lighting, and traffic signals, except where necessary for public safety.

Air Quality Element

Goal AQ 1: Protection from exposure to harmful air pollutants.

- **Policy AQ 1.1:** Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.

- **Policy AQ 1.2:** Encourage the use of low or no volatile organic compound (VOC) emitting materials.

- **Policy AQ 1.3:** Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.

- **Policy AQ 1.4:** Work with local air quality management districts to publicize air quality warnings, and to track potential sources of airborne toxics from identified mobile and stationary sources.

Goal AQ 2: The reduction of air pollution and mobile source emissions through coordinated land use, transportation and air quality planning.

- **Policy AQ 2.1:** Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.

- **Policy AQ 2.2:** Participate in, and effectively coordinate the development and implementation of community and regional air quality programs.

- **Policy AQ 2.3:** Support the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.

- **Policy AQ 2.4:** Coordinate with different agencies to minimize fugitive dust from different sources, activities, and uses.

Goal AQ 3: Implementation of plans and programs to address the impacts of climate change.

- **Policy AQ 3.1:** Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that The County reaches its climate change and greenhouse gas emission reduction goals.

- **Policy AQ 3.2:** Reduce energy consumption in County operations by 20 percent by 2015.
- **Policy AQ 3.3:** Reduce water consumption in County operations.
- **Policy AQ 3.4:** Participate in local, regional and state programs to reduce greenhouse gas emissions.
- **Policy AQ 3.5:** Encourage energy conservation in new development and municipal operations.
- **Policy AQ 3.6:** Support rooftop solar facilities on new and existing buildings.
- **Policy AQ 3.7:** Support and expand urban forest programs within the unincorporated areas.
- **Policy AQ 3.8:** Develop, implement, and maintain countywide climate change adaptation strategies to ensure that the community and public services are resilient to climate change impacts.

Conservation and Natural Resources Element

Goal C/NR 1: Open space areas that meet the diverse needs of Los Angeles County.

- **Policy C/NR 1.1:** Implement programs and policies that enforce the responsible stewardship and preservation of dedicated open space areas.
- **Policy C/NR 1.2:** Protect and conserve natural resources, natural areas, and available open spaces.
- **Policy C/NR 1.3:** Support the acquisition of new available open space areas. Augment this strategy by leveraging County resources in concert with the compatible open space stewardship actions of other agencies, as feasible and appropriate.
- **Policy C/NR 1.4:** Create, support and protect an established network of dedicated open space areas that provide regional connectivity, between the southwestern extent of the Tehachapi Mountains to the Santa Monica Mountains, and from the southwestern extent of the Mojave Desert to Puente Hills and Chino Hills.
- **Policy C/NR 1.5:** Provide and improve access to dedicated open space and natural areas for all users that considers sensitive biological resources.
- **Policy C/NR 1.6:** Prioritize open space acquisitions for available lands that contain unique ecological features, streams, watersheds, habitat types and/or offer linkages that enhance wildlife movements and genetic diversity.

Goal C/NR 2: Effective collaboration in open space resource preservation.

- **Policy C/NR 2.1:** Establish new revenue generating mechanisms to leverage County resources to enhance and acquire available open space and natural areas.

- **Policy C/NR 2.2:** Encourage the development of multi-benefit dedicated open spaces.

- **Policy C/NR 2.3:** Improve understanding and appreciation for natural areas through preservation programs, stewardship, and educational facilities.

- **Policy C/NR 2.4:** Collaborate with public, non-profit, and private organizations to acquire and preserve available land for open space.

Goal C/NR 3: Permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems including: habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and SEAs.

- **Policy C/NR 3.1:** Conserve and enhance the ecological function of diverse natural habitats and biological resources.

- **Policy C/NR 3.2:** Create and administer innovative County programs incentivizing the permanent dedication of SEAs and other important biological resources as open space areas.

- **Policy C/NR 3.3:** Restore significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function—acknowledging the importance of incrementally restoring ecosystem values when complete restoration is not feasible.

- **Policy C/NR 3.4:** Conserve and sustainably manage forests and woodlands.

- **Policy C/NR 3.5:** Ensure compatibility of development in the National Forests in conjunction with the US Forest Service Land and Resource Management Plan.

- **Policy C/NR 3.6:** Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

- **Policy C/NR 3.7:** Participate in inter-jurisdictional collaborative strategies that protect biological resources.

- **Policy C/NR 3.8:** Discourage development in areas with identified significant biological resources, such as SEAs.

- **Policy C/NR 3.9:** Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:

    - Preservation of biologically valuable habitats, species, wildlife corridors and linkages;

    - Protection of sensitive resources on the site within open space;

- Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats;
- Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources onsite);
- Design required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity;
- Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows on site; and
- Consideration of the continuity of onsite open space with adjacent open space, in project design.

- **Policy C/NR 3.10:** Require environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanently preserve mitigation sites.

- **Policy C/NR 3.11:** Discourage development in riparian habitats, streambeds, and wetlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.

Goal C/NR 8: Productive farmland that is protected for local food production, open space, public health, and the local economy.

- **Policy C/NR 8.1:** Protect ARAs, and other land identified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance by the California Department of Conservation, from encroaching development and discourage incompatible adjacent land uses.

- **Policy C/NR 8.2:** Discourage land uses in ARAs, and other land identified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance by the California Department of Conservation, that are incompatible with agricultural activities.

- **Policy C/NR 8.3:** Encourage agricultural activities within ARAs.

Goal C/NR 10: Locally available mineral resources to meet the needs of construction, transportation, and industry.

- **Policy C/NR 10.1:** Protect MRZ-2s and access to MRZ-2s from development and discourage incompatible adjacent land uses.

Goal C/NR 12: Sustainable management of renewable and non-renewable energy resources.

- **Policy C/NR 12.1:** Encourage the production and use of renewable energy resources.

- **Policy C/NR 12.2:** Encourage the effective management of energy resources, such as ensuring adequate reserves to meet peak demands.

Goal C/NR 13: Protected visual and scenic resources.

- **Policy C/NR 13.1:** Protect scenic resources through land use regulations that mitigate development impacts.

- **Policy C/NR 13.2:** Protect ridgelines from incompatible development that diminishes their scenic value.

Parks and Recreation Element

Goal P/R 1: Enhanced active and passive park and recreational opportunities for all users.

- **Policy P/R 1.9:** Offer more lighted playing fields using energy efficient light fixtures to extend playing time, where appropriate (e.g., not in areas adjacent to open space or natural areas that can be impacted by spillover lighting).

- **Policy P/R 1.11:** Provide access to parks by creating pedestrian and bicycle-friendly paths and signage regarding park locations and distances.

Goal P/R 2: Enhanced multi-agency collaboration to leverage resources.

- **Policy P/R 2.7:** Increase communication and partnerships with local law enforcement, neighborhood watch groups, and public agencies to improve safety in parks.

Goal P/R 3: Acquisition and development of additional parkland.

- **Policy P/R 3.2:** For projects that require zone change approvals, general plan amendments, specific plans, or development agreements, require developers to provide for local and regional parkland above and beyond their Quimby obligations as based on an appropriate nexus study.

Goal P/R 4: Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and community linkages.

- **Policy P/R 4.1:** Create multi-use trails to accommodate all users.

- **Policy P/R 4.2:** Develop staging areas and trail heads at strategic locations to accommodate multi-use trail users.

- **Policy P/R 4.3:** Develop a network of feeder trails into regional trails.

- **Policy P/R 4.4:** Maintain and design multi-purpose trails in ways that minimize circulation conflicts among trail users.

- **Policy P/R 4.5:** Collaborate with other public, non-profit, and private organizations in the development of a comprehensive trail system.

- **Policy P/R 4.6:** Create new multi-use trails that link community destinations including parks, schools and libraries.

Goal P/R 6: A sustainable parks and recreation system.

- **Policy P/R 6.1:** Support the use of recycled water for landscape irrigation in County parks.

- **Policy P/R 6.2:** Support the use of alternative sources of energy, such as wind and solar sources to reduce the use of energy at existing parks.

- **Policy P/R 6.3:** Prolong the life of existing buildings and facilities on County park properties through preventative maintenance programs and procedures.

- **Policy P/R 6.4:** Ensure that new buildings on County park properties are environmentally sustainable by reducing carbon footprints, and conserving water and energy.

- **Policy P/R 6.5:** Ensure the routine maintenance and operations of County parks and recreational facilities to optimize water and energy conservation.

Noise Element

Goal N 1: The reduction of excessive noise impacts.

- **Policy N 1.8:** Minimize noise impacts to pedestrians and transit-riders in the design of transportation facilities and mobility networks.

- **Policy N 1.12:** Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.

Safety Element

Goal S 4: Effective County emergency response management capabilities.

- **Policy S 4.1:** Ensure that residents are protected from the public health consequences of natural or man-made disasters through increased readiness and response capabilities, risk communication, and the dissemination of public information.

- **Policy S 4.2:** Support County emergency providers in reaching their response time goals.

- **Policy S 4.3:** Coordinate with other County and public agencies, such as transportation agencies, and health care providers on emergency planning and response activities, and evacuation planning.

- **Policy S 4.4:** Encourage the improvement of hazard prediction and early warning capabilities.
- **Policy S 4.5:** Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.
- **Policy S 4.6:** Ensure that essential public facilities are maintained during natural disasters, such as flooding.

Economic Development

Goal ED 1: An economic base and fiscal structures that attract and retain valuable industries and businesses.

- **Policy ED 1.1:** Encourage a diverse mix of industries and services in each Planning Area.
- **Policy ED 1.2:** Encourage and foster the development of the renewable energy economic sectors.

Goal ED 2: Land use practices and regulations that foster economic development and growth.

- **Policy ED 2.1:** Protect industrial lands, especially within Employment Protection Districts, from conversion to non-industrial uses.
- **Policy ED 2.2:** Utilize adequate buffering and other land use practices to facilitate the compatibility between industrial and non-industrial uses.
- **Policy ED 2.5:** Encourage employment opportunities to be located in proximity to housing.
- **Policy ED 2.6:** Encourage community-serving uses, such as child care centers and personal services, to be located in proximity to employment centers.
- **Policy ED 2.7:** Incentivize economic development and growth along existing transportation corridors and in urbanized areas.
- **Policy ED 2.9:** Explore zoning incentives for the operation of farms in Agricultural Resource Areas (ARAs).

Goal ED 4: Enhanced revitalization activities.

- **Policy ED 4.7:** Support expedited permitting for green building retrofits.

5.10.4 Environmental Impacts

The following impact analysis addresses Appendix G thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.10-1: Implementation of the Proposed Project would include construction of roads and other improvements that may divide an established community. [Threshold LU-1]

Impact Analysis: The Proposed General Plan Update is a long-range plan for the future of the Project Area. In addition to identifying land use changes in the Project Area, the Proposed General Plan Update identifies proposed and planned roadways in Los Angeles County. These improvements are identified for conceptual purposes; approval of the Proposed Project does not include approval of individual transportation or infrastructure projects. However, because the Proposed Project identifies where these projects may be located, the following analysis discusses the potential effects of their construction on established communities.

Land Use and Zoning Changes

As described in Chapter 3, *Project Description*, of this DEIR, most major land use and zoning changes planned for the unincorporated areas are concentrated in Transit Oriented Districts, which contain established roadway networks and urbanized land use patterns. Targeted increases in development capacity in unincorporated areas are intended primarily to allow intensified development or a more flexible mix of land uses. The changes do not introduce radically different land uses into neighborhoods, propose new street patterns, or otherwise divide these areas. Although buildout calculations for the Proposed General Plan Update contain unbuilt development capacity on parcels outside areas planned for land use changes (see Tables 3.6 and 3.7 of this DEIR), this capacity, if developed, would generally occur along existing land use patterns. At a programmatic level, the Proposed Project does not allow land uses patterns that would result in division of an established neighborhood or community.

Streets and Highways

Figure 7.3, *Highway Plan Policy Map*, of the Proposed General Plan Update shows the long-term street and highway network (Highway Plan) proposed for Project Area. The Mobility Element of the Proposed General Plan Update provides descriptions of the five roadway classifications identified on the Highway Plan Policy Map:

- Major Highway
- Secondary Highway
- Limited Secondary Highway
- Parkway
- Expressway

As described in Section of 5.16 of this DEIR, because the heavily urbanized portions of Los Angeles County are largely built out, a majority of roadways identified on the Highway Plan Policy Map are existing roadways built to their full cross-sections. The proposed roadway designations apply only to unincorporated areas. Segments of roadways that fall within cities are governed by applicable city plans; they are shown on the Highway Plan Policy Map for continuity/visual purposes only. Because a majority of roadways identified on

the Highways Plan Policy Map already exist, the potential for roadway construction to divide an established community is limited. Notable exceptions to this generalization are discussed below.

Antelope Valley and Santa Clarita Valley Planning Areas

In the northern portion of Los Angeles County, the Highway Plan governs a relatively larger portion of highway mileage compared to areas in the more urbanized southern portions of Los Angeles County. As discussed in detail in Section 5.16 of this DEIR, portions of the Project Area surrounding the rapidly growing City of Santa Clarita, City of Lancaster, and City of Palmdale are expected to see substantial growth in the coming decades. Accordingly, the Highway Plan proposes that, in conjunction with buildout of the Proposed Project, numerous roads will be constructed or upgraded in the Antelope Valley and Santa Clarity Valley Planning Areas. East of the City of Lancaster and the City of Palmdale, proposed major and secondary highways are generally extensions or upgrades of existing two-lane roadways, but also include new roadways. Another area of note is west of the City of Santa Clarita, where new major and secondary highways are proposed to traverse currently undeveloped parcels in the area designated under the Newhall Ranch Specific Plan. In both cases, despite the proposed construction of new roadways, these "highways" would not travel through existing neighborhoods or other built-up communities. They would traverse largely vacant areas and would increase regional access and connectivity between north Los Angeles County's cities and surrounding areas.

Other Planning Areas

Unlike the roadways proposed for the more rural areas of Los Angeles County, those proposed for the heavily urbanized portions of Los Angeles County (the East San Gabriel Valley, Gateway, Metro, San Fernando Valley, West San Gabriel Valley, and Westside Planning Areas) would traverse existing communities. These highways include roadways proposed to be widened (or otherwise improved) and roadways that would be built where no current roadway exists. Although such projects would involve the displacement of existing land uses, they would generally be constructed to increase access and connectivity in established communities, not divide them. Policies in the Proposed General Plan Update advocate for the creation of a mobility network that is sensitive to land use compatibility issues and balances the needs of all system users in a local area. In particular, the implementation of Policies M 2.2 through M 2.8 would ensure that streets and highways are designed to be context-sensitive. Policy M 5.3 would also ensure that right-of-way corridors for future transportation uses are maintained, limiting the future division of communities for the construction of new roadways and/or widening of existing roadways.

Public Transit

The Mobility Element of the Proposed General Plan Update also includes a diagram (Figure 7.1, *Major Public Transit Systems*) showing a long-term plan for public transit systems in Los Angeles County. The map identifies conceptual locations for the proposed Crenshaw/LAX Metro line and planned extensions of the Gold and Purple Lines. Because these transit lines would generally be underground, below-grade, or above-grade, they are not anticipated to result in significant impacts related to division of established communities. Furthermore, the location, alignment, and design of proposed Metro rail lines are conceptual. Therefore, it would be speculative to analyze their land use impacts in this DEIR. Future rail and other major

infrastructure projects constructed prior to buildout of the Proposed Project would be subject to project-level CEQA review.

Conclusion

Although policy maps included in the Land Use and Mobility Elements of the Proposed General Plan Update identify locations for Transit Oriented Districts, highways, and transit projects, these changes and improvements are not anticipated to divide established neighborhoods. Impacts would be less than significant.

Impact 5.10-2: Implementation of the Proposed Project would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect. [Threshold LU-2]

Impact Analysis: The Proposed Project is intended to shape development within the Project Area through 2035 and beyond. Buildout of the Proposed Project would allow for up to 668,911 residential dwelling units; 1.65 million square feet (3,793 acres) of commercial use; 2.27 million square feet (5,210 acres) of industrial use; 3.52 million square feet (80,896 acres) of public/semi-public; and 714,704 acres of public/open space. Table 3-6, *Proposed Project Buildout Projections (by Planning Area)*, summarizes proposed land use designations and the projections for buildout of the Proposed Project. Buildout of the Proposed Project would result in up to 368,432 additional residential dwelling units, approximately 1,316,958 additional residents, and approximately 225,201 additional workers.

In addition to the proposed Land Use Policy Map, the Proposed Project also includes the rezoning of parcels where necessary to create consistency between the General Plan and the Zoning Code. The Proposed Project also includes a comprehensive set of policies distributed throughout the General Plan elements, and the adoption of a Community Climate Action Plan. The following is an analysis of the Proposed Project's consistency with applicable state and regional laws, regulations, plans, and guidelines.

State Planning Law and California Complete Streets Act Consistency

The Proposed Project, including the Proposed General Plan Update, has been prepared in accordance with state planning law, as provided in California Government Code Section 65300. The Proposed General Plan Update is meant to be a framework for guiding planning and development in the Project Area through 2035 and beyond and can be thought of as the blueprint for Project Area's growth and development. The Proposed Project is consistent with California Government Code Section 65302 as it addresses, with one exception, the required General Plan elements. The County's Housing Element was adopted by the Board of Supervisors on February 4, 2014, for the 2014–2021 planning period.

The Proposed Project includes forecasts of long-term conditions and outlines development goals and policies, exhibits and diagrams, and text setting forth objectives, principles, standards, and plan proposals. The proposed Land Use Policy Maps (see Appendix C2) and the goals and policies in the updated elements strive to preserve and ensure land use compatibility throughout the Project Area. The proposed Land Use and Mobility Elements contain policies and implementation measures that help the County implement AB 1358,

include Policies M 1.1 through 1.3, which directly address implement the "complete streets" transportation model.

Each of the specific and applicable requirements in the state planning law (California Government Code Section 65300) have been examined and considered to determine if there are environmental issues within the community that the General Plan should address, such as fire hazards and flooding. The various environmental issues associated with the Proposed Project (e.g., air quality, hazards, flooding, traffic, etc.) are addressed in their respective topical sections in Chapter 5, *Environmental Analysis*, of this DEIR.

SCAG 2012–2035 RTP/SCS

Table 5.10-2 provides an assessment of the Proposed General Plan Update's relationship to pertinent 2012–2035 SCAG RTP/SCS goals. Proposed General Plan Update policies identified in the table are listed in Subsection 5.10-4 of this section.

Table 5.10-2 Consistency with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS Goal #	SCAG Goal	Project Compliance with Goal	Relevant Proposed General Plan Update Policies
G1	Align the plan investments and policies with improving regional economic development and competitiveness.	Not Applicable: This is not a project-specific goal and is therefore not applicable.	Not applicable
G2	Maximize mobility and accessibility for all people and goods in the region.	*Consistent:* Upon implementation of the Proposed General Plan Update, the transportation network in Los Angeles County would be designed, developed, and maintained to meet the needs of local and regional transportation and to ensure efficient mobility and accessibility. A number of regional and local plans and programs would be used to guide development and maintenance of transportation networks in Los Angeles County, including but not limited to: • SCAG's 2012–2035 RTP/SCS • County of Los Angeles Traffic Impact Analysis Guidelines • Los Angeles County Congestion Management Program • 2009 Metro Long Range Transportation Plan • 2012 Los Angeles County Bicycle Master Plan • Caltrans Traffic Impact Studies Guidelines and Highway Capacity Manual • Assembly Bill 1358 (The California Complete Streets Act) Additionally, the County is required by the California Government Code to coordinate its Mobility Element with regional transportation plans, including SCAG's 2012–2035 RTP/SCS. The Mobility Element is a comprehensive transportation	LU 2.7, LU 4.3, LU 5.10, LU 10.12, M 1.1 through M 1.3, M 2.1 through 2.11, M 3.1 through M 3.4, M 4.1 through 4.16, M 5.1 through M 5.5, M 6.1 through M 6.6, and P/R 4.1 through P/R 4.6

Table 5.10-2 Consistency with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS Goal #	SCAG Goal	Project Compliance with Goal	Relevant Proposed General Plan Update Policies
		management strategy that addresses infrastructure capacity. The Land Use and Mobility Elements of the Proposed General Plan Update both contain policies that provide specific guidance on how to improve mobility in Los Angeles County. In particular, policies M 1.1 through M 1.3 are address creation of "complete streets" that accommodate all users. Refer to Section 5.16, *Transportation and Traffic*, which addresses local and regional transportation, traffic, circulation, and mobility in more detail.	
G3	Ensure travel safety and reliability for all people and goods in the region.	*Consistent:* All modes of public (including motorized and nonmotorized) and commercial transit throughout Los Angeles County would be required to follow safety standards established by corresponding state, regional, and local regulatory documents, standards, and regulations. For example, pedestrian walkways and bicycle routes must follow safety precautions and standards established by local (e.g., County of Los Angeles) and regional (e.g. SCAG, Caltrans) agencies. Additionally, pedestrian circulation systems are required to be designed and constructed for the adaption and use of people with disabilities, consistent with the Americans with Disabilities Act (ADA) and state requirements. The County is also committed to ensuring that adequate pedestrian circulation is provided in future growth areas. Planning for complete streets pays close attention to the needs of pedestrians in the planning new and redeveloped areas. Pedestrian circulation planned as an overall system is important for assuring the safety of pedestrians and separating whenever possible pedestrians from automobile traffic. The reduction of pedestrian/vehicle conflict is one of the most important goals of the complete streets concept. Furthermore, roadways must follow safety standards established for the local and regional plans mentioned in the analysis for RTP/SCS Goal G2, as well as the County's adopted engineering standards for vehicular circulation improvements and systems. The provision of safe and reliable modes of transit throughout unincorporated areas of Los Angeles County would be ensured through the County's development review and building plan check process. The Mobility and Safety Elements of the Proposed General Plan Update provide guidance and policies that promote the safe movement of people and	M 1.1 through M 1.3, M 2.1 through M 2.3, M 3.1 through M 3.3, M 4.2 through M 4.14, M 4.16, M 5.4, M 5.5, M 6.1, M 6.2, M 6.5, S 4.5, and S 4.6

Table 5.10-2 Consistency with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS Goal #	SCAG Goal	Project Compliance with Goal	Relevant Proposed General Plan Update Policies
		goods, with importance placed on pedestrian and vehicular safety.	
G4	Preserve and ensure a sustainable regional transportation system.	*Consistent*: All new roadway developments and improvements to the existing transportation networks must be assessed with some level of traffic analysis (e.g., traffic assessments, traffic impact studies) to determine how the developments would impact existing traffic capacities and to determine the need for improving future traffic capacities. Additionally, the regional plans mentioned in the analysis for RTP/SCS Goal G2 would be applicable to the design and development of the regional roadway network in Los Angeles County. The Land Use and Mobility Elements of the Proposed General Plan Update encourage regional coordination of transportation issues and provide guidance and policies that help preserve and ensure a sustainable regional transportation system	Policies listed under RTP/SCS Goal G2 apply to this goal.
G5	Maximize the productivity of our transportation system.	*Consistent:* The local and regional transportation system would be improved and maintained to maximize efficiency and productivity. The County's Public Works Department oversees the improvement and maintenance of the Project Area's public rights-of-way on a routine basis. The County strives to maximize productivity of the region's public transportation system (e.g., bus, rail, and bicycle) for residents, visitors, and workers. For example, the County implements a Bicycle Master Plan, adopted in 2012, that encourages the development and maintenance of a safe and convenient bikeway system. The Mobility Element of the Proposed General Plan Update has been designed to be consistent with, and implement, the Bicycle Master Plan. Los Angeles County is served by an extensive network of public transit routes and facilities provided by large number of transit providers that include Amtrak, Antelope Valley Transit Authority, City of Los Angeles Department of Transportation (LADOT), Culver City Bus, Foothill Transit, Long Beach Transit, Los Angeles County Department of Public Works, Los Angeles County Metropolitan Transit Authority (LACMTA), Metrolink, Norwalk Transit, Santa Clarita Transit, Santa Monica Municipal Bus Lines, and Torrance Transit. The Transportation Division of the Public Works Department coordinates with these agencies to ensure that transportation in Los Angeles County is efficient and safe. Furthermore, the Mobility	M 1.1, M 1.3, M 2.11, M 3.3, M 4.1 through M 4.16, M 5.1 through 5.5, M 6.1 through M 6.3, M 6.5, and M 6.6

Table 5.10-2 Consistency with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS Goal #	SCAG Goal	Project Compliance with Goal	Relevant Proposed General Plan Update Policies
		Element of the Proposed General Plan Update contains guidance and policies to improve Los Angeles County's transportation system (see list at right).	
G6	Protect the environment and health of our residents by improving air quality and encouraging active transportation (i.e. nonmotorized transportation, such as bicycling and walking).	*Consistent:* The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable development would be encouraged through the development of alternative transportation methods, green-design techniques for buildings, and other energy-reducing techniques. For example, individual development projects in Los Angeles County are required to comply with provisions of the California Building Standards Code, which includes the Green Building Standards Code (CALGreen). Compliance with these regulations would be ensured through the development review and building plan check process. The County also strives to maximize protection of the environment and improvement of air quality by encouraging and improving the use of the region's public transportation system (i.e., bus, rail, and bicycle). As mentioned in the analysis for RTP/SCS Goal G5, the County implements its own Bicycle Master Plan. The Mobility Element of the Proposed General Plan Update has been designed to be consistent with, and implement, the Bicycle Master Plan. Additionally, the County is committed to ensuring that, consistent with complete streets strategies, adequate pedestrian circulation is provided in areas planned for growth. Furthermore, the Proposed General Plan Update's emphasis on focusing new development capacity in established Transit Oriented Districts would incentivize nonmotorized transportation modes such as biking and walking. This strategy, which acknowledges the relationship between land use and mobility, would reduce vehicle miles traveled and thereby reduce impacts related to air quality, greenhouse gas emissions, and traffic. Elements of the Proposed General Plan Update contain guidance and policies to improve and protect the region's air quality and environment and promote nonmotorized transportation. Policies related to the encouragement of nonmotorized transportation are largely concentrated in the Land Use and Mobility Elements, while additional policies related to air quality and greenhouse gases are identified in the Air Quality Element and Community Climate Action Plan. A comprehensive list of	LU 3.3, LU 4.1, LU 5.3, LU 8.2, LU 10.6, LU 10.7, LU 10.11, LU 10.12, M 1.1, M 1.2, M 2.1 through M 2.11, M 3.3, M 3.4, M 4.1, M 5.1 through M 5.4, AQ 1.1 through AQ 1.4, AQ 2.1 through AQ 2.4, P/R 1.11, P/R 4.1 through P/R 4.6, and ED 2.5

Table 5.10-2 Consistency with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS Goal #	SCAG Goal	Project Compliance with Goal	Relevant Proposed General Plan Update Policies
		applicable Proposed General Plan Update policies is identified to the right.	
G7	Actively encourage and create incentives for energy efficiency, where possible.	*Consistent:* The Proposed Project includes adoption of the County's proposed 2014 Community Climate Action Plan (CCAP). The CCAP describes the County's plan for reducing the impacts of climate change in unincorporated areas of Los Angeles County, and includes specific strategy areas for each major sector of emissions. CCAP implementation measures that encourage and incentivize energy efficiency include: • Rebates and tax incentives for energy-efficient development projects • Policies that encourage sustainable building design • Financing mechanisms to fund energy efficiency building upgrades • Programs to increase the efficiency of the transportation network • Financial incentives for consumers to purchase and use energy-efficient appliances As mentioned in the response to RTP/SCS Goal G6, the County Code includes provisions that require buildings constructed in Los Angeles County to be energy-efficient. In particular, Title 31 of the County's Code incorporates the California Green Building Standards Code by reference. Elements of the Proposed General Plan Update also contain policies that promote energy-efficient building practices and transportation systems (see full list at right).	LU 11.1 through LU 11.4, LU 11.8, AQ 3.1 through AQ 3.8, C/NR 12.1, C/NR 12.2, P/R 1.9, P/R 6.1 through P/R 6.5, PS/F 6.5, ED 1.2, and ED 4.7
G8	Encourage land use and growth patterns that facilitate transit and nonmotorized transportation.	*Consistent:* See response to RTP/SCS Goal G6.	LU 3.3, LU 4.1 through 4.4, LU 5.3, LU 9.2, LU 10.6, LU 10.7, LU 10.11, LU 10.12, M 1.1, M 1.2, M 2.1 through M 2.11, M 3.3, M 3.4, M 4.1, M 4.10 through M 4.13, M 5.1 through M 5.5, P/R 1.11, P/R 4.1 through P/R 4.6, N 1.8, and ED 2.5
G9	Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	*Consistent:* The County conducts frequent monitoring of existing and newly constructed roadways and transit routes to determine the adequacy and safety of these systems. Other local and regional agencies (i.e., Caltrans, SCAG) would continue to work with the County to manage these systems. Security situations involving roadways and evacuations would be addressed in the County's emergency management plans developed	LU 2.5, M 1.2, M 3.1 through 3.3, M 4.9, M 4.12, M 4.14, M 6.1 through M 6.5, P/R 2.7, S 4.1 through S 4.6, and PS/F 1.3

Table 5.10-2 Consistency with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy Goals

RTP/SCS Goal #	SCAG Goal	Project Compliance with Goal	Relevant Proposed General Plan Update Policies
		in accordance with the state and federal mandated emergency management regulations. Elements of the Proposed General Plan Update contain guidance and policies for a safe and efficient transportation system. In particular, implementation of Policy S 4.3 would ensure that transportation security in Los Angeles County (and emergency planning in general) would be a collaborative effort shared by a wide range of agencies and organizations.	

Source: 2012–2305 SCAG Regional Transportation Plan/Sustainable Communities Strategy.

The analysis in Table 5.10-2 concludes that the Proposed Project would be consistent with the applicable RTP/SCS goals. Therefore, implementation of the Proposed Project would not result in significant land use impacts related to relevant RTP/SCS goals.

Gateway Cities Council of Governments Subregional SCS

Unique to the SCAG region is the option for subregions to create their own SCS. In Los Angeles County, only the Gateway Cities Council of Governments (GCCOG) has created its own SCS. Although the GCCOG SCS identifies specific transportation improvement projects, travel demand management strategies, and other projects aimed at reducing GHG emissions, it does not propose its own set of goals and policies for GHG reduction. Instead, it relies on goals and policies generated for the SCAG region in its entirety. Therefore, the Proposed Project does not conflict with the GCCOG SCS.

Airport Land Use Compatibility Plans

Buildout of the Proposed Project would involve new development and redevelopment on parcels within the plan areas of adopted ALUCPs (including the comprehensive Los Angeles County ALUCP and the ALUCP for the General William J. Fox Airfield in Lancaster). However, future development under the Proposed Project would be required to be consistent with any applicable ALUCP. Furthermore, compliance with policies included in the Land Use and Noise Elements of the Proposed General Plan Update related to land use compatibility would ensure that development would not conflict with airport land use plans. In particular, Policy LU 7.6 explicitly requires consistency that airport land use plans address conflicts between airport operations and surrounding land uses. Policy N 1.12 requires that land use decisions on parcels adjacent to transportation facilities, including those adjacent to airports, consider existing and future noise levels of the adjacent transportation facilities. Therefore, no inconsistency existing between the Proposed Project and adopted ALUCPs.

Local Coastal Programs

There are five unincorporated areas in the state-designated coastal zone: Ballona Wetlands, Marina del Rey, Santa Catalina Island, a portion of the Santa Monica Mountains, and San Clemente Island. In accordance with the California Coastal Act, all development within the coastal zone must first obtain a Coastal Development Permit (CDP). Local Coastal Programs (LCPs) establish detailed land use policy and development standards within their respective coastal zone segments. The County has certified LCPs for Santa Catalina Island and Marina del Rey, which give the County authority over proposed developments. Prior to the certification of an LCP, specific development proposals are reviewed by the County for consistency with the General Plan, but the authority to issue CDPs lies with the California Coastal Commission.

Because the Proposed Project does not propose land use changes in the coastal zones, its implementation would be consistent with certified LCPs. Although buildout of the Proposed Project would involve additional development in coastal zones, individual projects would be required to obtain the applicable permits from the California Coastal Commission and/or local jurisdictions as under existing conditions.

Conclusion

As demonstrated in Table 5.10-2 and the other subsections above, the Proposed Project would not conflict with goals contained within SCAG's 2012–2035 RTP/SCS or other land use plans. Therefore, impacts related to compatibility between the Proposed Project and applicable plans adopted for the purpose of avoiding or mitigating environmental effects would be less than significant.

Impact 5.10-3: The Proposed Project would not conflict with adopted habitat conservation plans that apply to portions of the Antelope Valley and South Bay Planning Areas. [Threshold LU-3]

Impact Analysis: As discussed above under Section 5.10.1.1, *Applicable Plans and Regulations*, there are two habitat conservation plans that apply to portions of Los Angeles County: the Palos Verdes Peninsula NCCP/HCP, and the West Mojave Plan HCP (WMP). An addition third HCP, the Desert Renewable Energy Conservation Plan (DRECP), is under development, but not yet adopted. Consistency between these three plans and the Proposed Project is discussed below. The habitat conservation plans apply to portions of the Antelope Valley and South Bay planning areas.

Antelope Valley Planning Area

The plan areas for the Draft Desert Renewable Energy Conservation Plan NCCP/HCP and the West Mojave Plan HCP cover the northern two-thirds of the Antelope Valley Planning Area. This region is north of the San Gabriel Mountains and contains the Antelope Valley and its eastward transition into the Mojave Desert. Within Los Angeles County, the plans areas for the two conservation plans are coterminous.

Once approved, the Draft Desert Renewable Energy Conservation Plan NCCP/HCP would provide renewable energy project developers with binding, long-term endangered species permit assurances while facilitating the review and approval of solar thermal, utility-scale solar photovoltaic, wind, and other forms of renewable energy and associated infrastructure. Because the Draft Desert Renewable Energy Conservation Plan NCCP/HCP is not yet approved, implementation of the Proposed Project would not conflict with the

Plan. Furthermore, although the Proposed General Plan Update includes policies that encourage the development of renewable energy projects (see Policies C/NR 12.1, C/NR 12.2, PS/F 6.5, and ED 1.2), approval of the Proposed Project does include approval of specific energy projects in the plan area of the Draft Desert Renewable Energy Conservation Plan NCCP/HCP.

The intent of the West Mojave Plan HCP is to conserve habitat for special-status species in the Mojave Desert while creating a streamlined permit process that minimizes the need for individual consultations with the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife. Although buildout of the Proposed Project would result in substantial growth and development in the West Mojave Plan HCP area, individual development projects in the Antelope Valley would be required comply with provisions of the West Mojave Plan HCP and other local, state, and federal regulations. Therefore, the Proposed Project does not conflict with the West Mojave Plan HCP.

South Bay Planning Area

Although the Palos Verdes Peninsula NCCP/HCP applies to a portion of the South Bay Planning Area, it is coterminous with a city and would not be affected by policies, land use designations, or infrastructure improvements identified in the Proposed Project. Therefore, the Proposed Project would not conflict with provisions of the Palos Verdes Peninsula NCCP/HCP.

Conclusion

As demonstrated above, the Proposed Project would not conflict with adopted habitat conservation plans. Although buildout of the Proposed Project would include development and redevelopment in areas covered by conservations plans, such development would be required to comply with provisions of those plans. Therefore, impacts would be less than significant.

5.10.5 Cumulative Impacts

Cumulative projects in the Los Angeles County region would have the potential to result in a cumulative impact if they would, in combination, conflict with existing land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental impact. Similar to the Proposed Project, cumulative projects in the Los Angeles County region would utilize regional planning documents such as SCAG's RCP and RTP/SCS during planning, and the general plans of cities would be consistent with the regional plans, to the extent that they are applicable. Cumulative projects in these jurisdictions would be required to comply with the applicable land use plan or they would not be approved without a general plan amendment.

As discussed above, implementation of the Proposed Project would not conflict with existing land use plans, policies, or regulations of agencies with jurisdiction over the Project Area. Therefore, the Proposed Project would not contribute to a significant cumulative impact.

5.10.6 Existing Regulations

State

- State planning law (California Government Code Section 65300)
- Assembly Bill 1358, the California Complete Streets Act

Local

- Los Angeles County Code
- Existing Specific Plans
- Existing Area Plans, Coastal Land Use Plans, Community Plans, and Neighborhood Plans

5.10.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, the following impacts would be less than significant: 5.10-1, 5.10-2, and 5.10-3.

5.10.8 Mitigation Measures

No mitigation measures are necessary.

5.10.9 Level of Significance After Mitigation

No significant impacts were identified with regard to land use and planning.

5.10.10 References

Bureau of Land Management (BLM). 2013. West Mojave Plan Amendment Activity. http://www.blm.gov/ca/st/en/fo/cdd/west_mojave__wemo.html.

Cambridge Systematics. 2011, June 21. Gateway Cities Council of Governments Subregional Sustainable Communities Strategy. http://www.gatewaycog.org/projects/scssb-375/.

County of Los Angeles. 1991 (Revised 2004). Los Angeles County Airport Land Use Plan (ALUP). http://planning.lacounty.gov/view/alup/.

———.2014. Airport Land Use Commission (ALUC) Airport Information. http://planning.lacounty.gov/aluc/airports.

5.11 MINERAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts to mineral resources in the Plan Area from implementation of the Proposed Project.

5.11.1 Environmental Setting

Minerals are defined as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances. Minable minerals or an "ore deposit" is defined as a deposit of ore or mineral having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the project area.

5.11.1.1 REGULATORY SETTING

State

Surface Mining and Reclamation Act: California Public Resources Code Sections 2710 et seq.

The Surface Mining and Reclamation Act of 1975 (SMARA) is the primary regulator of onshore surface mining in the State. It delegates specific regulatoryauthority to local jurisdictions. The act requires the State geologist (California Geological Survey) to identify all mineral deposits within the State and to classify them as: (1) containing little or no mineral deposits; (2) significant deposits; or (3) deposits identified, but further evaluation is needed. Lands where such deposits are identified are designated Mineral Resource Zone (MRZ) 1, 2, 3, or 4, respectively. Local jurisdictions are required to enact specific procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans. A particular concern of state legislators in enacting SMARA was the premature loss of minerals and protection of sites threatened by development practices that might preclude future mineral extraction.

Mineral Resource Classification

The California Geological (CGS) Survey Mineral Resources Project provides information about California's nonfuel mineral resources. The Mineral Resources Project classifies lands throughout the State that contain regionally significant mineral resources as mandated by the Surface Mining and Reclamation Act (SMARA) of 1975. Nonfuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt and dimension stone; and construction aggregate including sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. Urban preemption of prime deposits and conflicts between mining and other uses throughout California led to passage of the SMARA, which requires all cities and counties to incorporate in their general plans the mapped designations approved by the State Mining and Geology Board.

The classification process involves the determination of Production-Consumption (P-C) Region boundaries, based on identification of active aggregate operations (Production) and the market area served (Consump-

tion). The P-C regional boundaries are modified to include only those portions of the region that are urbanized or urbanizing and are classified for their aggregate content. An aggregate appraisal further evaluates the presence or absence of significant sand, gravel, or stone deposits that are suitable sources of aggregate. The classification of these mineral resources is a joint effort of the State and local governments. It is based on geologic factors and requires that the State Geologist classify the mineral resources area as one of the four Mineral Resource Zones (MRZs), Scientific Resource Zones (SZ), or Identified Resource Areas (IRAs), described below.

- **MRZ-1:** A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2:** A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present or a likelihood of their presence and development should be controlled.
- **MRZ-3:** A Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.
- **MRZ-4:** A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.
- **SZ Areas:** Containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance shall be classified in this zone.
- **IRA Areas:** County or State Division of Mines and Geology Identified Areas where adequate production and information indicates that significant minerals are present.

As part of the classification process, an analysis of site specific conditions is utilized to calculate the total volume of aggregates within individually identified Resource Sectors. Resource Sectors are those MRZ-2 areas identified as having regional or statewide significance. Anticipated aggregate demand in the P-C Regions for the next 50 years is then estimated and compared to the total volume of aggregate reserves identified within the P-C Region.

Department of Conservation, Division of Oil, Gas & Geothermal Resources

The Division of Oil, Gas, and Geothermal Resources (DOGGR) is a subdivision of the California Department of Conservation. DOGGR oversees the drilling, operation, maintenance, and closing of oil, natural gas, and geothermal wells. The division is intended to protect the environment, prevent pollution, and ensure public safety (DOGGR 2013a). It functions as an information repository but also regulates oil and gas extraction activities consistent with state regulations that include Section 3000 et seq. of the State Public Resources Code and Title 14, Division 2, Chapter 4 of the California Code of Regulations. These codes include provisions regulating the distribution of oil wells.

Local

Community Standards Districts

Community Standards Districts (CSDs) are established by the County as supplemental districts to implement special development standards. CSDs also provide a means of addressing issues that are unique to certain geographic areas within the Project Area. Chapter 22.44 of the County Code contains development standards for the Baldwin Hills CSD and West Rancho Dominguez-Victoria CSD related to regulation of oil and natural gas facilities. Provisions for the Baldwin Hills CSD specifically state that its associated standards are intended, in part, to ensure that oil field operations are "conducted in harmony with adjacent land uses."

5.11.1.2 EXISTING CONDITIONS

The California Mineral Resources project designates P-C regions for the purpose of classifying mineral land resources. There are seven P-C regions entirely or partly within Los Angeles County:

- San Fernando Valley P-C Region
- San Gabriel Valley P-C Region
- Saugus-Newhall P-C Region
- Palmdale P-C Region
- Claremont-Upland P-C Region
- Orange County-Temescal Valley P-C Region
- Simi P-C Region

The San Fernando Valley, San Gabriel Valley, Saugus-Newhall, and Palmdale P-C Regions are all entirely within Los Angeles County and account for nearly all of its land. The majority of the lands covered by the Claremont-Upland, Orange County–Temescal Valley, and Simi P-C Regions are within adjacent counties, but small portions of each are in Los Angeles County. The location of these P-C Regions with respect to Los AngelesCounty is shown in Figure 5.11-1 *Aggregate Production-Consumption Regions.*

Mineral Resource Zones

Major Mineral Resource Zone 2 (MRZ-2) areas in Los Angeles County are listed in Table 5.11-1 and shown in figures referenced in the table. The acreages in the table are for entire MRZ-2 areas, including those located in the Project Area, in cities, or both.

Table 5.11-1 Major Mineral Resource Zone-2 Areas in Los Angeles County

Planning Area	Production-Consumption Region	MRZ-2 Area: Location and Acreage	Acres, Unincorporated Areas Only, by Planning Area	Figure
Antelope Valley	Palmdale	Three areas: one mostly in the City of Palmdale and partly in unincorporated Los Angeles County; the other two areas are in unincorporated Los Angeles County east of the City of Palmdale.	15,882	5.11-2
Santa Clarita Valley	Saugus-Newhall	Elongated branched area extending east-west along much of the length of the Santa Clarita River in Los Angeles County. One branch extends south into the southern part of the City of Santa Clarita; the second branch extends north along Castaic Creek near the I-5 freeway.	9,745	5.11-2
San Fernando Valley	San Fernando Valley	A wide swath of the eastern San Fernando Valley. Extends south along Los Angeles River; two branches at north end, one extending east along Tujunga Wash, and the other north along Pacoima Wash.	103	5.11-2
East San Gabriel Valley and West San Gabriel Valley	San Gabriel Valley	Much of the central San Gabriel Valley, plus three smaller separate areas: one along Eaton Wash, one along the Arroyo Seco, and one along Monrovia Canyon.	East San Gabriel Valley: 2,158 West San Gabriel Valley: 1,228 Total:3,386	5.11-3
Metro and Gateway	San Gabriel Valley	Parts of central and south-central Los Angeles.	Metro: 165 Gateway: None	5.11-4
South Bay	San Gabriel Valley	Elongated area at the northern foot of the Palos Verdes Hills, including parts of the cities of Rolling Hills, Rolling Hills Estates, Rancho Palos Verdes, and Torrance.	None	None
		Total acres, unincorporated areas	**29,282**	**N/A**

Source: CGS 2013.

Existing Conditions in MRZ-2 Areas

Antelope Valley Planning Area

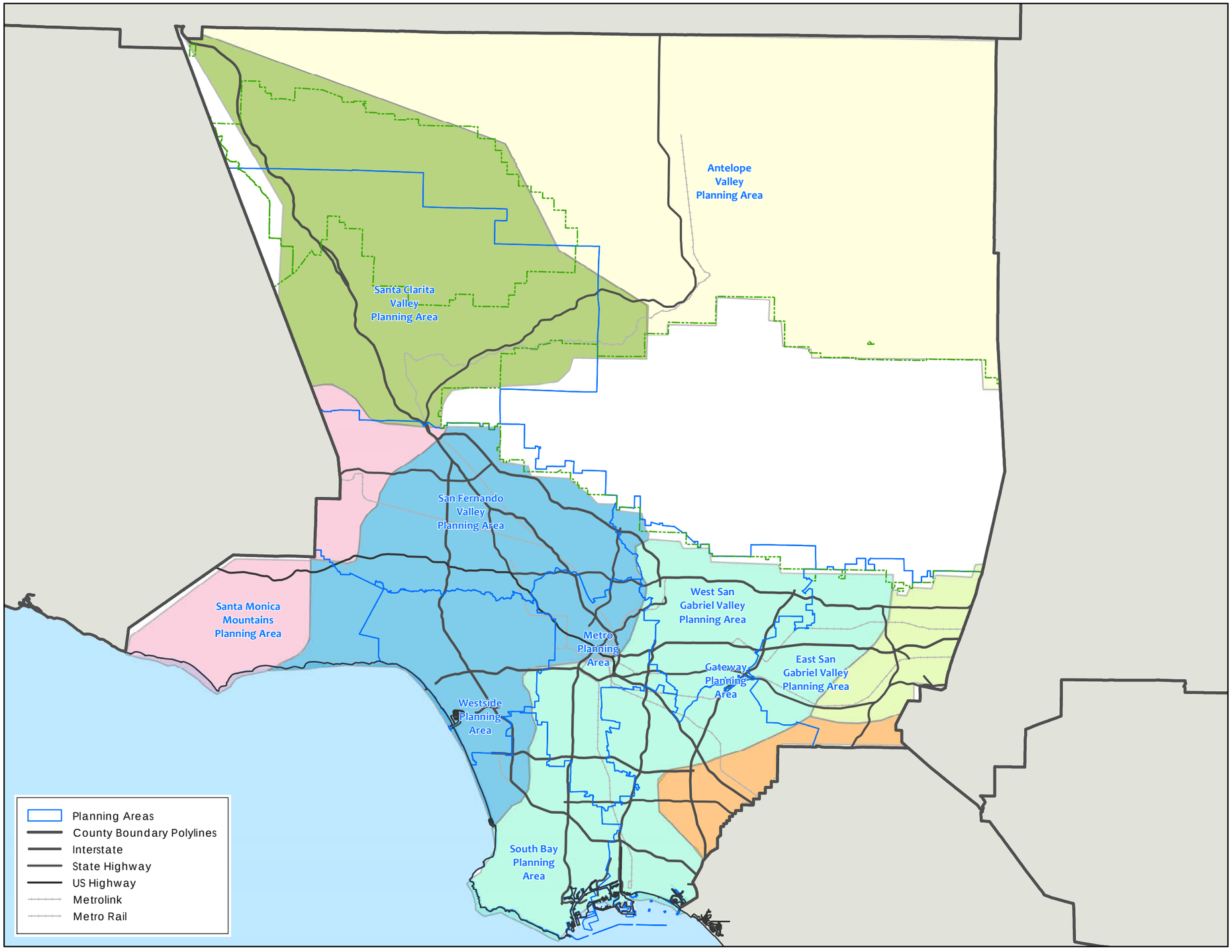
There are three MRZ-2 areas in the existing Antelope Valley Area Plan: from west to east, the Little Rock Wash; Big Rock Wash/Rock Creek area; and Mescal Creek area. The unincorporated MRZ-2 area in Little Rock Wash is entirely vacant except for one active mine—the Big Rock Creek Mine—west of 165th Street and south of Union Pacific Railroad tracks. The unincorporated MRZ-2 area near Mescal Creek is also completely vacant (see Figure 5.11-5, *Existing Conditions, Unincorporated MRZ-2 Areas, Antelope Valley Area Plan*).

Santa Clarita Valley Planning Area

MRZ-2 areas in unincorporated areas that are mapped within the Santa Clarita Valley Area Plan are east, north, and west of the City of Santa Clarita. The MRZ-2 area east of the City of Santa Clarita is entirely vacant except for one active mine, the Soledad Canyon Mine, southeast of the interchange of Soledad Canyon Road and the SR-14 freeway.

FIGURE 5.11-1

AGGREGATE PRODUCTION-CONSUMPTION REGIONS



- OC Temescal Valley P-C Region
- Claremont Upland P-C Region
- San Gabriel Valley P-C Region
- San Fernando P-C Region
- Simi P-C Region
- Saugus Newhall P-C Region
- Palmdale P-C Region

Source: California Geological Survey, 2013

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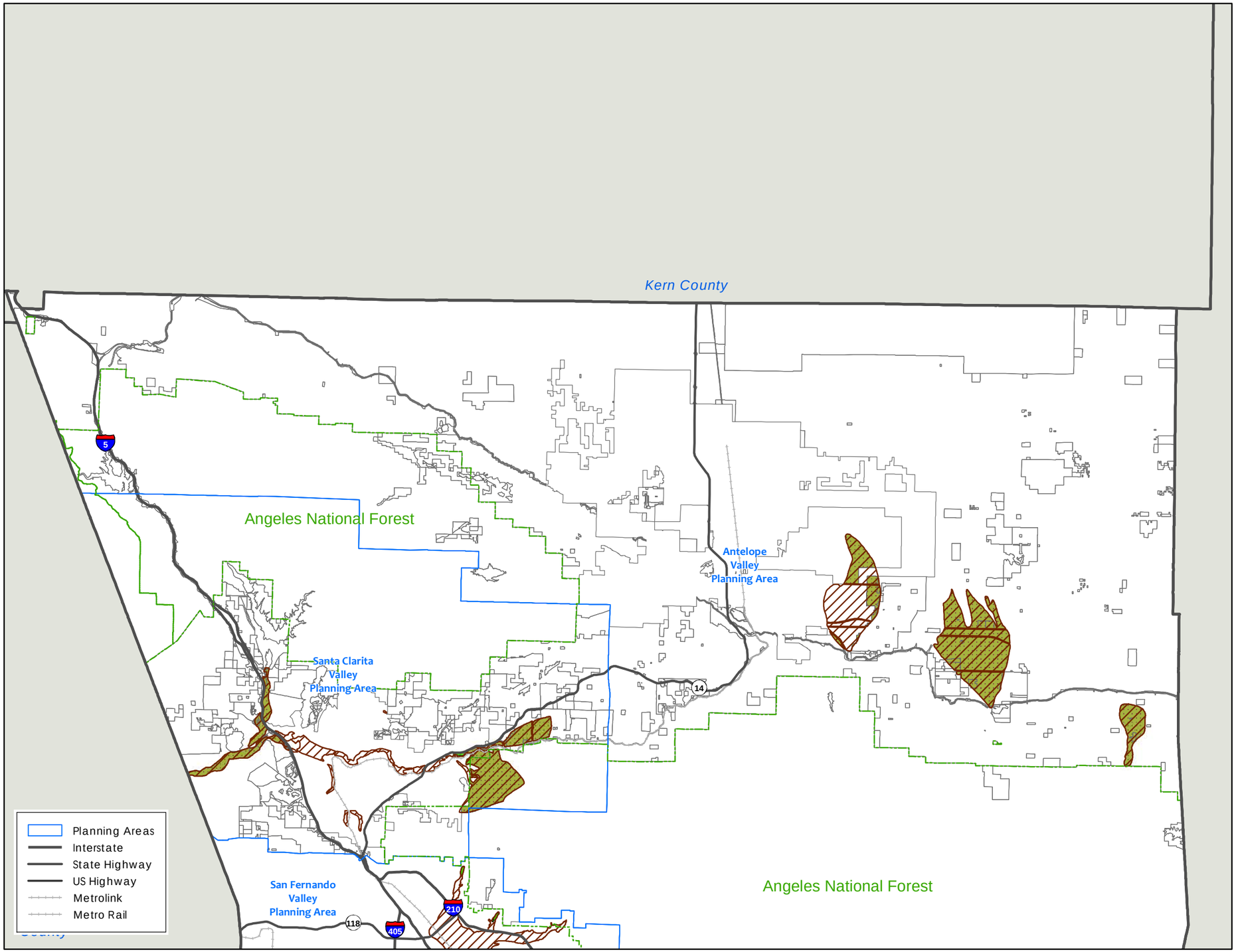
FIGURE 5.11-2

MINERAL RESOURCE ZONE-2 AREAS, ANTELOPE VALLEY PLANNING AREA, SAN FERNANDO PLANNING AREA, AND SANTA CLARITA VALLEY PLANNING AREA



Mineral Resources
Land Use Policy Area Community Plans
Mineral Resources In Area Community Plans
Mineral Resources In Unicorporated Areas

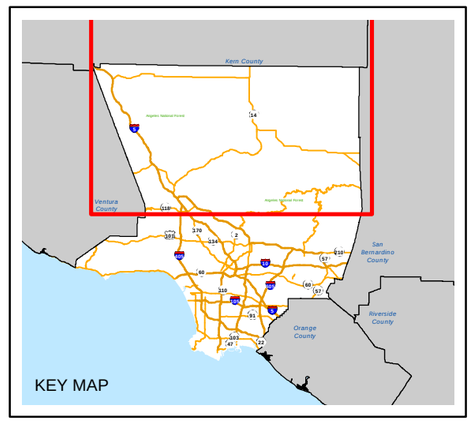


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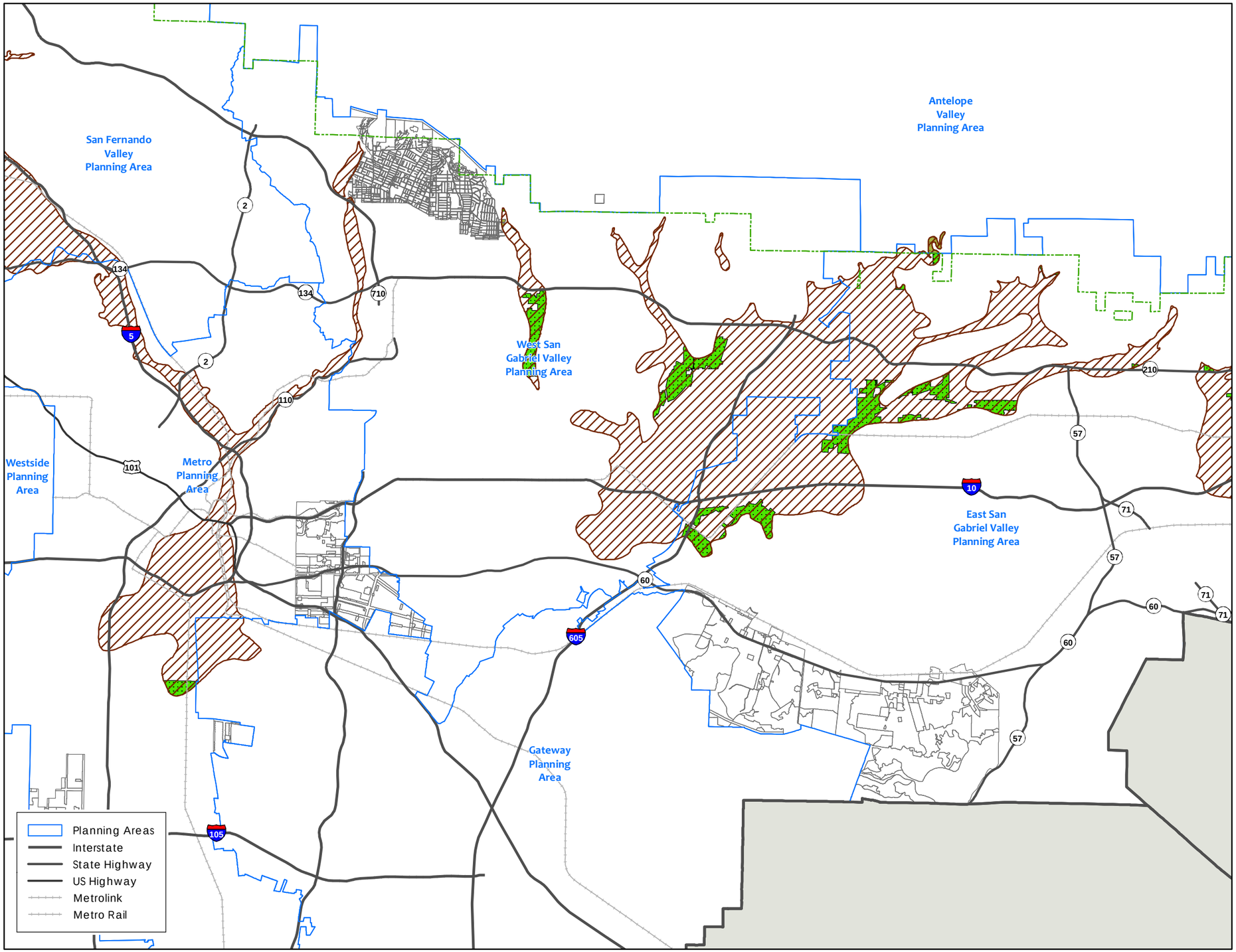
FIGURE 5.11-3

MINERAL RESOURCE ZONE-2 AREAS, WEST SAN GABRIEL VALLEY PLANNING AREA, EAST SAN GABRIEL VALLEY PLANNING AREA, AND METRO PLANNING AREA



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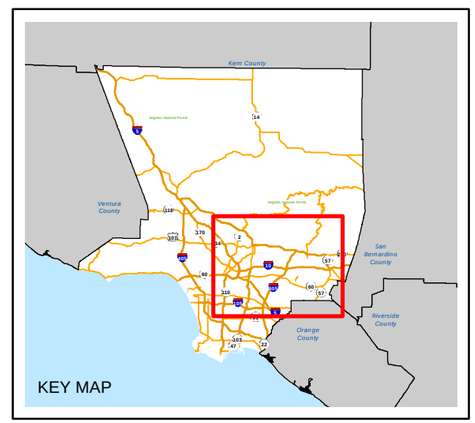
Land Use Policy Area Community Plans
Mineral Resources In Area Community Plans
Mineral Resources In Unincorporated Areas



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Source: California Geological Survey, 2013

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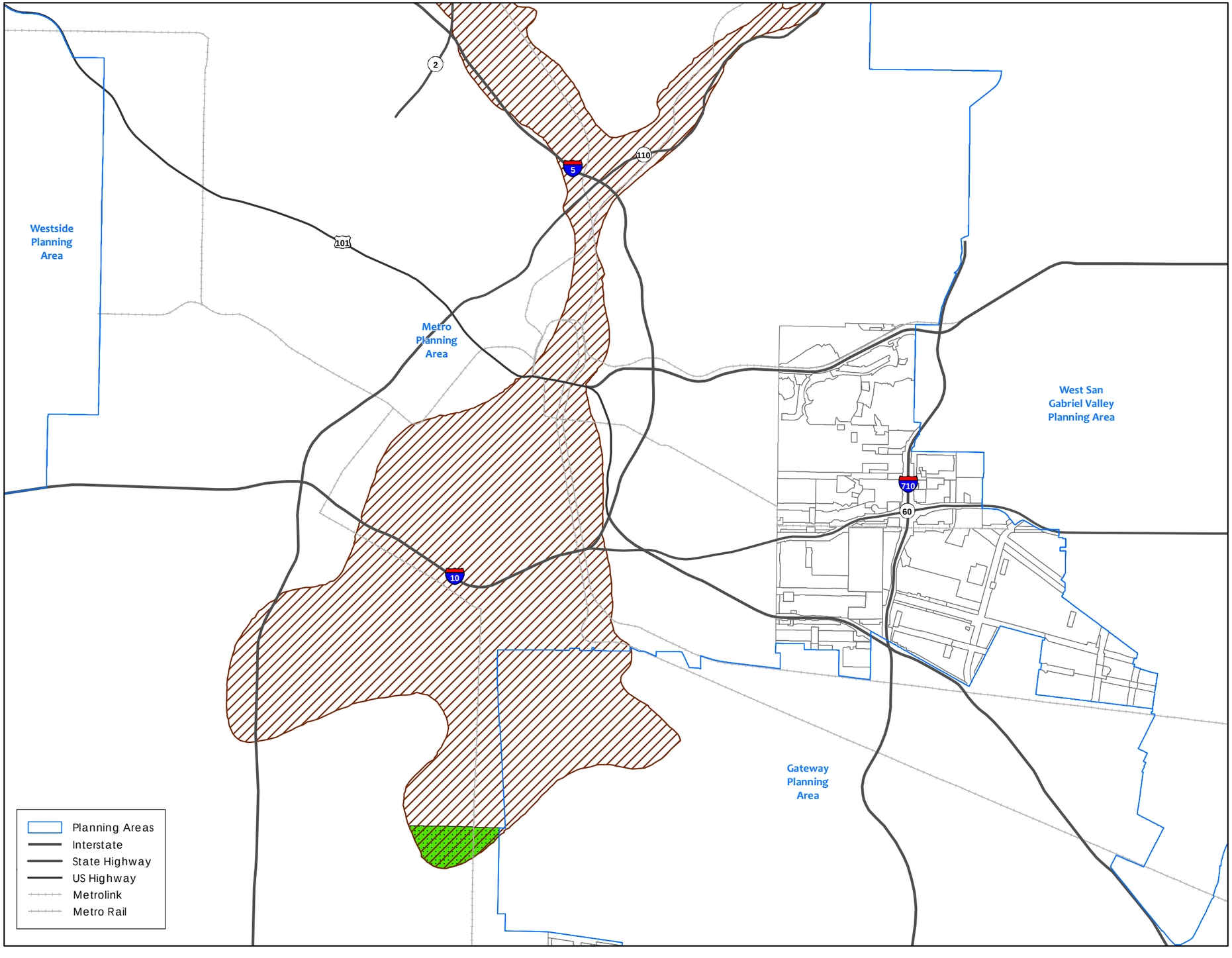
FIGURE 5.11-4

MINERAL RESOURCE ZONE-2 AREAS, METRO PLANNING AREA



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Source: California Geological Survey, 2013

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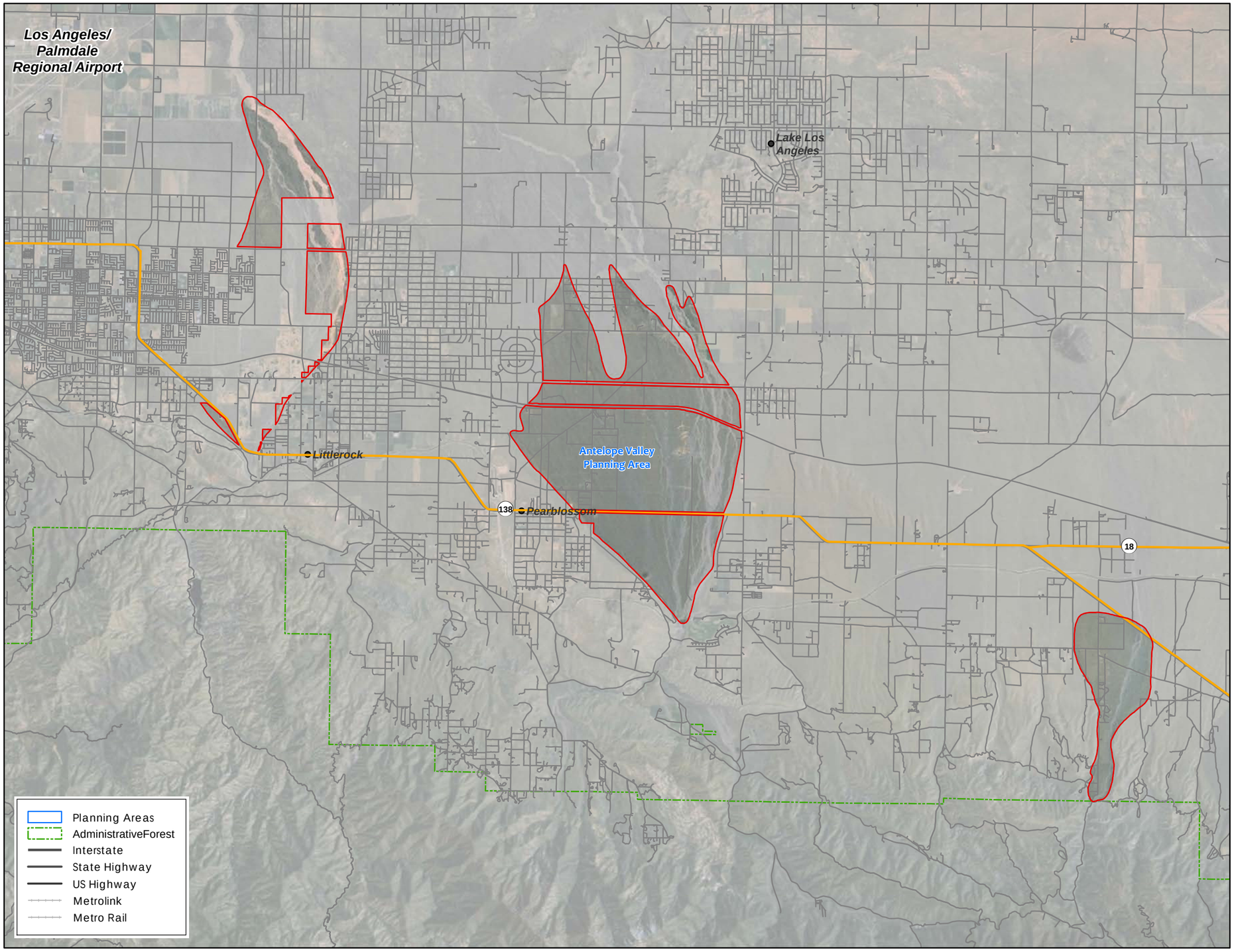
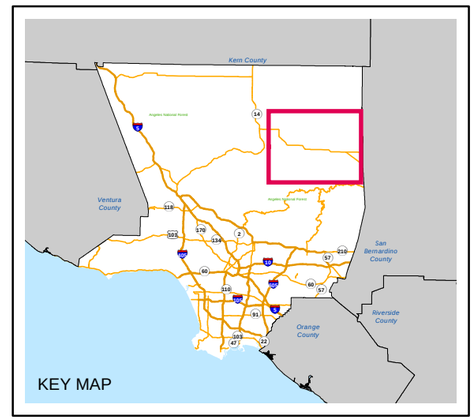
FIGURE 5.11-5

EXISTING CONDITIONS, UNINCORPORATED MRZ-2 AREAS, ANTELOPE VALLEY PLANNING AREA

Unincorporated MRZ-2 Areas





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PLACEWORKS

Source: Calfornia Geological Survey, 2013

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The unincorporated MRZ-2 area north of the City of Santa Clarita is mostly vacant except for scattered agricultural uses, a few scattered buildings, and part of the parking lot of the North County Correctional Facility in the south end of the area. Much of the area is in the flood plain of Castaic Creek.

The unincorporated MRZ-2 area west of Santa Clarita extends north to Firebrand Drive, south to the east edge of the Six Flags Magic Mountain Theme Park, and west to the Los Angeles County boundary. Much of this area in the flood plain of the Santa Clara River is developed with agricultural uses. Parts of the MRZ-2 area east of Commerce Center Drive and north of SR-126 are developed with residential and commercial uses. The south end of the area near Magic Mountain is developed as part of a wastewater treatment plant. An RV park is next to the south side of SR-126 west of Commerce Center Drive (see Figure 5.11-6, *Existing Conditions, Unincorporated MRZ-2 Areas, Santa Clarita Valley Area Plan*).

West San Gabriel Valley Planning Area

Four portions of unincorporated land in this Planning Area are mapped MRZ-2: one is in the communities of East Pasadena and East San Gabriel; the other is mostly in the communities of Mayflower Village and South Monrovia, with a small part of the second portion in the community of North El Monte. The portion in East Pasadena and East San Gabriel is developed with residential, commercial, and industrial land uses and roadways. The portion in Mayflower Village, South Monrovia, and North El Monte is built out almost entirely with residential uses; the south end of this area is developed as Arcadia Golf Course (see Figure 5.11-7, *Existing Conditions, Unincorporated MRZ-2 Areas, West San Gabriel Valley Planning Area*).

Two other areas are identified in the existing Altadena Community Plan as MRZ-2: one on the western boundary of the Community Plan area, and the other on the eastern boundary of the Community Plan area straddling New York Avenue. The MRZ-2 area on the western boundary is developed with single-family residential uses; the MRZ-2 area on the eastern boundary is partly developed with single-family residential uses and partly vacant land. The vacant land spans about 4.5 acres and abuts the north side of New York Avenue.

East San Gabriel Valley Planning Area

Nearly all of the MRZ-2 area in the East San Gabriel Valley Planning Area is in the communities of Avocado Heights, West Puente Valley, East Irwindale, and Charter Oak. Small MRZ-2 areas are in the communities of West Claremont and North Pomona.

- **Avocado Heights**: South of Valley Boulevard: MRZ-2 area is built out with residential and some commercial land uses and San Angelo Park. North of Valley Boulevard: MRZ-2 area is built out with industrial uses.

- **West Puente Valley:** MRZ-2 area is built out with residential uses and two schools.

- **East Irwindale:** MRZ-2 area is built out with residential and some commercial land uses, schools, and a park.

- **Covina Islands:** MRZ-2 areas are built out with mostly residential areas and some commercial and industrial areas.
- **Charter Oak:** MRZ-2 area is built out with residential and some commercial uses.
- **West Claremont:** MRZ-2 area is built out with residential land uses.
- **North Pomona:** MRZ-2 area is built out with residential land uses (see Figure 5.11-8, *Existing Conditions, Unincorporated MRZ-2 Areas, East San Gabriel Valley Planning Area*).

Metro Planning Area

The MRZ-2 area in the unincorporated areas of the Metro Planning Area is at the north end of the community of Florence–Firestone and is developed with residential, commercial, and industrial land uses.

San Fernando Valley Planning Area

Two portions of unincorporated areas in the San Fernando Valley Planning Area are mapped MRZ-2: one in Kagel Canyon and the other in Pacoima Canyon within the Angeles National Forest. The area in Pacoima Canyon is vacant. Most of the MRZ-2 area in Kagel Canyon is developed with horse stables and associated parking lots (see Figure 5.11-9, *Existing Conditions, Unincorporated MRZ-2 Areas, San Fernando Valley Planning Area*).

Gateway Planning Area

No unincorporated areas within the Gateway Planning Area are mapped MRZ-2.

Existing Area Plan Land Use Designations in MRZ-2 Areas

Existing land use designations for unincorporated MRZ-2 areas within the Antelope Valley Planning Area and Santa Clarita Valley Planning Area are listed in Table 5.11-2 and shown on Figure 5.11-10, *Land Use Designations, Unincorporated MRZ-2 Areas, Antelope Valley Area Plan*, and Figure 5.11-11, *Land Use Designations, Unincorporated MRZ-2 Areas, Santa Clarita Valley Area Plan*.

Table 5.11-2 Existing Land Use Designations: MRZ-2 Areas

Designation	Acres
Antelope Valley Planning Area	
Airport	1,634
C – Commercial	9
M – Industry	15
N1 – Non-Urban 1 (0.5 du/ac)	13,031
N2 – Non-Urban 2 (1.0 du/ac)	328
O – Open Space	317
O-BLM – Open Space, Bureau of Land Management	234
O-NF – National Forest	150
U1 – Urban 1 (1.1 to 3.3 du/ac)	165
Total	**15,882**
Santa Clarita Valley Planning Area	
CG – General Commercial	9
CM – Major Commercial	209
Freeway Right of Way	7
H2 – Residential 2	1
H30 – Residential 30	7
H5 – Residential 5	92
IL – Light Industrial	3
IO – Industrial Office	451
OS-C – Conservation	31
OS-NF – National Forest	4,755
OS-PR – Parks and Recreation	61
OS-W – Water	4
P – Public and Semi-Public	568
RL1 – Rural Land 1	77
RL10 – Rural Land 10	457
RL2 – Rural Land 2	0
RL20 – Rural Land 20	1,707
SP – Specific Plan	1,186
Total	**9,626**
West San Gabriel Valley Planning Area	
BP – Business Park	3
I – Institutions	1
LD – Low Density Residential (1 to 6 du/gross ac)	19
Right-of-Way	6
Total	**29**

Mineral Resource Sectors

Mineral Resource Sectors are areas where mineral resources of regional or statewide significance are considered to be present or likely to be present and that have current land uses deemed compatible with potential mining. Mineral resource sectors in Los Angeles County are described below in Table 5.11-3.

Table 5.11-3 Mineral Resource Sectors in Los Angeles County

Planning Area	Production-Consumption Region and Map Date	Mineral Resource Sectors		
		Number of Sectors and Locations	Mapped as Urbanized, Urbanizing, or Zoned Urban	Active Mines mapped
East San Gabriel Valley and West San Gabriel Valley	San Gabriel Valley 2010	9 sectors mostly in the cities of Azusa and Irwindale; a small part of 1 sector is in the City of Arcadia. None of the 9 sectors are in unincorporated Los Angeles County.	Parts of 5 sectors (the 5 largest of the 9 sectors) are mapped as lost to land uses incompatible with mining.	Active mines are mapped in 4 of the 9 sectors.
		1 sector in Eaton Wash in the City of Pasadena.	None	None
		1 sector in Arroyo Seco in City of Pasadena. No areas mapped as lost to urbanization or as active mines.	None	None
South Bay	San Gabriel Valley 2010	1 sector in cities of Rolling Hills Estates and Torrance.	Most mapped as lost to land uses incompatible with mining.	None
Antelope Valley	Palmdale 1994	10 sectors. 2 sectors and parts of 2 additional sectors are in the City of Palmdale; the balance of the sectors is in unincorporated Los Angeles County.	Parts of 4 sectors mapped as zoned for urban development; part of 1 sector mapped as urbanized or urbanizing. Urban, urbanizing, and zoned urban areas are in both the City of Palmdale and in unincorporated Los Angeles County.	Parts of 2 sectors, in the City of Palmdale, mapped as owned or controlled by aggregate producers.
Santa Clarita Valley	Saugus-Newhall 1994	16 sectors. 8 sectors are in unincorporated Los Angeles County, 7 sectors are in the City of Santa Clarita, and 1 sector is in both jurisdictions.	Parts of 5 sectors mapped as urbanized or urbanizing. Most of the urbanized/urbanizing areas are in the City of Santa Clarita; the balance is in unincorporated Los Angeles County.	Parts of 3 sectors, in unincorporated Los Angeles County, mapped as owned or controlled by aggregate producers.
San Fernando Valley	San Fernando Valley 1994	4 sectors. 3 sectors are in and near Tujunga Valley in the City of Los Angeles. 1 sector in Pacoima Wash mostly in the City of Los Angeles with the balance in unincorporated Los Angeles County.	Most of 2 sectors, and part of the third sector, in Tujunga Valley mapped as lost to urbanization.	None

Sources: CGS 1994; CGS 2010.

Active and Inactive Mines

There are currently a total of 46 mines operated by 32 companies within Los Angeles County. Of these mines, 24 are currently active. Two additional mines are currently permitted but not yet active. The active mines are detailed in Table 5.11-4, *Active Mines in Los Angeles County*, below. Seven of the 24 active mines are in unincorporated areas.

Table 5.11-4 Active Mines in Los Angeles County

Mine Name[1] Mine ID	Lead Agency[2]	Operator	Production
Antelope Valley Planning Area *Palmdale Production-Consumption Region*			
Holliday–Palmdale 91-19-0001	City of Palmdale	Holliday Rock Company, Inc.	Sand and gravel
Antelope Valley Aggregate, Inc. 91-19-0002	City of Palmdale	Holliday Rock Company, Inc.	Sand and gravel
Littlerock 91-19-0008	City of Palmdale	Granite Construction Company	Sand and gravel
Palmdale 91-19-0020	City of Palmdale	Calmat Company	Sand and gravel
Big Rock Creek 91-19-0021	**Los Angeles County**	Calmat Company	Sand and gravel
Little Rock Quarry 91-19-0026	City of Palmdale	Hi-Grade Materials Co.	Sand and gravel
Palmdale 91-19-0033	City of Palmdale	Robertson's Ready Mix	Sand and gravel
Lane Quarry 91-19-0040	City of Palmdale	Lane Quarry	Decomposed granite
Big Rock Creek *(Newly Permitted)* 91-19-0046	**Los Angeles County**	Granite Construction Company	Sand and gravel
75th Street Quarry *(Newly Permitted)* 91-19-0049	City of Palmdale	JV Aggregate Processing, LLC	Sand and gravel
Antelope Valley Planning Area *Saugus-Newhall Production-Consumption Region*			
Acton Clay Quarries 91-19-0047	**Los Angeles County**	North Star Minerals, Inc.	Clay
Santa Clarita Valley Planning Area *Saugus-Newhall Production-Consumption Region*			
Lang Station 91-19-0030	**Los Angeles County**	Curtis Sand & Gravel	Sand and gravel
Rasmussen Soledad Rock Quarry 91-19-0032	**Los Angeles County**	Rasmussen R & R, Inc.	Sand and gravel
Soledad Canyon 91-19-0038	**Los Angeles County**	Triangle Rock Products	Sand and gravel
Castaic Clay Manufacturing 91-19-0041	**Los Angeles County**	Castaic Clay Products	Clay
East San Gabriel Valley Planning Area *San Gabriel Valley Production-Consumption Region*			
Azusa Quarry 91-19-0007	City of Azusa	Cemex Construction Materials	Sand and gravel
Reliance–Irwindale 91-19-0016	City of Irwindale	Calmat Company	Sand and gravel

Table 5.11-4 Active Mines in Los Angeles County

Mine Name[1] Mine ID	Lead Agency[2]	Operator	Production
Reliance–Azusa 91-19-0018	City of Irwindale	Calmat Company	Sand and gravel
Durbin 91-19-0023	City of Irwindale	Calmat Company	Sand and gravel
West San Gabriel Valley Planning Area *San Gabriel Valley Production-Consumption Region*			
United Rock Products Corp. 91-19-0012	City of Irwindale	United Rock Products Corporation	Sand and gravel
Quarry III 91-19-0015	City of Irwindale	United Rock Products Corporation	Sand and gravel
Irwindale 91-19-0025	City of Irwindale	Hanson Aggregates LLC	Sand and gravel
Peck Road Gravel Pit 91-19-0043	City of Irwindale	SLSN Inc.	Sand and gravel
Gateway Planning Area *San Gabriel Valley Production-Consumption Region*			
Atkinson Pit 91-19-0004	State Mining & Geology Board	Atkinson Brick Company	Clay
Coastal Islands Planning Area (not in a production –consumption region)			
Pebbly Beach Quarry (Catalina Island) 91-19-0010	**Los Angeles County**	Connolly-Pacific Company	Stone

Source: California State Office of Mine Reclamation, 2013.
[1] All mines listed are active except the two noted as newly permitted.
[2] Active mines in unincorporated areas are indicated by *Los Angeles County* in boldface in the Lead Agency column.

Aggregate Mining Sites Identified in the Existing General Plan

Major sand and gravel extraction sites are found in the alluvial fans of the Tujunga Wash and the San Fernando Valley and in the San Gabriel River in and near Irwindale. Other sites are in the Santa Clara River, and Little Rock and Big Rock washes in the north county (Antelope Valley).

Aggregate Supplies and Demands

Aggregate reserves are aggregate that have been determined to be acceptable for commercial use, that exist within properties owned or leased by aggregate producing companies, and for which permits have been granted to allow mining and processing of the material. Aggregate resources include reserves as well as all potentially usable aggregate materials that may be mined in the future, but for which no permit allowing mining has been granted, or for which marketability has not been established. PCC-Grade aggregate reserves and resources for each of the P-C Regions in the county are shown in Table 5.11-5, below.

Projections of aggregate demand for Los Angeles County through the year 2044 were made based upon population projections and an average per capita consumption rate. These projections are compared to existing aggregate reserves and resources in Table 5.11-5.

Table 5.11-5 Aggregate Resources, Reserves, and Demands of Los Angeles County

Portland Cement Concrete (PCC)-Grade Aggregate Resources	11,095 million tons
PCC-Grade Aggregate Reserves	750 million tons
50-Year Demand, All Aggregate	2,009 million tons
50-Year Demand, PCC-Grade Aggregate	1,105 million tons
Estimated Depletion, PCC-Grade Aggregate Reserves	2016

Source: CDMG 1994.

The results of these projections show that an estimated two billion tons of aggregate will be needed to satisfy the future demand through the year 2044 in the area supplied by aggregate produced in Los Angeles County. Of this total, 55 percent, or 1.1 billion tons must be of PCC grade. Existing PCC-grade reserves total roughly 750 million tons and are expected to be depleted by 2016.

Aggregate Production

California is divided into 12 districts for the purpose of reporting minerals production statistics in the Minerals Yearbook published by the US Geological Survey. The most recent yearbook available is for 2009, published in August 2013. District 11 comprises Los Angeles County, Ventura County, and Orange County. Minerals production in District 11 in 2009 is summarized in Table 5.11-6.

Table 5.11-6 Mineral Production, District 11, 2009

Mineral Type	Production, Metric Tons	Production, dollar value
Concrete aggregate and concrete products	5,580,000	$68,700,000
Asphaltic concrete aggregates and road base materials	575,000	$3,910,000
Other miscellaneous uses	302,000	$3,000,000
Unspecified	4,960,000	$59,000,000
Other Production Materials	184,000	$2,340,000
Total	**11,601,000**	**$136,950,000**

Source: USGS 2013a.
One metric ton is 2,205 pounds.

Oil and Natural Gas Resources

Mineral resource areas also include oil and natural gas resources. Oil production still occurs in many parts of Los Angeles County. Oil fields extend across broad areas of the southern and central Los Angeles Basin, from the City of Long Beach and unincorporated Rowland Heights in the east; to the City of Torrance, unincorporated Marina del Rey, and West Los Angeles—in the City of Los Angeles—in the west. Oil and natural gas resource areas in Los Angeles County are shown in Figures 5.11-12, *Oil and Gas Fields in the General Plan Area – North County,* and 5.11-13, *Oil and Gas Fields in the General Plan Area – South County*.

Oil and Natural Gas Production

Oil production in Los Angeles County in 2012 was about 24 million barrels (1 barrel = 42 US gallons). Natural gas production in Los Angeles County in 2012 was about 18.5 billion cubic feet. There were 3,690 active oil and gas wells in Los Angeles County in 2012 (DOGGR 2013b).

5.11.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

M-1 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

M-2 Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

5.11.3 Relevant General Plan Goals and Policies

The following is a list of applicable goals and policies of the Proposed Project that are intended to reduce potentially significant adverse effects concerning mineral resources.

Goal C/NR 10: Locally available mineral resources to meet the needs of construction, transportation, and industry.

- **Policy C/NR 10.1:** Protect MRZ-2s and access to MRZ-2s from development and discourage incompatible adjacent land uses.

Goal C/NR 11: Mineral extraction and production activities that are conducted in a manner that minimizes impacts to the environment.

- **Policy C/NR 11.1:** Require mineral resource extraction and production activities and drilling for and production of oil and natural gas to comply with County regulations and state requirements, such as SMARA, and DOGGR regulations.

- **Policy C/NR 11.2:** Require the reclamation of abandoned surface mines to productive second uses.

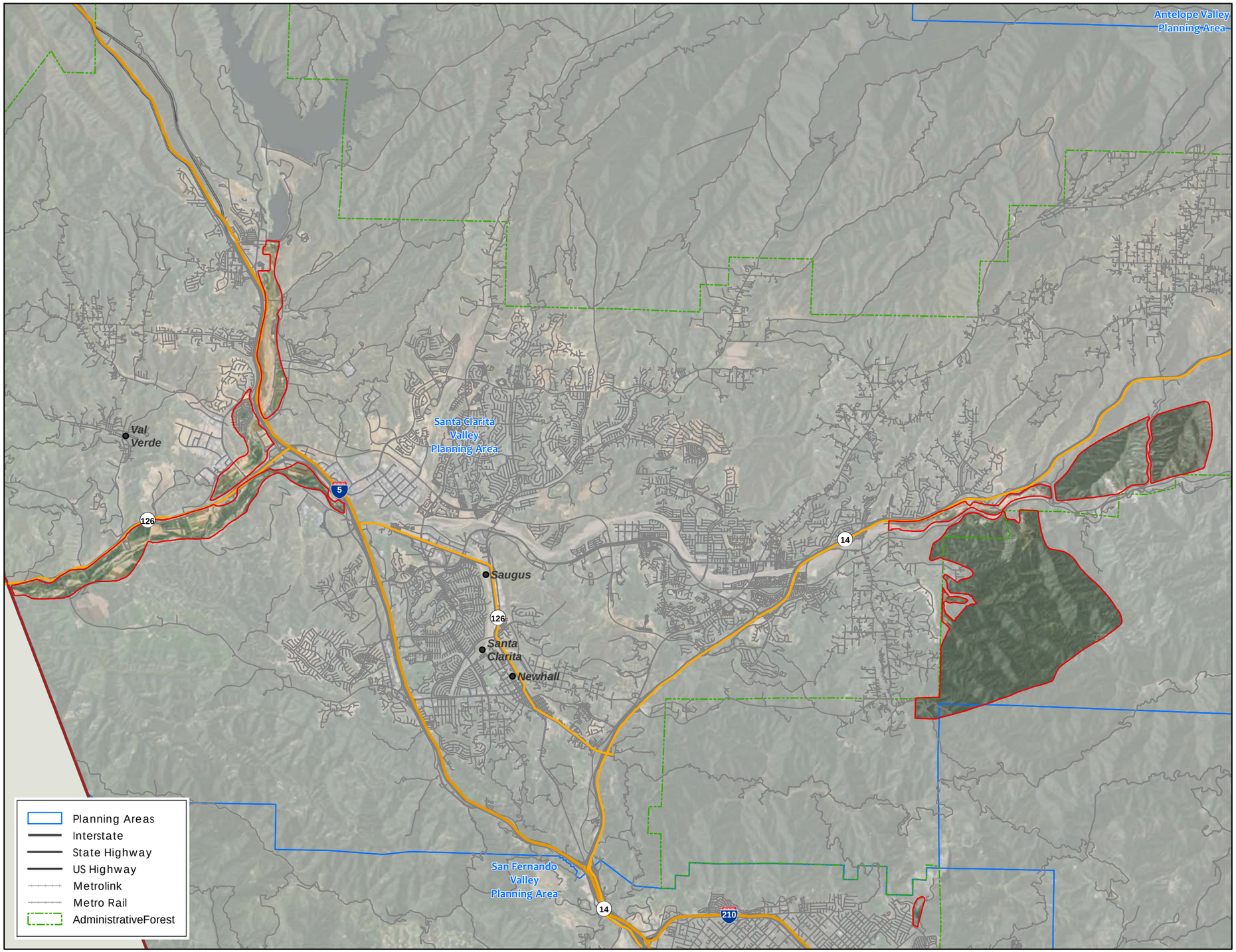
- **Policy C/NR 11.3:** Require appropriate levels of remediation for all publicly-owned oil and natural gas production sites based on possible future uses.

- **Policy C/NR 11.4:** Require that mineral resource extraction and production operations as well as activities related to the drilling for and production of oil and natural gas be conducted to protect other natural resources and prevent excessive grading in hillside areas.

FIGURE 5.11-6

EXISTING CONDITIONS, UNINCORPORATED MRZ-2 AREAS, SANTA CLARITA VALLEY PLANNING AREA

Unincorporated MRZ-2 Areas



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Source: California Geological Survey, 2013

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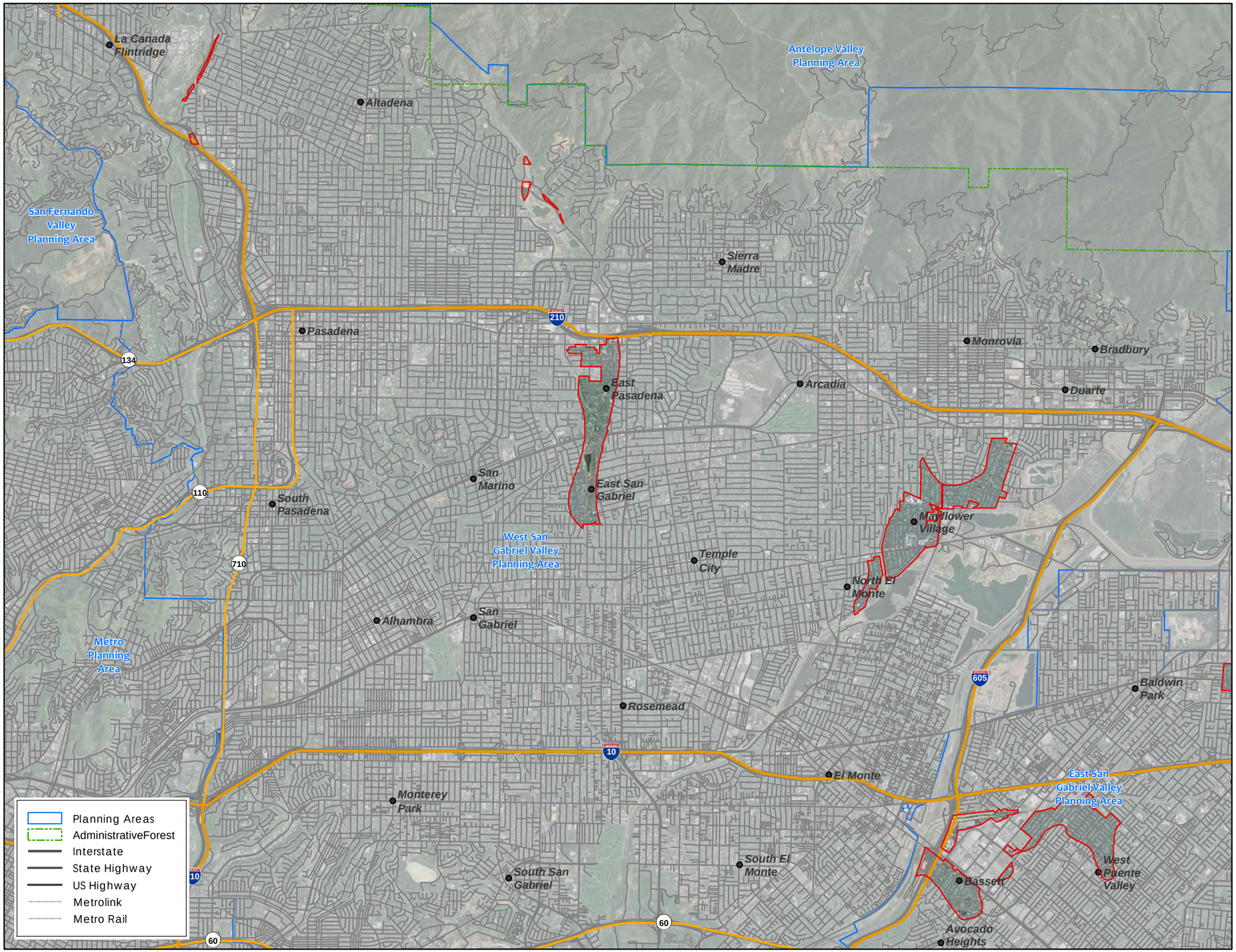
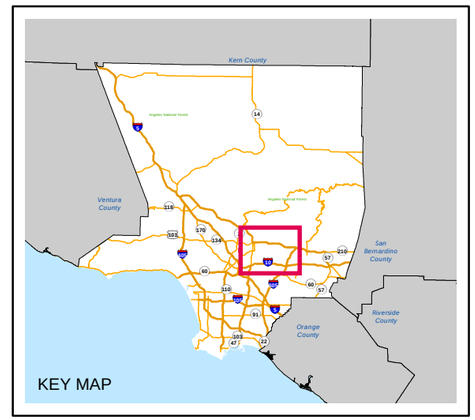
FIGURE 5.11-7

EXISTING CONDITIONS, UNINCORPORATED MRZ-2 AREAS, WEST SAN GABRIEL VALLEY PLANNING AREA

Unincorporated MRZ-2





Source: California Geological Survey, 2013

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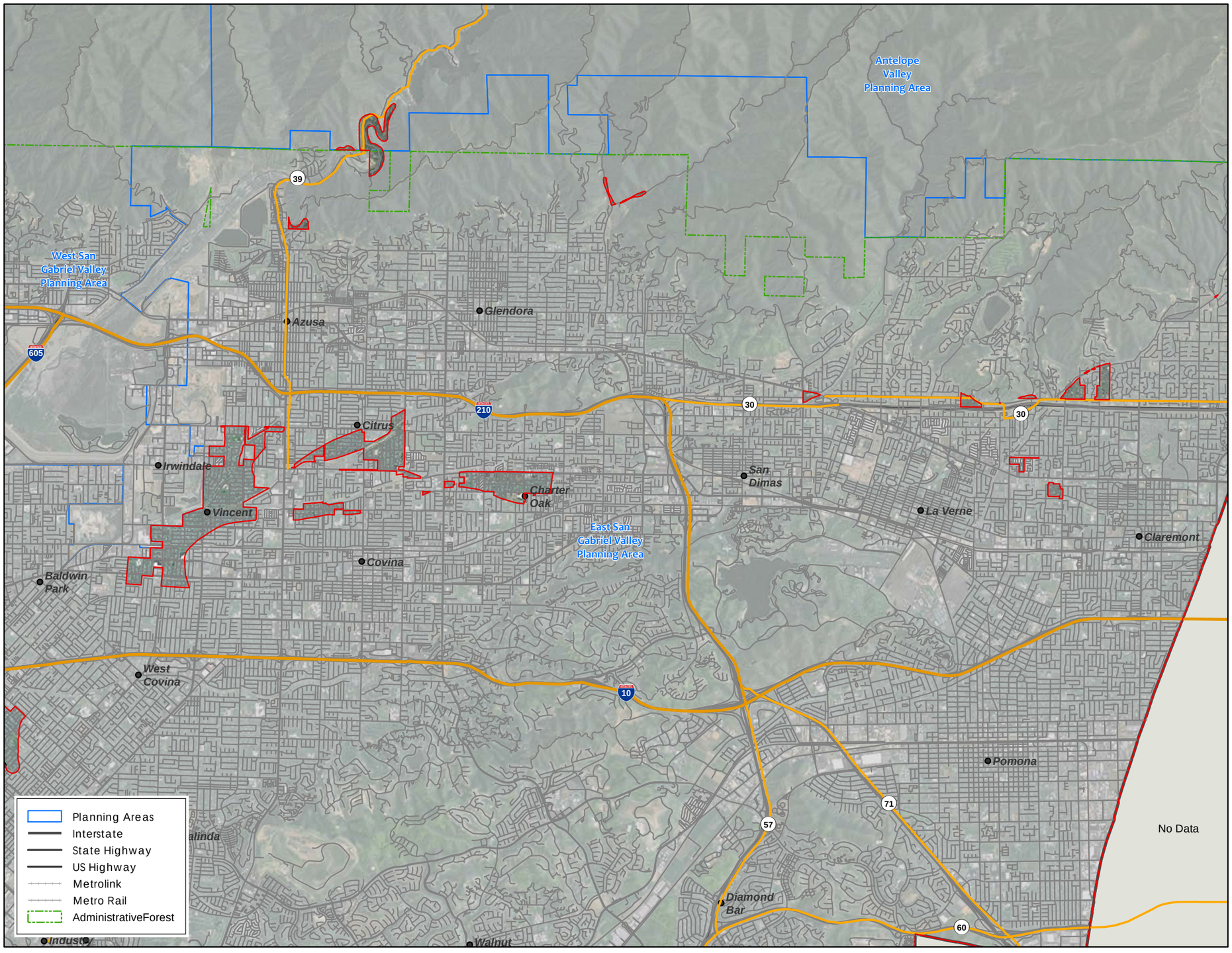
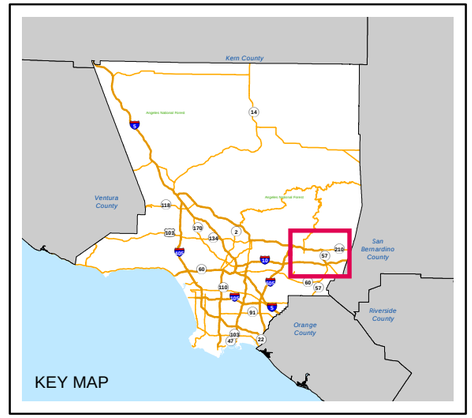
FIGURE 5.11-8

EXISTING CONDITIONS, UNINCORPORATED MRZ-2 AREAS, EAST SAN GABRIEL VALLEY PLANNING AREA

Unincorporated MRZ-2 Areas





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Source: California Geological Survey, 2013

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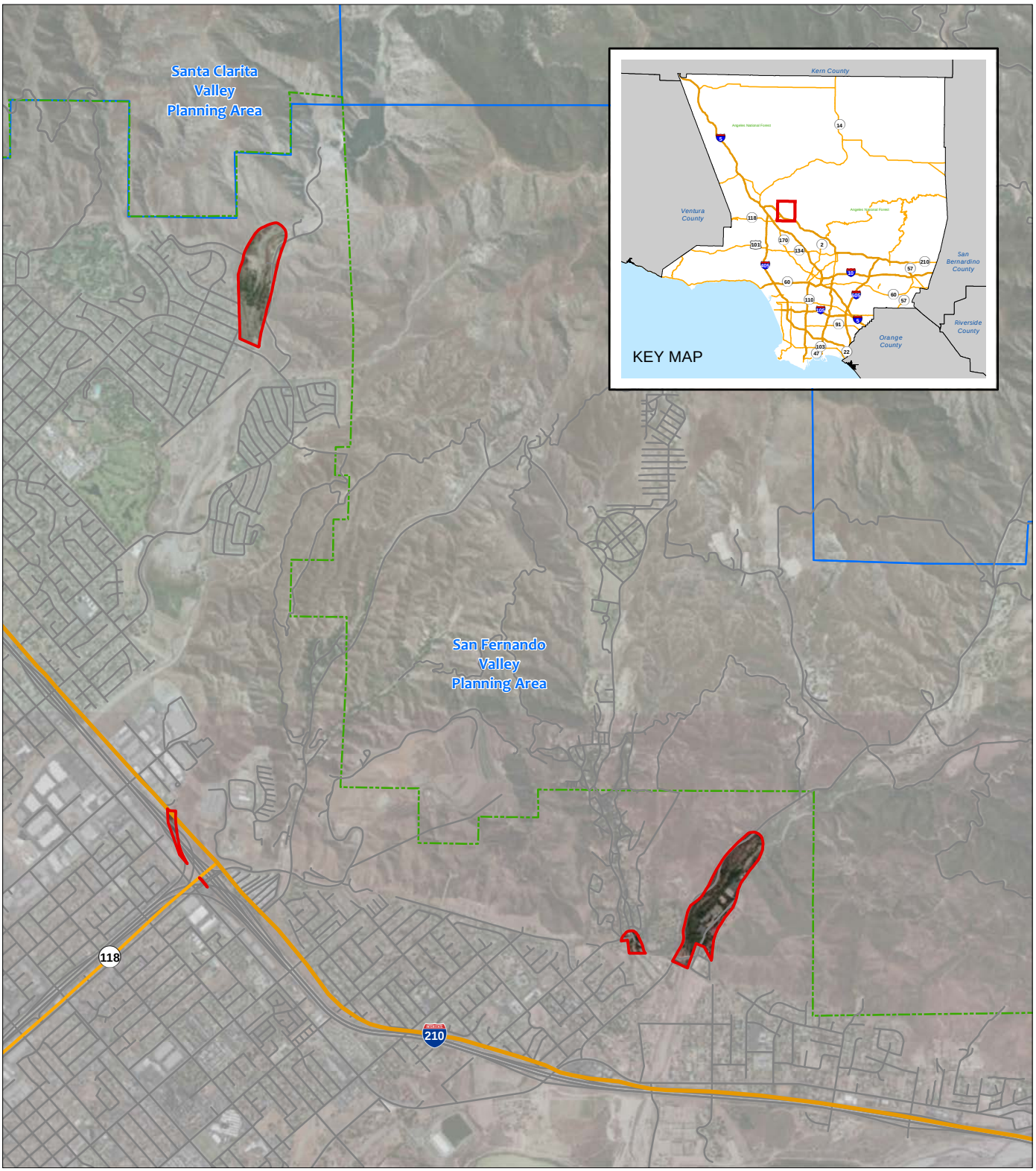
EXISTING CONDITIONS, UNINCORPORATED MRZ-2 AREAS, SAN FERNANDO VALLEY PLANNING AREA

FIGURE 5.11-9



Source: California Geological Survey, 2013

Unincorporated MRZ-2 Areas

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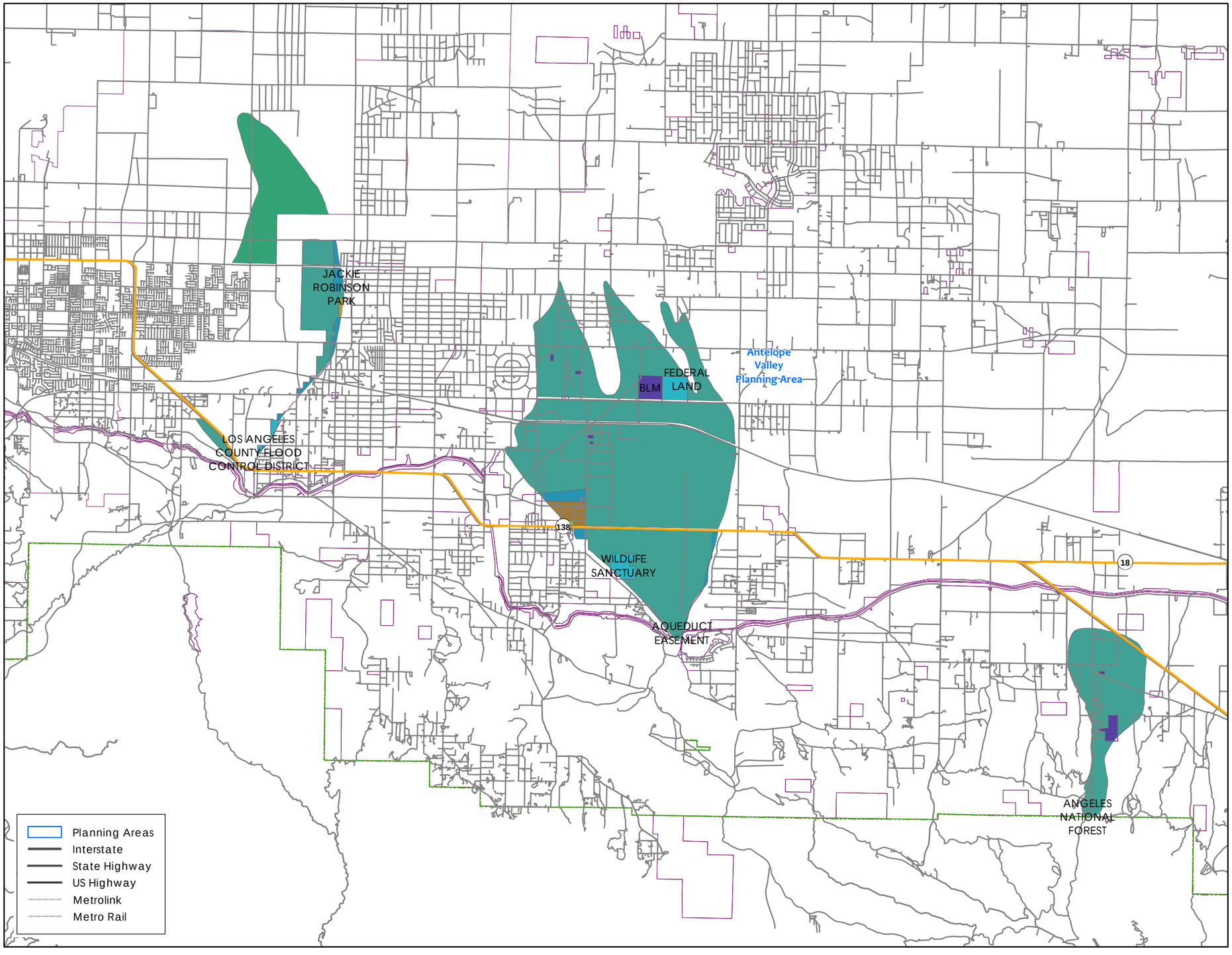
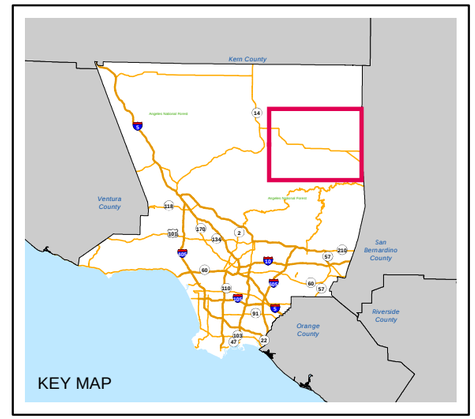
FIGURE 5.11-10

LAND USE DESIGNATIONS, UNINCORPORATED MRZ-2 AREAS, ANTELOPE VALLEY PLANNING AREA



Airport
C - Commercial
M - Industry
N1 - Non-Urban 1 (0.5 du/ac)
N2 - Non-Urban 2 (1.0 du/ac)
O - Open Space
O-BLM - Open Space, Bureau of Land Management
O-NF - National Forest
U1 - Urban 1 (1.1 to 3.3 du/ac)
Community Plan



Source: California Geological Survey, 2013

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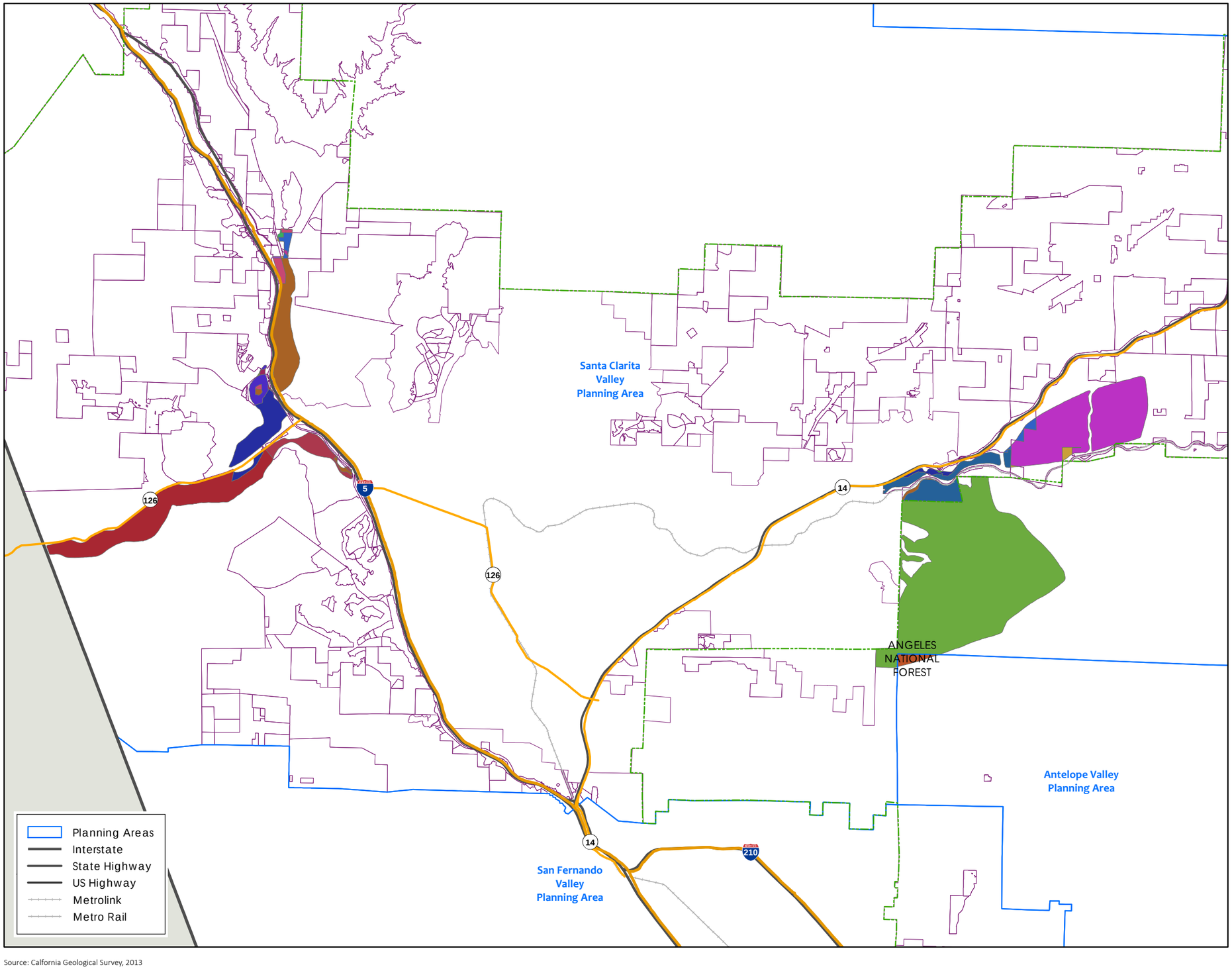
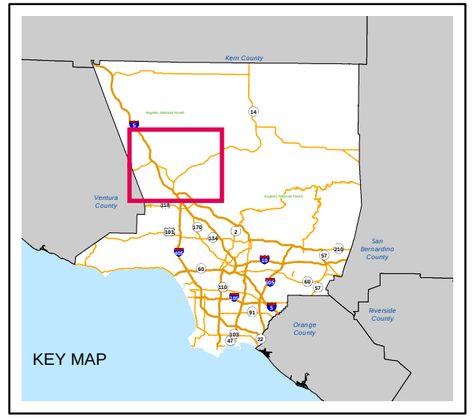
FIGURE 5.11-11

LAND USE DESIGNATIONS, UNINCORPORATED MRZ-2 AREAS, SANTA CLARITA VALLEY PLANNING AREA



- CG - General Commercial
- CM - Major Commercial
- H2 - Residential 2
- H30 - Residential 30
- H5 - Residential 5
- IL - Light Industrial
- IO - Industrial Office
- O-NF - National Forest
- OS-C - Conservation
- OS-NF - National Forest
- OS-PR - Parks and Recreation
- OS-W - Water
- P - Public and Semi-Public
- RL1 - Rural Land 1
- RL10 - Rural Land 10
- RL2 - Rural Land 2
- RL20 - Rural Land 20
- SP - Specific Plan
- freeway right-of-way



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Source: Calfornia Geological Survey, 2013

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FIGURE 5.11-12

MAP OF OIL AND GAS FIELDS IN THE GENERAL PLAN AREA - NORTH COUNTY

Oil and Gas Fields

Santa Clarita Valley Planning Area

Antelope Valley Planning Area

San Fernando Valley Planning Area

Planning Areas
Interstate
State Highway
US Highway
Metrolink
Metro Rail

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Source: Los Angeles County Department of Public Works, 2014

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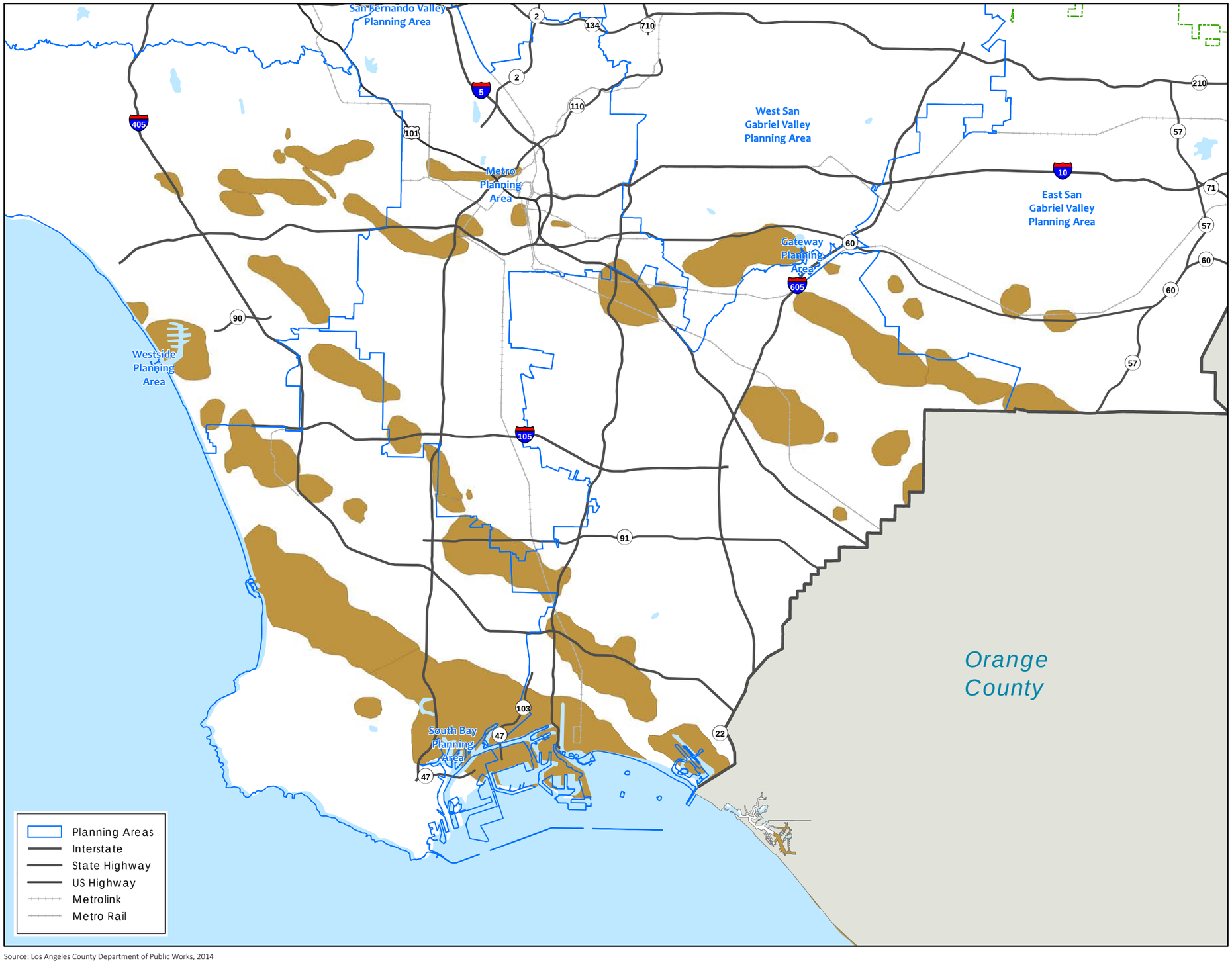
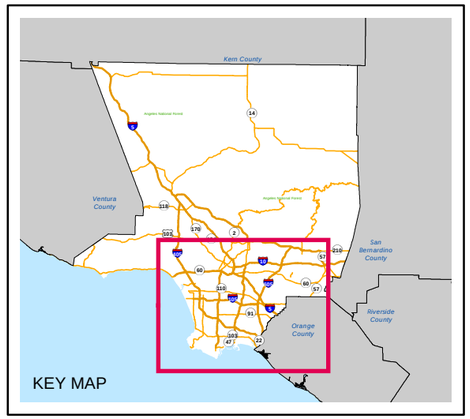
FIGURE 5.11-13

MAP OF OIL AND GAS FIELDS IN THE GENERAL PLAN AREA - SOUTH COUNTY

Oil and Gas Fields





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Source: Los Angeles County Department of Public Works, 2014

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- **Policy C/NR 11.5:** Encourage and support efforts to increase the safety of oil and gas production and processing activities, including state regulations related to well stimulation techniques such as hydraulic fracturing or "fracking."

Goal C/NR 12: Sustainable management of renewable and non-renewable energy resources.

- **Policy C/NR 12.1:** Encourage the production and use of renewable energy resources.

- **Policy C/NR 12.2:** Encourage the effective management of energy resources, such as ensuring adequate reserves to meet peak demands.

5.11.4 Environmental Impacts

The following impact analysis addresses thresholds according to Appendix G of the CEQA Guidelines of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.11-1: Implementation of the Proposed Project would cause the loss of availability of known mineral resources in the Antelope Valley Planning Area but not in the other 10 Planning Areas. [Thresholds M-1 and M-2]

Impact Analysis: Approval of the Proposed Project would not change land uses and would not impact availability of known mineral resources. Buildout of the Proposed Project would change land use designations in the areas listed below, identified as MRZ-2, mineral resource sectors, or as active mines.

Active aggregate mines are owned and/or controlled by aggregate producers, and are permitted by the city or county the mine is in (the "lead agency"). Thus, changes in land use designations for active mines pursuant to the Proposed Project would not block continued mining at those sites.

Antelope Valley Planning Area

Existing Land Use Designations in MRZ-2 Areas: Compatibility with Future Mining

Of the 15,882 acres of MRZ-2 area in the existing Antelope Valley Area Plan, 1,823 acres, or 11.5 percent, are designated for land uses incompatible with mining. Those designations are Airport (1,634 acres), C-Commercial (9 acres), M–Industry (15 acres), U1–Urban (165 acres).

Airport Designation

The Airport designation permits uses including airport uses, agriculture, industrial and commercial uses appropriate to airports, recreational uses, and other appropriate public and semipublic uses. Palmdale Regional Airport (PMD) occupies a 17,000-acre site (26.5 square miles) on an unincorporated island in the City of Palmdale. Most of the land is vacant. The closest unincorporated MRZ-2 area to the existing PMD airfield is nearly 4.5 miles to the southeast and about 4 miles south-southeast of the nearest existing industrial uses on the PMD site.

Mining is not listed as a permitted land use for the Airport designation. Industrial use is permitted in this designation; however, the Area Plan's Industrial land use designation specifies industrial uses that are clean, nonpolluting, with no offensive odors, and visually attractive. It is therefore assumed here that mining use does not fit into the Industrial category of permitted land uses in the Airport designation.

Santa Clarita Valley Planning Area

Compatibility of Land Use Designations with Mining

As shown in Table 5.11-7, buildout of the existing Santa Clarita Valley Area Plan would result in 952 acres of land uses incompatible with mining.

Table 5.11-7 Land Use Compatibility of MRZ-2 Areas in the Santa Clarita Valley Planning Area

Existing Land Use Designation	MRZ-2 Areas (acres)
Land Uses Incompatible with Mining	
CG – General Commercial	9
CM – Major Commercial	209
Freeway Right of Way	7
H2 – Residential 2	1
H30 – Residential 30	7
H5 – Residential 5	92
IL – Light Industrial	3
IO – Industrial Office	451
OS-PR - Parks and Recreation	61
OS-C – Conservation	31
OS-W – Water	4
RL1 – Rural Land 1	77
Subtotal	**952**
Land Uses Compatible with Mining	
OS-NF - National Forest	4,755
RL10 - Rural Land 10	457
RL20 - Rural Land 20	1,707
P - Public and Semi-Public	568
Subtotal	**7,487**
Total	**8,439 acres**

The balance of MRZ-2 areas within the Area Plan, 1,186 acres, is designated Specific Plan; compatibility with mining would depend on specific allowed land uses within each specific plan and is not evaluated here.

Existing Area Plan Policies

Santa Clarita Valley Area Plan policies relevant to maintaining availability of mineral resources are listed below:

- **Policy CO 1.3.3:** Provide informational material to the public about programs to conserve nonrenewable resources and recover materials from the waste stream.

- **Policy CO 2.3.1:** Identify areas with significant mineral resources that are available for extraction pursuant to Zoning Ordinance requirements.

- **Policy CO 2.3.2:** Consider appropriate buffers near mineral resource areas that are planned forextraction, to provide for land use compatibility and prevent the encroachment of incompatible land uses.

- **Policy CO 2.3.3:** Through the review process for any mining or mineral extraction proposal, ensure mitigation of impacts from mining and processing of materials on adjacent uses or on the community, including but not limited to air and water pollution, traffic and circulation, noise, and land use incompatibility.

- **Policy CO 2.3.4:** Ensure that mineral extraction sites are maintained in a safe and secure manner after cessation of extraction activities, which may include the regulated decommissioning of wells, clean-up of any contaminated soils or materials, closing of mine openings, or other measures as deemed appropriate by the agencies having jurisdiction.

- **Policy LU 7.7.1:** Maintain a suitable distance and/or provide buffering to separate aggregate mining and processing activities from nearby residential uses and other uses with sensitive receptors to noise and airborne emissions.

The Certified EIR for the Santa Clarita Valley Area Plan concluded that implementation of the Area Plan policies would limit impacts on mineral resources to less than significant, and no mitigation measures for impacts to mineral resources were required.

San Fernando Valley Planning Area

The proposed land use designation in the two MRZ-2 areas is RL20 (Rural Land, 20 acres minimum per single-family residence). Because RL20 designation maintains nearly the entire area as open space, buildout of the Proposed Project in these two small areas would not substantially reduce availability of mineral resources.

West San Gabriel Valley Planning Area

MRZ-2 Areas

Unincorporated areas designated MRZ-2 in the West San Gabriel Valley Planning Area where land use designation changes are proposed in the Proposed Project are built out with residential uses and a golf course. Buildout of the Proposed Project in the West San Gabriel Valley Planning Area would not impact availability of mineral resources.

Mineral Resource Sectors and Active Mines

Mineral Resource Sectors in this Planning Area are in the cities of Irwindale and Arcadia; no sectors are in unincorporated areas. All of the active mines in this Planning Area are in the City of Irwindale. Buildout of the Proposed Project would not involve land use changes within mineral resource sectors or on active mines.

Existing Altadena Community Plan

All of the existing designations for land mapped MRZ-2 in the Altadena Community Plan area (within the West San Gabriel Valley Planning Area) are for land uses incompatible with mining: Business Park, Institutions, Low-Density Residential, and Right-of-Way. However, well over three-quarters of the MRZ-2 area within the Altadena Community Plan are already developed. Considering the small amount of vacant land designated MRZ-2 in the Community Plan area that could be developed pursuant to Proposed Project buildout—approximately 4.5 acres—compared to the total MRZ-2 area in the Project Area (29,282 acres), impacts of Proposed Project buildout on mineral resources in the Altadena Community Plan area would be less than significant.

East San Gabriel Valley Planning Area

MRZ-2 Areas

MRZ-2 areas in the East San Gabriel Valley Planning Area are built out with residential, commercial, and industrial land uses and parks and schools. Thus, buildout of the Proposed Project in this Planning Area would not impact availability of mineral resources.

Mineral Resource Sectors and Active Mines

Mineral resource sectors in this Planning Area are in the cities of Irwindale and Azusa; no sectors are in unincorporated areas. All of the active mines in this Planning Area are in the cities of Irwindale and Azusa. Buildout of the Proposed Project would not involve land use changes in mineral resource sectors or on active mines.

Westside, South Bay, and Santa Monica Mountains Planning Areas

No MRZ-2 areas, mineral resource sectors, or active mines are present in the Westside or Santa Monica Mountains Planning Areas, or in the unincorporated areas of the South Bay Planning Area, and no impact would occur.

Metro Planning Area

Since the MRZ-2 area in the Metro Planning Area is built out with urban land uses, buildout of the Proposed Project would have no impact on availability of mineral resources in this Planning Area. No changes in land use designations are proposed in the Proposed Project in unincorporated areas within areas designated MRZ-2 in the Metro Planning Area. No impact would occur.

Gateway Planning Area

No unincorporated areas of the Gateway Planning Area are mapped as MRZ-2, and there are no mineral resource sectors in the Planning Area. One active mine, the Atkinson Pit, is in the Gateway Planning Area in the City of Compton. However, buildout of the Proposed Project would not impact the Atkinson Pit.

Impact 5.11-2 Buildout of the Proposed Project would cause a loss of availability of mineral resources in one mineral extraction area identified in the Existing General Plan: the Little Rock Wash in the Antelope Valley Planning Area. [Threshold M-2]

Impact Analysis: Buildout of the Proposed Project would substantially reduce availability of mineral resources in one mineral extraction area identified in the Existing General Plan: the Little Rock Wash area in the Antelope Valley Planning Area. This impact would be potentially significant. No significant impacts would occur to other mineral extraction areas identified in the Project Area.

Impact 5.11-3 Buildout of the Proposed Project would cause a loss of availability of oil and natural gas reserves in Los Angeles County. [Threshold M-1]

Impact Analysis: Buildout of the Proposed Project wouldresult in development of land that is used for, or has the potential to be used for, extraction of fossil fuels such as oil and natural gas. As shown in Figures5.11-12 and 5.11-13, oil and natural gas fields lie beneath large swaths of Los Angeles County. In the northern part of Los Angeles County, the largest of these fields are located in mountainous areas of the San Fernando Valley and Santa Clarita Valley Planning Areas, generally north of SR-118 and west of I-5. As shown in Figure 5.11-13, oil and gas fields are also located beneath substantial portions of the Los Angeles Basin, which spans parts of the Gateway, Metro, South Bay, and Westside Planning Areas. Additional oil and gas fields are located in the Chino Hills and Puente Hills, which traverse the East San Gabriel Valley, Gateway, and West San Gabriel Valley Planning Areas. The Los Angeles Basin alone has ten oil fields that each contains more than 1 billion barrels of oil (USGS 2013b).

San Fernando Valley and Santa Clarita Valley Planning Areas

These two Planning Areas feature a substantial collection of oil and gas fields, which together straddles the boundary between them. Some of the oil fields are currently used for fossil fuel extraction, while others are not. Although much of their area is located in hillside or mountainous areas, they also traverse the Santa Clarita Valley, which follows the path of the Santa Clara River and SR-126. This area includes the Pico Canyon Oilfield, which produced one of California's first commercially successful oil wells. Buildout of the Proposed Project would result in the construction of thousands of new housing units and other land uses over existing oil fields in the San Fernando Valley and Santa Clarita Valley Planning Areas. Notably, buildout of the Newhall Ranch Specific Plan area would result in the construction of over 20,000 homes on land that is directly above substantial oil fields. Consequently, buildout of the Proposed Project would reduce the amount of land area available for extraction of oil and natural gas reserves. However, as shown in Figure 5.11-12, the oil fields in the San Fernando Valley and Santa Clarita Valley Planning Areas cover large geographic areas that also contain steep hillsides and mountains where urban development is neither feasible nor permitted. Therefore, access to oil fields in these Planning Areas—even those that would be partially

concealed by urban development—would continue to be available upon buildout of the Proposed Project. In particular, the Newhall Ranch Specific Plan allows existing and new oil and natural gas operations as permitted uses. Furthermore, the Proposed Project does not propose any land use changes for the Santa Clarita Valley Planning Area.

Gateway, Metro, South Bay, and Westside Planning Areas

In terms of both geographic size and volume of reserves, the largest collection of fossil fuels in Los Angeles County is located in the Los Angeles Basin. Among other smaller deposits, it includes the Beverly Hills, Dominguez, Inglewood, Long Beach, Los Angeles, Salt Lake, Santa Fe Springs, Torrance, Seal Beach, and Wilmington oil fields. Most of these are partially or entirely within the boundaries of cities, including the two largest: the Torrance and Wilmington oilfields. Many others are currently inaccessible due to urban development. Only six unincorporated areas in the Los Angeles Basin are above substantial oil deposits. The analysis below describes how buildout of the Proposed Project would generally affect the availability of these deposits:

- **Alondra Park (South Bay Planning Area).** This area is directly above the Howard Townsite Oil Field. However, it is built out with residential, commercial, institutional, and recreational land uses. Therefore, implementation of the Proposed Project is not anticipated to further reduce access to underground oil and natural gas reserves.

- **Baldwin Hills (Westside Planning Area).**The Inglewood Oil Field beneath the Baldwin Hills in the Westside Planning Area is one of the largest contiguous urban oil fields in the country. It is still a productive site for oil and natural gas extraction. The productive areas of the oil field are designated Mineral Resources (MR) in the Proposed Project (see Figure A.16, *Ladera Heights/Viewpark-Windsor Hills Land Use Policy*, in Appendix C to this DEIR. The stated purpose of the MR designation is to allow mineral extraction and processing and "as well as activities related to the drilling for and production of oil and gas." Therefore,availability of oil and gas reserves in the Baldwin Hills area would not be diminished by implementation of the Proposed Project.

  Furthermore, the extraction of fossil fuels in the area is regulated by the Baldwin Hills CSD. The Baldwin Hills CSD was established to provide a means of implementing regulations, safeguards, and controls for activities related to drilling for and production of oil and gas within the oil field discussed above. Amongst other objectives, regulations established by the Baldwin Hills CSD are intended to ensure that operations remain compatible with surrounding land uses. Continued implementation of such regulations would ensure that oil and natural gas extraction remains physically and politically viable in the area, ensuring that availability of those resources is not diminished during the planning period of the Proposed Project.

- **Marina del Rey (Westside Planning Area).** Marina del Rey is above the substantially depleted Playa del Rey Oil Field. The oil field is now used for underground storage of natural gas (Southern California Gas Company 2008). The area is generally built out with urban land uses or protected as wetlands. Furthermore, underground natural gas storage is accessed from outside the Project Area in a portion of

the oil field that is in the City of Los Angeles. No land use changes are planned for the area as part of the Proposed Project.

- **Rancho Dominguez (Gateway Planning Area).**The unincorporated island of Rancho Dominguez is located within the Gateway Planning Area. It is located above the eastern third of the Dominguez Oil Field.The oil field is still productive and there is continued interest in developing new oil wells in the area. However, the area is largely built out by urban land uses. Although zone changes are proposed for the area by the Proposed Project, these changes would alter the development capacity of already-developed parcels and would not result in the urbanization of large parcels currently used for oil extraction.

- **West Carson (South Bay Planning Area).** This unincorporated area is above a small portion of the Torrance/Wilmington oil fields. However, West Carson itself is almost entirely developed with urban uses. Therefore, buildout of the Proposed Project is not anticipated to substantially reduce availability of underground fossil fuel reserves.

- **West Rancho Dominguez (Metro Planning Area).** This area is located above the Rosecrans Oil Field. However, it is largely built out with urban uses. Implementation of the Proposed Project would not allow development of large parcels currently used for oil extraction. Therefore, buildout of the Proposed Project is not anticipated to result in a tangible reduction in the availability of oil and natural gas reserves.

East and West San Gabriel Valley Planning Areas

Large portions of the Chino and Puente Hills contain oil and natural gas reserves. However, the relevant oil fields are generally located within the boundaries of cities.Although the Montebello and Whittier oil fields are located in the Project Area, their oil reserves are largely accessed from wells in the City of Montebello. The unincorporated area that includes the Whittier Narrows Recreational Area and Whittier Narrows Natural Areas is primarily designated for water and recreational uses in the Proposed Project. These uses already exist. Therefore, the Proposed Project would not dramatically reduce the availability of oil reserves in this area.

Regulation of Oil and Natural Gas Reserves in Los Angeles County

New and existing oil and natural gas facilities in Los Angeles County are required to comply with rules established by DOGGR and applicable state regulations, which include Title 14, Division 2, Chapter 4, *Development, Regulation, and Conservation of Oil and Natural Gas Resources*, of the California Code of Regulations, and Section 3000 et seq., *Oil and Gas Conservation*, of the California Public Resources Code.

Because DOGGR oversees regulation of oil and natural gas in California, it manages the overall distribution of facilities used to access such resources. Additionally, policies in the Proposed Project address extraction and production of oil and gas. In particular, Policy C/NR 11.1 requires that drilling and production activities comply with applicable county and state regulations. Policies C/NR 11.3 through C/NR 11.5 require that operations be sensitive to surrounding land uses and natural resources.

Conclusion

Many smaller oil fields in Los Angeles Count have become inaccessible due to urban development. Buildout of the Proposed Project, which is anticipated to involvethe development of 368,432 additional housing units and 4 million additional square feet of nonresidential space in the Project Area, would result in development of land above oil and natural gas reserves. This would result in reductions in availability of fossil fuel reserves.

However, for the reasons discussed above, buildout of the Proposed Project would not substantially reduce the regional availability of oil and natural gas, and it would not render any large oil fields completely inaccessible. Large oil fields in Los Angeles County are generally located within 1) cities (and therefore not in the Project Area), 2) unincorporated areas already built out with urban development (as in the Los Angeles Basin), 3) areas where both urban development and continued oil extraction are permitted (as in the Newhall Ranch Specific Plan area), and 4) areas where urban development above and/or near oil fields is neither permitted nor feasible (as in large areas of the Santa Clarita Valley Planning Area). Furthermore, development of residential, commercial, and other urban uses does not preclude the continued use of nearby oil wells. Therefore, the geographic scope of areas available for the extraction of oil and natural gas are not expected to be dramatically reduced by implementation of the Proposed Project. Impacts would be less than significant.

5.11.5 Cumulative Impacts

Cumulative projects could cause significant cumulative impacts if they caused a loss of availability of a known mineral resource valuable to the region and the state or caused a loss of availability of an important mining site delineated in a local general plan or other land use plan. Construction and operation of cumulative growth identified in Section 4.4, *Assumptions Regarding Cumulative Impacts*, would have the potential to result in the loss of availability of known mineral resources. Urbanization and growth in the jurisdictions adjacent to the unincorporated County would have the potential to result in land uses that are incompatible with mining and resource recovery and would result in a cumulative loss of available resources. Similar to portions of the Project Area, the CGS has classified land within cities of Los Angeles County into MRZs. Adjacent jurisdictions have included protections in their general plans or other planning documents to protect these and other mineral resources. However, planned and projected growth in the region would result in a reasonably foreseeable loss of mineral resources due to the encroachment of incompatible uses that would limit future areas from being permitted for mining operations.

MRZ-2 Areas

MRZ-2 areas by Planning Area are shown in Table 5.11-8. As shown in the table, only 26.3 percent of areas designated MRZ-2 is located with the Project Area.

Table 5.11-8 MRZ-2 Areas by Planning Area

Planning Area	MRZ-2 Areas				
	Acres			Percentage	
	Within Cities	Within the Project Area (Unincorporated Areas)	Total	Within Cities	Within Project Area
Antelope Valley	5,506	15,882	21,388	25.7	74.3
East San Gabriel Valley	24,567	2,158	26,725	91.9	8.1
Gateway	1,225	0	1,225	100.0	0.0
Metro	9,463	165	9,628	98.3	1.7
San Fernando Valley	21,496	103	21,599	99.5	0.4
Santa Clarita Valley	3,054	9,625	12,679	24.1	75.9
South Bay	325	0	325	100.0	0.0
West San Gabriel Valley	16,597	1,228	17,825	93.1	6.9
Total	**82,233**	**29,161**	**111,394**	**73.7%**	**26.3%**

Note that much of the areas designated MRZ-2 in the two San Gabriel Valley Planning Areas and the Metro and San Fernando Valley Planning Areas are built out with urban uses. Redevelopment or reuse of currently developed land in cities in those planning areas would not affect availability of mineral resources.

Mineral Resource Sectors

All of the mineral resource sectors in the two San Gabriel Valley Planning Areas, the South Bay Planning Area, most of the sectors in the San Fernando Valley Planning Area, and some of the sectors in the Antelope Valley and Santa Clarita Valley Planning Areas are within cities. Most of the mineral resource sectors in the two San Gabriel Valley Planning Areas are active mines, or in the 100-year floodplain of the San Gabriel River, or in the Santa Fe Flood Control Basin, and thus are unavailable for development with other land uses. Therefore, substantial cumulative impacts within mineral resource sectors in the San Gabriel Valley are unlikely.

Active Mines

Of the 24 active mines listed in Table 5.11-4, 16 are within cities. Active mines are owned and/or controlled by aggregate producers and are permitted by the relevant jurisdiction. Development of urban land uses on existing mining sites in these cities, such as new residential or commercial uses, is generally neither permitted nor feasible. Therefore, even if mines both within and outside the Project Area ended operation, those sites would likely remain accessible should mining be commercially viable in the future. Furthermore, as discussed above, Los Angeles County has numerous aggregate mining sites; the loss of availability of a substantial portion of these mines during the planning period of the Proposed Project is unlikely. For these reasons, cumulative impacts to active aggregate mines are not anticipated.

Oil and Natural Gas Resources

As discussed above, Los Angeles County contains substantial oil and natural gas reserves and much of these reserves are located within cities. However, the applicable cities are generally built out with urban land uses;

particularly those cities in the Los Angeles Basin (see discussion under Impact 5.11-3, above). Although future development and redevelopment would be expected to occur in cities containing portions of underground fossil fuel reserves, such development would not make inaccessible large areas that are currently accessible for oil and natural gas extraction. Therefore, access to reserves is not likely to be completely lost in areas where extraction remains commercially viable. Furthermore, due to advances in drilling technology, the development of other land uses near oil and natural gas reserves does not fully preclude the location of extraction facilities on other portions of the developed area. Cities such as Long Beach allow continued operation of oil wells even when residential development is built in close proximity, provided that the adjacency is in compliance with state regulations. Lastly, Los Angeles County's largest oil fields cross city boundaries into offshore areas in the Pacific Ocean and mountainous unincorporated areas of Los Angeles County. Therefore, regional access to oil and natural gas resources would remain accessible upon buildout of the Proposed Project and cumulative growth in Los Angeles County's 88 cities. Accordingly, cumulative impacts to such resources would be less than significant.

Conclusion

Cumulative projects in combination with buildout of the Proposed Project would contribute to significant cumulative impacts in the Antelope Valley Planning Area. No mitigation measures are available that would reduce this impact to less than significant; therefore, this impact would remain significant and unavoidable. Cumulative impacts would be less than significant in the remaining 10 Planning Areas.

5.11.6 Existing Regulations and Standard Conditions

- California Code of Regulations, Title 14, Division 2, Chapter 4: Development, Regulation, and Conservation of Oil and Natural Gas Resources

- California Public Resources Code
  - Sections 2710 et seq.: Surface Mining and Reclamation Act
  - Sections 3000 et seq.: Oil and Gas Conservation
- Los Angeles County Community Standards District Regulations (various)

5.11.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.11-1 for all Planning Areas except for the Antelope Valley Planning Area.

Without mitigation, the following impacts would be **potentiallysignificant**:

- **Impact 5.11-1** Buildout of the Proposed Project would cause a loss of availability of known mineral resources within the Antelope Valley Planning Area.

- **Impact 5.11-2** Implementation of the Proposed Project would cause a substantial loss of availability of mineral resources in one mineral extraction area identified in the Existing General Plan: the Little Rock Wash area in the Antelope Valley Planning Area.

5.11.8 Mitigation Measures

No mitigation measures are available that would reduce impacts of Proposed Project buildout to less than significant. Mineral resources are limited and nonrenewable and cannot be increased elsewhere to compensate for loss of availability of mineral resources due to buildout of the Proposed Project. Compensatory mitigation outside of the region is also infeasible; such mitigation would not reduce the loss of availability of mineral resources in Los Angeles County due to the very high cost of transporting aggregate.

5.11.9 Level of Significance After Mitigation

Impacts would be significant and unavoidable within the Antelope Valley Area Planning Area only, for the reasons identified above.

5.11.10 References

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5.12 NOISE AND VIBRATION

This section discusses the fundamentals of sound; examines federal, state, and local noise guidelines, policies, and standards; reviews noise levels at existing receptor locations; evaluates potential noise impacts associated with the General Plan Update (Proposed Project); and provides mitigation to reduce noise impacts at noise-sensitive receptor land uses. This evaluation uses procedures and methodologies as specified by Caltrans and the Federal Highway Administration (FHWA).

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Proposed Project to result in noise impacts in the unincorporated areas of Los Angeles County (Project Area).

Additional information relative to this noise section is included in the Technical Appendices to this Draft EIR (Appendix K)

5.12.1 Environmental Setting

Noise Descriptors

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

The following are brief definitions of terminology used in this section:

- **Sound:** A disturbance created by a vibrating object, which when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

- **Noise:** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

- **Decibel (dB):** A unit of level that denotes the ratio between two quantities that are proportional to power. The number of decibels is 10 times the logarithm (base 10) of this ratio which has a reference quantity in the denominator. For sound pressure decibels, the reference quantity is 20 micropascals (μPa).

- **A-Weighted Decibel (dBA):** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

- **Equivalent Continuous Noise Level (L_{eq}):** The mean of the noise level, energy averaged over the measurement period.

- **Statistical Sound Level (L_n):** The sound level that is exceeded "n" percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period), which is half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the

"median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L_{90} is the sound level exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

- **Day-Night Sound Level (L_{dn} or DNL):** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.

- **Community Noise Equivalent Level (CNEL):** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the levels occurring during the period from 7:00 PM to 10:00 PM and 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.

Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the loudness of sound is the decibel (dB). Changes of 1 to 3 dB are detectable under quiet, controlled conditions and changes of less than 1 dBA are usually indiscernible. A 3 dB change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dB is readily discernable to most people in an exterior environment whereas a 10 dBA change is perceived as a doubling (or halving) of the sound.

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all and are "felt" more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise is defined as unwanted sound, and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State of California, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities.

Measurement of Sound

Sound intensity is measured through the A-weighted measure to correct for the relative frequency response of the human ear. In other words, an A-weighted noise level deemphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies.

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. This logarithmic scale is used to better account for the large variations in pressure

amplitude (the above range of human hearing, 0 to 140 dBA, represents a ratio in pressures of 100 trillion to one). All noise levels in this study are relative to the industry-standard pressure reference value of 20 micropascals. Because of the physical characteristics of noise transmission and perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 5.12-1 presents the subjective effect of changes in sound pressure levels.

Table 5.12-1 Change in Apparent Loudness

± 3 dB	Threshold of human perceptibility
± 5 dB	Clearly noticeable change in noise level
± 10 dB	Half or twice as loud
± 20 dB	Much quieter or louder

Source: Bies and Hansen 2009.

In practical application, an increase of 10 dB is 10 times more intense than 1 dB, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud). To help relate noise level values to common experience, Table 5.12-2 shows typical noise levels from noise sources.

Table 5.12-2 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans 2009.

Sound levels are generated from a source and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. This phenomenon is known as "spreading loss." For a single point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by onsite operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases by 4.5 dB for each doubling of distance.

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2, L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour. These "L" values are typically used to demonstrate compliance for stationary noise sources with a given city's or county's noise ordinance, as discussed below. Other values typically noted during a noise survey are the L_{min} and L_{max}. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law and most local jurisdictions (including the County of Los Angeles [County]) require that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment of 5 dBA be added to the actual noise level for the hours from 7:00 PM to 10:00 PM and 10 dBA for the hours from 10:00 PM to 7:00 AM The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 PM and 10:00 PM Both descriptors give roughly the same 24-hour level with the CNEL being only slightly more restrictive (i.e., higher).

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, and thereby affecting blood pressure, functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA could result in permanent hearing damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 190 dBA will rupture the eardrum and permanently damage the inner ear.

Vibration Fundamentals

Vibration is a trembling, quivering, or oscillating motion of the earth. Like noise, vibration is transmitted in waves, but in this case through the earth or solid objects. Unlike noise, vibration is typically of a frequency that is felt rather than heard.

Vibration can be either natural as in the form of earthquakes, volcanic eruptions, sea waves, landslides, or manmade as from explosions, the action of heavy machinery or heavy vehicles such as trains. Both natural and manmade vibration may be continuous such as from operating machinery, or transient as from an explosion. The way in which vibration is transmitted through the earth is called propagation. Propagation of earthborn vibrations is complicated and difficult to predict because of the endless variations in the soil through which waves travel. There are three main types of vibration propagation: surface, compression and shear waves. Surface waves, or Raleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or "side-to-side and perpendicular to the direction of propagation."

As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

As with noise, vibration can be described by both its amplitude and frequency. Amplitude may be characterized in three ways: displacement, velocity, and acceleration. Particle displacement is a measure of the distance that a vibrated particle travels from its original position and for the purposes of soil displacement is typically measured in inches or millimeters. Particle velocity is the rate of speed at which soil particles move in inches per second or millimeters per second. Particle acceleration is the rate of change in velocity with respect to time and is measured in inches per second or millimeters per second. Typically, particle velocity (measured in inches or millimeters per second) and/or acceleration (measured in gravities) are used to describe vibration. Table 5.12-3 presents the human reaction to various levels of peak particle velocity.

Table 5.12-3 Human Reaction to Typical Vibration Levels

Vibration Level Peak Particle Velocity (in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling–houses with plastered walls and ceilings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Caltrans 2002.

Vibrations also vary in frequency and this affects perception. Typical construction vibrations fall in the 10 to 30 Hz range and usually occur around 15 Hz. Traffic vibrations exhibit a similar range of frequencies; however, due to their suspension systems, buses often generate frequencies around 3 Hz at high vehicle speeds. It is less common, but possible, to measure traffic frequencies above 30 Hz.

Noise- and Vibration-Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residential, schools, libraries, churches, nursing homes, hospitals, and open space/recreation areas where quiet environments are necessary for enjoyment, public health, and safety. Commercial and industrial uses are generally not considered noise- and vibration-sensitive uses, unless noise and vibration would interfere with their normal operations and business activities.

Regulatory Framework

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise.

Federal

Aircraft Noise Standards

The FAA Advisory Circular Number 150 5020 2, entitled "Noise Assessment Guidelines for New Helicopters recommends the use of a cumulative noise measure, the 24-hour equivalent sound level [$L_{eq(24)}$], so that the relative contributions of the heliport and other sound sources within the community may be compared. The $L_{eq(24)}$ is similar to the L_{dn} used in assessing the impacts of fixed-wing aircraft. The helicopter $L_{eq(24)}$) values are obtained by logarithmically adding the single-event SEL values over a 24-hour period.

Public Law 96 193 also directs the FAA to identify land uses that are "normally compatible" with various levels of noise from aircraft operations. Because of the size and complexity of many major hub airports and their operations, FAR Part 150 identifies a large number of land uses and their attendant noise levels. However, since the operations of most heliports and helistops tend to be much simpler and the impacts more restricted in area, Part 150 does not apply to heliports/helistops not located on airport property. Instead, the FAA recommends exterior noise criteria for individual heliports based on the types of surrounding land uses. These recommended noise levels are included in Table 5.12-4.

Table 5.12-4 Normally Compatible Community Sound Levels

Type of Area	$L_{eq(24)}$
Residential	
• Suburban	57
• Urban	67
• City	72
Commercial	72
Industrial	77

Source: FAA Advisory Circular Number 150-5020-2, 1983

The maximum recommended cumulative sound level [$L_{eq(24)}$] from the operations of helicopters at any new site should not exceed the ambient noise already present in the community at the site of the proposed heliport or the sound levels in Table 5.12-4, whichever is lower.

Highway Noise Standards

The Federal Highway Administration (FHWA) is the agency responsible for administering the Federal-Aid highway program in accordance with federal statutes and regulations. The FHWA developed the noise regulations as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat. 1713). The regulation, 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise, applies to highway construction projects where a state department of transportation has requested federal funding for participation in the project. The regulation requires the highway agency to investigate traffic noise impacts in areas adjacent to federally-aided highways for proposed construction of a highway on a new location or the reconstruction of an existing highway to either significantly change the horizontal or vertical alignment or increase the number of through-traffic lanes. If the highway agency identifies impacts, it must consider abatement. The highway agency must incorporate all feasible and reasonable noise abatement into the project design.

State and local governments have the authority to regulate land use planning or the land development process. The FHWA and other federal agencies encourage state and local governments to practice land use planning and control in the vicinity of highways to avoid future noise impacts and the need to provide noise abatement for future highway projects. The federal government advocates use of local government authority to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that

noise impacts are minimized. For interstate freeways and for state routes, these noise investigations are coordinated through the California Department of Transportation (Caltrans).

State

State of California Building Code

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

State of California Roadway-Related Noise and Vibration

FHWA approved the California DOT noise policy (Protocol) for new or reconstruction highway projects. This Protocol became effective on July 13, 2011 for all Federal-Aid projects. This noise protocol is mandated by the revised Title 23, Part 772 Federal Code (which became effective a year earlier on July 13, 2010. This Protocol contains many new provisions including the criteria for grandfathering existing projects currently under development.

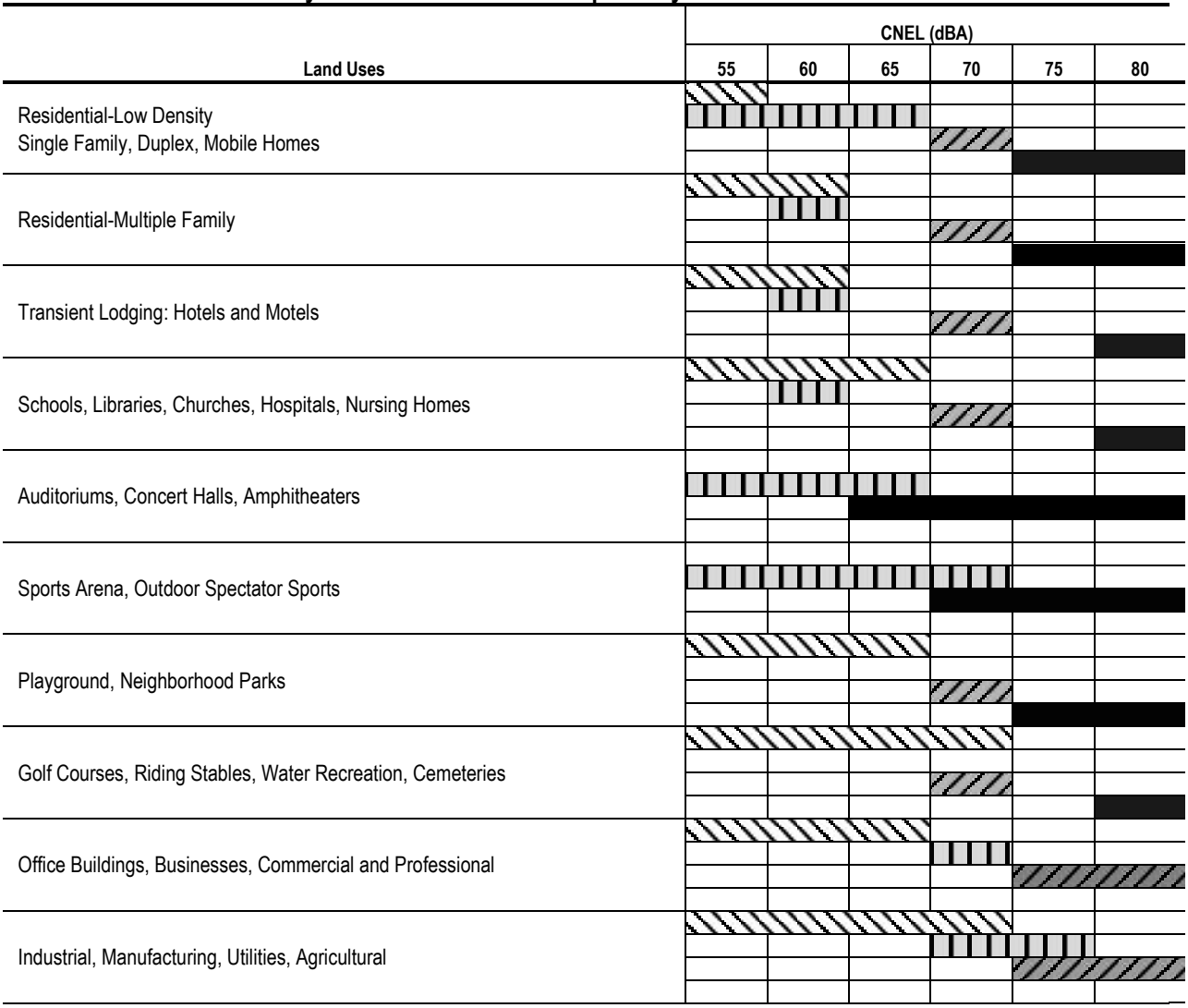
Additionally, the Technical Noise Supplement (TeNS) to the Traffic Noise Analysis Protocol has been updated. As of July 2011, 23CFR 771 requires the use of the official Traffic Noise Model (TNM) analysis for all Activity Category Land Uses. This document contains Caltrans noise analysis procedures, practices, and other useful technical background information related to the analysis and reporting of highway and construction noise impacts and abatement. It supplements and expands on concepts and procedures referred to in the Traffic Noise Analysis Protocol, which in turn is required by federal regulations in 23CFR772. Except for some Caltrans-specific methods and procedures, most methods and procedures recommended in this document are in conformance with industry standards and practices. This document can be used as a standalone guide for highway noise training purposes or as a reference for technical concepts, methodology, and terminology needed to acquire a basic understanding of highway noise and construction noise-related issues.

As with transportation-related noise, Caltrans addresses roadway vibration in its Transportation and Construction Vibration Guidance Manual. This manual provides practical guidance to engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects.

California Noise/Land Use Compatibility Matrix

The California Office of Noise Control has prepared a land use compatibility chart for community noise to provide a tool to gauge the compatibility of land uses relative to existing and future noise levels. This land use compatibility chart, reproduced below as Table 5.12-5, identifies 'normally acceptable,' 'conditionally acceptable,' and 'clearly unacceptable' noise levels for various land uses. A conditionally acceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a normally acceptable designation indicates that standard construction can occur with no special noise reduction requirements.

Table 5.12-5 Community Noise and Land Use Compatibility



Explanatory Notes

Normally Acceptable:
With no special noise reduction requirements assuming standard construction.

Normally Unacceptable:
New construction is discouraged. If new construction does not proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Conditionally Acceptable:
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design.

Clearly Unacceptable:
New construction or development should generally not be undertaken.

Source: California Office of Noise Control. Guidelines for the Preparation and Content of Noise Elements of the General Plan. February 1976. Adapted from the US EPA Office of Noise Abatement Control, Washington D.C. Community Noise. Prepared by Wyle Laboratories. December 1971.

County of Los Angeles

Existing Noise Element Goals and Policies

The Noise Element of the Existing General Plan includes goals, policies, and implementation measures to evaluate existing and future noise conditions and minimize the impacts of noise in the Project Area. The policies stated in this section contain a direct relationship to the desired goals of the community and are the legislative tools with which the County can continue to realize its vision for the future. The goals of the Project include:

- Reduce transportation noise to a level that does not jeopardize health and welfare
- Minimize noise levels of future transportation facilities
- Establish compatible land use adjacent to transportation facilities
- Allocate noise mitigation costs among those who produce the noise
- Alert the public regarding the potential impact of transportation noise
- Protect areas that are presently quiet from future noise impact

The following policies from the 1974 Los Angeles County General Plan are intended to support the above goals:

1. Promote the necessary organizational adjustments within county government to establish a central authority which identifies technological opportunities, conducts studies, assesses effectiveness of programs, sets standards, and recommends transportation noise mitigation techniques, programs, and alternatives.

2. Determine and evaluate the present and future noise levels associated with all major transportation facilities in the county.

3. Establish acceptable noise standards consistent with health and quality of life goals and employ effective techniques of noise abatement through such means as building code, noise, subdivision, and zoning ordinances.

4. Reduce the present and future impact of excessive noise from transportation sources through judicious use of technology, planning, and regulatory measures.

5. Establish noise criteria in the specifications for purchase of vehicles, aircraft, and their components intended for use by the county, including all equipment needed for maintenance and repair of such vehicles and aircraft.

6. Promote increased public awareness concerning the effects of noise.

7. Encourage cities to adopt definitive noise ordinances and policies that are consistent throughout the county.

8. Coordinate with, and assist the various cities in dealing with the problem of noise and provide leadership and technical expertise when requested by other jurisdictions.

9. Coordinate with federal, state, and city governments in developing and implementing noise abatement programs.

10. Seek funds from the appropriate levels of government to underwrite the costs of noise abatement programs.

11. Monitor the programs and policies of the responsible special districts, regional, state, and federal agencies in order to insure [sic] that they effectively exercise their mandate to control the sources of noise for new, proposed, or existing transportation facilities, vehicles, or aircraft.

12. Encourage the state Department of Transportation to conduct an active highway noise abatement program with scenic/esthetic considerations.

13. Urge continued federal and state research into the noise problem and recommend additional research programs as problems are identified.

14. Recommend needed legislation to the state and federal government which will provide for noise abatement and the distribution of the costs of noise abatement programs among the producers of noise.

15. Encourage the federal and state governments and other agencies to work for standardization and simplification of the measurement methods used in assessing noise impact.

Existing Los Angeles County Code Provisions

The following are provisions of the Los Angeles County Code that relate to the prevention or mitigation of excessive noise.

> **Section 1207 Sound Transmission**
>
> **1207.1 Purpose and scope.**
>
> The purpose of this Section is to establish uniform minimum noise insulation performance standards to protect persons within hotels, motels, dormitories, long-term care facilities, apartment houses, dwellings, private schools, and places of worship from the effects of excessive noise, including, but not limited to, hearing loss or impairment and interference with speech and sleep. This Section shall apply to all buildings for which applications for building permits were made subsequent to August 22, 1974.
>
> **1207.11.1 Application.**
>
> Consistent with local land use standards, all structures identified in Section 1207.1 located in noise critical areas, such as proximity to highways, county roads, city streets, railroads, rapid transit lines, airports or industrial areas, shall be designed to prevent the intrusion of exterior

noises beyond prescribed levels. Proper design shall include, but shall not be limited to, orientation of the structure, setbacks, shielding, and sound insulation of the building itself.

1207.11.2 Allowable interior noise levels.

Interior noise levels attributable to exterior sources shall not exceed 45 dBA in any habitable rooms, classrooms, and all rooms used in patient care and worship. The noise metric shall be either the day-night average sound level (L_{dn}) or the community noise equivalent level (CNEL), consistent with the noise element of the local general plan.

1207.11.3 Airport noise sources.

Residential structures and all other structures identified in Section 1207.1, located where the annual Ldn or CNEL (as defined in Title 21, Division 2.5, Chapter 6, Article 1, Section 5001, California Code of Regulations) exceeds 60 dBA and 65 dBA, respectively, shall require an acoustical analysis showing that the proposed design will achieve prescribed allowable interior level.

EXCEPTION: New single-family detached dwellings and all nonresidential, noise-sensitive structures located outside the noise impact boundary of 65 dBA CNEL are exempt from Section 1207.

Alterations or additions to all noise-sensitive structures, within the 65 dBA and greater CNEL shall comply with Section 1207. If the addition or alteration cost exceeds 75 percent of the replacement cost of the existing structure, then the entire structure must comply with Section 1207.

For public-use airports or heliports, the L_{dn} or CNEL shall be determined from the Aircraft Noise Impact Area Map prepared by the Airport Authority. For military bases, the L_{dn} shall be determined from the facility Air Installation Compatible Use Zone (AICUZ) plan. For all other airports or heliports, or public-use airports or heliports for which a land use plan has not been developed, the Ldn or CNEL shall be determined from the noise element of the general plan of the local jurisdiction.

1207.11.4 Other noise sources.

All structures identified in Section 1207 located where the Ldn or CNEL exceeds 60 dBA shall require an acoustical analysis showing that the proposed design will limit exterior noise to the prescribed allowable interior level. The noise element of the local general plan shall be used to the greatest extent possible to identify sites with noise levels potentially greater than 60 dBA.

1207.12 Compliance.

Evidence of compliance shall consist of submittal of an acoustical analysis report, prepared under the supervision of a person experienced in the field of acoustical engineering, with the application for a building permit for all structures identified in Section 1207 or the use of prescriptive standards. The report shall show topographical relationships of noise sources and dwelling sites, identification of noise sources and their characteristics, predicted noise spectra, and levels at the exterior of the proposed dwelling structure considering present and future land usage, basis for the prediction (measured or obtained from published data), noise attenuation measures to be applied, and an analysis of the noise insulation effectiveness of the proposed construction showing that the prescribed interior noise level requirements are met.

[Sections 12.08.010 through 12.08.360 relate to the general provisions and definitions of the Los Angeles County Code of Ordinances Noise Chapter.]

12.08.370 Decibel measurement—Basis.

Any decibel measurement made pursuant to the provisions of this chapter shall be based on a reference sound-pressure of 20 micropascals, as measured with a sound level meter using the A-weighted network (scale) at slow response, or at the fast response when measuring impulsive sound levels and vibrations.

12.08.380 Noise zones designated.

Receptor properties described hereinafter in this chapter are hereby assigned to the following noise zones:

Noise Zone I—Noise-sensitive area; Noise Zone II—Residential properties; Noise Zone III—Commercial properties; Noise Zone IV—Industrial properties.

12.08.390 Exterior noise standards—Citations for violations authorized when.

A. Unless otherwise herein provided, the following exterior noise levels shall apply to all receptor properties within a designated noise zone [See Table 5.12-6, below]:

B. Unless otherwise herein provided, no person shall operate or cause to be operated, any source of sound at any location within the unincorporated county, or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level, when measured on any other property either incorporated or unincorporated, to exceed any of the following exterior noise standards:

Table 5.12-6 County of Los Angeles Exterior Noise Standards (by Noise Zone)

Noise Zone	Designated Noise Zone Land Use (Receptor property)	Time Interval	Exterior Noise Level (dB)
I	Noise-sensitive area	Anytime	45
II	Residential properties	10:00 PM to 7:00 AM (nighttime)	45
		7:00 AM to 10:00 PM (daytime)	50
III	Commercial properties	10:00 PM to 7:00 AM (nighttime)	55
		7:00 AM to 10:00 PM (daytime)	65
IV	Industrial properties	Anytime	70

Source: Los Angeles County Code of Ordinances.

Standard No. 1 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level from subsection A of this section; or, if the ambient L_{50} exceeds the foregoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.

Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from subsection A of this section plus 5 dB; or, if the ambient L_{25} exceeds the foregoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.

Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable noise level from subsection A of this section plus 10 dB[1]; or, if the ambient $L_{8.3}$ exceeds the foregoing level, then the ambient $L_{8.3}$ becomes exterior noise level for Standard No. 3.

Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable noise level from subsection A of this section plus 15 dB; or, if the ambient $L_{1.7}$ exceeds the foregoing level, then the ambient $L_{1.7}$ becomes the exterior noise level for Standard No. 4.

Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from subsection A

[1] County Code Section 12.08.390 contains a typographical error, which is corrected here. Standard No. 3, dealing with the $L_{8.3}$ noise level metric, should have an increment of plus 10 dB above the basic limits (shown in Table 5.12-6), rather than the as-written (and incorrect) increment of plus 20 dB. The County Noise Ordinance will be updated as part of the implementation of the Proposed General Plan Update.

of this section plus 20 dB; or, if the ambient L_0 (i.e., L_{max}) exceeds the foregoing level then the ambient L_0 (L_{max}) becomes the exterior noise level for Standard No. 5.

C. If the measurement location is on a boundary property between two different zones, the exterior noise level utilized in subsection B of this section to determine the exterior standard shall be the arithmetic mean of the exterior noise levels in subsection A of the subject zones. Except as provided for above in this subsection C, when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level as designated in subsection A shall be the daytime exterior noise level for the subject receptor property.

D. The ambient noise histogram shall be measured at the same location along the property line utilized in subsection B of this section, with the alleged intruding noise source inoperative. If for any reason the alleged intruding noise source cannot be turned off, the ambient noise histogram will be estimated by performing a measurement in the same general area of the alleged intruding noise source but at a sufficient distance such that the noise from the alleged intruding noise source is at least 10 dB below the ambient noise histogram in order that only the actual ambient noise histogram be measured. If the difference between the ambient noise histogram and the alleged intruding noise source is 5 to 10 dB, then the level of the ambient noise histogram itself can be reasonably determined by subtracting a one-decibel correction to account for the contribution of the alleged intruding noise source.

E. In the event the intrusive exceeds the exterior noise standards as set forth in subsections B and C of this section at a specific receptor property and the health officer has reason to believe that this violation at said specific receptor property was unanticipated and due to abnormal atmospheric conditions, the health officer shall issue an abatement notice in lieu of a citation. If the specific violation is abated, no citation shall be issued therefor. If, however, the specific violation is not abated, the health officer may issue a citation.

12.08.400 Interior noise standards.

A. No person shall operate or cause to be operated within a dwelling unit, any source of sound, or allow the creation of any noise, which causes the noise level when measured inside a neighboring receiving dwelling unit to exceed the following standards:

Standard No. 1 The applicable interior noise level for cumulative period of more than five minutes in any hour; or

Standard No. 2 The applicable interior noise level plus 5 dB for a cumulative period of more than one minute in any hour; or

Standard No. 3 The applicable interior noise level plus 10 dB or the maximum measured ambient noise level for any period of time.

B. The following interior noise levels for multifamily residential dwellings shall apply, unless otherwise specifically indicated, within all such dwellings with windows in their normal seasonal configuration. [See Table 5.12-7 below]

C. If the measured ambient noise level reflected by the L_{50} exceeds that permissible within any of the interior noise standards in subsection A of Section 12.08.390, the allowable interior noise level shall be increased in 5 dB increments in each standard as appropriate to reflect said ambient noise level (L50).

12.08.410 Correction for certain types of sounds.

Table 5.12-7 County of LA Multi-family Residential Land Use Interior Noise Standards

Noise Zone	Designated Land Use	Time Interval	Allowable Interior Noise Level (dBA)
All	Multi-family Residential	10:00 PM to 7:00 AM (nighttime)	40
		7:00 AM to 10:00 PM (daytime)	45

Source: Los Angeles County Code.

For any source of sound which emits a pure tone or impulsive noise, the noise levels as set forth in Sections 12.08.390 and 12.08.400 shall be reduced by five decibels.

12.08.420 Measurement Methods.

A. Utilizing the A-weighting scale of the sound-level meter and the "slow" meter response (use "fast" response for impulsive type sounds), the noise level shall be measured at a position or positions at any point on the receiver's property.

B. In general, the microphone shall be located four to five feet above the ground; 10 feet or more from the nearest reflective surface, where possible. However, in those cases where another elevation is deemed appropriate, the latter shall be utilized.

C. Interior noise measurements shall be made within the affected residential unit. The measurements shall be made at a point at least four feet from the wall, ceiling, or floor nearest the noise source, with windows in the normal seasonal configuration. Calibration of the measurement equipment, utilizing an acoustic calibrator, shall be performed immediately prior to recording any noise data.

12.08.430 Acts deemed violations when

Notwithstanding any other provisions of this chapter, the acts set out in this Part 4, and the causing or permitting thereof, are declared to be in violation of this chapter.

12.08.440 Construction noise.

A. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 PM and 7:00 AM, or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited.

B. Noise Restrictions at Affected Structures. The contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in the following schedule:

1. At Residential Structures.

a. Mobile Equipment. Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment:

Table 5.12-8 Noise Restrictions on Mobile Equipment at Residential Structures

	Single-Family Residential	Multi-Family Residential	Semi-residential/ Commercial
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	75 dBA	80 dBA	85 dBA
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	60 dBA	64 dBA	70 dBA

Source: Los Angeles County Code of Ordinances.

b. Stationary Equipment. Maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment:

Table 5.12-9 Noise Restrictions on Stationary Equipment at Residential Structures

	Single-Family Residential	Multi-Family Residential	Semi-residential/ Commercial
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	60 dBA	65 dBA	70 dBA
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

Source: Los Angeles County Code.

2. At Business Structures

a. Mobile equipment. Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment: Daily, including Sunday and legal holidays, all hours: maximum of 85 dBA.

C. All mobile or stationary internal-combustion-engine powered equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order.

D. In case of a conflict between this chapter and any other ordinance regulating construction activities, provisions of any specific ordinance regulating construction activities shall control.

12.08.450 Forced-air blowers in tunnel car washes.

Operating or permitting the operation of any forced-air blower in a tunnel car wash between the hours of 7:00 AM and 8:00 PM in such a manner as to exceed any of the following sound levels is prohibited:

Table 5.12-10 Noise Restrictions on Forced Air Blowers in Tunnel Car Washes

Land Use Classification	Sound Level Limit, dBA	
	Installed Before 1-1-80	Installed On or After 1-1-80
Residential	70	60
Commercial/Industrial	75	65

Source: Los Angeles County Code.
Measurement Location: Any point on contiguous receptor property, five feet above grade level, no closer than three feet from any wall.

12.08.460 Loading and unloading operations.

Loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of 10:00 PM and 6:00 AM in such a manner as to cause noise disturbance is prohibited.

12.08.470 Noise disturbances in noise-sensitive zones.

A. Creating or causing the creation of any noise disturbance within any noise-sensitive zone, as designated by the health officer, is prohibited, provided that conspicuous signs are displayed indicating the presence of the zone.

B. Noise-sensitive zones must be indicated by the display of conspicuous signs in at least three separate locations within 164 meters (one-tenth mile) of the institution or facility.

12.08.480 Places of public entertainment.

Operating, playing or permitting the operation or playing of any radio, television, phonograph, drum, musical instrument, sound amplifier or similar device which produces,

reproduces or amplifies sound in any place of public entertainment at a sound level greater than 95 dBA, as read by the slow response on a sound level meter at any point that is normally occupied by a customer is prohibited, unless a conspicuous and legible sign is located outside such place, near each public entrance, stating "WARNING: SOUND LEVELS WITHIN MAY CAUSE HEARING IMPAIRMENT."

12.08.490 Powered model vehicles.

Operating or permitting the operation of powered model vehicles so as to create a noise disturbance across a residential real-property boundary, or within a noise-sensitive zone between the hours of 8:00 PM and 7:00 AM the following day is prohibited.

12.08.500 Emergency signaling devices.

A. The intentional sounding or permitting the sounding outdoors of any emergency signaling device, including fire, burglar or civil-defense alarm, siren, whistle, or similar stationary emergency signaling device, except for emergency purposes or for testing, as provided in subsection B2 below, is prohibited.

B.
1. Testing of a stationary emergency signaling device shall not occur before 7:00 AM or after 7:00 PM. Any such testing shall use only the minimum cycle test time. In no case shall such test time exceed 60 seconds.

2. Testing of the complete emergency signaling system, including the functioning of the signaling device, and the personnel response to the signaling device, shall not occur more than once in each calendar month. Such testing shall not occur before 7:00 AM or after 10:00 PM. The time limit specified in subsection B1 above shall not apply to such complete-system testing.

C. Sounding or permitting the sounding of any exterior burglar or fire alarm, or any motor-vehicle burglar alarm is prohibited, unless such alarm is terminated within 15 minutes of activation.

12.08.510 Stationary nonemergency signaling devices.

A. Sounding or permitting the sounding of any electronically amplified signal from any stationary bell, chime, siren, whistle, or similar device intended primarily for nonemergency purposes, from any place, for more than 10 consecutive seconds in any hourly period is prohibited.

B. Houses of religious worship shall be exempt for the operation of this provision.

C. Sound sources covered by this provision and not exempted under subsection B may be exempted by a variance issued by the health officer.

12.08.520 Refuse collection vehicles.

A. On or after three years following August 17, 1978, the effective date of the ordinance codified in this chapter, operating or permitting the operation of the compacting mechanism of any motor vehicle which compacts refuse and which creates, during the compacting cycle, a sound level in excess of 86 dBA when measured at 50 feet from any point of the vehicle is prohibited.

B. Operating or permitting the operation of the compacting mechanism of any motor vehicle which compacts refuse between the hours of 10:00 PM and 6:00 AM the following day in a residential area or noise-sensitive zone, or within 500 feet thereof is prohibited.

C. Collecting refuse with collection vehicle between the hours of 10:00 PM and 6:00 AM the following day in a residential area or noise-sensitive zone or within 500 feet thereof.

D. In the case of conflict between this chapter and any other ordinance regulating refuse collection, provisions of any specific ordinance regulating refuse collection shall control.

12.08.530 Residential air-conditioning or refrigeration equipment.

Operating or permitting the operation of any air-conditioning or refrigeration equipment in such a manner as to exceed any of the following sound levels is prohibited.

Table 5.12-11 Noise Restrictions on Residential air conditioning or refrigeration equipment.

Measurement Location	Sound Level Limit, dBA	
	Installed Before 1-1-80	Installed On or After 1-1-80
Any point on neighboring property line, 5 feet above grade level, no closer than 3 feet from any wall.	60	55
Center of neighboring patio, 5 feet above grade level, no closer than 3 feet from any wall.	55	50
Outside the neighboring living area window nearest the equipment location, not more than 3 feet from the window opening, but at least 3 feet from any other surface.	55	50

Source: Los Angeles County Code.

12.08.540 Street sales.

Offering for sale, selling anything, or advertising by shouting or outcry within any residential or commercial area or noise-sensitive zone of the unincorporated areas of the county is prohibited except by variance issued by the health officer. The provisions of this section shall not be construed to prohibit the selling by outcry of merchandise, food and beverages

at licensed sporting events, parades, fairs, circuses, or other similar licensed public-entertainment events.

12.08.541 Street sales—Restrictions on sound system speakers.

A person offering for sale, selling or advertising anything edible shall not emit music or other sounds from an external speaker affixed to a motor vehicle between the hours of 8:00 PM and 6:00 AM within any residential, commercial or noise sensitive-zone of the unincorporated area of the County. The provisions of this section shall not be construed to prohibit the selling by outcry of merchandise, food and beverages, at licensed sporting events, parades, fairs, circuses, or other similar licensed-entertainment events.

12.08.550 Vehicle or motorboat repairs and testing.

Repairing, rebuilding, modifying or testing any motor vehicle, motorcycle or motorboat in such a manner as to cause a noise disturbance across a real-property boundary or within a noise-sensitive zone is prohibited.

12.08.560 Vibration.

Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz.

12.08.570 Activities exempt from chapter restrictions.

The following activities set out in this chapter shall be exempted from the provisions of this chapter:

A. Emergency Exemption. The emission of sound for the purpose of alerting persons to the existence of an emergency, or the emission of sound in the performance of emergency work;

B. Warning Devices. Warning devices necessary for the protection of public safety, as for example police, fire and ambulance sirens, and train horns;

C. Outdoor Activities. Activities conducted on public playgrounds and public or private school grounds, including but not limited to school athletic and school entertainment events;

D. Exemption from Exterior Noise Standards. The following activities are exclusively regulated by the prohibitions of Part 4 [Sections 12.08.430 through 12.08.560] of this chapter:

1. Construction,

2. Stationary nonemergency signaling devices,
3. Emergency signaling devices,
4. Refuse collection vehicles,
5. Residential air-conditioning or refrigeration equipment,
6. Forced-air blowers;

E. Motion Picture Production and Related Activities;

F. Railroad Activities. All locomotives and rail cars operated by any railroad which is regulated by the California Public Utilities Commission;

G. Federal or State Pre-exempted Activities. Any activity, to the extent regulation thereof has been preempted by state or federal law;

H. Public Health and Safety Activities. All transportation, flood control, and utility company maintenance and construction operations at any time on public right-of-way, and those situations which may occur on private real property deemed necessary to serve the best interest of the public and to protect the public's health and well-being, including but not limited to street sweeping, debris and limb removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, snow removal, house moving, vacuuming catch basins, removal of damaged poles and vehicles, repair of water hydrants and mains, gas lines, oil lines, sewers, etc.;

I. Motor Vehicles on Private Right-of-way and Private Property. Except as provided in Section 12.08.550, all legal vehicles of transportation operating in a legal manner in accordance with local, state and federal vehicle-noise regulations within the public right-of-way or air space, or on private property;

J. Seismic Surveys Authorized by the State Land Commission;

K. Agricultural Operations. All mechanical devices, apparatus, or equivalent associated with agricultural operations conducted on agricultural property, unless if in the vicinity of residential land uses, in which case a variance permit is required to operate noise-producing devices, with the following stipulations:

1. Operations do not take place between 8:00 PM and 6:00 AM, or

2. Such operations and equipment are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions, or

3. Such operations and equipment are associated with agricultural pest-control through pesticide application, provided the application is made in accordance with permits issued by or regulations enforced by the county agricultural commissioner,

4. Such devices utilized for pest control which incorporate stationary or mobile noise sources (electro-mechanical bird-scare devices, etc.) are operated only by permit issued by the health officer. The allowable hours and days for operation of these devices will be specified in the permit,

5. All equipment and machinery powered by internal combustion engines shall be equipped with a proper muffler and air-intake silencer in good working order;

L. Minor Maintenance to Residential Real Property. Noise sources associated with the minor maintenance of residential real property, provided said activities take place as follows:

1. During Pacific Standard Time between the hours of 8:00 AM and 6:00 PM on any day except Sunday, when such activities may take place between the hours of 9:00 AM and 6:00 PM, and

2. During Daylight Savings Time between the hours of 8:00 AM and 7:00 PM on any day except Sunday, when such activities may take place between the hours of 9:00 AM and 6:00 PM;

M. Operation of Oil and Gas Wells.

1. Normal well servicing, remedial or maintenance work performed within an existing well which does not involve drilling or re-drilling and which is restricted to the hours between 7:00 AM and 10:00 PM, and

2. Drilling or re-drilling work which is done in full compliance with the conditions of permits issued under Chapter 5, Article 1, of the County Zoning Ordinance, as amended, as set out in Title 22 of this code.

[Sections 12.08.580 through 12.08.640 relate to the conditions and requirements for granting of variances for the Los Angeles County Code of Ordinances Noise Chapter.]

[Sections 12.08.650 through 12.08.680 relate to addressing violations and enforcement mechanisms for the Los Angeles County Code of Ordinances Noise Chapter.]

[Sections 12.12.010 through 12.12.020 discuss definitions and references to provisions for this chapter of the Los Angeles County Code of Ordinances Noise Chapter.]

12.12.030 Construction noise prohibited when.

Except as otherwise provided in this chapter, a person, on any Sunday, or at any other time between the hours of 8:00 PM and 6:30 AM the following day, shall not perform any construction or repair work of any kind upon any building or structure, or perform any earth excavating, filling or moving, where any of the foregoing entails the use of any air

compressors; jackhammers; power-driven drill; riveting machine; excavator, diesel-powered truck, tractor or other earth moving equipment; hand hammers on steel or iron, or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in a dwelling, apartment, hotel, mobile home, or other place of residence.

12.12.040 Exemptions—Certain zoned areas.

The provisions of this chapter do not apply in any territory which is in a zone in which the Zoning Ordinance, codified in Title 22 of this code, prohibits any residential use and which is not less than 500 feet from any territory in any residential zone as defined in Section 201 of Ordinance 1494, or any territory in a residential zone in any city.

12.12.050 Exemptions—Work performed with county engineer's permission.

The provisions of Section 12.12.030 do not apply to any person who performs the construction, repair, excavation, or earthmoving work involved pursuant to the express written permission of the county engineer to perform such work at times prohibited in Section 12.12.030. Upon receipt of an application in writing therefor, stating the reasons for the request and the facts upon which such reasons are based, the county engineer may grant such permission if he finds that:

A. The work proposed to be done is effected with a public interest; or

B. Hardship or injustice, or unreasonable delay, would result from the interruption thereof during the hours and days specified in Section 12.12.030; or

C. The building or structure involved is devoted or intended to be devoted to a use immediately incident to public defense.

12.12.060 Exemptions—Work by public utilities—Conditions.

The provisions of Section 12.12.030 do not apply to the construction, repair or excavation by a public utility which is subject to the jurisdiction of the Public Utilities Commission as may be necessary for the preservation of life or property, and where such necessity makes it necessary to construct, repair or excavate during the prohibited hours.

12.12.070 Exemptions—Emergency work—Permit requirements.

The provisions of Section 12.12.030 do not apply to such construction, repair or excavation during prohibited hours as may be necessary for the preservation of life or property when such necessity arises during such hours as the offices of the county are closed or where such necessity requires immediate action prior to the time at which it would be possible to obtain a permit pursuant to Section 12.12.050, if the person doing such construction, repair or

excavation obtains a permit therefor within one day after the offices of the county engineer are first opened subsequent to the making of such construction, repair or excavation.

[Sections 12.12.080 through 12.12.100 discuss appeals, violations, penalties, and severability for this chapter of the Los Angeles County Code of Ordinances]

13.45.010 Loud, unnecessary and unusual noise.

Notwithstanding any other provisions of this chapter and in addition thereto, it shall be unlawful for any person to wilfully make or continue, or cause to be made or continued, any loud, unnecessary, and unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The standard which may be considered in determining whether a violation of the provisions of this section exists may include, but not be limited to, the following:

A. The level of noise;
B. Whether the nature of the noise is usual or unusual;
C. Whether the origin of the noise is natural or unnatural;
D. The level and intensity of any background noise;
E. The proximity of the noise to residential sleeping facilities;
F. The nature and zoning of the area within which the noise emanates;
G. The density of the inhabitation of the area within which the noise emanates;
H. The time of the day or night the noise occurs;
I. The duration of the noise;
J. Whether the noise is recurrent, intermittent, or constant; and
K. Whether the noise is produced by a commercial or non-commercial activity.

If interior allowable noise levels are met by requiring that windows be un-openable or closed, the design for the structure must also specify an air-conditioning or ventilation system to provide a habitable interior environment. The ventilation system must not compromise the interior room noise reduction.

Additional sections of the Los Angeles County Code mention noise briefly or in passing and do not contain specific regulations that would need to be specifically considered in relation to the Project. Many of these incidental mentions of noise pertain to generalized prohibitions on excessive noise from specific activities or land uses, all of which are governed by other overarching provisions of the Los Angeles County Code.

Vibration Criteria

The County has adopted, as part of The Los Angeles Code, the following provision (also listed above) that governs impacts from vibration:

12.08.560 Vibration.

Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz.

Vibration Annoyance

Table 5.12-12, *Groundborne Vibration Impact Criteria: Human Annoyance*, shows the FTA and Caltrans vibration criteria to evaluate vibration-related annoyance due to resonances of the structural components of a building. These criteria are based on the work of many researchers that suggested that humans are sensitive to vibration velocities in the range of 8 to 80 Hz.

Table 5.12-12 Groundborne Vibration Criteria: Human Annoyance

Land Use Category	Vibration Velocity, in/sec (RMS amplitude)[1]	Description
Workshop	0.032	Distinctly felt vibration. Appropriate to workshops and non-sensitive areas
Office	0.016	Felt vibration. Appropriate to offices and non-sensitive areas.
Residential – Daytime	0.008	Barely felt vibration. Adequate for computer equipment.
Residential – Nighttime	0.004	Vibration not felt, but groundborne noise may be audible inside quiet rooms.

Source: FTA 2006 and Caltrans 2004.
[1] As measured in 1/3-octave bands of frequency over the frequency ranges of 8 to 80 Hz.

Vibration-Related Structural Damage

Structures amplify groundborne vibration and wood-frame buildings, such as typical residential structures, are more affected by ground vibration than heavier buildings. The level at which groundborne vibration is strong enough to cause architectural damage has not been determined conclusively. The most conservative estimates are reflected in the FTA standards, shown in Table 5.12-13, *Groundborne Vibration Impact Criteria – Architectural Damage*.

Table 5.12-13 Groundborne Vibration Impact Criteria: Architectural Damage

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: FTA 2006.

5.12.1.2 EXISTING SETTING

Existing Noise Environment

Los Angeles County is impacted by a multitude of noise sources. Mobile sources, especially automobiles, trucks, and trains, are the most common and significant sources of noise in most communities and the predominant source of noise in Los Angeles County. Major sources of transportation noise include a large number of highways and rail lines that traverse unincorporated areas. In addition, commercial, industrial, and institutional land uses (i.e., schools, fire stations, utilities) throughout Los Angeles County generate stationary-source noise. These different classes of noise sources are discussed in more detail in the following subsections.

Local Noise Monitoring Data

Ambient noise measurement data from several recent projects studied within Los Angeles County have been compiled and are presented in Table 5.12-14, *Noise Level Measurements Summary*.

Table 5.12-14 Noise Level Measurements Summary

Planning Area	Project	General Location	CNEL, dBA	L_{10}, dBA	L_{eq}, dBA	L_{90}, dBA
Antelope Valley	Palmdale Hybrid Power Project	Palmdale	61.6 – 73.5	D: 51.7 – 68.6 N: 43.2 – 59.8	D: 55.5 – 60.9 N: 40.9 – 52.8	D: 39.8 – 50.6 N: 34.6 – 39.3
Coastal Islands	No data available	No data available	No data	No data	No data	No data
East San Gabriel Valley	Buddhist Tzu Chi Foundation	San Dimas	51.9 – 61.0	No data	D: 48.2 – 59.8 N: 41.5 – 52.4	No data
	1880 Railroad	Rowland Heights	No data	No data	66.2	No data
	15003 Mullberry	Whittier	No data	No data	64.1	56.9
	15156 Gale Ave	Hacienda Heights	No data	No data	67.4	59.0
	17175 Colima	Hacienda Heights	No data	No data	59.9	No data
	19650 Reedview	Rowland Heights	No data	No data	43.5 - 61.5	No data
	1555 Fairway	Walnut	No data	No data	55.8	48.9
	Verizon at 7316 ½ Broadway Ave	Whittier	No data	No data	68.0 – 68.6	58.0 – 59.1
	12020 Shoemaker	Whittier	No data	No data	63.8 – 65.2	51 – 56
	San Angelo Park Community Center	El Monte	No data	No data	63	No data
	15955 E. San Bernardino	Covina	No data	No data	60 – 64.6	55.1 – 56.9
Gateway	710 Freeway Corridor	Various	*Data metrics and results are too broad to encapsulate herein*			
	Equilon Enterprise Car Wash	Los Angeles	~67.6	No data	64.3	No data
	Studies for Gateway COG	Various	*Data metrics and results are too broad to encapsulate herein*			
	Candlelight Brookfield Homes	Whittier	57.1 – 65.9	No data	39.7 – 68.7	No data
Metro	1155 Eastern Ave	Los Angeles	No data	No data	63 – 71	No data
	5051 E 3rd St.	Los Angeles	No data	No data	65.9	57.2
	357 W Compton	Gardena	No data	No data	71.9	69.5
	City Terrace Recycling/Transfer Station	Los Angeles	No data	64.5 – 75.0	64.1 – 70.9	56.0 – 63.0
San Fernando Valley	No data available	No data available	No data	No data	No data	No data
Santa Clarita Valley	Santa Clarita Valley Area Plan	S.C. Valley	No data	62 – 86 (L_{max})	38 - 72	36 – 62 (L_{min})
Santa Monica Mountains	Malibu Institute Project	Malibu	No data	No data	54.7 – 55.3[1]	No data
South Bay	22433 S Vermont	Torrance	No data	No data	65.2 – 76.4	56.5 – 70.7
West San Gabriel Valley	5025 Acacia	San Gabriel	No data	No data	51.5	38.4
	Eaton Canyon Dining/ Banquet Facility	Pasadena	No data	~69.5	~59.5	No data
Westside	No data available	No data available	No data	No data	No data	No data

Source: County of Los Angeles Public Health Department staff, 2013.
[1.] Questionable data

As shown in Table 5.12-14 above, energy-average (L_{eq}) community noise levels are most often in the range of low-60's to low-70's dBA. Maximum (L_{max}) sound levels and the similar intrusive sound levels (L_{10}) can often

reach into the mid- to upper-80's dBA; depending on the proximity to heavily traveled roadways and/or other, major noise sources. These sample data for ambient conditions are judged to be typical for primarily developed areas within a large, metropolitan region. As such, they inherently include noise from traffic along major roadways, traffic at busy intersections, movements along commuter and freight rail lines, and aircraft fly-overs. These various major noise source types are discussed in more detail in following sub-sections.

Military Installations and Operations Areas

Los Angeles County includes several military installations that contribute to the noise environment in the unincorporated areas. The U.S. Department of Defense is responsible for thousands of acres within Los Angeles County, including installations and facilities. Coordination between the County and U.S. Department of Defense is important to ensure compatibility between military installations and operation areas, and adjacent land uses. The management of natural resources within the military installations and operation areas are described in greater detail in the Conservation and Natural Resources Element. In guiding growth and development in the unincorporated areas, it is important to consider the critical role of Military Operation Areas in support of national defense. The Proposed Project considers all future land uses that seriously impact or hinder the military's training and testing capabilities to be incompatible land uses.

Although much of the Antelope Valley Planning Area consists of undeveloped land, a substantial portion of this land is used for military operations. Proposed General Plan Update Figure 6.2 identifies military installations and operation areas in Los Angeles County, which are primarily located in the Antelope Valley Planning Area. In particular, portions of Edwards Air Force Base in Los Angeles County are entirely located within the unincorporated areas. Noise from military installations would primarily be related to aircraft operations and, secondarily, to ground-based activities involving vehicle movements and/or weapons training. In general, noise from military installations is exempt from the purview of local jurisdictions, such as cities or counties.

Rail Noise

Los Angeles County has an extensive rail network that is focused on the efficient and safe movement of people and goods throughout the region. For transporting people via rail lines, there are three systems that operate within Los Angeles County: Metro, Metrolink, and Amtrak.

The Los Angeles County Metropolitan Transportation Authority (Metro) operates the Metro rail system, which is exclusively within Los Angeles County. The Metro rail system consists of the following lines: Red, Purple, Blue, Green, Gold, and Expo. The hub of the system is in Downtown Los Angeles at Union Station. The Metro lines that primarily serve the unincorporated areas include the Metro Blue, Green, and Gold Lines. Two additional rail service operators that provide services in Los Angeles County are Metrolink and Amtrak. The Southern California Regional Rail Authority (SCRRA) operates the 416-mile Metrolink commuter rail system, which has its hub in Downtown Los Angeles at Union Station and extends to Ventura, San Bernardino, Riverside, Orange, and San Diego counties, and serves some of the unincorporated areas. Amtrak provides interstate service from points around the country to Union Station, as well as regional service between major cities throughout California.

For the movement of goods, the Southern Pacific Railway and the Union Pacific Railway operate between the ports of Los Angeles and Long Beach and the central Los Angeles freight yard transfer stations, with connections onward to the transcontinental rail network. Proposed General Plan Update Figure 7.5 shows the freight and passenger rail lines that run throughout Los Angeles County.

In general, noise from rail operations, both for people and goods movement, is under the jurisdiction of the Federal Railroad Administration (FRA) sets forth and enforces safety standards, including noise emissions for railroad locomotive cabs, at-grade crossing bells, and locomotive warning horns. Additionally, the location, alignment, and design of potential, future rail lines are conceptual at this juncture. Therefore, it would be speculative to analyze their noise impacts in this DEIR. Future rail and other major infrastructure projects constructed prior to Proposed Project buildout would be subject to project-level CEQA review.

Aircraft Noise

Los Angeles County includes a large number of public- and private-use airports that contribute to the noise environment. These airports are summarized in Table 5.12-15.

Table 5.12-15 Airports within Los Angeles County

Number	Airport Name
1	Agua Dulce Airport
2	Bob Hope/Burbank Airport
3	Brackett Field Airport
4	Catalina Airport
5	Compton/Woodley Airport
6	El Monte Airport
7	General William J. Fox Airfield
8	Hawthorne Municipal/Jack Northrop Field Airport
9	Long Beach Municipal/Daugherty Field Airport
10	Los Angeles International Airport
11	Palmdale Regional Airport
12	Santa Monica Municipal Airport
13	Torrance/Zamperini Airport
14	Van Nuys Airport
15	Whiteman Airport

Source: Los Angeles County Department of Regional Planning and Los Angeles County Airport Land Use Commission. Data current as of 1997 (Fox Field current as of 2004).
Note: most of these airports are within the boundaries of incorporated cities.

The associated airport noise contours are shown in Figure 5.12-1, *Airport Noise Contours*. In general, community-based annoyance reactions to airport noise increases as the noise environment increases. Communities with the strongest reaction from airport noise are those with homes and businesses that lie beneath the flight path of major airports, such as Los Angeles International Airport (LAX). Noise from aircraft and airports is regulated by the Federal Aviation Administration (FAA).

Vibration

The primary existing sources of vibration within Los Angeles County are rail and truck traffic. Perceptible vibration levels may be caused by train pass-bys in areas adjacent to the railroad lines. Also, heavy trucks hitting discontinuities in the pavement from gaps and potholes can cause potentially troublesome vibration effects. Under normal conditions with well-maintained asphalt, vibration levels are usually not perceptible beyond the road right-of-way. There are no known major sources of vibration, such as heavy industrial equipment, that would cause substantial levels of vibration to nearby sensitive uses.

On-Road Vehicles

By far, the largest single source of community noise within Los Angeles County is the flow of traffic on major roadways. Motor vehicle noise is generated by engine vibrations, the interaction between tires and the road, and the exhaust system. Reducing the average motor vehicle speed reduces the noise exposure of receptors adjacent to the road. Each reduction of five miles per hour reduces noise by about 1.3 dBA.

In order to assess the potential for mobile-source noise impacts, it is necessary to determine the noise currently generated by vehicles traveling through the Project Area. Average daily traffic (ADT) volumes were based on the existing daily traffic volumes provided by Iteris (the Iteris traffic study methodologies, analyses, and results are contained in Appendix L). The results of this modeling indicate that average noise levels along arterial segments currently range from approximately 46 dBA to 79 dBA CNEL as calculated at a distance of 100 feet from the centerline of the road. Noise levels for existing conditions along analyzed roadways are presented in Table 5.12-16, *Existing Roadway Noise Levels and Contours*.[2]

[2] The existing noise contours are shown in Appendix K of this EIR.

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline)		
					65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
South Bay	Crenshaw Boulevard	Palos Verdes Lane to Silver Spur Road	30,112	71.2	119	257	555
South Bay	Vermont Street	Lomita Boulevard to Sepulveda Boulevard	26,488	70.6	110	236	509
South Bay	Vermont Street	Sepulveda Boulevard to W 228th Street	17,224	68.7	82	177	382
South Bay	Vermont Street	W 228th Street to W 223rd Street	18,418	69.0	86	185	400
South Bay	Vermont Street	W 223rd Street to W 220th Street	10,300	66.5	58	126	271
South Bay	Vermont Street	W 220th Street to Carson Street	6,160	64.3	41	89	193
South Bay	Vermont Street	Carson Street to Torrance Boulevard	15,431	68.3	77	165	355
South Bay	Vermont Street	Torrance Boulevard to Del Amo Boulevard	17,954	68.9	85	182	393
South Bay	Manhattan Beach Blvd	Prairie Avenue to Crenshaw Boulevard	13,814	67.8	71	153	330
South Bay	Lennox Boulevard	La Cienega Boulevard to Inglewood Avenue	6,963	62.3	31	66	142
South Bay	Lennox Boulevard	Inglewood Avenue to Hawthorne Boulevard	10,091	63.9	39	84	182
South Bay	Lennox Boulevard	Hawthorne Boulevard to Freeman Avenue	7,832	63.0	34	74	159
South Bay	W 220th Street	Normandie Avenue to Meyler Street	4,240	60.4	23	49	106
South Bay	W 220th Street	Meyler Street to Vermont Avenue	4,140	60.2	22	48	104
South Bay	Normandie Avenue	Sepulveda Boulevard to Lomita Boulevard	8,720	63.5	37	79	171
South Bay	Normandie Avenue	W 228th Street to Sepulveda Boulevard	9,960	64.1	40	87	187
South Bay	Normandie Avenue	W 223rd Street to W 228th Street	7,890	63.1	34	74	160
South Bay	Normandie Avenue	W 220th Street to W 223rd Street	11,420	64.7	44	95	204
South Bay	Normandie Avenue	Carson Street to W 220th Street	4,860	60.9	25	54	116
South Bay	Normandie Avenue	Torrance Boulevard to Carson Street	7,680	62.9	34	73	157
South Bay	Normandie Avenue	Del Amo Boulevard to Torrance Boulevard	15,440	66.0	54	116	250
South Bay	Sepulveda Boulevard	Normandie Avenue to Vermont Avenue	39,350	72.6	149	320	690
South Bay	Sepulveda Boulevard	Vermont Avenue to I-110 South Off-ramp	60,300	74.4	198	426	917
South Bay	Sepulveda Boulevard	I-110 South Off-ramp to Figueroa St	36,590	72.3	142	305	657
Antelope Valley	W Avenue J	90th Street E to 100th Street E	2,180	59.6	20	44	94
Antelope Valley	W Avenue J	100th Street E to 110th Street E	4,040	62.3	31	66	142

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Antelope Valley	W Avenue J	110th Street E to 140th Street E	3,560	61.7	28	61	131
Antelope Valley	W Avenue J	140th Street E to 150th Street E	4,800	63.0	34	74	159
Antelope Valley	W Avenue J	150th Street E to 170th Street E	4,940	63.2	35	75	163
Antelope Valley	W Avenue J	170th Street E to 200th Street E	4,970	63.2	35	76	163
Antelope Valley	Lancaster Road	Pine Canyon Road to W Avenue I	0	n/a	n/a	n/a	n/a
Antelope Valley	Lancaster Road	W Avenue I to 190th Street W	0	n/a	n/a	n/a	n/a
Antelope Valley	Lancaster Road	190th Street W to 170th Street W	0	n/a	n/a	n/a	n/a
Antelope Valley	Lancaster Road	170th Street W to 110th Street W	1,190	61.5	27	59	126
Antelope Valley	Lancaster Road	110th Street W to 90th Street W	670	59.0	19	40	86
Antelope Valley	Lancaster Road	90th Street W to 70th Street W	3,060	65.6	51	110	237
Antelope Valley	Lancaster Road	70th Street W to 60th Street W	4,160	67.0	63	135	291
Antelope Valley	170th Street E	Avenue T to Avenue W	0	n/a	n/a	n/a	n/a
Antelope Valley	170th Street E	Avenue W to 165th Street	0	n/a	n/a	n/a	n/a
Antelope Valley	Elizabeth Lake Road	Johnson Road to San Francisquito Canyon Road	3,665	61.9	29	62	133
Antelope Valley	Elizabeth Lake Road	San Francisquito Canyon Road to Bouquet Canyon Road	2,290	59.8	21	45	97
Antelope Valley	Elizabeth Lake Road	Bouquet Canyon Road to Godde Hill Road	8,610	65.6	51	109	235
Antelope Valley	W Avenue P	15th Street E to 20th Street E	6,400	64.4	43	92	198
Antelope Valley	W Avenue P	20th Street E to 25th Street E	6,400	64.4	43	92	198
Antelope Valley	W Avenue P	25th Street E to 30th Street E	1,410	57.9	16	33	72
Antelope Valley	W Avenue P	30th Street E to 40th Street E	2,670	60.5	23	50	108
Antelope Valley	W Avenue P	40th Street E to 47th Street E	1,900	59.0	19	40	86
Antelope Valley	W Avenue P	47th Street E to 70th Street E	2,860	60.8	24	52	113
Antelope Valley	200th Street E	E Avenue G to E Avenue J	2,290	57.5	15	31	68
Antelope Valley	E Palmdale Boulevard	90th Street E to 95th Street E	7,911	65.2	48	103	222

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100 ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Antelope Valley	E Palmdale Boulevard	95th Street E to 100th Street E	9,450	66.0	54	116	250
Antelope Valley	E Palmdale Boulevard	100th Street E to 105th Street E	6,390	64.3	42	90	193
Antelope Valley	E Palmdale Boulevard	105th Street E to 110 Street E	6,390	64.3	42	90	193
Antelope Valley	W Avenue G	SR-14 Antelope Valley Freeway to 15th Street W	2,130	58.4	17	36	78
Antelope Valley	W Avenue G	15th Street W to 10th Street W	740	53.8	8	18	38
Antelope Valley	W Avenue G	10th Street W to Sierra Highway	1,110	55.5	11	23	50
Antelope Valley	W Avenue G	Sierra Highway to Division Street	1,370	56.4	12	27	58
Antelope Valley	E Avenue O	145th Street E to 150th Street E	1,850	58.9	18	39	84
Antelope Valley	E Avenue O	150th Street E to 170th Street E	4,434	62.7	33	70	151
Antelope Valley	E Avenue O	170th Street E to 175th Street E	3,102	61.1	26	55	119
Antelope Valley	E Avenue O	175th Street E to 180th Street E	1,246	57.2	14	30	65
Antelope Valley	E Avenue O	180th Street E to 200th Street E	991	53.8	8	18	39
Antelope Valley	E Avenue O	200th Street E to 210 Street E	3,110	58.8	18	39	83
Antelope Valley	E Avenue O	210 Street E to 240th Street E	3,670	59.5	20	43	93
Antelope Valley	W Avenue L	Rancho Vista Road to 45th Street W	12,420	69.4	91	196	423
Antelope Valley	W Avenue L	45th Street W to 40th Street W	9,580	68.3	77	165	356
Antelope Valley	Pearblossom Highway (SR-138)	70th Street E to E Avenue T 8	21,150	69.6	94	203	438
Antelope Valley	Pearblossom Highway (SR-138)	E Avenue T 8 to 82nd Street E	15,222	68.2	76	163	352
Antelope Valley	Pearblossom Highway (SR-138)	82nd Street E to 87th Street E	14,676	68.0	74	159	343
Antelope Valley	Pearblossom Highway (SR-138)	87th Street E to 96th Street E	17,790	68.9	84	181	390
Antelope Valley	Pearblossom Highway (SR-138)	96th Street E to 106th Street E	20,020	69.4	91	196	422

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100 ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Antelope Valley	Pearblossom Highway (SR-138)	106th Street E to 116th Street E	19,850	69.3	90	195	420
Antelope Valley	Pearblossom Highway (SR-138)	116th Street E to 126th Street E	18,560	69.1	87	186	402
Antelope Valley	Pearblossom Highway (SR-138)	126th Street E to 131st Street E	20,310	69.4	92	198	427
Antelope Valley	Pearblossom Highway (SR-138)	131st Street E to 170th Street E	24,450	70.3	104	224	483
Antelope Valley	Fort Tejon Road	87th Street E to Mount Emma Road	3,960	59.8	21	45	98
Antelope Valley	Fort Tejon Road	Mount Emma Road to 96th Street	7,160	62.4	31	67	145
Antelope Valley	Fort Tejon Road	96th Street to 106th Street	7,420	62.6	32	69	148
Antelope Valley	Fort Tejon Road	106th Street to 131 Street E	5,210	61.0	25	54	117
Santa Clarita Valley	Pico Canyon Road	The Old Road to I-5 South Off-ramp	34,490	71.7	131	282	607
Santa Clarita Valley	Pico Canyon Road	Constitution Drive to The Old Road	38,820	72.3	142	305	657
Santa Clarita Valley	Pico Canyon Road	Stevenson Ranch Parkway to Constitution Drive	38,820	72.3	142	305	657
Santa Clarita Valley	Pico Canyon Road	Whispering Oaks Drive to Stevenson Ranch Parkway	28,550	70.9	115	248	535
Santa Clarita Valley	Copper Hill Drive	Avenida Rancho Tesoro to E/O McBean Parkway	9,190	66.0	54	117	251
Santa Clarita Valley	Copper Hill Drive	Decoro Drive to Avenida Rancho Tesoro	29,407	71.3	122	264	568
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Commerce Center Drive to I-5 South Off-ramp	3,766	66.5	59	126	272
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Del Valle Road to Commerce Center Drive	27,360	75.1	220	474	1,021
Santa Clarita Valley	Henry Mayo Drive (SR-126)	San Martinez Grande Canyon Road to Del Valle Road	33,070	73.6	175	377	812
Santa Clarita Valley	Bouquet Canyon Road	Vasquez Canyon Road to Shadow Valley Lane	6,300	64.2	41	89	191
Santa Clarita Valley	Bouquet Canyon Road	Texas Canyon Road to Vasquez Canyon Road	5,610	63.7	38	82	177
Santa Clarita Valley	Sierra Highway	Sand Canyon Road to Ryan Lane	7,955	65.4	49	106	228
Santa Clarita Valley	Sierra Highway	Vasquez Canyon Road to Sand Canyon Road	5,690	63.9	39	85	183

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100 ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Santa Clarita Valley	Sierra Highway	Davenport Road to Vasquez Canyon Road	8,134	65.5	50	108	232
Santa Clarita Valley	Sierra Highway	Agua Dulce Canyon Road to Davenport Road	5,459	63.6	37	81	174
Santa Clarita Valley	Vasquez Canyon Road	Bouquet Canyon Road to Sierra Highway	1,970	59.2	19	41	88
Santa Clarita Valley	Plum Canyon Road	Via Joyce Drive to Santa Catarina Road	17,798	69.1	88	189	407
Santa Clarita Valley	Plum Canyon Road	Santa Catarina Road to La Madrid Drive	16,479	68.8	83	179	386
Santa Clarita Valley	Plum Canyon Road	La Madrid Drive to Farrell Road	14,673	68.3	77	166	358
Santa Clarita Valley	Plum Canyon Road	Farrell Road to Ashboro Road	11,760	67.3	66	143	308
Santa Clarita Valley	Commerce Center Drive	The Old Road to Hasley Canyon Road	25,760	70.5	108	232	500
Santa Clarita Valley	Commerce Center Drive	Hasley Canyon Road to Live Oak Road	5,830	64.0	40	86	186
Santa Clarita Valley	Commerce Center Drive	Live Oak Road to Henry Mayo Drive	6,720	64.6	44	95	204
East San Gabriel Valley	Colima Road	Camino Del Sur to Hacienda Boulevard	46,720	73.3	167	359	774
East San Gabriel Valley	Colima Road	Hacienda Boulevard to Stimson Avenue	30,210	71.4	125	269	579
East San Gabriel Valley	Colima Road	Stimson Avenue to Haliburton Road	35,410	72.1	139	299	643
East San Gabriel Valley	Colima Road	Halliburton Road to Azusa Avenue	38,010	72.4	145	313	674
East San Gabriel Valley	Colima Road	Azusa Avenue to Albatross Road	36,880	72.3	142	307	661
East San Gabriel Valley	Colima Road	Albatross Road to Stoner Creek Road	16,720	68.9	84	181	390
East San Gabriel Valley	Colima Road	Stoner Creek Road to Larkvane Road	29,460	71.3	123	264	569
East San Gabriel Valley	Colima Road	S Larkvane Road to Fullerton Road	29,460	71.3	123	264	569
East San Gabriel Valley	Colima Road	Fullerton Road to Batson Avenue	30,180	71.4	125	268	578
East San Gabriel Valley	Colima Road	Batson Avenue to Nogales Street	18,470	69.3	90	193	417
East San Gabriel Valley	Colima Road	Nogales Street to Otterbein Avenue	21,890	70.0	101	217	467
East San Gabriel Valley	Colima Road	Otterbein Avenue to Fairway Drive	14,660	68.3	77	166	357
East San Gabriel Valley	Colima Road	Fairway Drive to Lake Canyon Drive	7,520	65.1	47	102	220
East San Gabriel Valley	Amar Road	Echelon Avenue to Valinda Avenue	21,920	69.8	97	208	449
East San Gabriel Valley	Amar Road	Valinda Avenue to Lark Ellen Avenue	24,862	70.6	109	236	508
East San Gabriel Valley	Amar Road	Lark Ellen Avenue to Azusa Avenue	28,862	71.2	121	261	561

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline)		
					65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
East San Gabriel Valley	Nogales Street	Gale Street to SR-60 Freeway Westbound Off-ramp	35,110	71.8	132	285	614
East San Gabriel Valley	Nogales Street	SR-60 Freeway Eastbound Off-ramp to Daisetta Street	36,549	72.3	142	305	657
East San Gabriel Valley	Nogales Street	Daisetta Street to Colima Road	39,690	72.4	144	309	667
East San Gabriel Valley	Nogales Street	Colima Road to Pathfinder Road	16,349	68.5	80	171	369
East San Gabriel Valley	Hacienda Boulevard	Gale Avenue to SR-60 Freeway Westbound Off-ramp	47,330	73.4	168	362	781
East San Gabriel Valley	Hacienda Boulevard	SR-60 Freeway Westbound Off-ramp to SR-60 Freeway Eastbound Off-ramp	50,470	73.7	176	378	815
East San Gabriel Valley	Hacienda Boulevard	SR-60 Freeway Eastbound Off-ramp to Halliburton Road	43,640	73.0	159	343	739
East San Gabriel Valley	Hacienda Boulevard	Halliburton Road to Las Lomitas Drive	41,544	72.8	154	332	716
East San Gabriel Valley	Hacienda Boulevard	Las Lomitas Drive to Colima Road	35,300	72.1	138	298	642
East San Gabriel Valley	Hacienda Boulevard	Colima Road to Glenmark Drive	25,670	70.5	107	231	499
East San Gabriel Valley	Grand Avenue	Holt Avenue to Cameron Avenue	30,943	71.3	122	262	565
East San Gabriel Valley	Cypress Street	Ellen Drive to Vincent Avenue	7,390	62.5	32	69	148
East San Gabriel Valley	Cypress Street	Vincent Avenue to Lark Ellen Avenue	6,540	62.0	29	63	136
East San Gabriel Valley	Arrow Highway	Glendora Avenue to Bonnie Cove Avenue	19,340	69.2	89	192	413
East San Gabriel Valley	Arrow Highway	Bonnie Cove Avenue to Sunflower Avenue	19,030	69.2	88	190	408
East San Gabriel Valley	Arrow Highway	Sunflower Avenue to Valley Center Avenue	22,550	69.9	99	212	457
East San Gabriel Valley	Cienega Avenue	Glendora Avenue to Bonnie Cove Avenue	900	53.6	8	17	38
East San Gabriel Valley	Cienega Avenue	Bonnie Cove Avenue to Sunflower Avenue	890	53.6	8	17	37
East San Gabriel Valley	Cienega Avenue	Sunflower Avenue to Valley Center Avenue	220	47.5	3	7	15
Gateway	Alameda Street (SR-47)	Laurel Park Road to Del Amo Boulevard	9,580	66.4	58	125	269
Gateway	Alameda Street (SR-47)	Manville Street to Laurel Park Road	7,920	65.6	51	110	237
Gateway	Santa Fe Avenue	Las Hermanas Street to Victoria Street	16,270	68.5	79	171	368

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100 ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Gateway	Santa Fe Avenue	Victoria Street to Santa Fe Avenue	7,040	64.8	45	98	210
Gateway	Norwalk Boulevard	Whittier Boulevard to Townley Drive	14,620	68.0	74	159	343
Gateway	Norwalk Boulevard	Townley Drive to Mines Boulevard	20,368	69.5	92	198	427
Gateway	Norwalk Boulevard	Mines Boulevard to Saragosa Street	20,685	69.5	93	200	432
Gateway	Norwalk Boulevard	Saragosa Street to Washington Boulevard	23,653	70.1	102	219	472
Gateway	Norwalk Boulevard	Broadway to Slauson Avenue	23,574	70.0	99	214	461
Gateway	Norwalk Boulevard	Slauson Avenue to Los Nietos Road	22,348	69.7	96	206	445
Gateway	Washington Boulevard	Broadway to Sorensen Avenue	26,560	70.6	110	237	510
Gateway	Washington Boulevard	Sorensen Avenue to Calobar Avenue	18,930	69.1	88	189	407
Gateway	Washington Boulevard	Calobar Avenue to Rivera Road	19,840	69.3	90	195	420
Gateway	Slauson Avenue	Sal Avenue to I-605 Southbound Off-ramp	53,450	73.7	175	377	813
Gateway	Slauson Avenue	I-605 Southbound to Pioneer Boulevard	31,370	71.3	123	265	570
Gateway	Slauson Avenue	Pioneer Boulevard to Norwalk Boulevard	34,762	72.0	137	295	635
Gateway	Mulberry Drive	Painter Avenue to Calmada Avenue	26,376	70.8	114	245	529
Gateway	Mulberry Drive	Calmada Avenue to Gunn Avenue	27,780	71.1	118	254	547
Gateway	Mulberry Drive	Gunn Avenue to Mills Avenue	25,339	70.7	111	239	515
Gateway	Mulberry Drive	Mills Avenue to Colima Road	17,960	69.2	88	190	409
Gateway	Mulberry Drive	Colima Road to LA Mirada Boulevard	20,830	69.6	93	201	434
Gateway	Mulberry Drive	La Mirada Boulevard to Scott Avenue	14,412	67.8	71	154	332
Gateway	Colima Road	Telegraph Road to Broadway	30,234	68.7	81	176	378
Gateway	Colima Road	Broadway to Mulberry Drive	19,270	66.7	60	130	280
Gateway	Colima Road	Mulberry Drive to La Mirada Boulevard	15,600	65.8	52	113	243
Gateway	Colima Road	La Mirada Boulevard to Lambert Road	28,089	68.6	80	173	372
Gateway	Carmenita Road	Telegraph Road to Florence Avenue	17,110	66.4	58	124	268
Gateway	Carmenita Road	Florence Avenue to Lakeland Road	18,430	66.7	61	131	281
Gateway	Carmenita Road	Lakeland Road to Meyer Road	16,140	66.2	55	119	257

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Gateway	Carmenita Road	Meyer Road to Leffingwell Road	19,470	67.0	63	135	292
Gateway	Carmenita Road	Leffingwell Road to Imperial Highway	25,930	68.2	76	164	353
Gateway	Telegraph Road	Carmenita Road to Gunn Avenue	39,710	72.4	144	310	667
Gateway	Telegraph Road	Gunn Avenue to Mills Avenue	37,290	72.1	138	297	640
Gateway	Telegraph Road	Mills Avenue to Valley View Avenue	45,230	72.9	157	338	727
Gateway	Telegraph Road	Valley View Avenue to Colima Road	25,180	70.4	106	228	492
Gateway	Telegraph Road	Colima Road to Leffingwell Road	30,890	71.3	122	262	564
Gateway	Telegraph Road	Leffingwell Road to Imperial Highway	23,870	70.2	102	220	475
Gateway	Imperial Highway	Shoemaker Avenue to Leffingwell Road	50,290	73.4	168	362	781
Gateway	Imperial Highway	Leffingwell Road to Carmenita Road	28,470	70.9	115	248	534
Gateway	Imperial Highway	Carmenita Road to Shopping Center Driveway	31,920	71.4	124	268	577
Gateway	Imperial Highway	Shopping Center Driveway to Meyer Road	28,739	71.0	116	250	538
Gateway	Imperial Highway	Meyer Road to Valley View Avenue	35,360	71.9	133	287	617
Gateway	Imperial Highway	Valley View Avenue to Biola Avenue	26,665	70.6	110	237	511
Gateway	Imperial Highway	Biola Avenue to Telegraph Road	35,680	71.9	134	288	621
Westside	La Cienega Boulevard	Stocker Street to Slauson Avenue	62,480	74.6	202	436	939
Westside	La Cienega Boulevard	Rodeo Place to Stocker Street	49,930	73.6	174	375	809
Westside	La Brea Avenue	Veronica Street to Overhill Drive	49,220	73.6	173	372	801
Westside	La Brea Avenue	Overhill Drive to Slauson Avenue	55,730	73.8	180	388	836
Westside	La Brea Avenue	Slauson Avenue to Centinela Avenue	27,915	70.8	114	245	527
Westside	Slauson Avenue	Corning Avenue to La Cienega Boulevard	59,520	74.4	196	422	909
Westside	Slauson Avenue	La Cienega Boulevard to Fairfax Boulevard	37,233	72.3	143	309	665
Westside	Slauson Avenue	Fairfax Boulevard to La Brea Avenue	76,310	75.5	231	498	1,073
Westside	Slauson Avenue	La Brea Avenue to Overhill Drive	41,230	72.8	153	330	712
Westside	Stocker Street	La Cienega Boulevard to Fairfax Boulevard	27,634	70.8	113	243	524
Westside	Stocker Street	Fairfax Boulevard to Overhill Drive/La Brea	21,910	69.8	97	208	449

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
		Avenue					
San Fernando Valley	Foothill Boulevard	Pennsylvania Avenue to La Crescenta Avenue	15,410	68.3	76	165	355
San Fernando Valley	Foothill Boulevard	La Crescenta Avenue to Rosemont Avenue	4,260	62.7	32	70	151
San Fernando Valley	Foothill Boulevard	Rosemont Avenue to Briggs Avenue	18,050	68.9	85	183	394
San Fernando Valley	Rosemont Avenue	Rockdell Street to Orange Avenue	8,330	63.1	34	74	160
San Fernando Valley	Rosemont Avenue	Orange Avenue to Foothill Boulevard	5,349	61.1	26	55	119
San Fernando Valley	Rosemont Avenue	Foothill Boulevard to Foothill Freeway	860	53.4	8	17	36
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Colorado Boulevard to Del Mar Boulevard	36,840	72.0	137	294	634
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Del Mar Boulevard to San Pasqual Street	36,700	72.0	136	294	633
West San Gabriel Valley	Rosemead Boulevard (SR -19)	San Pasqual Street to California Boulevard	36,950	72.0	137	295	636
West San Gabriel Valley	Rosemead Boulevard (SR -19)	E California Boulevard to Huntington Drive	33,720	71.7	129	278	598
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Huntington Drive to Huntington Drive	30,040	71.1	119	257	554
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Huntington Drive to Duarte Road	25,420	70.4	107	230	495
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Duarte Road to Ardendale Avenue	29,100	71.0	117	252	542
West San Gabriel Valley	Huntington Drive	San Gabriel Boulevard to Madre Street	32,658	79.0	399	860	1,853
West San Gabriel Valley	Huntington Drive	Madre Street to Madre Street	0	n/a	n/a	n/a	n/a
West San Gabriel Valley	Huntington Drive	Madre Street to Rosemead Boulevard	31,671	78.9	391	843	1,815
West San Gabriel Valley	Huntington Drive	Rosemead Boulevard to Michillinda Avenue	33,328	79.1	405	872	1,878
West San Gabriel Valley	San Gabriel Boulevard	E California Boulevard to Lombardy Road	28,475	70.9	115	248	534
West San Gabriel Valley	San Gabriel Boulevard	Lombardy Road to Huntington Drive	30,510	71.2	121	260	559
West San Gabriel Valley	San Gabriel Boulevard	Huntington Drive to Duarte Road	35,030	71.8	132	285	613
West San Gabriel Valley	San Gabriel Boulevard	Duarte Road to Longden Avenue	28,170	70.9	114	246	530
West San Gabriel Valley	San Gabriel Boulevard	Longden Avenue to Las Tunas Drive	33,650	71.6	129	277	597
West San Gabriel Valley	Duarte Boulevard	San Gabriel Boulevard to Muscatel Avenue	10,853	66.6	59	127	275
West San Gabriel Valley	Duarte Boulevard	Muscatel Avenue to Madre Street	11,153	66.7	60	130	280
West San Gabriel Valley	Duarte Boulevard	Madre Street to Rosemead Boulevard	1,680	58.5	17	37	79

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
West San Gabriel Valley	Duarte Boulevard	Rosemead Boulevard to Oaks Avenue	5,840	64.0	40	86	186
West San Gabriel Valley	New York Drive	Lake Avenue to Holliston Avenue	9,095	63.4	37	79	170
West San Gabriel Valley	New York Drive	Holliston Avenue to Hill Avenue	10,900	64.2	41	89	192
West San Gabriel Valley	New York Drive	Hill Avenue to Allen Avenue	7,914	62.8	33	72	155
West San Gabriel Valley	New York Drive	Allen Avenue to Altadena Drive	8,556	63.2	35	76	163
West San Gabriel Valley	Fair Oaks Avenue	Loma Alta Drive to Terrace Street	4,486	62.7	33	71	152
West San Gabriel Valley	Fair Oaks Avenue	Terrace Street to Ventura Street	10,722	66.7	60	129	279
West San Gabriel Valley	Fair Oaks Avenue	Ventura Street to Woodbury Road	9,840	66.3	57	122	263
West San Gabriel Valley	Lake Avenue	Loma Alta Drive to Altadena Drive	6,172	62.0	29	63	136
West San Gabriel Valley	Lake Avenue	Altadena Drive to Mendocino Lane	10,244	64.2	41	88	190
West San Gabriel Valley	Lake Avenue	Menocino Lane to Calaveras Street	5,080	61.1	26	55	119
West San Gabriel Valley	Lake Avenue	Calaveras Street to New York Drive	5,080	61.1	26	55	119
West San Gabriel Valley	Marengo Avenue	Loma Alta Drive to Altadena Drive	663	52.1	6	14	30
West San Gabriel Valley	Marengo Avenue	Altadena Drive to Woodbury Road	3,872	59.7	21	45	96
West San Gabriel Valley	Woodbury Road	Windsor Avenue to Lincoln Avenue	14,919	65.8	53	113	244
West San Gabriel Valley	Woodbury Road	Lincoln Avenue to Fair Oaks Road	19,600	67.0	63	136	293
West San Gabriel Valley	Woodbury Road	Fair Oaks Road to Marengo Avenue	17,780	66.6	59	127	275
West San Gabriel Valley	Woodbury Road	Marengo Avenue to Mariposa Street	13,100	65.0	47	100	217
West San Gabriel Valley	Woodbury Road	Mariposa Street to Los Robles Avenue	12,660	64.9	46	98	212
West San Gabriel Valley	Woodbury Road	Los Robles Avenue to El Molina Avenue	7,410	62.6	32	69	148
West San Gabriel Valley	Woodbury Road	El Molina Avenue to Lake Avenue	11,230	64.4	42	91	195
West San Gabriel Valley	Lincoln Avenue	Loma Alta Drive to Terrace Street	8,160	63.2	35	76	163
West San Gabriel Valley	Lincoln Avenue	Terrace Street to Ventura Street	5,220	61.0	25	54	117
West San Gabriel Valley	Lincoln Avenue	Ventura Street to Woodbury Road	5,220	61.0	25	54	117
West San Gabriel Valley	Allen Avenue	Altadena Drive to Mendocino Lane	3,109	58.8	18	39	83
West San Gabriel Valley	Allen Avenue	Mendocino Lane to New York Drive	4,340	60.2	22	48	104

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
West San Gabriel Valley	Allen Avenue	New York Drive to Washington Boulevard	5,580	61.3	26	57	123
West San Gabriel Valley	San Gabriel Boulevard	Pomona Freeway (SR-60) to Town Center Drive	41,660	72.6	148	320	689
West San Gabriel Valley	San Gabriel Boulevard	Town Center Drive to Plaza Drive	31,730	71.4	124	267	574
West San Gabriel Valley	San Gabriel Boulevard	Plaza Drive to E Lincoln Avenue	38,560	72.2	141	304	654
West San Gabriel Valley	San Gabriel Boulevard	E Lincoln Avenue to Rosemead Boulevard (SR-19)	41,240	72.5	147	317	684
West San Gabriel Valley	Durfee Avenue	Rosemead Boulevard (SR-19) to Santa Anita Avenue	11,083	66.8	61	132	285
West San Gabriel Valley	Durfee Avenue	Santa Anita Avenue to Peck Road	10,300	66.5	58	126	271
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Rush Street to Town Center Drive	52,090	73.8	179	386	832
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Town Center Drive to Durfee Avenue	23,260	70.3	105	226	486
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Durfee Avenue to Legg Lake Bus Stop	53,780	73.7	176	379	816
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Legg Lake Bus Stop to Gallatin Road	53,780	73.7	176	379	816
Metro	Western Avenue	108th Street to Imperial Highway	24,594	70.3	104	225	485
Metro	Western Avenue	Imperial Highway to 120th Street	24,792	70.3	105	226	487
Metro	Western Avenue	120th Street to El Segundo Boulevard	20,430	69.5	92	199	428
Metro	Normandie Avenue	Manchester Avenue to 92nd Street	7,720	62.7	33	71	152
Metro	Normandie Avenue	92nd Street to 95th Street	11,880	64.6	44	94	203
Metro	Normandie Avenue	95th Street to Century Boulevard	18,617	66.6	59	127	274
Metro	Normandie Avenue	Century Boulevard to 108th Street	19,114	66.7	60	129	279
Metro	Normandie Avenue	108th Street to Imperial Highway	10,060	63.9	39	84	182
Metro	Normandie Avenue	Imperial Highway to 120th Street	14,380	65.4	50	107	230
Metro	Normandie Avenue	120th Street to El Segundo Boulevard	11,940	64.6	44	94	204
Metro	Vermont Avenue	Manchester Avenue to 90th Street	27,200	71.0	116	250	540
Metro	Vermont Avenue	90th Street to 92nd Street	21,320	69.9	99	213	459
Metro	Vermont Avenue	92nd Street to Colden Avenue	25,300	70.7	111	239	514

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Vermont Avenue	Colden Avenue to Century Boulevard	22,620	70.2	103	221	477
Metro	Vermont Avenue	Century Boulevard to 108th Street	27,180	71.0	116	250	539
Metro	Vermont Avenue	108th Street to 111th Street	29,945	71.4	124	267	575
Metro	Vermont Avenue	111th Street to Imperial Highway	24,790	70.6	109	235	507
Metro	Vermont Avenue	Imperial Highway to 120th Street	32,740	71.8	132	283	610
Metro	Vermont Avenue	120th Street to El Segundo Boulevard	32,810	71.8	132	284	611
Metro	Broadway	120th Street to 124th Street	9,700	66.2	56	121	261
Metro	Broadway	124th Street to El Segundo Boulevard	9,475	66.1	55	119	257
Metro	Broadway	El Segundo Boulevard to 135th Street	8,285	65.6	51	109	235
Metro	Broadway	135th Street to Rosecrans Avenue	9,412	66.1	55	119	255
Metro	Broadway	Rosecrans Avenue to Compton Boulevard	7,987	65.4	49	106	229
Metro	Broadway	Compton Boulevard to Redondo Beach Boulevard	8,260	65.5	50	109	234
Metro	Broadway	Redondo Beach Boulevard to Alondra Boulevard	10,062	66.4	58	124	267
Metro	El Segundo Boulevard	Figueroa Street to Broadway	20,680	69.8	97	209	449
Metro	El Segundo Boulevard	Broadway to Main Street	20,870	69.8	97	210	452
Metro	El Segundo Boulevard	Main Street to San Pedro Street	19,010	69.4	92	197	425
Metro	El Segundo Boulevard	San Pedro Street to Avalon Boulevard	21,180	69.9	98	212	457
Metro	El Segundo Boulevard	Avalon Boulevard to Central Avenue	21,701	70.0	100	215	464
Metro	El Segundo Boulevard	Wilmington Avenue to Metro Blue Line	8,970	65.9	53	115	247
Metro	El Segundo Boulevard	Metro Blue Line to Mona Boulevard	6,230	64.3	42	90	194
Metro	El Segundo Boulevard	Mona Boulevard to Alameda Street	9,730	66.3	56	121	261
Metro	Rosecrans Avenue	Figueroa Street to Broadway	24,360	70.5	108	233	501
Metro	Rosecrans Avenue	Broadway to Main Street	21,650	70.0	100	215	463
Metro	Rosecrans Avenue	Main Street to San Pedro Street	25,820	70.8	112	242	521
Metro	Rosecrans Avenue	San Pedro Street to Avalon Boulevard	23,270	70.3	105	226	486

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100 ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Rosecrans Avenue	Avalon Boulevard to Stanford Avenue	25,930	70.8	113	243	523
Metro	Rosecrans Avenue	Stanford Avenue to Central Avenue	24,050	70.4	107	231	497
Metro	Compton Avenue	Slauson Avenue to Gage Avenue	14,840	65.8	52	113	243
Metro	Compton Avenue	Gage Avenue to 71st Street	16,998	66.4	57	124	266
Metro	Compton Avenue	Florence Avenue to Nadeau Street	16,640	66.3	57	122	263
Metro	Compton Avenue	Nadeau Street to Manchester Avenue	16,036	66.1	55	119	256
Metro	Compton Avenue	Manchester Avenue to 92nd Street	11,995	64.9	45	98	211
Metro	Compton Avenue	I-105 Freeway to 120th Street	7,600	62.9	34	72	156
Metro	Compton Avenue	120th Street to El Segundo Boulevard	3,760	59.8	21	45	97
Metro	Manchester Avenue	Central Avenue to Hooper Avenue	36,520	72.0	136	293	631
Metro	Firestone Boulevard	Central Avenue to Compton Avenue	31,238	71.3	122	264	568
Metro	Firestone Boulevard	Compton Avenue to Maie Avenue	31,150	71.3	122	263	567
Metro	Firestone Boulevard	Maie Avenue to Metro Blue Line	31,650	71.4	124	266	573
Metro	Firestone Boulevard	Metro Blue Line to Holmes Avenue	31,300	71.3	123	264	569
Metro	Firestone Boulevard	Holmes Avenue to Walnut Drive	34,510	71.8	131	282	607
Metro	Firestone Boulevard	Walnut Drive to Ivy Street	28,157	70.9	114	246	530
Metro	Firestone Boulevard	Ivy Street to Alameda Street	28,360	70.9	115	247	533
Metro	Wilmington Avenue	I-105 Eastbound off-ramp to 120th Street	27,630	71.0	117	253	545
Metro	Wilmington Avenue	120th Street to 124th Street	16,180	68.5	79	170	367
Metro	Wilmington Avenue	124th Street to El Segundo Boulevard	15,040	68.1	75	162	349
Metro	Florence Avenue	Clovis Avenue to Central Avenue	29,260	71.3	122	263	566
Metro	Florence Avenue	Central Avenue to Compton Avenue	6,366	64.7	44	95	205
Metro	Florence Avenue	Compton Avenue to Maie Avenue	23,050	70.0	100	215	464
Metro	Florence Avenue	Maie Avenue to Holmes Avenue	23,520	70.1	101	218	470
Metro	Florence Avenue	Holmes Avenue to Walnut Drive	22,950	70.0	100	215	463
Metro	Florence Avenue	Walnut Drive to Wilmington Avenue	25,264	70.4	106	229	493

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Florence Avenue	Wilmington Avenue to Alameda Street	24,740	70.3	105	226	486
Metro	Florence Avenue	Alameda Street to Santa Fe Avenue	31,020	71.3	122	263	566
Metro	Florence Avenue	Santa Fe Avenue to Pacific Boulevard	32,110	71.4	125	269	579
Metro	Florence Avenue	Pacific Boulevard to Seville Avenue	27,460	70.8	112	242	522
Metro	Florence Avenue	Seville Avenue to Stafford Avenue	25,260	70.4	106	229	493
Metro	Florence Avenue	Stafford Avenue to Soto Street	28,750	71.0	116	250	538
Metro	Florence Avenue	Soto Street to Mountain View Avenue	37,180	72.1	138	296	638
Metro	Redondo Beach Boulevard	Figueroa Street to Broadway	19,230	69.2	89	191	411
Metro	Redondo Beach Boulevard	Broadway to Main Street	17,200	68.7	82	177	382
Metro	Redondo Beach Boulevard	Main Street to San Pedro Street	7,040	64.8	45	98	210
Metro	Redondo Beach Boulevard	San Pedro Street to Avalon Boulevard	6,730	64.7	44	95	204
Metro	Redondo Beach Boulevard	Avalon Boulevard to Compton Boulevard	7,080	64.9	46	98	211
Metro	Compton Boulevard	Figueroa Street to Broadway	4,060	60.2	22	48	103
Metro	Compton Boulevard	Broadway to Main Street	14,110	65.6	51	109	235
Metro	Compton Boulevard	Main Street to San Pedro Street	160	46.1	3	6	12
Metro	Compton Boulevard	San Pedro Street to Avalon Boulevard	7,020	62.5	32	69	148
Metro	Compton Boulevard	Avalon Boulevard to Stanford Avenue	4,450	60.6	23	51	109
Metro	135th Street	Figueroa Street to Broadway	5,560	61.5	27	59	126
Metro	136th Street	Broadway to Main Street	6,110	61.9	29	63	135
Metro	137th Street	Main Street to San Pedro Street	2,590	58.2	16	35	76
Metro	138th Street	San Pedro Street to Avalon Boulevard	1,640	56.2	12	26	56
Metro	Main Street	120th Street to 124th Street	10,550	66.6	59	128	276
Metro	Main Street	124th Street to El Segundo Boulevard	8,553	65.7	52	111	240
Metro	Main Street	El Segundo Boulevard to 135th Street	7,698	65.2	48	104	223
Metro	Main Street	135th Street to Rosecrans Avenue	7,866	65.3	49	105	227
Metro	Main Street	Rosecrans Avenue to Compton Boulevard	8,562	65.7	52	111	240

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100 ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Main Street	Compton Boulevard to Redondo Beach Boulevard	4,140	62.5	32	69	148
Metro	Main Street	Redondo Beach Boulevard to Alondra Boulevard	12,888	67.5	68	146	315
Metro	San Pedro Street	120th Street to 124th Street	3,410	59.4	20	42	91
Metro	San Pedro Street	124th Street to El Segundo Boulevard	2,370	57.8	15	33	72
Metro	San Pedro Street	El Segundo Boulevard to 135th Street	5,990	61.9	29	62	133
Metro	San Pedro Street	135th Street to Rosecrans Avenue	5,180	61.2	26	56	121
Metro	San Pedro Street	Rosecrans Avenue to Compton Boulevard	11,530	64.7	44	95	206
Metro	San Pedro Street	Compton Boulevard to Redondo Beach Boulevard	9,440	63.8	39	84	180
Metro	San Pedro Street	Redondo Beach Boulevard to Avalon Boulevard	13,300	65.3	49	105	226
Metro	Avalon Boulevard	120th Street to 124th Street	17,339	68.8	83	178	384
Metro	Avalon Boulevard	124th Street to El Segundo Boulevard	18,604	69.1	87	187	402
Metro	Avalon Boulevard	El Segundo Boulevard to 135th Street	16,074	68.4	79	169	365
Metro	Avalon Boulevard	135th Street to Rosecrans Avenue	14,961	68.1	75	161	348
Metro	Avalon Boulevard	Rosecrans Avenue to Compton Boulevard	15,107	68.2	75	163	350
Metro	Avalon Boulevard	Compton Boulevard to Redondo Beach Boulevard	7,220	65.0	46	99	214
Metro	Avalon Boulevard	Redondo Beach Boulevard to San Pedro Street	14,364	67.9	73	157	339
Metro	Avalon Boulevard	San Pedro Street to Alondra Boulevard	20,960	69.8	98	210	453
Metro	120st Street	Van Ness Avenue to Western Avenue	19,880	67.1	64	137	296
Metro	120st Street	Western Avenue to Normandie Avenue	7,050	62.6	32	69	148
Metro	120st Street	Normandie Avenue to Vermont Avenue	8,291	63.3	36	77	165
Metro	120st Street	Central Avenue to Success Avenue	12,374	65.0	46	100	216

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	120st Street	Success Avenue to Compton Avenue	2,040	57.2	14	30	65
Metro	120st Street	Compton Avenue to Wilmington Avenue	11,019	64.5	43	93	200
Metro	120st Street	Wilmington Avenue to Metro Blue Line	12,950	65.0	46	100	215
Metro	120st Street	Metro Blue Line to Mona Boulevard	380	49.7	4	9	20
Metro	Imperial Highway	Van Ness Avenue to Western Avenue	27,580	71.0	117	253	545
Metro	Imperial Highway	Western Avenue to Normandie Avenue	27,323	71.0	117	251	541
Metro	Imperial Highway	Normandie Avenue to Vermont Avenue	29,535	71.3	123	265	570
Metro	Century Boulevard	Van Ness Avenue to Western Avenue	29,500	71.3	123	264	570
Metro	Century Boulevard	Western Avenue to Normandie Avenue	25,660	70.5	107	231	498
Metro	Gage Avenue	Central Avenue to Hooper Avenue	20,510	67.2	65	140	302
Metro	Gage Avenue	Hooper Avenue to Compton Avenue	26,630	68.3	77	167	359
Metro	Gage Avenue	Compton Avenue to Metro Blue Line	19,550	67.0	63	136	292
Metro	Gage Avenue	Holmes Avenue to Wilmington Avenue	21,300	67.4	67	144	310
Metro	Long Beach Boulevard	Florence Avenue to Broadway	9,960	66.4	57	123	265
Metro	Santa Fe Avenue	Florence Avenue to Nadeau Street	22,465	69.9	98	212	456
Metro	Santa Fe Avenue	Nadeau Street to Broadway	23,660	70.1	102	219	472
Metro	Santa Fe Avenue	Broadway to Sale Place	16,386	68.5	80	172	370
Metro	Santa Fe Avenue	Sale Place to Firestone Boulevard	13,472	67.7	70	151	324
Metro	Nadeau Street	Central Avenue to Hooper Avenue	6,310	62.1	30	64	138
Metro	Nadeau Street	Hooper Avenue to Compton Avenue	16,946	66.4	57	123	266
Metro	Nadeau Street	Compton Avenue to Maie Avenue	11,720	64.8	45	97	208
Metro	Nadeau Street	Maie Avenue to Walnut Drive	12,450	65.0	47	100	216
Metro	Nadeau Street	Walnut Drive to Bell Avenue	15,590	66.0	54	117	252
Metro	Nadeau Street	Bell Avenue to Crockett Boulevard	19,475	67.0	63	135	292
Metro	Nadeau Street	Crockett Boulevard to Alameda Street	12,580	65.1	47	101	218
Metro	Nadeau Street	Alameda Street to Santa Fe Avenue	26,310	68.3	77	165	356

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100 ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Hooper Avenue	Slauson Avenue to Gage Avenue	11,637	64.7	45	96	207
Metro	Hooper Avenue	Gage Avenue to Florence Avenue	3,570	59.4	20	42	91
Metro	Hooper Avenue	Florence Avenue to Nadeau Street	12,978	65.2	48	103	223
Metro	Hooper Avenue	Nadeau Street to Manchester Avenue	12,569	65.1	47	101	218
Metro	Central Avenue	Manchester Avenue to 92nd Street	16,670	66.3	57	122	263
Metro	N Eastern Avenue	City Terrace Drive to Floral Drive	16,630	66.3	57	122	263
Metro	N Eastern Avenue	Floral Drive to Cesar Chavez Avenue	12,350	65.0	46	100	215
Metro	N Eastern Avenue	Cesar Chavez Avenue to 1st Street	14,430	65.7	51	111	239
Metro	N Eastern Avenue	1st Street to SR-60 Freeway	15,230	65.9	53	115	248
Metro	N Eastern Avenue	SR-60 Freeway to Eagle Street	10,330	64.2	41	89	191
Metro	N Eastern Avenue	Eagle Street to Whittier Boulevard	11,220	64.6	44	94	202
Metro	N Eastern Avenue	Whittier Boulevard to I-710 Freeway South off-ramp	15,240	65.9	53	115	248
Metro	N Eastern Avenue	I-710 Freeway South off-ramp to Olympic Boulevard	15,450	66.0	54	116	250
Metro	N Eastern Avenue	Olympic Boulevard to Triggs Street	17,090	66.4	58	124	267
Metro	Atlantic Boulevard	3rd Street/Pomona Boulevard to Beverly Boulevard	38,960	72.3	142	306	658
Metro	Atlantic Boulevard	Beverly Boulevard to Whittier Boulevard	25,090	70.4	106	228	491
Metro	Atlantic Boulevard	Whittier Boulevard to Olympic Boulevard	24,108	70.5	107	231	498
Metro	Atlantic Boulevard	Olympic Boulevard to Ferguson Drive	20,353	69.3	90	194	418
Metro	Floral Drive	Eastern Avenue to Humphreys Avenue	6,366	61.9	29	62	134
Metro	Floral Drive	Humphrey's Avenue to Ford Boulevard	10,390	64.0	40	86	186
Metro	Floral Drive	Ford Boulevard to Corporate Center Drive	10,010	63.9	39	84	181
Metro	Floral Drive	Corporate Center Drive to Mednik Avenue	5,460	61.5	27	58	125
Metro	Floral Drive	Mednik Avenue to Bleakwood Avenue	4,720	60.6	24	51	110
Metro	Cesar Chavez Avenue	Indiana Street to Rowan Avenue	17,050	66.4	58	124	267

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Cesar Chavez Avenue	Rowan Avenue to Gage Avenue	14,040	65.6	51	109	235
Metro	Cesar Chavez Avenue	Gage Avenue to Hazard Avenue	20,110	67.1	64	138	298
Metro	Cesar Chavez Avenue	Hazard Avenue to Eastern Avenue	26,990	68.4	78	168	363
Metro	Cesar Chavez Avenue	Eastern Avenue to Humphreys Avenue	29,020	68.7	82	177	381
Metro	Cesar Chavez Avenue	Humphrey's Avenue to Ford Boulevard	23,770	67.8	72	155	333
Metro	Cesar Chavez Avenue	Ford Boulevard to Mednik Avenue	19,110	66.9	62	134	288
Metro	Cesar Chavez Avenue	Mednik Avenue to Bleakwood Avenue	9,520	63.9	39	84	181
Metro	4th Street	Indiana Street to Rowan Avenue	11,750	64.8	45	97	208
Metro	3rd Street	Rowan Avenue to Gage Avenue	14,110	65.6	51	109	235
Metro	2nd Street	Gage Avenue to Eastern Avenue	10,000	64.1	40	87	187
Metro	1st Street	Eastern Avenue to Humphreys Avenue	9,610	63.9	39	85	182
Metro	0th Street	Ford Boulevard to Mednik Avenue	11,070	64.5	43	93	200
Metro	1st Street	Mednik Avenue to Bleakwood Avenue	18,197	66.5	58	125	270
Metro	3rd Street	Indiana Street to Rowan Avenue	8,389	65.6	51	110	237
Metro	1st Street	Rowan Avenue to Gage Avenue	7,840	65.3	49	105	226
Metro	2nd Street	Gage Avenue to Sunol Drive	15,610	68.3	77	166	358
Metro	3rd Street	Sunol Drive to Eastern Avenue	12,045	67.2	65	140	301
Metro	3rd Street	Eastern Avenue to Humphreys Avenue	13,054	67.5	68	147	318
Metro	3rd Street	Ford Boulevard to Mednik Avenue	12,370	67.2	65	139	300
Metro	3rd Street	Mednik Avenue to Beverly Boulevard	15,939	68.7	81	175	378
Metro	4th Street	Beverly Boulevard to Atlantic Boulevard	5,260	63.8	39	84	180
Metro	5th Street	Atlantic Boulevard to Hillview Avenue	16,790	68.6	81	174	376
Metro	Whittier Boulevard	Indiana Street to Ditman Avenue	20,200	67.1	64	139	299
Metro	Whittier Boulevard	Ditman Avenue to Rowan Avenue	11,160	64.6	43	93	201
Metro	Whittier Boulevard	Rowan Avenue to Sunol Drive	10,290	64.2	41	88	191
Metro	Whittier Boulevard	Sunol Drive to Eastern Avenue	26,908	68.4	78	168	362

Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
			ADT Volumes	CNEL (dBA @ 100 ft)	Distance to CNEL Contour (Feet from Centerline) 65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Whittier Boulevard	Ford Boulevard to Arizona Avenue	26,362	68.3	77	166	357
Metro	Whittier Boulevard	Arizona Avenue to Atlantic Boulevard	23,800	67.8	72	155	333
Metro	Whittier Boulevard	Atlantic Boulevard to Belden Avenue	14,580	68.0	74	159	342
Metro	Whittier Boulevard	Belden Avenue to Gethart Avenue	14,050	67.8	72	155	334
Metro	Whittier Boulevard	Gethart Avenue to Hendricks Avenue	14,150	67.9	72	156	335
Metro	Whittier Boulevard	Hendrick Avenue to Garfield Avenue	21,745	69.7	96	207	446
Metro	Olympic Boulevard	Indiana Street to Rowan Avenue	25,270	70.4	106	229	493
Metro	Olympic Boulevard	Rowan Avenue to Sunol Drive	22,328	69.9	98	211	454
Metro	Olympic Boulevard	Sunol Drive to Eastern Avenue	34,245	71.7	130	280	604
Metro	Olympic Boulevard	Ford Boulevard to Arizona Avenue	24,780	70.3	105	226	487
Metro	Olympic Boulevard	Arizona Avenue to Atlantic Boulevard	24,186	70.2	103	222	479
Metro	Olympic Boulevard	Atlantic Boulevard to Goodrich Boulevard	13,560	67.7	70	151	326
Metro	Olympic Boulevard	Goodrich Boulevard to Gethart Avenue	18,720	69.1	87	188	404
Metro	Olympic Boulevard	Gethart Avenue to Hendricks Avenue	19,999	69.4	91	196	422
Metro	Olympic Boulevard	Hendrick Avenue to Garfield Avenue	19,877	69.4	91	195	420
Santa Monica Mountains	Kanan Dume Road	Latigo Canyon Road to Pacific Coast Highway	9,460	66.0	54	116	251
Santa Monica Mountains	Kanan Dume Road	Mulholland Highway to Latigo Canyon Road	9,460	66.0	54	116	251
Santa Monica Mountains	Kanan Dume Road	Triunfo Canyon Road to Mulholland Highway	7,790	65.1	47	102	220
Santa Monica Mountains	Kanan Road	Sierra Creek Road to Triunfo Canyon Road	13,353	67.5	68	146	315
Santa Monica Mountains	Kanan Road	Troutdale Drive to Sierra Creek Road	15,709	68.2	76	163	351
Santa Monica Mountains	Kanan Road	Cornell Road to Troutdale Drive	12,660	67.3	66	141	304
Santa Monica Mountains	Malibu Canyon Road	Adamson Flat/Palm Canyon Lane to Piuma Road	19,399	69.1	87	188	405
Santa Monica Mountains	Las Virgenes Road	Piuma Road to Mulholland Highway	19,553	69.1	88	189	407
Santa Monica Mountains	Las Virgenes Road	Mulholland Highway to Lost Hills Road	15,930	68.2	76	165	355

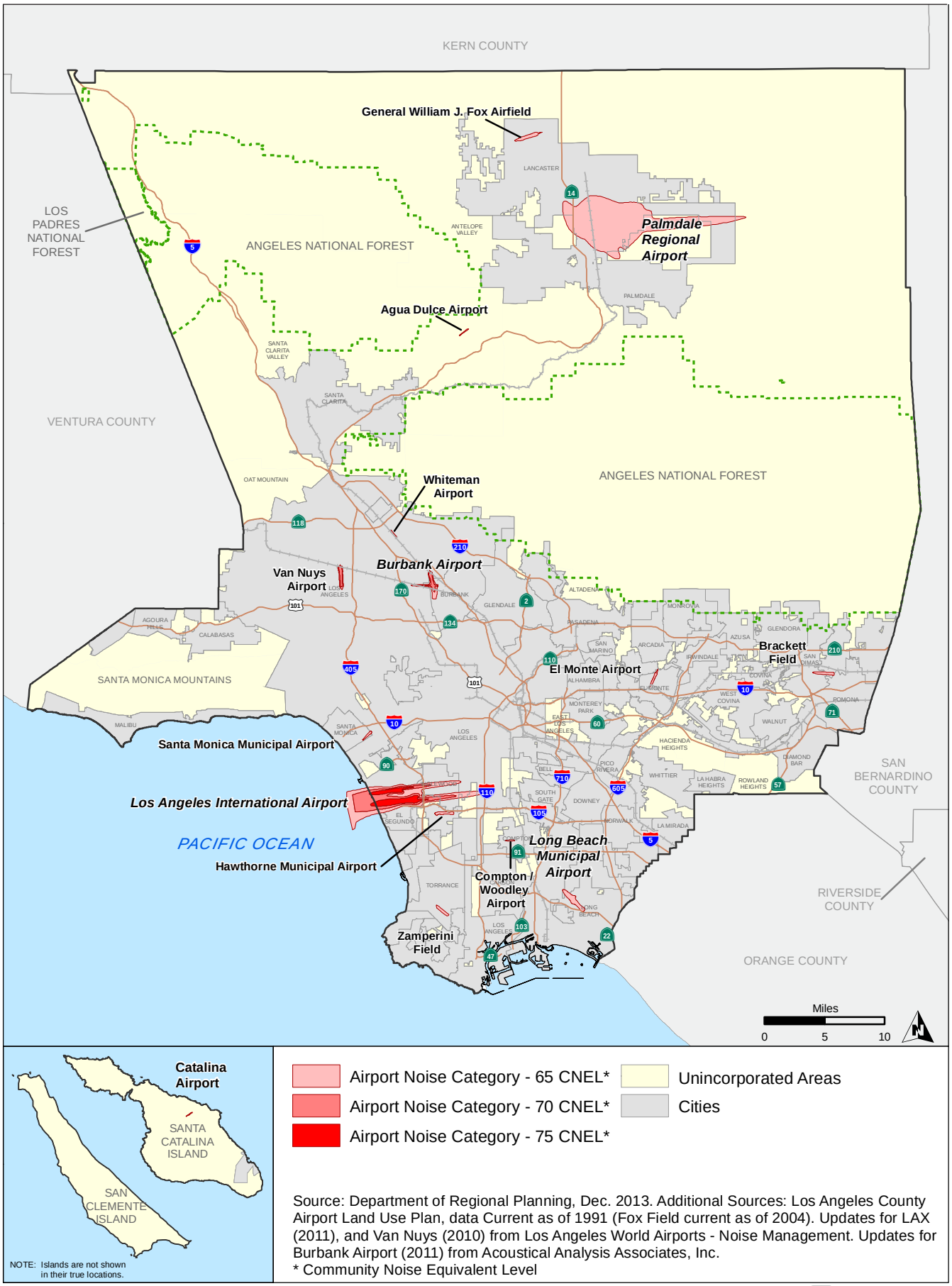
Table 5.12-16 Existing Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Existing Year 2013				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100 ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Pacific Coast Highway to Fernwood Pacific Drive	18,020	66.4	58	124	268
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Fernwood Pacific Drive to Old Topanga Canyon Road	20,830	67.0	64	137	295
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Old Topanga Canyon Road to Keller Road	9,300	63.5	37	80	172
Santa Monica Mountains	Mulholland Highway	Lechusa Road to Kanan Road	2,708	59.4	20	42	91
Santa Monica Mountains	Mulholland Highway	Kanan Road to Sierra Creek Road	1,468	56.7	13	28	61
Santa Monica Mountains	Mulholland Highway	Sierra Creek Road to Troutdale Drive	1,180	55.8	11	24	52
Santa Monica Mountains	Mulholland Highway	Troutdale Drive to Lake Vista Drive	7,420	63.8	39	83	179
Santa Monica Mountains	Mulholland Highway	Lake Vista Drive to Cornell Road	1,430	56.6	13	28	60
Santa Monica Mountains	Mulholland Highway	Cornell Road to Udell Road	9,660	64.9	46	99	213
Santa Monica Mountains	Mulholland Highway	Udell Road to Las Virgenes Road	1,150	55.7	11	24	52
Santa Monica Mountains	Mulholland Highway	Las Virgenes Road to Cold Canyon Road	5,720	62.7	32	70	150
Santa Monica Mountains	Mulholland Highway	Cold Canyon Road to Stunt Road	4,530	61.6	28	60	129

Note: Based on traffic data provided by Iteris, 2014. Calculations are included in Appendix L.

AIRPORT NOISE CONTOURS

FIGURE 5.12-1



Source: Department of Regional Planning, Dec. 2013. Additional Sources: Los Angeles County Airport Land Use Plan, data Current as of 1991 (Fox Field current as of 2004). Updates for LAX (2011), and Van Nuys (2010) from Los Angeles World Airports - Noise Management. Updates for Burbank Airport (2011) from Acoustical Analysis Associates, Inc.

* Community Noise Equivalent Level

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Stationary Sources of Noise

Whereas mobile-source noise affects many receptors along an entire length of roadway, stationary noise sources affect only their immediate areas. Stationary sources of noises may occur from all types of land uses. Residential uses would generate noise from landscaping, maintenance activities, and air conditioning systems. Commercial uses would generate noise from heating, ventilation, air conditioning (HVAC) systems, loading docks and other sources. Industrial uses may generate noise from HVAC systems, loading docks, and, possibly, machinery; all of which may be on a more continual basis due to the nature of the particular activities[3]. Also, noise from at-grade railroad crossing bells and/or train warning horns, both regulated by the Federal Railway Administration, can generate notable noise levels near the crossings.

Noise generated by residential, commercial, and school uses is generally short and intermittent. Schools are considered noise-sensitive because of the necessity for quiet in the classroom to provide an adequate environment for learning. However, outdoor activities that occur on school campuses throughout Los Angeles County can generate noticeable levels of noise. While it is preferable to have schools in residential areas to support the neighborhood, noise generated on both the weekdays (by physical education classes and sports programs) and weekends (by use of the fields by youth organizations) can elevate noise levels.

Noise from stationary sources is regulated through the County Code (described above).

5.12.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would result in:

N-1 Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

- For noise compatibility, noise levels at noise-sensitive exterior areas exceed 65 dBA CNEL.
- For noise compatibility, interior noise levels in habitable noise-sensitive areas exceed 45 dBA CNEL.

N-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

N-3 A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

- Project-related traffic noise increase the ambient noise level at noise-sensitive locations by 3 dBA or more and the ambient noise levels under with-project conditions fall within the "Normally Unacceptable" or "Clearly Unacceptable" categories; OR

[3] Noise exposure to workers within industrial facilities is controlled by federal and state employee health and safety regulations, whereas noise levels outside of industrial and other facilities are subject to local standards.

- Project-related traffic noise increases the ambient noise level at noise-sensitive locations by 5 dBA or more.

N-4 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

N-5 For a project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project Area to excessive noise levels.

N-6 For a project within the vicinity of a private airstrip, expose people residing or working the Project Area to excessive noise levels.

5.12.3 Relevant General Plan Goals and Policies

The following is a list of applicable goals and policies of the General Plan Update that are intended to reduce potentially significant adverse effects concerning noise.

Noise Element

Goal N 1: The reduction of excessive noise impacts.

- **Policy N 1.1:** Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.
- **Policy N 1.2:** Reduce exposure to noise impacts by promoting land use compatibility.
- **Policy N 1.3:** Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).
- **Policy N 1.4:** Enhance and promote noise abatement programs in an effort to maintain acceptable levels of noise as defined by the Los Angeles County Exterior Noise Standards and other applicable noise standards.
- **Policy N 1.5:** Ensure compliance with the jurisdictions of State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code), such as noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or L_{dn}) noise exposure contours.
- **Policy N 1.6:** Ensure cumulative impacts related to noise do not exceed health-based safety margins.
- **Policy N 1.7:** Utilize traffic management and noise suppression techniques to minimize noise from traffic and transportation systems.

- **Policy N 1.8:** Minimize noise impacts to pedestrians and transit-riders in the design of transportation facilities and mobility networks.

- **Policy N 1.9:** Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.

- **Policy N 1.10:** Orient residential units away from major noise sources (in conjunction with applicable building codes).

- **Policy N 1.11:** Maximize buffer distances and design and orient sensitive receptor structures (hospitals, residential, etc.) to prevent noise and vibration transfer from commercial/light industrial uses.

- **Policy N 1.12:** Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.

5.12.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-1: Construction activities would result in temporary noise increases in the vicinity of the Proposed Project. [Threshold N-4]

Impact Analysis: Implementation of the Proposed Project would result in construction of new residential, commercial, and industrial uses throughout Los Angeles County. Two types of temporary noise impacts could occur during construction. First, the transport of workers and movement of materials to and from the individual work sites could incrementally increase noise levels along local access roads. The second type of temporary noise impact is related to demolition, site preparation, grading, and/or physical construction. Construction is performed in distinct steps, each of which has its own mix of equipment, and, consequently, its own noise characteristics. Table 5.12-17 lists typical construction equipment noise levels recommended for noise-impact assessments, based on a reference distance of 50 feet between the equipment and noise receptor.

Table 5.12-17 Construction Equipment Noise Emission Levels

Construction Equipment	Typical Maximum Noise Level (dBA L_{max})[1]	Construction Equipment	Typical Noise Level (dBA L_{max})[1]
Air Compressor	81	Pile-Driver (Impact)	101
Backhoe	80	Pile-Driver (Sonic)	96
Ballast Equalizer	82	Pneumatic Tool	85
Ballast Tamper	83	Pump	76
Compactor	82	Rail Saw	90
Concrete Mixer	85	Rock Drill	98
Concrete Pump	71	Roller	74
Concrete Vibrator	76	Saw	76
Crane, Derrick	88	Scarifier	83
Crane, Mobile	83	Scraper	89
Dozer	85	Shovel	82
Generator	81	Spike Driver	77
Grader	85	Tie Cutter	84
Impact Wrench	85	Tie Handler	80
Jack Hammer	88	Tie Inserter	85
Loader	85	Truck	88
Paver	89		

Source: FTA 2006.
[1] Measured 50 feet from the source.

As shown, construction equipment generates high-levels of noise with maximums ranging from 71 dBA to 101 dBA. Construction of individual developments associated with the buildout of the Proposed Project would temporarily increase the ambient noise environment and would have the potential to affect noise-sensitive land uses in the vicinity of an individual project. County Code Section 12.08.440 allows for construction activities during the specified hours of 7:00 AM to 7:00 PM on weekdays (including Saturdays), but restricts such activities on Sundays or holidays. Furthermore, this code section restricts noise levels by both equipment type (i.e., mobile or stationary) and receptor land use classification type. However, construction activities may occur outside of these hours if the County determines that the emergency maintenance, repair, or improvement of public service utilities is needed or if a variance is issued by the health officer.

Significant noise impacts may occur from operation of heavy earthmoving equipment and truck haul that would occur with construction of individual development projects. Implementation of the Proposed Project anticipates an increase in development intensity. Construction noise levels are dependent upon the specific locations, site plans, and construction details of individual projects, which have not yet been developed. Construction would be localized and would occur intermittently for varying periods of time. Because specific project-level information is not available at this time, it is not possible to quantify the construction noise impacts at specific sensitive receptors. Construction of individual developments associated with

implementation of the Proposed Project would temporarily increase the ambient noise environment in the vicinity of each individual project. Because construction activities associated with any individual development may occur near noise-sensitive receptors and, depending on the project type noise, disturbances may occur for prolonged periods of time, construction noise impacts associated with implementation of the Proposed Project are considered significant.

Impact 5.12-2 Buildout of the Proposed Project would result in an increase in traffic on local roadways in Los Angeles County, which would substantially increase the existing ambient noise environment. [Thresholds N-1 and N-3]

Impact Analysis: Future development in accordance with the Proposed Project would cause increases in traffic along some roadways. For the purpose of assessing the compatibility of new development with the anticipated ambient noise, the County utilizes the State's Community Noise and Land Use Compatibility standards; previously summarized in Table 5.12-5. Noise-sensitive land uses include residential, schools, libraries, churches, nursing homes, hospitals, and open space/recreation areas. Commercial and industrial areas are not considered noise sensitive and have much higher tolerances for exterior noise levels. The "normally unacceptable" minimum noise level for considered noise-sensitive land uses is 70 dBA CNEL. For purposes of this analysis, a significant impact would occur if project-related traffic increases the ambient noise environment of noise-sensitive locations by 3 dB or more and the ambient noise level under with-project conditions is 70 dBA CNEL or higher (i.e., those with-project conditions that fall within the "Normally Unacceptable" or "Clearly Unacceptable" land use categories). Additionally, a significant impact would also occur if project-related traffic increases the ambient noise environment of noise-sensitive locations by 5 dB or more regardless of the ambient noise level under with-project conditions.

The traffic noise levels were estimated using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (RD-77-108). The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, traffic flows, vehicle speeds, car/truck mix, length of exposed roadway, and road width. The distances to the 70, 65, and 60 CNEL contours for selected roadway segments in the vicinity of Proposed Project site are included in Appendix K. Table 5.12-18, *Project Off-Site Contributions: Buildout Year Conditions*, shows the increase in noise levels on roadways over existing conditions at 100 feet from the centerline of each roadway segment for the Proposed Project.

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Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
South Bay	Crenshaw Boulevard	Palos Verdes Lane to Silver Spur Road	71.2	70.0	-1.2	No
South Bay	Vermont Street	Lomita Boulevard to Sepulveda Boulevard	70.6	71.2	0.6	No
South Bay	Vermont Street	Sepulveda Boulevard to W 228th Street	68.7	67.6	-1.1	No
South Bay	Vermont Street	W 228th Street to W 223rd Street	69.0	70.8	1.8	No
South Bay	Vermont Street	W 223rd Street to W 220th Street	66.5	68.9	2.4	No
South Bay	Vermont Street	W 220th Street to Carson Street	64.3	64.2	-0.1	No
South Bay	Vermont Street	Carson Street to Torrance Boulevard	68.3	68.2	-0.1	No
South Bay	Vermont Street	Torrance Boulevard to Del Amo Boulevard	68.9	68.7	-0.2	No
South Bay	Manhattan Beach Blvd	Prairie Avenue to Crenshaw Boulevard	67.8	67.6	-0.2	No
South Bay	Lennox Boulevard	La Cienega Boulevard to Inglewood Avenue	62.3	64.2	1.9	No
South Bay	Lennox Boulevard	Inglewood Avenue to Hawthorne Boulevard	63.9	61.5	-2.4	No
South Bay	Lennox Boulevard	Hawthorne Boulevard to Freeman Avenue	63.0	59.2	-3.8	No
South Bay	W 220th Street	Normandie Avenue to Meyler Street	60.4	63.9	3.5	No
South Bay	W 220th Street	Meyler Street to Vermont Avenue	60.2	64.0	3.8	No
South Bay	Normandie Avenue	Sepulveda Boulevard to Lomita Boulevard	63.5	64.3	0.8	No
South Bay	Normandie Avenue	W 228th Street to Sepulveda Boulevard	64.1	65.0	0.9	No
South Bay	Normandie Avenue	W 223rd Street to W 228th Street	63.1	64.2	1.1	No
South Bay	Normandie Avenue	W 220th Street to W 223rd Street	64.7	66.1	1.4	No
South Bay	Normandie Avenue	Carson Street to W 220th Street	60.9	60.2	-0.7	No
South Bay	Normandie Avenue	Torrance Boulevard to Carson Street	62.9	64.2	1.3	No
South Bay	Normandie Avenue	Del Amo Boulevard to Torrance Boulevard	66.0	66.8	0.8	No
South Bay	Sepulveda Boulevard	Normandie Avenue to Vermont Avenue	72.6	73.6	1.0	No
South Bay	Sepulveda Boulevard	Vermont Avenue to I-110 South Off-ramp	74.4	75.5	1.1	No
South Bay	Sepulveda Boulevard	I-110 South Off-ramp to Figueroa St	72.3	73.3	1.0	No
Antelope Valley	W Avenue J	90th Street E to 100th Street E	59.6	68.5	8.9	Yes
Antelope Valley	W Avenue J	100th Street E to 110th Street E	62.3	69.5	7.2	Yes
Antelope Valley	W Avenue J	110th Street E to 140th Street E	61.7	70.2	8.5	Yes

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Antelope Valley	W Avenue J	140th Street E to 150th Street E	63.0	70.3	7.3	Yes
Antelope Valley	W Avenue J	150th Street E to 170th Street E	63.2	70.8	7.6	Yes
Antelope Valley	W Avenue J	170th Street E to 200th Street E	63.2	70.9	7.7	Yes
Antelope Valley	Lancaster Road	Pine Canyon Road to W Avenue I	n/a	n/a	n/a	n/a
Antelope Valley	Lancaster Road	W Avenue I to 190th Street W	n/a	76.2	n/a	n/a
Antelope Valley	Lancaster Road	190th Street W to 170th Street W	n/a	70.4	n/a	n/a
Antelope Valley	Lancaster Road	170th Street W to 110th Street W	61.5	80.0	18.5	Yes
Antelope Valley	Lancaster Road	110th Street W to 90th Street W	59.0	77.3	18.3	Yes
Antelope Valley	Lancaster Road	90th Street W to 70th Street W	65.6	76.5	10.9	Yes
Antelope Valley	Lancaster Road	70th Street W to 60th Street W	67.0	76.7	9.7	Yes
Antelope Valley	170th Street E	Avenue T to Avenue W	n/a	n/a	n/a	n/a
Antelope Valley	170th Street E	Avenue W to 165th Street	n/a	n/a	n/a	n/a
Antelope Valley	Elizabeth Lake Road	Johnson Road to San Francisquito Canyon Road	61.9	72.4	10.5	Yes
Antelope Valley	Elizabeth Lake Road	San Francisquito Canyon Road to Bouquet Canyon Road	59.8	67.7	7.9	Yes
Antelope Valley	Elizabeth Lake Road	Bouquet Canyon Road to Godde Hill Road	65.6	72.4	6.8	Yes
Antelope Valley	W Avenue P	15th Street E to 20th Street E	64.4	71.1	6.7	Yes
Antelope Valley	W Avenue P	20th Street E to 25th Street E	64.4	70.1	5.7	Yes
Antelope Valley	W Avenue P	25th Street E to 30th Street E	57.9	68.4	10.5	Yes
Antelope Valley	W Avenue P	30th Street E to 40th Street E	60.5	67.8	7.3	Yes
Antelope Valley	W Avenue P	40th Street E to 47th Street E	59.0	68.8	9.8	Yes
Antelope Valley	W Avenue P	47th Street E to 70th Street E	60.8	70.8	10.0	Yes
Antelope Valley	200th Street E	E Avenue G to E Avenue J	57.5	70.0	12.5	Yes
Antelope Valley	E Palmdale Boulevard	90th Street E to 95th Street E	65.2	70.6	5.4	Yes
Antelope Valley	E Palmdale Boulevard	95th Street E to 100th Street E	66.0	69.6	3.6	No
Antelope Valley	E Palmdale Boulevard	100th Street E to 105th Street E	64.3	68.8	4.5	No
Antelope Valley	E Palmdale Boulevard	105th Street E to 110 Street E	64.3	68.3	4.0	No
Antelope Valley	W Avenue G	SR-14 Antelope Valley Freeway to 15th Street W	58.4	74.8	16.4	Yes

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Antelope Valley	W Avenue G	15th Street W to 10th Street W	53.8	73.0	19.2	Yes
Antelope Valley	W Avenue G	10th Street W to Sierra Highway	55.5	73.9	18.4	Yes
Antelope Valley	W Avenue G	Sierra Highway to Division Street	56.4	76.0	19.6	Yes
Antelope Valley	E Avenue O	145th Street E to 150th Street E	58.9	69.8	10.9	Yes
Antelope Valley	E Avenue O	150th Street E to 170th Street E	62.7	65.5	2.8	No
Antelope Valley	E Avenue O	170th Street E to 175th Street E	61.1	65.4	4.3	No
Antelope Valley	E Avenue O	175th Street E to 180th Street E	57.2	66.7	9.5	Yes
Antelope Valley	E Avenue O	180th Street E to 200th Street E	53.8	67.4	13.6	Yes
Antelope Valley	E Avenue O	200th Street E to 210 Street E	58.8	67.3	8.5	Yes
Antelope Valley	E Avenue O	210 Street E to 240th Street E	59.5	63.7	4.2	No
Antelope Valley	W Avenue L	Rancho Vista Road to 45th Street W	69.4	77.4	8.0	Yes
Antelope Valley	W Avenue L	45th Street W to 40th Street W	68.3	76.6	8.3	Yes
Antelope Valley	Pearblossom Highway (SR-138)	70th Street E to E Avenue T 8	69.6	74.6	5.0	Yes
Antelope Valley	Pearblossom Highway (SR-138)	E Avenue T 8 to 82nd Street E	68.2	74.5	6.3	Yes
Antelope Valley	Pearblossom Highway (SR-138)	82nd Street E to 87th Street E	68.0	73.5	5.5	Yes
Antelope Valley	Pearblossom Highway (SR-138)	87th Street E to 96th Street E	68.9	73.5	4.6	Yes
Antelope Valley	Pearblossom Highway (SR-138)	96th Street E to 106th Street E	69.4	74.2	4.8	Yes
Antelope Valley	Pearblossom Highway (SR-138)	106th Street E to 116th Street E	69.3	73.8	4.5	Yes
Antelope Valley	Pearblossom Highway (SR-138)	116th Street E to 126th Street E	69.1	73.6	4.5	Yes
Antelope Valley	Pearblossom Highway (SR-138)	126th Street E to 131st Street E	69.4	73.9	4.5	Yes
Antelope Valley	Pearblossom Highway (SR-138)	131st Street E to 170th Street E	70.3	75.9	5.6	Yes
Antelope Valley	Fort Tejon Road	87th Street E to Mount Emma Road	59.8	65.8	6.0	Yes
Antelope Valley	Fort Tejon Road	96th Street to 106th Street	62.6	67.1	4.5	No
Antelope Valley	Fort Tejon Road	106th Street to 131 Street E	61.0	63.8	2.8	No
Antelope Valley	Fort Tejon Road	The Old Road to I-5 South Off-ramp	71.7	74.3	2.6	No
Santa Clarita Valley	Pico Canyon Road	Constitution Drive to The Old Road	72.3	74.6	2.3	No
Santa Clarita Valley	Pico Canyon Road	Stevenson Ranch Parkway to Constitution Drive	72.3	74.6	2.3	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Santa Clarita Valley	Pico Canyon Road	Whispering Oaks Drive to Stevenson Ranch Parkway	70.9	74.5	3.6	Yes
Santa Clarita Valley	Pico Canyon Road	Avenida Rancho Tesoro to E/O McBean Parkway	66.0	71.4	5.4	Yes
Santa Clarita Valley	Copper Hill Drive	Decoro Drive to Avenida Rancho Tesoro	71.3	69.0	-2.3	No
Santa Clarita Valley	Copper Hill Drive	Commerce Center Drive to I-5 South Off-ramp	66.5	83.7	17.2	Yes
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Del Valle Road to Commerce Center Drive	75.1	81.9	6.8	Yes
Santa Clarita Valley	Henry Mayo Drive (SR-126)	San Martinez Grande Canyon Road to Del Valle Road	73.6	82.9	9.3	Yes
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Vasquez Canyon Road to Shadow Valley Lane	64.2	69.8	5.6	Yes
Santa Clarita Valley	Bouquet Canyon Road	Texas Canyon Road to Vasquez Canyon Road	63.7	70.9	7.2	Yes
Santa Clarita Valley	Bouquet Canyon Road	Sand Canyon Road to Ryan Lane	65.4	72.4	7.0	Yes
Santa Clarita Valley	Sierra Highway	Vasquez Canyon Road to Sand Canyon Road	63.9	72.6	8.7	Yes
Santa Clarita Valley	Sierra Highway	Davenport Road to Vasquez Canyon Road	65.5	70.2	4.7	Yes
Santa Clarita Valley	Sierra Highway	Agua Dulce Canyon Road to Davenport Road	63.6	67.9	4.3	No
Santa Clarita Valley	Sierra Highway	Bouquet Canyon Road to Sierra Highway	59.2	68.5	9.3	Yes
Santa Clarita Valley	Vasquez Canyon Road	Via Joyce Drive to Santa Catarina Road	69.1	70.2	1.1	No
Santa Clarita Valley	Plum Canyon Road	Santa Catarina Road to La Madrid Drive	68.8	70.7	1.9	No
Santa Clarita Valley	Plum Canyon Road	La Madrid Drive to Farrell Road	68.3	71.0	2.7	No
Santa Clarita Valley	Plum Canyon Road	Farrell Road to Ashboro Road	67.3	69.9	2.6	No
Santa Clarita Valley	Plum Canyon Road	The Old Road to Hasley Canyon Road	70.5	74.1	3.6	Yes
Santa Clarita Valley	Commerce Center Drive	Hasley Canyon Road to Live Oak Road	64.0	69.7	5.7	Yes
Santa Clarita Valley	Commerce Center Drive	Live Oak Road to Henry Mayo Drive	64.6	71.5	6.9	Yes
Santa Clarita Valley	Commerce Center Drive	Camino Del Sur to Hacienda Boulevard	73.3	74.5	1.2	No
East San Gabriel Valley	Colima Road	Hacienda Boulevard to Stimson Avenue	71.4	72.1	0.7	No
East San Gabriel Valley	Colima Road	Stimson Avenue to Haliburton Road	72.1	72.9	0.8	No
East San Gabriel Valley	Colima Road	Halliburton Road to Azusa Avenue	72.4	73.3	0.9	No
East San Gabriel Valley	Colima Road	Azusa Avenue to Albatross Road	72.3	73.4	1.1	No
East San Gabriel Valley	Colima Road	Albatross Road to Stoner Creek Road	68.9	70.2	1.3	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
East San Gabriel Valley	Colima Road	Stoner Creek Road to Larkvane Road	71.3	72.4	1.1	No
East San Gabriel Valley	Colima Road	S Larkvane Road to Fullerton Road	71.3	72.4	1.1	No
East San Gabriel Valley	Colima Road	Fullerton Road to Batson Avenue	71.4	73.4	2.0	No
East San Gabriel Valley	Colima Road	Batson Avenue to Nogales Street	69.3	71.0	1.7	No
East San Gabriel Valley	Colima Road	Nogales Street to Otterbein Avenue	70.0	71.2	1.2	No
East San Gabriel Valley	Colima Road	Otterbein Avenue to Fairway Drive	68.3	69.6	1.3	No
East San Gabriel Valley	Colima Road	Fairway Drive to Lake Canyon Drive	65.1	67.6	2.5	No
East San Gabriel Valley	Colima Road	Echelon Avenue to Valinda Avenue	69.8	69.7	-0.1	No
East San Gabriel Valley	Amar Road	Valinda Avenue to Lark Ellen Avenue	70.6	71.3	0.7	No
East San Gabriel Valley	Amar Road	Lark Ellen Avenue to Azusa Avenue	71.2	72.2	1.0	No
East San Gabriel Valley	Amar Road	Gale Street to SR-60 Freeway Westbound Off-ramp	71.8	71.6	-0.2	No
East San Gabriel Valley	Nogales Street	SR-60 Freeway Eastbound Off-ramp to Daisetta Street	72.3	73.0	0.7	No
East San Gabriel Valley	Nogales Street	Daisetta Street to Colima Road	72.4	73.4	1.0	No
East San Gabriel Valley	Nogales Street	Colima Road to Pathfinder Road	68.5	69.9	1.4	No
East San Gabriel Valley	Nogales Street	Gale Avenue to SR-60 Freeway Westbound Off-ramp	73.4	73.3	-0.1	No
East San Gabriel Valley	Hacienda Boulevard	SR-60 Freeway Westbound Off-ramp to SR-60 Freeway Eastbound Off-ramp	73.7	74.6	0.9	No
East San Gabriel Valley	Hacienda Boulevard	SR-60 Freeway Eastbound Off-ramp to Halliburton Road	73.0	74.8	1.8	No
East San Gabriel Valley	Hacienda Boulevard	Halliburton Road to Las Lomitas Drive	72.8	74.4	1.6	No
East San Gabriel Valley	Hacienda Boulevard	Las Lomitas Drive to Colima Road	72.1	73.7	1.6	No
East San Gabriel Valley	Hacienda Boulevard	Colima Road to Glenmark Drive	70.5	69.0	-1.5	No
East San Gabriel Valley	Hacienda Boulevard	Holt Avenue to Cameron Avenue	71.3	71.6	0.3	No
East San Gabriel Valley	Grand Avenue	Ellen Drive to Vincent Avenue	62.5	62.2	-0.3	No
East San Gabriel Valley	Cypress Street	Vincent Avenue to Lark Ellen Avenue	62.0	61.6	-0.4	No
East San Gabriel Valley	Cypress Street	Glendora Avenue to Bonnie Cove Avenue	69.2	70.2	1.0	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
East San Gabriel Valley	Arrow Highway	Bonnie Cove Avenue to Sunflower Avenue	69.2	70.2	1.0	No
East San Gabriel Valley	Arrow Highway	Sunflower Avenue to Valley Center Avenue	69.9	70.0	0.1	No
East San Gabriel Valley	Arrow Highway	Glendora Avenue to Bonnie Cove Avenue	53.6	54.4	0.8	No
East San Gabriel Valley	Cienega Avenue	Bonnie Cove Avenue to Sunflower Avenue	53.6	54.4	0.8	No
East San Gabriel Valley	Cienega Avenue	Sunflower Avenue to Valley Center Avenue	47.5	48.6	1.1	No
East San Gabriel Valley	Cienega Avenue	Laurel Park Road to Del Amo Boulevard	66.4	67.7	1.3	No
Gateway	Alameda Street (SR-47)	Manville Street to Laurel Park Road	65.6	66.8	1.2	No
Gateway	Alameda Street (SR-47)	Las Hermanas Street to Victoria Street	68.5	69.1	0.6	No
Gateway	Santa Fe Avenue	Victoria Street to Santa Fe Avenue	64.8	65.5	0.7	No
Gateway	Santa Fe Avenue	Whittier Boulevard to Townley Drive	68.0	68.5	0.5	No
Gateway	Norwalk Boulevard	Townley Drive to Mines Boulevard	69.5	70.6	1.1	No
Gateway	Norwalk Boulevard	Mines Boulevard to Saragosa Street	69.5	68.7	-0.8	No
Gateway	Norwalk Boulevard	Saragosa Street to Washington Boulevard	70.1	66.0	-4.1	No
Gateway	Norwalk Boulevard	Broadway to Slauson Avenue	70.0	70.2	0.2	No
Gateway	Norwalk Boulevard	Slauson Avenue to Los Nietos Road	69.7	69.3	-0.4	No
Gateway	Norwalk Boulevard	Broadway to Sorensen Avenue	70.6	71.6	1.0	No
Gateway	Washington Boulevard	Sorensen Avenue to Calobar Avenue	69.1	69.3	0.2	No
Gateway	Washington Boulevard	Calobar Avenue to Rivera Road	69.3	69.7	0.4	No
Gateway	Washington Boulevard	Sal Avenue to I-605 Southbound Off-ramp	73.7	73.7	0.0	No
Gateway	Slauson Avenue	I-605 Southbound to Pioneer Boulevard	71.3	73.9	2.6	No
Gateway	Slauson Avenue	Pioneer Boulevard to Norwalk Boulevard	72.0	71.8	-0.2	No
Gateway	Slauson Avenue	Painter Avenue to Calmada Avenue	70.8	72.1	1.3	No
Gateway	Mulberry Drive	Calmada Avenue to Gunn Avenue	71.1	72.0	0.9	No
Gateway	Mulberry Drive	Gunn Avenue to Mills Avenue	70.7	72.1	1.4	No
Gateway	Mulberry Drive	Mills Avenue to Colima Road	69.2	70.1	0.9	No
Gateway	Mulberry Drive	Colima Road to LA Mirada Boulevard	69.6	69.5	-0.1	No
Gateway	Mulberry Drive	La Mirada Boulevard to Scott Avenue	67.8	65.8	-2.0	No
Gateway	Mulberry Drive	Telegraph Road to Broadway	68.7	66.4	-2.3	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Gateway	Colima Road	Broadway to Mulberry Drive	66.7	67.2	0.5	No
Gateway	Colima Road	Mulberry Drive to La Mirada Boulevard	65.8	66.0	0.2	No
Gateway	Colima Road	La Mirada Boulevard to Lambert Road	68.6	69.6	1.0	No
Gateway	Colima Road	Telegraph Road to Florence Avenue	66.4	67.1	0.7	No
Gateway	Carmenita Road	Florence Avenue to Lakeland Road	66.7	67.8	1.1	No
Gateway	Carmenita Road	Lakeland Road to Meyer Road	66.2	67.2	1.0	No
Gateway	Carmenita Road	Meyer Road to Leffingwell Road	67.0	67.6	0.6	No
Gateway	Carmenita Road	Leffingwell Road to Imperial Highway	68.2	69.2	1.0	No
Gateway	Carmenita Road	Carmenita Road to Gunn Avenue	72.4	72.0	-0.4	No
Gateway	Telegraph Road	Gunn Avenue to Mills Avenue	72.1	71.7	-0.4	No
Gateway	Telegraph Road	Mills Avenue to Valley View Avenue	72.9	72.7	-0.2	No
Gateway	Telegraph Road	Valley View Avenue to Colima Road	70.4	70.2	-0.2	No
Gateway	Telegraph Road	Colima Road to Leffingwell Road	71.3	71.7	0.4	No
Gateway	Telegraph Road	Leffingwell Road to Imperial Highway	70.2	70.3	0.1	No
Gateway	Telegraph Road	Shoemaker Avenue to Leffingwell Road	73.4	73.4	0.0	No
Gateway	Imperial Highway	Leffingwell Road to Carmenita Road	70.9	70.6	-0.3	No
Gateway	Imperial Highway	Carmenita Road to Shopping Center Driveway	71.4	71.4	0.0	No
Gateway	Imperial Highway	Shopping Center Driveway to Meyer Road	71.0	70.5	-0.5	No
Gateway	Imperial Highway	Meyer Road to Valley View Avenue	71.9	72.1	0.2	No
Gateway	Imperial Highway	Valley View Avenue to Biola Avenue	70.6	71.3	0.7	No
Gateway	Imperial Highway	Biola Avenue to Telegraph Road	71.9	71.8	-0.1	No
Gateway	Imperial Highway	Stocker Street to Slauson Avenue	74.6	75.5	0.9	No
Westside	La Cienega Boulevard	Rodeo Place to Stocker Street	73.6	74.4	0.8	No
Westside	La Cienega Boulevard	Veronica Street to Overhill Drive	73.6	74.4	0.8	No
Westside	La Brea Avenue	Overhill Drive to Slauson Avenue	73.8	74.7	0.9	No
Westside	La Brea Avenue	Slauson Avenue to Centinela Avenue	70.8	72.2	1.4	No
Westside	La Brea Avenue	Corning Avenue to La Cienega Boulevard	74.4	75.4	1.0	No
Westside	Slauson Avenue	La Cienega Boulevard to Fairfax Boulevard	72.3	75.5	3.2	Yes

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Westside	Slauson Avenue	Fairfax Boulevard to La Brea Avenue	75.5	76.2	0.7	No
Westside	Slauson Avenue	La Brea Avenue to Overhill Drive	72.8	73.8	1.0	No
Westside	Slauson Avenue	La Cienega Boulevard to Fairfax Boulevard	70.8	72.2	1.4	No
Westside	Stocker Street	Fairfax Boulevard to Overhill Drive/La Brea Avenue	69.8	71.8	2.0	No
Westside	Stocker Street	Pennsylvania Avenue to La Crescenta Avenue	68.3	70.1	1.8	No
San Fernando Valley	Foothill Boulevard	La Crescenta Avenue to Rosemont Avenue	62.7	66.0	3.3	No
San Fernando Valley	Foothill Boulevard	Rosemont Avenue to Briggs Avenue	68.9	71.2	2.3	No
San Fernando Valley	Foothill Boulevard	Rockdell Street to Orange Avenue	63.1	64.9	1.8	No
San Fernando Valley	Rosemont Avenue	Orange Avenue to Foothill Boulevard	61.1	64.5	3.4	No
San Fernando Valley	Rosemont Avenue	Foothill Boulevard to Foothill Freeway	53.4	60.9	7.5	Yes
San Fernando Valley	Rosemont Avenue	Colorado Boulevard to Del Mar Boulevard	72.0	73.3	1.3	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Del Mar Boulevard to San Pasqual Street	72.0	72.7	0.7	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	San Pasqual Street to California Boulevard	72.0	73.4	1.4	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	E California Boulevard to Huntington Drive	71.7	73.4	1.7	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Huntington Drive to Huntington Drive	71.1	72.7	1.6	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Huntington Drive to Duarte Road	70.4	71.8	1.4	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Duarte Road to Ardendale Avenue	71.0	72.3	1.3	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	San Gabriel Boulevard to Madre Street	79.0	81.2	2.2	No
West San Gabriel Valley	Huntington Drive	Madre Street to Madre Street	n/a	n/a	n/a	n/a
West San Gabriel Valley	Huntington Drive	Madre Street to Rosemead Boulevard	78.9	80.2	1.3	No
West San Gabriel Valley	Huntington Drive	Rosemead Boulevard to Michillinda Avenue	79.1	81.0	1.9	No
West San Gabriel Valley	Huntington Drive	E California Boulevard to Lombardy Road	70.9	72.2	1.3	No
West San Gabriel Valley	San Gabriel Boulevard	Lombardy Road to Huntington Drive	71.2	72.3	1.1	No
West San Gabriel Valley	San Gabriel Boulevard	Huntington Drive to Duarte Road	71.8	73.0	1.2	No
West San Gabriel Valley	San Gabriel Boulevard	Duarte Road to Longden Avenue	70.9	72.8	1.9	No
West San Gabriel Valley	San Gabriel Boulevard	Longden Avenue to Las Tunas Drive	71.6	72.8	1.2	No
West San Gabriel Valley	San Gabriel Boulevard	San Gabriel Boulevard to Muscatel Avenue	66.6	64.4	-2.2	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
West San Gabriel Valley	Duarte Boulevard	Muscatel Avenue to Madre Street	66.7	65.9	-0.8	No
West San Gabriel Valley	Duarte Boulevard	Madre Street to Rosemead Boulevard	58.5	60.7	2.2	No
West San Gabriel Valley	Duarte Boulevard	Rosemead Boulevard to Oaks Avenue	64.0	65.7	1.7	No
West San Gabriel Valley	Duarte Boulevard	Lake Avenue to Holliston Avenue	63.4	64.6	1.2	No
West San Gabriel Valley	New York Drive	Holliston Avenue to Hill Avenue	64.2	65.4	1.2	No
West San Gabriel Valley	New York Drive	Hill Avenue to Allen Avenue	62.8	61.3	-1.5	No
West San Gabriel Valley	New York Drive	Allen Avenue to Altadena Drive	63.2	64.9	1.7	No
West San Gabriel Valley	New York Drive	Loma Alta Drive to Terrace Street	62.7	66.5	3.8	No
West San Gabriel Valley	Fair Oaks Avenue	Terrace Street to Ventura Street	66.7	67.4	0.7	No
West San Gabriel Valley	Fair Oaks Avenue	Ventura Street to Woodbury Road	66.3	67.5	1.2	No
West San Gabriel Valley	Fair Oaks Avenue	Loma Alta Drive to Altadena Drive	62.0	54.9	-7.1	No
West San Gabriel Valley	Lake Avenue	Altadena Drive to Mendocino Lane	64.2	65.1	0.9	No
West San Gabriel Valley	Lake Avenue	Menocino Lane to Calaveras Street	61.1	61.4	0.3	No
West San Gabriel Valley	Lake Avenue	Calaveras Street to New York Drive	61.1	61.4	0.3	No
West San Gabriel Valley	Lake Avenue	Loma Alta Drive to Altadena Drive	52.1	49.0	-3.1	No
West San Gabriel Valley	Marengo Avenue	Altadena Drive to Woodbury Road	59.7	54.2	-5.5	No
West San Gabriel Valley	Marengo Avenue	Windsor Avenue to Lincoln Avenue	65.8	66.7	0.9	No
West San Gabriel Valley	Woodbury Road	Lincoln Avenue to Fair Oaks Road	67.0	68.9	1.9	No
West San Gabriel Valley	Woodbury Road	Fair Oaks Road to Marengo Avenue	66.6	68.4	1.8	No
West San Gabriel Valley	Woodbury Road	Marengo Avenue to Mariposa Street	65.0	66.2	1.2	No
West San Gabriel Valley	Woodbury Road	Mariposa Street to Los Robles Avenue	64.9	65.8	0.9	No
West San Gabriel Valley	Woodbury Road	Los Robles Avenue to El Molina Avenue	62.6	63.8	1.2	No
West San Gabriel Valley	Woodbury Road	El Molina Avenue to Lake Avenue	64.4	65.7	1.3	No
West San Gabriel Valley	Woodbury Road	Loma Alta Drive to Terrace Street	63.2	64.7	1.5	No
West San Gabriel Valley	Lincoln Avenue	Terrace Street to Ventura Street	61.0	61.8	0.8	No
West San Gabriel Valley	Lincoln Avenue	Ventura Street to Woodbury Road	61.0	61.8	0.8	No
West San Gabriel Valley	Lincoln Avenue	Altadena Drive to Mendocino Lane	58.8	63.9	5.1	Yes
West San Gabriel Valley	Allen Avenue	Mendocino Lane to New York Drive	60.2	63.1	2.9	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
West San Gabriel Valley	Allen Avenue	New York Drive to Washington Boulevard	61.3	63.7	2.4	No
West San Gabriel Valley	Allen Avenue	Pomona Freeway (SR-60) to Town Center Drive	72.6	73.8	1.2	No
West San Gabriel Valley	San Gabriel Boulevard	Town Center Drive to Plaza Drive	71.4	72.2	0.8	No
West San Gabriel Valley	San Gabriel Boulevard	Plaza Drive to E Lincoln Avenue	72.2	73.0	0.8	No
West San Gabriel Valley	San Gabriel Boulevard	E Lincoln Avenue to Rosemead Boulevard (SR-19)	72.5	73.3	0.8	No
West San Gabriel Valley	San Gabriel Boulevard	Rosemead Boulevard (SR-19) to Santa Anita Avenue	66.8	68.1	1.3	No
West San Gabriel Valley	Durfee Avenue	Santa Anita Avenue to Peck Road	66.5	67.6	1.1	No
West San Gabriel Valley	Durfee Avenue	Rush Street to Town Center Drive	73.8	74.7	0.9	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Town Center Drive to Durfee Avenue	70.3	70.9	0.6	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Durfee Avenue to Legg Lake Bus Stop	73.7	74.4	0.7	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Legg Lake Bus Stop to Gallatin Road	73.7	74.4	0.7	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	108th Street to Imperial Highway	70.3	69.2	-1.1	No
Metro	Western Avenue	Imperial Highway to 120th Street	70.3	71.3	1.0	No
Metro	Western Avenue	120th Street to El Segundo Boulevard	69.5	71.0	1.5	No
Metro	Western Avenue	Manchester Avenue to 92nd Street	62.7	61.7	-1.0	No
Metro	Normandie Avenue	92nd Street to 95th Street	64.6	63.9	-0.7	No
Metro	Normandie Avenue	95th Street to Century Boulevard	66.6	62.8	-3.8	No
Metro	Normandie Avenue	Century Boulevard to 108th Street	66.7	64.1	-2.6	No
Metro	Normandie Avenue	108th Street to Imperial Highway	63.9	62.9	-1.0	No
Metro	Normandie Avenue	Imperial Highway to 120th Street	65.4	63.6	-1.8	No
Metro	Normandie Avenue	120th Street to El Segundo Boulevard	64.6	62.6	-2.0	No
Metro	Normandie Avenue	Manchester Avenue to 90th Street	71.0	72.3	1.3	No
Metro	Vermont Avenue	90th Street to 92nd Street	69.9	71.3	1.4	No
Metro	Vermont Avenue	92nd Street to Colden Avenue	70.7	71.9	1.2	No
Metro	Vermont Avenue	Colden Avenue to Century Boulevard	70.2	71.4	1.2	No
Metro	Vermont Avenue	Century Boulevard to 108th Street	71.0	71.9	0.9	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Metro	Vermont Avenue	108th Street to 111th Street	71.4	71.5	0.1	No
Metro	Vermont Avenue	111th Street to Imperial Highway	70.6	71.5	0.9	No
Metro	Vermont Avenue	Imperial Highway to 120th Street	71.8	72.7	0.9	No
Metro	Vermont Avenue	120th Street to El Segundo Boulevard	71.8	72.3	0.5	No
Metro	Vermont Avenue	120th Street to 124th Street	66.2	67.9	1.7	No
Metro	Broadway	124th Street to El Segundo Boulevard	66.1	67.9	1.8	No
Metro	Broadway	El Segundo Boulevard to 135th Street	65.6	66.1	0.5	No
Metro	Broadway	135th Street to Rosecrans Avenue	66.1	65.4	-0.7	No
Metro	Broadway	Rosecrans Avenue to Compton Boulevard	65.4	65.1	-0.3	No
Metro	Broadway	Compton Boulevard to Redondo Beach Boulevard	65.5	67.2	1.7	No
Metro	Broadway	Redondo Beach Boulevard to Alondra Boulevard	66.4	65.6	-0.8	No
Metro	Broadway	Figueroa Street to Broadway	69.8	71.3	1.5	No
Metro	El Segundo Boulevard	Broadway to Main Street	69.8	71.1	1.3	No
Metro	El Segundo Boulevard	Main Street to San Pedro Street	69.4	70.9	1.5	No
Metro	El Segundo Boulevard	San Pedro Street to Avalon Boulevard	69.9	71.4	1.5	No
Metro	El Segundo Boulevard	Avalon Boulevard to Central Avenue	70.0	70.4	0.4	No
Metro	El Segundo Boulevard	Wilmington Avenue to Metro Blue Line	65.9	67.7	1.8	No
Metro	El Segundo Boulevard	Metro Blue Line to Mona Boulevard	64.3	66.4	2.1	No
Metro	El Segundo Boulevard	Mona Boulevard to Alameda Street	66.3	69.2	2.9	No
Metro	El Segundo Boulevard	Figueroa Street to Broadway	70.5	71.3	0.8	No
Metro	Rosecrans Avenue	Broadway to Main Street	70.0	71.1	1.1	No
Metro	Rosecrans Avenue	Main Street to San Pedro Street	70.8	71.7	0.9	No
Metro	Rosecrans Avenue	San Pedro Street to Avalon Boulevard	70.3	71.5	1.2	No
Metro	Rosecrans Avenue	Avalon Boulevard to Stanford Avenue	70.8	71.8	1.0	No
Metro	Rosecrans Avenue	Stanford Avenue to Central Avenue	70.4	71.4	1.0	No
Metro	Rosecrans Avenue	Slauson Avenue to Gage Avenue	65.8	66.8	1.0	No
Metro	Compton Avenue	Gage Avenue to 71st Street	66.4	65.4	-1.0	No
Metro	Compton Avenue	Florence Avenue to Nadeau Street	66.3	65.1	-1.2	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Metro	Compton Avenue	Nadeau Street to Manchester Avenue	66.1	63.5	-2.6	No
Metro	Compton Avenue	Manchester Avenue to 92nd Street	64.9	63.0	-1.9	No
Metro	Compton Avenue	I-105 Freeway to 120th Street	62.9	63.3	0.4	No
Metro	Compton Avenue	120th Street to El Segundo Boulevard	59.8	60.3	0.5	No
Metro	Compton Avenue	Central Avenue to Hooper Avenue	72.0	72.3	0.3	No
Metro	Manchester Avenue	Central Avenue to Compton Avenue	71.3	69.9	-1.4	No
Metro	Firestone Boulevard	Compton Avenue to Maie Avenue	71.3	71.6	0.3	No
Metro	Firestone Boulevard	Maie Avenue to Metro Blue Line	71.4	71.6	0.2	No
Metro	Firestone Boulevard	Metro Blue Line to Holmes Avenue	71.3	71.6	0.3	No
Metro	Firestone Boulevard	Holmes Avenue to Walnut Drive	71.8	72.1	0.3	No
Metro	Firestone Boulevard	Walnut Drive to Ivy Street	70.9	70.4	-0.5	No
Metro	Firestone Boulevard	Ivy Street to Alameda Street	70.9	71.3	0.4	No
Metro	Firestone Boulevard	I-105 Eastbound off-ramp to 120th Street	71.0	72.1	1.1	No
Metro	Wilmington Avenue	120th Street to 124th Street	68.5	69.9	1.4	No
Metro	Wilmington Avenue	124th Street to El Segundo Boulevard	68.1	69.7	1.6	No
Metro	Wilmington Avenue	Clovis Avenue to Central Avenue	71.3	73.3	2.0	No
Metro	Florence Avenue	Central Avenue to Compton Avenue	64.7	71.4	6.7	Yes
Metro	Florence Avenue	Compton Avenue to Maie Avenue	70.0	71.8	1.8	No
Metro	Florence Avenue	Maie Avenue to Holmes Avenue	70.1	71.9	1.8	No
Metro	Florence Avenue	Holmes Avenue to Walnut Drive	70.0	71.8	1.8	No
Metro	Florence Avenue	Walnut Drive to Wilmington Avenue	70.4	73.0	2.6	No
Metro	Florence Avenue	Wilmington Avenue to Alameda Street	70.3	72.1	1.8	No
Metro	Florence Avenue	Alameda Street to Santa Fe Avenue	71.3	72.8	1.5	No
Metro	Florence Avenue	Santa Fe Avenue to Pacific Boulevard	71.4	72.8	1.4	No
Metro	Florence Avenue	Pacific Boulevard to Seville Avenue	70.8	72.2	1.4	No
Metro	Florence Avenue	Seville Avenue to Stafford Avenue	70.4	71.7	1.3	No
Metro	Florence Avenue	Stafford Avenue to Soto Street	71.0	72.2	1.2	No
Metro	Florence Avenue	Soto Street to Mountain View Avenue	72.1	73.3	1.2	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Metro	Florence Avenue	Figueroa Street to Broadway	69.2	70.6	1.4	No
Metro	Redondo Beach Boulevard	Broadway to Main Street	68.7	69.9	1.2	No
Metro	Redondo Beach Boulevard	Main Street to San Pedro Street	64.8	66.2	1.4	No
Metro	Redondo Beach Boulevard	San Pedro Street to Avalon Boulevard	64.7	66.0	1.3	No
Metro	Redondo Beach Boulevard	Avalon Boulevard to Compton Boulevard	64.9	66.0	1.1	No
Metro	Redondo Beach Boulevard	Figueroa Street to Broadway	60.2	62.6	2.4	No
Metro	Compton Boulevard	Broadway to Main Street	65.6	66.1	0.5	No
Metro	Compton Boulevard	Main Street to San Pedro Street	46.1	49.6	3.5	No
Metro	Compton Boulevard	San Pedro Street to Avalon Boulevard	62.5	63.2	0.7	No
Metro	Compton Boulevard	Avalon Boulevard to Stanford Avenue	60.6	61.1	0.5	No
Metro	Compton Boulevard	Figueroa Street to Broadway	61.5	62.5	1.0	No
Metro	135th Street	Broadway to Main Street	61.9	62.9	1.0	No
Metro	136th Street	Main Street to San Pedro Street	58.2	60.5	2.3	No
Metro	137th Street	San Pedro Street to Avalon Boulevard	56.2	57.5	1.3	No
Metro	138th Street	120th Street to 124th Street	66.6	67.9	1.3	No
Metro	Main Street	124th Street to El Segundo Boulevard	65.7	66.2	0.5	No
Metro	Main Street	El Segundo Boulevard to 135th Street	65.2	67.2	2.0	No
Metro	Main Street	135th Street to Rosecrans Avenue	65.3	64.5	-0.8	No
Metro	Main Street	Rosecrans Avenue to Compton Boulevard	65.7	68.9	3.2	No
Metro	Main Street	Compton Boulevard to Redondo Beach Boulevard	62.5	63.8	1.3	No
Metro	Main Street	Redondo Beach Boulevard to Alondra Boulevard	67.5	64.7	-2.8	No
Metro	Main Street	120th Street to 124th Street	59.4	59.3	-0.1	No
Metro	San Pedro Street	124th Street to El Segundo Boulevard	57.8	57.2	-0.6	No
Metro	San Pedro Street	El Segundo Boulevard to 135th Street	61.9	62.6	0.7	No
Metro	San Pedro Street	135th Street to Rosecrans Avenue	61.2	61.7	0.5	No
Metro	San Pedro Street	Rosecrans Avenue to Compton Boulevard	64.7	65.0	0.3	No
Metro	San Pedro Street	Compton Boulevard to Redondo Beach Boulevard	63.8	64.1	0.3	No
Metro	San Pedro Street	Redondo Beach Boulevard to Avalon Boulevard	65.3	65.7	0.4	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Metro	San Pedro Street	120th Street to 124th Street	68.8	66.7	-2.1	No
Metro	Avalon Boulevard	124th Street to El Segundo Boulevard	69.1	66.7	-2.4	No
Metro	Avalon Boulevard	El Segundo Boulevard to 135th Street	68.4	65.5	-2.9	No
Metro	Avalon Boulevard	135th Street to Rosecrans Avenue	68.1	66.6	-1.5	No
Metro	Avalon Boulevard	Rosecrans Avenue to Compton Boulevard	68.2	66.7	-1.5	No
Metro	Avalon Boulevard	Compton Boulevard to Redondo Beach Boulevard	65.0	66.9	1.9	No
Metro	Avalon Boulevard	Redondo Beach Boulevard to San Pedro Street	67.9	66.8	-1.1	No
Metro	Avalon Boulevard	San Pedro Street to Alondra Boulevard	69.8	71.0	1.2	No
Metro	Avalon Boulevard	Van Ness Avenue to Western Avenue	67.1	67.5	0.4	No
Metro	120st Street	Western Avenue to Normandie Avenue	62.6	65.7	3.1	No
Metro	120st Street	Normandie Avenue to Vermont Avenue	63.3	64.8	1.5	No
Metro	120st Street	Central Avenue to Success Avenue	65.0	62.7	-2.3	No
Metro	120st Street	Success Avenue to Compton Avenue	57.2	58.3	1.1	No
Metro	120st Street	Compton Avenue to Wilmington Avenue	64.5	60.2	-4.3	No
Metro	120st Street	Wilmington Avenue to Metro Blue Line	65.0	66.7	1.7	No
Metro	120st Street	Metro Blue Line to Mona Boulevard	49.7	47.9	-1.8	No
Metro	120st Street	Van Ness Avenue to Western Avenue	71.0	70.1	-0.9	No
Metro	Imperial Highway	Western Avenue to Normandie Avenue	71.0	72.3	1.3	No
Metro	Imperial Highway	Normandie Avenue to Vermont Avenue	71.3	72.3	1.0	No
Metro	Imperial Highway	Van Ness Avenue to Western Avenue	71.3	72.8	1.5	No
Metro	Century Boulevard	Western Avenue to Normandie Avenue	70.5	72.2	1.7	No
Metro	Century Boulevard	Central Avenue to Hooper Avenue	67.2	68.1	0.9	No
Metro	Gage Avenue	Hooper Avenue to Compton Avenue	68.3	67.9	-0.4	No
Metro	Gage Avenue	Compton Avenue to Metro Blue Line	67.0	68.0	1.0	No
Metro	Gage Avenue	Holmes Avenue to Wilmington Avenue	67.4	68.2	0.8	No
Metro	Gage Avenue	Florence Avenue to Broadway	66.4	67.5	1.1	No
Metro	Long Beach Boulevard	Florence Avenue to Nadeau Street	69.9	70.5	0.6	No
Metro	Santa Fe Avenue	Nadeau Street to Broadway	70.1	72.3	2.2	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Metro	Santa Fe Avenue	Broadway to Sale Place	68.5	68.3	-0.2	No
Metro	Santa Fe Avenue	Sale Place to Firestone Boulevard	67.7	67.9	0.2	No
Metro	Santa Fe Avenue	Central Avenue to Hooper Avenue	62.1	61.2	-0.9	No
Metro	Nadeau Street	Hooper Avenue to Compton Avenue	66.4	66.0	-0.4	No
Metro	Nadeau Street	Compton Avenue to Maie Avenue	64.8	66.5	1.7	No
Metro	Nadeau Street	Maie Avenue to Walnut Drive	65.0	66.7	1.7	No
Metro	Nadeau Street	Walnut Drive to Bell Avenue	66.0	67.4	1.4	No
Metro	Nadeau Street	Bell Avenue to Crockett Boulevard	67.0	65.8	-1.2	No
Metro	Nadeau Street	Crockett Boulevard to Alameda Street	65.1	66.5	1.4	No
Metro	Nadeau Street	Alameda Street to Santa Fe Avenue	68.3	69.7	1.4	No
Metro	Nadeau Street	Slauson Avenue to Gage Avenue	64.7	65.3	0.6	No
Metro	Hooper Avenue	Gage Avenue to Florence Avenue	59.4	61.3	1.9	No
Metro	Hooper Avenue	Florence Avenue to Nadeau Street	65.2	64.4	-0.8	No
Metro	Hooper Avenue	Nadeau Street to Manchester Avenue	65.1	64.9	-0.2	No
Metro	Hooper Avenue	Manchester Avenue to 92nd Street	66.3	64.7	-1.6	No
Metro	Central Avenue	City Terrace Drive to Floral Drive	66.3	67.1	0.8	No
Metro	N Eastern Avenue	Floral Drive to Cesar Chavez Avenue	65.0	66.5	1.5	No
Metro	N Eastern Avenue	Cesar Chavez Avenue to 1st Street	65.7	67.3	1.6	No
Metro	N Eastern Avenue	1st Street to SR-60 Freeway	65.9	67.4	1.5	No
Metro	N Eastern Avenue	SR-60 Freeway to Eagle Street	64.2	66.7	2.5	No
Metro	N Eastern Avenue	Eagle Street to Whittier Boulevard	64.6	67.0	2.4	No
Metro	N Eastern Avenue	Whittier Boulevard to I-710 Freeway South off-ramp	65.9	68.0	2.1	No
Metro	N Eastern Avenue	I-710 Freeway South off-ramp to Olympic Boulevard	66.0	67.4	1.4	No
Metro	N Eastern Avenue	Olympic Boulevard to Triggs Street	66.4	67.2	0.8	No
Metro	N Eastern Avenue	3rd Street/Pomona Boulevard to Beverly Boulevard	72.3	71.9	-0.4	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Metro	Atlantic Boulevard	Beverly Boulevard to Whittier Boulevard	70.4	71.5	1.1	No
Metro	Atlantic Boulevard	Whittier Boulevard to Olympic Boulevard	70.5	71.7	1.2	No
Metro	Atlantic Boulevard	Olympic Boulevard to Ferguson Drive	69.3	69.6	0.3	No
Metro	Atlantic Boulevard	Eastern Avenue to Humphreys Avenue	61.9	65.4	3.5	No
Metro	Floral Drive	Humphrey's Avenue to Ford Boulevard	64.0	65.2	1.2	No
Metro	Floral Drive	Ford Boulevard to Corporate Center Drive	63.9	64.6	0.7	No
Metro	Floral Drive	Corporate Center Drive to Mednik Avenue	61.5	61.9	0.4	No
Metro	Floral Drive	Mednik Avenue to Bleakwood Avenue	60.6	61.2	0.6	No
Metro	Floral Drive	Indiana Street to Rowan Avenue	66.4	66.3	-0.1	No
Metro	Cesar Chavez Avenue	Rowan Avenue to Gage Avenue	65.6	65.9	0.3	No
Metro	Cesar Chavez Avenue	Gage Avenue to Hazard Avenue	67.1	67.7	0.6	No
Metro	Cesar Chavez Avenue	Hazard Avenue to Eastern Avenue	68.4	69.4	1.0	No
Metro	Cesar Chavez Avenue	Eastern Avenue to Humphreys Avenue	68.7	69.6	0.9	No
Metro	Cesar Chavez Avenue	Humphrey's Avenue to Ford Boulevard	67.8	68.9	1.1	No
Metro	Cesar Chavez Avenue	Ford Boulevard to Mednik Avenue	66.9	68.1	1.2	No
Metro	Cesar Chavez Avenue	Mednik Avenue to Bleakwood Avenue	63.9	64.6	0.7	No
Metro	Cesar Chavez Avenue	Indiana Street to Rowan Avenue	64.8	64.1	-0.7	No
Metro	4th Street	Rowan Avenue to Gage Avenue	65.6	64.2	-1.4	No
Metro	3rd Street	Gage Avenue to Eastern Avenue	64.1	65.2	1.1	No
Metro	2nd Street	Eastern Avenue to Humphreys Avenue	63.9	65.5	1.6	No
Metro	1st Street	Ford Boulevard to Mednik Avenue	64.5	66.3	1.8	No
Metro	0th Street	Mednik Avenue to Bleakwood Avenue	66.5	60.1	-6.4	No
Metro	1st Street	Indiana Street to Rowan Avenue	65.6	70.7	5.1	Yes
Metro	3rd Street	Rowan Avenue to Gage Avenue	65.3	70.0	4.7	Yes
Metro	1st Street	Gage Avenue to Sunol Drive	68.3	71.0	2.7	No
Metro	2nd Street	Sunol Drive to Eastern Avenue	67.2	70.3	3.1	Yes
Metro	3rd Street	Eastern Avenue to Humphreys Avenue	67.5	68.4	0.9	No
Metro	3rd Street	Ford Boulevard to Mednik Avenue	67.2	67.8	0.6	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Metro	3rd Street	Mednik Avenue to Beverly Boulevard	68.7	73.3	4.6	Yes
Metro	3rd Street	Beverly Boulevard to Atlantic Boulevard	63.8	69.1	5.3	Yes
Metro	4th Street	Atlantic Boulevard to Hillview Avenue	68.6	70.1	1.5	No
Metro	5th Street	Indiana Street to Ditman Avenue	67.1	68.1	1.0	No
Metro	Whittier Boulevard	Ditman Avenue to Rowan Avenue	64.6	64.5	-0.1	No
Metro	Whittier Boulevard	Rowan Avenue to Sunol Drive	64.2	65.3	1.1	No
Metro	Whittier Boulevard	Sunol Drive to Eastern Avenue	68.4	67.6	-0.8	No
Metro	Whittier Boulevard	Ford Boulevard to Arizona Avenue	68.3	67.8	-0.5	No
Metro	Whittier Boulevard	Arizona Avenue to Atlantic Boulevard	67.8	66.1	-1.7	No
Metro	Whittier Boulevard	Atlantic Boulevard to Belden Avenue	68.0	69.0	1.0	No
Metro	Whittier Boulevard	Belden Avenue to Gethart Avenue	67.8	69.2	1.4	No
Metro	Whittier Boulevard	Gethart Avenue to Hendricks Avenue	67.9	69.0	1.1	No
Metro	Whittier Boulevard	Hendrick Avenue to Garfield Avenue	69.7	68.6	-1.1	No
Metro	Whittier Boulevard	Indiana Street to Rowan Avenue	70.4	72.1	1.7	No
Metro	Olympic Boulevard	Rowan Avenue to Sunol Drive	69.9	69.9	0.0	No
Metro	Olympic Boulevard	Sunol Drive to Eastern Avenue	71.7	70.6	-1.1	No
Metro	Olympic Boulevard	Ford Boulevard to Arizona Avenue	70.3	71.6	1.3	No
Metro	Olympic Boulevard	Arizona Avenue to Atlantic Boulevard	70.2	70.1	-0.1	No
Metro	Olympic Boulevard	Atlantic Boulevard to Goodrich Boulevard	67.7	69.3	1.6	No
Metro	Olympic Boulevard	Goodrich Boulevard to Gethart Avenue	69.1	69.5	0.4	No
Metro	Olympic Boulevard	Gethart Avenue to Hendricks Avenue	69.4	69.5	0.1	No
Metro	Olympic Boulevard	Hendrick Avenue to Garfield Avenue	69.4	69.5	0.1	No
Metro	Olympic Boulevard	Latigo Canyon Road to Pacific Coast Highway	66.0	67.1	1.1	No
Santa Monica Mountains	Kanan Dume Road	Mulholland Highway to Latigo Canyon Road	66.0	67.1	1.1	No
Santa Monica Mountains	Kanan Dume Road	Triunfo Canyon Road to Mulholland Highway	65.1	67.2	2.1	No
Santa Monica Mountains	Kanan Dume Road	Sierra Creek Road to Triunfo Canyon Road	67.5	70.5	3.0	Yes
Santa Monica Mountains	Kanan Road	Troutdale Drive to Sierra Creek Road	68.2	70.4	2.2	No
Santa Monica Mountains	Kanan Road	Cornell Road to Troutdale Drive	67.3	68.6	1.3	No

Table 5.12-18 Project Off-Site Contributions: Buildout Year Conditions

Planning Area	Roadway	Segment	CNEL at 100 Feet (dBA)			
			Existing	Buildout	Project Contribution	Potential Impact?
Santa Monica Mountains	Kanan Road	Adamson Flat/Palm Canyon Lane to Piuma Road	69.1	70.1	1.0	No
Santa Monica Mountains	Malibu Canyon Road	Piuma Road to Mulholland Highway	69.1	69.4	0.3	No
Santa Monica Mountains	Las Virgenes Road	Mulholland Highway to Lost Hills Road	68.2	70.1	1.9	No
Santa Monica Mountains	Las Virgenes Road	Pacific Coast Highway to Fernwood Pacific Drive	66.4	67.5	1.1	No
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Fernwood Pacific Drive to Old Topanga Canyon Road	67.0	68.0	1.0	No
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Old Topanga Canyon Road to Keller Road	63.5	65.1	1.6	No
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Lechusa Road to Kanan Road	59.4	74.6	15.2	Yes
Santa Monica Mountains	Mulholland Highway	Kanan Road to Sierra Creek Road	56.7	66.9	10.2	Yes
Santa Monica Mountains	Mulholland Highway	Sierra Creek Road to Troutdale Drive	55.8	67.5	11.7	Yes
Santa Monica Mountains	Mulholland Highway	Troutdale Drive to Lake Vista Drive	63.8	73.5	9.7	Yes
Santa Monica Mountains	Mulholland Highway	Lake Vista Drive to Cornell Road	56.6	67.8	11.2	Yes
Santa Monica Mountains	Mulholland Highway	Cornell Road to Udell Road	64.9	74.6	9.7	Yes
Santa Monica Mountains	Mulholland Highway	Udell Road to Las Virgenes Road	55.7	74.6	18.9	Yes
Santa Monica Mountains	Mulholland Highway	Las Virgenes Road to Cold Canyon Road	62.7	72.6	9.9	Yes
Santa Monica Mountains	Mulholland Highway	Cold Canyon Road to Stunt Road	61.6	72.3	10.7	Yes
Santa Monica Mountains	Mulholland Highway	Palos Verdes Lane to Silver Spur Road	71.2	70.0	-1.2	No

Note: Based on traffic data provided by Iteris, 2014. Calculations included in Appendix K.

As shown in the table, seven of the 10 Planning Areas would have noise impacted roadways. Buildout of the Proposed Project could result in noise level increases of up to 19.6 dB. The following are roadway segments which have existing nearby noise-sensitive receptors that would experience a substantial increase in noise over existing conditions and would meet the significance criteria.

Antelope Valley Planning Area

- W Avenue J from 90th Street E to 100th Street E
- W Avenue J from 100th Street E to 110th Street E
- W Avenue J from 110th Street E to 140th Street E
- W Avenue J from 140th Street E to 150th Street E
- W Avenue J from 150th Street E to 170th Street E
- Lancaster Road from 170th Street W to 110th Street W
- Lancaster Road from 110th Street W to 90th Street W
- Lancaster Road from 90th Street W to 70th Street W
- Elizabeth Lake Road from Johnson Road to San Francisquito Canyon Road
- Elizabeth Lake Road from San Francisquito Canyon Road to Bouquet Canyon Road
- Elizabeth Lake Road from Bouquet Canyon Road to Godde Hill Road
- W Avenue P from 25th Street E to 30th Street E
- 200th Street E from E Avenue G to E Avenue J
- E Palmdale Boulevard from 90th Street E to 95th Street E
- W Avenue G from Sierra Highway to Division Street
- E Avenue O from 175th Street E to 180th Street E
- E Avenue O from 180th Street E to 200th Street E
- E Avenue O from 200th Street E to 210 Street E
- W Avenue L from Rancho Vista Road to 45th Street W
- W Avenue L from 45th Street W to 40th Street W
- Pearblossom Highway (SR-138) from E Avenue T 8 to 82nd Street E
- Pearblossom Highway (SR-138) from 82nd Street E to 87th Street E
- Pearblossom Highway (SR-138) from 106th Street E to 116th Street E
- Pearblossom Highway (SR-138) from 116th Street E to 126th Street E
- Pearblossom Highway (SR-138) from 126th Street E to 131st Street E
- Pearblossom Highway (SR-138) from 131st Street E to 170th Street E
- Fort Tejon Road from 87th Street E to Mount Emma Road

Santa Clarita Valley Planning Area

- Pico Canyon Road from Whispering Oaks Drive to Stevenson Ranch Parkway
- Copper Hill Drive from Avenida Rancho Tesoro to E/O McBean Parkway
- Bouquet Canyon Road from Vasquez Canyon Road to Shadow Valley Lane
- Bouquet Canyon Road from Texas Canyon Road to Vasquez Canyon Road
- Sierra Highway from Sand Canyon Road to Ryan Lane
- Sierra Highway from Vasquez Canyon Road to Sand Canyon Road
- Sierra Highway from Davenport Road to Vasquez Canyon Road
- Vasquez Canyon Road from Bouquet Canyon Road to Sierra Highway
- Commerce Center Drive from The Old Road to Hasley Canyon Road

Westside Planning Area

- Slauson Avenue from La Cienega Boulevard to Fairfax Boulevard

San Fernando Valley Planning Area

- Rosemont Avenue from Foothill Boulevard to Foothill Freeway

West San Gabriel Valley Planning Area

- Allen Avenue from Altadena Drive to Mendocino Lane

Metro Planning Area

- 3rd Street from Indiana Street to Rowan Avenue
- 3rd Street from Sunol Drive to Eastern Avenue
- 3rd Street from Mednik Avenue to Beverly Boulevard
- 4th Street from Beverly Boulevard to Atlantic Boulevard

Santa Monica Mountains Planning Area

- Kanan Road from Sierra Creek Road to Triunfo Canyon Road
- Topanga Canyon Boulevard (SR-27) from Lechusa Road to Kanan Road
- Mulholland Highway from Kanan Road to Sierra Creek Road
- Mulholland Highway from Sierra Creek Road to Troutdale Drive
- Mulholland Highway from Troutdale Drive to Lake Vista Drive
- Mulholland Highway from Lake Vista Drive to Cornell Road
- Mulholland Highway from Cornell Road to Udell Road
- Mulholland Highway from Udell Road to Las Virgenes Road

- Mulholland Highway from Las Virgenes Road to Cold Canyon Road
- Mulholland Highway from Cold Canyon Road to Stunt Road

The existing noise-sensitive receptors along these roadways include single- and multi-family residential land uses in addition to schools healthcare facilities. Individual projects associated with buildout of the Proposed Project would occur over a period of many years and the increase in noise on an annual basis would not be readily discernable as traffic and noise would increase incrementally.

Implementation of the following Proposed General Plan Update policies would reduce impacts to the extent feasible:

- **Policy N 1.1:** Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.

- **Policy N 1.4:** Enhance and promote noise abatement programs in an effort to maintain acceptable levels of noise as defined by the Los Angeles County Exterior Noise Standards and other applicable noise standards.

- **Policy N 1.6:** Ensure cumulative impacts related to noise do not exceed health-based safety margins.

- **Policy N 1.7:** Utilize traffic management and noise suppression techniques to minimize noise from traffic and transportation systems.

However, cumulative increases in the ambient noise environment along the roadway segments identified from buildout of the proposed land use plan would be substantial. Additionally, there are no other reasonably feasible measures to reduce traffic noise impacts to existing uses either due to implementation constraints, aesthetics drawbacks, and/or costs considerations[4]. Therefore, traffic noise impacts to existing noise-sensitive receptors (along the above-noted roadway segments) would experience a substantial increase in noise over existing conditions, would meet the significance criteria, and would be exposed to potentially significant noise levels due to traffic flows.

Impact 5.12-3 New noise-sensitive land uses associated with Proposed Project could be exposed to elevated noise levels from mobile sources along roadways. [Thresholds N-1 and N-3]

Impact Analysis: Table 5.12-19, *Buildout Year Traffic Noise Levels and Contours*, shows the 65, 70, and 75 dBA CNEL noise contours of roadways within Los Angeles County in future buildout year conditions.[5] For the purpose of assessing the compatibility of new development with the anticipated ambient noise, the County utilizes the State's Community Noise and Land Use Compatibility standards; previously summarized in Table 5.12-5. New sensitive land uses would have to demonstrate compatibility with the ambient noise levels. A potentially significant impact could occur if the Proposed Project designates noise-sensitive exterior land

[4] These may include, but not be limited to, such concerns as driveway openings in sound walls, 10 to 16 foot tall sound wall heights, hundreds (or thousands) of miles of sound barrier walls, hundreds (or thousands) of miles of repaving with 'quiet' pavement technologies.
[5] The buildout year noise contours are shown in Appendix K of this EIR.

uses in areas where the ambient noise level exceeds 65 dBA CNEL. Likewise, interior noise levels in habitable noise-sensitive areas should not exceed 45 dBA CNEL.

The Proposed General Plan Update contains the following policies related to minimizing noise land use compatibility impacts.

- **Policy** N **1.1:** Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.
- **Policy N 1.2:** Reduce exposure to noise impacts by promoting land use compatibility.
- **Policy N 1.3:** Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).
- **Policy N 1.4:** Enhance and promote noise abatement programs in an effort to maintain acceptable levels of noise as defined by the Los Angeles County Exterior Noise Standards and other applicable noise standards.
- **Policy N 1.5:** Ensure compliance with the jurisdictions of State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code), such as noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or L_{dn}) noise exposure contours.
- **Policy N 1.6:** Ensure cumulative impacts related to noise do not exceed health-based safety margins.
- **Policy N 1.7:** Utilize traffic management and noise suppression techniques to minimize noise from traffic and transportation systems.
- **Policy N 1.9:** Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.
- **Policy N 1.10:** Orient residential units away from major noise sources (in conjunction with applicable building codes).
- **Policy N 1.11:** Maximize buffer distances and design and orient sensitive receptor structures (hospitals, residential, etc.) to prevent noise and vibration transfer from commercial/light industrial uses.
- **Policy N 1.12:** Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.

Implementation of Proposed General Plan Update policies would reduce impacts to the extent feasible. However, additional measures would be required during specific, project-level assessments to ensure that future land uses are compatible to their noise environment. Therefore, impacts related to noise land use compatibility are considered potentially significant.

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
South Bay	Crenshaw Boulevard	Palos Verdes Lane to Silver Spur Road	19,102	70.0	100	216	466
South Bay	Vermont Street	Lomita Boulevard to Sepulveda Boulevard	24,902	71.2	120	258	556
South Bay	Vermont Street	Sepulveda Boulevard to W 228th Street	10,974	67.6	69	150	322
South Bay	Vermont Street	W 228th Street to W 223rd Street	22,708	70.8	113	243	523
South Bay	Vermont Street	W 223rd Street to W 220th Street	14,772	68.9	85	182	393
South Bay	Vermont Street	W 220th Street to Carson Street	5,001	64.2	41	89	191
South Bay	Vermont Street	Carson Street to Torrance Boulevard	12,550	68.2	76	164	352
South Bay	Vermont Street	Torrance Boulevard to Del Amo Boulevard	14,064	68.7	82	176	380
South Bay	Manhattan Beach Blvd	Prairie Avenue to Crenshaw Boulevard	10,888	67.6	69	149	321
South Bay	Lennox Boulevard	La Cienega Boulevard to Inglewood Avenue	10,305	64.2	41	89	191
South Bay	Lennox Boulevard	Inglewood Avenue to Hawthorne Boulevard	5,488	61.5	27	58	125
South Bay	Lennox Boulevard	Hawthorne Boulevard to Freeman Avenue	3,274	59.2	19	41	89
South Bay	W 220th Street	Normandie Avenue to Meyler Street	9,495	63.9	39	84	181
South Bay	W 220th Street	Meyler Street to Vermont Avenue	9,771	64.0	40	85	184
South Bay	Normandie Avenue	Sepulveda Boulevard to Lomita Boulevard	10,542	64.3	42	90	194
South Bay	Normandie Avenue	W 228th Street to Sepulveda Boulevard	12,444	65.0	47	100	216
South Bay	Normandie Avenue	W 223rd Street to W 228th Street	10,263	64.2	41	88	190
South Bay	Normandie Avenue	W 220th Street to W 223rd Street	15,941	66.1	55	118	255
South Bay	Normandie Avenue	Carson Street to W 220th Street	4,050	60.2	22	48	102
South Bay	Normandie Avenue	Torrance Boulevard to Carson Street	10,319	64.2	41	89	191
South Bay	Normandie Avenue	Del Amo Boulevard to Torrance Boulevard	18,703	66.8	61	132	284
South Bay	Sepulveda Boulevard	Normandie Avenue to Vermont Avenue	43,571	73.6	174	375	808
South Bay	Sepulveda Boulevard	Vermont Avenue to I-110 South Off-ramp	66,645	75.5	231	498	1,072
South Bay	Sepulveda Boulevard	I-110 South Off-ramp to Figueroa St	40,427	73.3	166	357	769
Antelope Valley	W Avenue J	90th Street E to 100th Street E	13,386	68.5	79	171	368
Antelope Valley	W Avenue J	100th Street E to 110th Street E	17,043	69.5	93	201	432

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Antelope Valley	W Avenue J	110th Street E to 140th Street E	19,860	70.2	103	222	478
Antelope Valley	W Avenue J	140th Street E to 150th Street E	20,453	70.3	105	226	488
Antelope Valley	W Avenue J	150th Street E to 170th Street E	22,687	70.8	113	243	523
Antelope Valley	W Avenue J	170th Street E to 200th Street E	23,236	70.9	114	247	531
Antelope Valley	Lancaster Road	Pine Canyon Road to W Avenue I	0	n/a	n/a	n/a	n/a
Antelope Valley	Lancaster Road	W Avenue I to 190th Street W	17,109	76.2	259	559	1,204
Antelope Valley	Lancaster Road	190th Street W to 170th Street W	4,472	70.4	106	228	492
Antelope Valley	Lancaster Road	170th Street W to 110th Street W	40,913	80.0	464	999	2,153
Antelope Valley	Lancaster Road	110th Street W to 90th Street W	21,905	77.3	306	659	1,420
Antelope Valley	Lancaster Road	90th Street W to 70th Street W	18,166	76.5	270	582	1,253
Antelope Valley	Lancaster Road	70th Street W to 60th Street W	19,292	76.7	281	605	1,304
Antelope Valley	170th Street E	Avenue T to Avenue W	0	n/a	n/a	n/a	n/a
Antelope Valley	170th Street E	Avenue W to 165th Street	0	n/a	n/a	n/a	n/a
Antelope Valley	Elizabeth Lake Road	Johnson Road to San Francisquito Canyon Road	32,837	72.4	144	311	669
Antelope Valley	Elizabeth Lake Road	San Francisquito Canyon Road to Bouquet Canyon Road	11,137	67.7	70	151	325
Antelope Valley	Elizabeth Lake Road	Bouquet Canyon Road to Godde Hill Road	32,660	72.4	144	309	667
Antelope Valley	W Avenue P	15th Street E to 20th Street E	24,336	71.1	118	254	548
Antelope Valley	W Avenue P	20th Street E to 25th Street E	19,420	70.1	102	219	471
Antelope Valley	W Avenue P	25th Street E to 30th Street E	13,217	68.4	79	169	365
Antelope Valley	W Avenue P	30th Street E to 40th Street E	11,376	67.8	71	153	330
Antelope Valley	W Avenue P	40th Street E to 47th Street E	14,320	68.8	83	179	385
Antelope Valley	W Avenue P	47th Street E to 70th Street E	22,875	70.8	113	244	526
Antelope Valley	200th Street E	E Avenue G to E Avenue J	39,383	70.0	101	217	466
Antelope Valley	E Palmdale Boulevard	90th Street E to 95th Street E	21,606	70.6	109	235	506
Antelope Valley	E Palmdale Boulevard	95th Street E to 100th Street E	17,387	69.6	94	203	438

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Antelope Valley	E Palmdale Boulevard	100th Street E to 105th Street E	14,316	68.8	83	179	385
Antelope Valley	E Palmdale Boulevard	105th Street E to 110 Street E	12,909	68.3	77	167	359
Antelope Valley	W Avenue G	SR-14 Antelope Valley Freeway to 15th Street W	12,341	74.8	209	450	968
Antelope Valley	W Avenue G	15th Street W to 10th Street W	8,212	73.0	159	343	738
Antelope Valley	W Avenue G	10th Street W to Sierra Highway	10,030	73.9	182	391	843
Antelope Valley	W Avenue G	Sierra Highway to Division Street	16,226	76.0	250	539	1,162
Antelope Valley	E Avenue O	145th Street E to 150th Street E	18,151	69.8	97	209	451
Antelope Valley	E Avenue O	150th Street E to 170th Street E	6,713	65.5	50	108	232
Antelope Valley	E Avenue O	170th Street E to 175th Street E	6,544	65.4	49	106	228
Antelope Valley	E Avenue O	175th Street E to 180th Street E	8,920	66.7	60	130	281
Antelope Valley	E Avenue O	180th Street E to 200th Street E	21,350	67.4	67	144	310
Antelope Valley	E Avenue O	200th Street E to 210 Street E	20,868	67.3	66	142	305
Antelope Valley	E Avenue O	210 Street E to 240th Street E	9,199	63.7	38	82	177
Antelope Valley	W Avenue L	Rancho Vista Road to 45th Street W	22,331	77.4	310	667	1,438
Antelope Valley	W Avenue L	45th Street W to 40th Street W	18,924	76.6	277	598	1,288
Antelope Valley	Pearblossom Highway (SR-138)	70th Street E to E Avenue T 8	54,146	74.6	201	433	934
Antelope Valley	Pearblossom Highway (SR-138)	E Avenue T 8 to 82nd Street E	52,889	74.5	198	427	919
Antelope Valley	Pearblossom Highway (SR-138)	82nd Street E to 87th Street E	42,843	73.5	172	371	799
Antelope Valley	Pearblossom Highway (SR-138)	87th Street E to 96th Street E	42,853	73.5	172	371	799
Antelope Valley	Pearblossom Highway (SR-138)	96th Street E to 106th Street E	49,731	74.2	190	410	882
Antelope Valley	Pearblossom Highway (SR-138)	106th Street E to 116th Street E	45,231	73.8	178	384	828
Antelope Valley	Pearblossom Highway (SR-138)	116th Street E to 126th Street E	43,562	73.6	174	375	808
Antelope Valley	Pearblossom Highway (SR-138)	126th Street E to 131st Street E	46,646	73.9	182	392	845
Antelope Valley	Pearblossom Highway (SR-138)	131st Street E to 170th Street E	73,294	75.9	246	530	1,143
Antelope Valley	Fort Tejon Road	87th Street E to Mount Emma Road	14,939	65.8	53	113	244

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Antelope Valley	Fort Tejon Road	Mount Emma Road to 96th Street	18,613	66.8	61	131	283
Antelope Valley	Fort Tejon Road	96th Street to 106th Street	20,077	67.1	64	138	298
Antelope Valley	Fort Tejon Road	106th Street to 131 Street E	9,361	63.8	39	83	179
Santa Clarita Valley	Pico Canyon Road	The Old Road to I-5 South Off-ramp	50,874	74.3	193	416	896
Santa Clarita Valley	Pico Canyon Road	Constitution Drive to The Old Road	54,667	74.6	202	436	940
Santa Clarita Valley	Pico Canyon Road	Stevenson Ranch Parkway to Constitution Drive	54,667	74.6	202	436	940
Santa Clarita Valley	Pico Canyon Road	Whispering Oaks Drive to Stevenson Ranch Parkway	53,008	74.5	198	427	921
Santa Clarita Valley	Copper Hill Drive	Avenida Rancho Tesoro to E/O McBean Parkway	26,270	71.4	124	268	577
Santa Clarita Valley	Copper Hill Drive	Decoro Drive to Avenida Rancho Tesoro	14,973	69.0	85	184	396
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Commerce Center Drive to I-5 South Off-ramp	95,575	83.7	817	1,760	3,791
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Del Valle Road to Commerce Center Drive	63,100	81.9	619	1,334	2,874
Santa Clarita Valley	Henry Mayo Drive (SR-126)	San Martinez Grande Canyon Road to Del Valle Road	79,063	82.9	720	1,551	3,341
Santa Clarita Valley	Bouquet Canyon Road	Vasquez Canyon Road to Shadow Valley Lane	18,104	69.8	97	209	450
Santa Clarita Valley	Bouquet Canyon Road	Texas Canyon Road to Vasquez Canyon Road	23,557	70.9	116	249	536
Santa Clarita Valley	Sierra Highway	Sand Canyon Road to Ryan Lane	33,306	72.4	146	313	675
Santa Clarita Valley	Sierra Highway	Vasquez Canyon Road to Sand Canyon Road	34,888	72.6	150	323	697
Santa Clarita Valley	Sierra Highway	Davenport Road to Vasquez Canyon Road	20,069	70.2	104	224	482
Santa Clarita Valley	Sierra Highway	Agua Dulce Canyon Road to Davenport Road	11,709	67.9	72	156	336
Santa Clarita Valley	Vasquez Canyon Road	Bouquet Canyon Road to Sierra Highway	13,327	68.5	79	170	367
Santa Clarita Valley	Plum Canyon Road	Via Joyce Drive to Santa Catarina Road	20,094	70.2	104	224	482
Santa Clarita Valley	Plum Canyon Road	Santa Catarina Road to La Madrid Drive	22,532	70.7	112	242	520
Santa Clarita Valley	Plum Canyon Road	La Madrid Drive to Farrell Road	23,682	71.0	116	250	538
Santa Clarita Valley	Plum Canyon Road	Farrell Road to Ashboro Road	18,380	69.9	98	211	454

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Santa Clarita Valley	Commerce Center Drive	The Old Road to Hasley Canyon Road	48,336	74.1	187	402	866
Santa Clarita Valley	Commerce Center Drive	Hasley Canyon Road to Live Oak Road	17,557	69.7	95	205	441
Santa Clarita Valley	Commerce Center Drive	Live Oak Road to Henry Mayo Drive	26,812	71.5	126	271	584
East San Gabriel Valley	Colima Road	Camino Del Sur to Hacienda Boulevard	53,918	74.5	201	432	931
East San Gabriel Valley	Colima Road	Hacienda Boulevard to Stimson Avenue	30,819	72.1	138	298	641
East San Gabriel Valley	Colima Road	Stimson Avenue to Haliburton Road	36,949	72.9	156	336	724
East San Gabriel Valley	Colima Road	Halliburton Road to Azusa Avenue	40,255	73.3	165	356	766
East San Gabriel Valley	Colima Road	Azusa Avenue to Albatross Road	41,348	73.4	168	362	780
East San Gabriel Valley	Colima Road	Albatross Road to Stoner Creek Road	19,834	70.2	103	222	478
East San Gabriel Valley	Colima Road	Stoner Creek Road to Larkvane Road	32,847	72.4	144	311	669
East San Gabriel Valley	Colima Road	S Larkvane Road to Fullerton Road	32,847	72.4	144	311	669
East San Gabriel Valley	Colima Road	Fullerton Road to Batson Avenue	41,649	73.4	169	364	784
East San Gabriel Valley	Colima Road	Batson Avenue to Nogales Street	23,754	71.0	116	250	539
East San Gabriel Valley	Colima Road	Nogales Street to Otterbein Avenue	25,035	71.2	120	259	558
East San Gabriel Valley	Colima Road	Otterbein Avenue to Fairway Drive	17,239	69.6	94	202	435
East San Gabriel Valley	Colima Road	Fairway Drive to Lake Canyon Drive	10,846	67.6	69	148	320
East San Gabriel Valley	Amar Road	Echelon Avenue to Valinda Avenue	17,804	69.7	96	206	445
East San Gabriel Valley	Amar Road	Valinda Avenue to Lark Ellen Avenue	25,402	71.3	121	262	564
East San Gabriel Valley	Amar Road	Lark Ellen Avenue to Azusa Avenue	31,589	72.2	140	303	652
East San Gabriel Valley	Nogales Street	Gale Street to SR-60 Freeway Westbound Off-ramp	27,490	71.6	128	276	594
East San Gabriel Valley	Nogales Street	SR-60 Freeway Eastbound Off-ramp to Daisetta Street	38,165	73.0	159	343	740
East San Gabriel Valley	Nogales Street	Daisetta Street to Colima Road	41,615	73.4	169	364	784
East San Gabriel Valley	Nogales Street	Colima Road to Pathfinder Road	18,635	69.9	99	213	459
East San Gabriel Valley	Hacienda Boulevard	Gale Avenue to SR-60 Freeway Westbound Off-ramp	40,380	73.3	165	356	768

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
East San Gabriel Valley	Hacienda Boulevard	SR-60 Freeway Westbound Off-ramp to SR-60 Freeway Eastbound Off-ramp	54,809	74.6	203	437	941
East San Gabriel Valley	Hacienda Boulevard	SR-60 Freeway Eastbound Off-ramp to Halliburton Road	57,833	74.8	210	453	976
East San Gabriel Valley	Hacienda Boulevard	Halliburton Road to Las Lomitas Drive	52,115	74.4	196	423	910
East San Gabriel Valley	Hacienda Boulevard	Las Lomitas Drive to Colima Road	44,966	73.7	178	383	825
East San Gabriel Valley	Hacienda Boulevard	Colima Road to Glenmark Drive	15,063	69.0	86	185	398
East San Gabriel Valley	Grand Avenue	Holt Avenue to Cameron Avenue	27,544	71.6	128	276	595
East San Gabriel Valley	Cypress Street	Ellen Drive to Vincent Avenue	6,481	62.2	30	65	140
East San Gabriel Valley	Cypress Street	Vincent Avenue to Lark Ellen Avenue	5,650	61.6	28	59	128
East San Gabriel Valley	Arrow Highway	Glendora Avenue to Bonnie Cove Avenue	19,678	70.2	102	221	476
East San Gabriel Valley	Arrow Highway	Bonnie Cove Avenue to Sunflower Avenue	19,948	70.2	103	223	480
East San Gabriel Valley	Arrow Highway	Sunflower Avenue to Valley Center Avenue	19,056	70.0	100	216	465
East San Gabriel Valley	Cienega Avenue	Glendora Avenue to Bonnie Cove Avenue	1,084	54.4	9	20	43
East San Gabriel Valley	Cienega Avenue	Bonnie Cove Avenue to Sunflower Avenue	1,076	54.4	9	20	42
East San Gabriel Valley	Cienega Avenue	Sunflower Avenue to Valley Center Avenue	286	48.6	4	8	17
Gateway	Alameda Street (SR-47)	Laurel Park Road to Del Amo Boulevard	11,268	67.7	71	152	328
Gateway	Alameda Street (SR-47)	Manville Street to Laurel Park Road	9,112	66.8	61	132	285
Gateway	Santa Fe Avenue	Las Hermanas Street to Victoria Street	15,552	69.1	88	189	407
Gateway	Santa Fe Avenue	Victoria Street to Santa Fe Avenue	6,793	65.5	50	109	234
Gateway	Norwalk Boulevard	Whittier Boulevard to Townley Drive	13,464	68.5	80	171	369
Gateway	Norwalk Boulevard	Townley Drive to Mines Boulevard	21,558	70.6	109	235	505
Gateway	Norwalk Boulevard	Mines Boulevard to Saragosa Street	14,210	68.7	82	178	383
Gateway	Norwalk Boulevard	Saragosa Street to Washington Boulevard	7,474	66.0	54	116	249
Gateway	Norwalk Boulevard	Broadway to Slauson Avenue	19,931	70.2	103	223	480
Gateway	Norwalk Boulevard	Slauson Avenue to Los Nietos Road	16,334	69.3	90	195	420

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Gateway	Washington Boulevard	Broadway to Sorensen Avenue	27,369	71.6	128	275	593
Gateway	Washington Boulevard	Sorensen Avenue to Calobar Avenue	16,269	69.3	90	194	419
Gateway	Washington Boulevard	Calobar Avenue to Rivera Road	17,820	69.7	96	207	445
Gateway	Slauson Avenue	Sal Avenue to I-605 Southbound Off-ramp	44,689	73.7	177	381	822
Gateway	Slauson Avenue	I-605 Southbound to Pioneer Boulevard	46,338	73.9	181	391	842
Gateway	Slauson Avenue	Pioneer Boulevard to Norwalk Boulevard	28,553	71.8	131	283	610
Gateway	Mulberry Drive	Painter Avenue to Calmada Avenue	30,669	72.1	138	297	639
Gateway	Mulberry Drive	Calmada Avenue to Gunn Avenue	29,844	72.0	135	291	628
Gateway	Mulberry Drive	Gunn Avenue to Mills Avenue	30,778	72.1	138	297	641
Gateway	Mulberry Drive	Mills Avenue to Colima Road	19,494	70.1	102	219	473
Gateway	Mulberry Drive	Colima Road to LA Mirada Boulevard	17,106	69.5	93	201	433
Gateway	Mulberry Drive	La Mirada Boulevard to Scott Avenue	7,196	65.8	52	113	243
Gateway	Colima Road	Telegraph Road to Broadway	17,173	66.4	58	125	268
Gateway	Colima Road	Broadway to Mulberry Drive	20,520	67.2	65	140	302
Gateway	Colima Road	Mulberry Drive to La Mirada Boulevard	15,642	66.0	54	117	252
Gateway	Colima Road	La Mirada Boulevard to Lambert Road	36,044	69.6	95	204	440
Gateway	Carmenita Road	Telegraph Road to Florence Avenue	19,912	67.1	64	137	296
Gateway	Carmenita Road	Florence Avenue to Lakeland Road	23,334	67.8	71	153	329
Gateway	Carmenita Road	Lakeland Road to Meyer Road	20,303	67.2	65	139	300
Gateway	Carmenita Road	Meyer Road to Leffingwell Road	22,395	67.6	69	149	320
Gateway	Carmenita Road	Leffingwell Road to Imperial Highway	32,530	69.2	88	191	411
Gateway	Telegraph Road	Carmenita Road to Gunn Avenue	30,041	72.0	136	293	631
Gateway	Telegraph Road	Gunn Avenue to Mills Avenue	27,843	71.7	129	278	599
Gateway	Telegraph Road	Mills Avenue to Valley View Avenue	35,548	72.7	152	327	705
Gateway	Telegraph Road	Valley View Avenue to Colima Road	19,974	70.2	103	223	480
Gateway	Telegraph Road	Colima Road to Leffingwell Road	28,039	71.7	130	280	602

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Gateway	Telegraph Road	Leffingwell Road to Imperial Highway	20,125	70.3	104	224	483
Gateway	Imperial Highway	Shoemaker Avenue to Leffingwell Road	41,726	73.4	169	364	785
Gateway	Imperial Highway	Leffingwell Road to Carmenita Road	21,596	70.6	109	235	506
Gateway	Imperial Highway	Carmenita Road to Shopping Center Driveway	26,422	71.4	125	269	579
Gateway	Imperial Highway	Shopping Center Driveway to Meyer Road	21,508	70.5	109	234	505
Gateway	Imperial Highway	Meyer Road to Valley View Avenue	30,931	72.1	139	298	643
Gateway	Imperial Highway	Valley View Avenue to Biola Avenue	25,349	71.3	121	261	563
Gateway	Imperial Highway	Biola Avenue to Telegraph Road	28,695	71.8	132	284	612
Westside	La Cienega Boulevard	Stocker Street to Slauson Avenue	68,051	75.5	234	505	1,088
Westside	La Cienega Boulevard	Rodeo Place to Stocker Street	52,500	74.4	197	425	915
Westside	La Brea Avenue	Veronica Street to Overhill Drive	52,710	74.4	198	426	917
Westside	La Brea Avenue	Overhill Drive to Slauson Avenue	56,297	74.7	206	445	958
Westside	La Brea Avenue	Slauson Avenue to Centinela Avenue	31,616	72.2	141	303	652
Westside	Slauson Avenue	Corning Avenue to La Cienega Boulevard	65,377	75.4	228	491	1,059
Westside	Slauson Avenue	La Cienega Boulevard to Fairfax Boulevard	67,771	75.5	234	503	1,085
Westside	Slauson Avenue	Fairfax Boulevard to La Brea Avenue	78,728	76.2	258	556	1,198
Westside	Slauson Avenue	La Brea Avenue to Overhill Drive	45,837	73.8	180	388	836
Westside	Stocker Street	La Cienega Boulevard to Fairfax Boulevard	31,772	72.2	141	304	654
Westside	Stocker Street	Fairfax Boulevard to Overhill Drive/La Brea Avenue	28,618	71.8	132	283	610
San Fernando Valley	Foothill Boulevard	Pennsylvania Avenue to La Crescenta Avenue	19,305	70.1	101	218	470
San Fernando Valley	Foothill Boulevard	La Crescenta Avenue to Rosemont Avenue	7,519	66.0	54	116	250
San Fernando Valley	Foothill Boulevard	Rosemont Avenue to Briggs Avenue	25,133	71.2	121	260	560
San Fernando Valley	Rosemont Avenue	Rockdell Street to Orange Avenue	12,135	64.9	46	99	213
San Fernando Valley	Rosemont Avenue	Orange Avenue to Foothill Boulevard	11,023	64.5	43	93	200
San Fernando Valley	Rosemont Avenue	Foothill Boulevard to Foothill Freeway	4,756	60.9	25	53	114

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Colorado Boulevard to Del Mar Boulevard	40,450	73.3	166	357	769
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Del Mar Boulevard to San Pasqual Street	35,418	72.7	152	327	704
West San Gabriel Valley	Rosemead Boulevard (SR -19)	San Pasqual Street to California Boulevard	41,120	73.4	167	361	777
West San Gabriel Valley	Rosemead Boulevard (SR -19)	E California Boulevard to Huntington Drive	41,636	73.4	169	364	784
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Huntington Drive to Huntington Drive	35,109	72.7	151	325	700
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Huntington Drive to Duarte Road	28,680	71.8	132	284	611
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Duarte Road to Ardendale Avenue	32,083	72.3	142	306	659
West San Gabriel Valley	Huntington Drive	San Gabriel Boulevard to Madre Street	53,931	81.2	558	1,202	2,589
West San Gabriel Valley	Huntington Drive	Madre Street to Madre Street	0	n/a	n/a	n/a	n/a
West San Gabriel Valley	Huntington Drive	Madre Street to Rosemead Boulevard	43,272	80.2	482	1,037	2,235
West San Gabriel Valley	Huntington Drive	Rosemead Boulevard to Michillinda Avenue	51,334	81.0	540	1,163	2,505
West San Gabriel Valley	San Gabriel Boulevard	E California Boulevard to Lombardy Road	31,733	72.2	141	304	654
West San Gabriel Valley	San Gabriel Boulevard	Lombardy Road to Huntington Drive	32,008	72.3	142	305	658
West San Gabriel Valley	San Gabriel Boulevard	Huntington Drive to Duarte Road	38,133	73.0	159	343	739
West San Gabriel Valley	San Gabriel Boulevard	Duarte Road to Longden Avenue	35,843	72.8	153	329	709
West San Gabriel Valley	San Gabriel Boulevard	Longden Avenue to Las Tunas Drive	36,187	72.8	154	331	714
West San Gabriel Valley	Duarte Boulevard	San Gabriel Boulevard to Muscatel Avenue	5,241	64.4	42	91	197
West San Gabriel Valley	Duarte Boulevard	Muscatel Avenue to Madre Street	7,310	65.9	53	114	246
West San Gabriel Valley	Duarte Boulevard	Madre Street to Rosemead Boulevard	2,224	60.7	24	52	111
West San Gabriel Valley	Duarte Boulevard	Rosemead Boulevard to Oaks Avenue	7,110	65.7	52	112	241
West San Gabriel Valley	New York Drive	Lake Avenue to Holliston Avenue	11,202	64.6	43	94	202
West San Gabriel Valley	New York Drive	Holliston Avenue to Hill Avenue	13,643	65.4	50	107	230
West San Gabriel Valley	New York Drive	Hill Avenue to Allen Avenue	5,332	61.3	26	57	123
West San Gabriel Valley	New York Drive	Allen Avenue to Altadena Drive	11,947	64.9	45	98	211
West San Gabriel Valley	Fair Oaks Avenue	Loma Alta Drive to Terrace Street	8,441	66.5	58	126	270
West San Gabriel Valley	Fair Oaks Avenue	Terrace Street to Ventura Street	10,418	67.4	67	144	311

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Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
West San Gabriel Valley	Fair Oaks Avenue	Ventura Street to Woodbury Road	10,556	67.5	68	146	314
West San Gabriel Valley	Lake Avenue	Loma Alta Drive to Altadena Drive	1,199	54.9	10	21	45
West San Gabriel Valley	Lake Avenue	Altadena Drive to Mendocino Lane	12,684	65.1	47	102	219
West San Gabriel Valley	Lake Avenue	Menocino Lane to Calaveras Street	5,341	61.4	27	57	123
West San Gabriel Valley	Lake Avenue	Calaveras Street to New York Drive	5,341	61.4	27	57	123
West San Gabriel Valley	Marengo Avenue	Loma Alta Drive to Altadena Drive	311	49.0	4	9	18
West San Gabriel Valley	Marengo Avenue	Altadena Drive to Woodbury Road	1,022	54.2	9	19	41
West San Gabriel Valley	Woodbury Road	Windsor Avenue to Lincoln Avenue	18,230	66.7	60	130	279
West San Gabriel Valley	Woodbury Road	Lincoln Avenue to Fair Oaks Road	30,423	68.9	85	182	393
West San Gabriel Valley	Woodbury Road	Fair Oaks Road to Marengo Avenue	26,925	68.4	78	168	362
West San Gabriel Valley	Woodbury Road	Marengo Avenue to Mariposa Street	16,148	66.2	55	120	257
West San Gabriel Valley	Woodbury Road	Mariposa Street to Los Robles Avenue	14,994	65.8	53	114	245
West San Gabriel Valley	Woodbury Road	Los Robles Avenue to El Molina Avenue	9,423	63.8	39	83	180
West San Gabriel Valley	Woodbury Road	El Molina Avenue to Lake Avenue	14,681	65.7	52	112	242
West San Gabriel Valley	Lincoln Avenue	Loma Alta Drive to Terrace Street	11,611	64.7	45	96	207
West San Gabriel Valley	Lincoln Avenue	Terrace Street to Ventura Street	5,874	61.8	28	61	131
West San Gabriel Valley	Lincoln Avenue	Ventura Street to Woodbury Road	5,874	61.8	28	61	131
West San Gabriel Valley	Allen Avenue	Altadena Drive to Mendocino Lane	9,560	63.9	39	84	182
West San Gabriel Valley	Allen Avenue	Mendocino Lane to New York Drive	7,972	63.1	35	75	161
West San Gabriel Valley	Allen Avenue	New York Drive to Washington Boulevard	9,249	63.7	38	82	178
West San Gabriel Valley	San Gabriel Boulevard	Pomona Freeway (SR-60) to Town Center Drive	45,655	73.8	180	387	833
West San Gabriel Valley	San Gabriel Boulevard	Town Center Drive to Plaza Drive	31,779	72.2	141	304	655
West San Gabriel Valley	San Gabriel Boulevard	Plaza Drive to E Lincoln Avenue	37,600	73.0	158	340	732
West San Gabriel Valley	San Gabriel Boulevard	E Lincoln Avenue to Rosemead Boulevard (SR-19)	40,986	73.3	167	360	776

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
West San Gabriel Valley	Durfee Avenue	Rosemead Boulevard (SR-19) to Santa Anita Avenue	12,164	68.1	74	160	345
West San Gabriel Valley	Durfee Avenue	Santa Anita Avenue to Peck Road	10,999	67.6	70	150	323
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Rush Street to Town Center Drive	55,661	74.7	205	441	951
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Town Center Drive to Durfee Avenue	23,382	70.9	115	248	533
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Durfee Avenue to Legg Lake Bus Stop	52,395	74.4	197	424	914
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Legg Lake Bus Stop to Gallatin Road	52,395	74.4	197	424	914
Metro	Western Avenue	108th Street to Imperial Highway	15,752	69.2	88	190	410
Metro	Western Avenue	Imperial Highway to 120th Street	25,807	71.3	123	264	570
Metro	Western Avenue	120th Street to El Segundo Boulevard	24,085	71.0	117	253	544
Metro	Normandie Avenue	Manchester Avenue to 92nd Street	5,812	61.7	28	60	130
Metro	Normandie Avenue	92nd Street to 95th Street	9,667	63.9	39	85	183
Metro	Normandie Avenue	95th Street to Century Boulevard	7,385	62.8	33	71	153
Metro	Normandie Avenue	Century Boulevard to 108th Street	10,153	64.1	41	88	189
Metro	Normandie Avenue	108th Street to Imperial Highway	7,685	62.9	34	73	157
Metro	Normandie Avenue	Imperial Highway to 120th Street	8,947	63.6	37	81	174
Metro	Normandie Avenue	120th Street to El Segundo Boulevard	7,053	62.6	32	69	148
Metro	Vermont Avenue	Manchester Avenue to 90th Street	32,210	72.3	142	307	660
Metro	Vermont Avenue	90th Street to 92nd Street	25,833	71.3	123	265	570
Metro	Vermont Avenue	92nd Street to Colden Avenue	29,615	71.9	135	290	625
Metro	Vermont Avenue	Colden Avenue to Century Boulevard	26,250	71.4	124	267	576
Metro	Vermont Avenue	Century Boulevard to 108th Street	29,314	71.9	134	288	620
Metro	Vermont Avenue	108th Street to 111th Street	26,705	71.5	126	271	583
Metro	Vermont Avenue	111th Street to Imperial Highway	26,619	71.5	125	270	582
Metro	Vermont Avenue	Imperial Highway to 120th Street	35,392	72.7	152	326	703
Metro	Vermont Avenue	120th Street to El Segundo Boulevard	32,567	72.3	143	309	665

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Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Broadway	120th Street to 124th Street	11,709	67.9	72	156	336
Metro	Broadway	124th Street to El Segundo Boulevard	11,697	67.9	72	156	336
Metro	Broadway	El Segundo Boulevard to 135th Street	7,747	66.1	55	119	255
Metro	Broadway	135th Street to Rosecrans Avenue	6,570	65.4	49	106	229
Metro	Broadway	Rosecrans Avenue to Compton Boulevard	6,140	65.1	47	102	219
Metro	Broadway	Compton Boulevard to Redondo Beach Boulevard	9,861	67.2	65	139	300
Metro	Broadway	Redondo Beach Boulevard to Alondra Boulevard	6,850	65.6	51	109	235
Metro	El Segundo Boulevard	Figueroa Street to Broadway	25,505	71.3	122	262	565
Metro	El Segundo Boulevard	Broadway to Main Street	24,499	71.1	119	255	550
Metro	El Segundo Boulevard	Main Street to San Pedro Street	23,095	70.9	114	246	529
Metro	El Segundo Boulevard	San Pedro Street to Avalon Boulevard	25,968	71.4	123	266	572
Metro	El Segundo Boulevard	Avalon Boulevard to Central Avenue	20,790	70.4	106	229	493
Metro	El Segundo Boulevard	Wilmington Avenue to Metro Blue Line	11,048	67.7	70	150	324
Metro	El Segundo Boulevard	Metro Blue Line to Mona Boulevard	8,286	66.4	58	124	267
Metro	El Segundo Boulevard	Mona Boulevard to Alameda Street	15,846	69.2	89	191	412
Metro	Rosecrans Avenue	Figueroa Street to Broadway	25,391	71.3	121	262	564
Metro	Rosecrans Avenue	Broadway to Main Street	24,343	71.1	118	254	548
Metro	Rosecrans Avenue	Main Street to San Pedro Street	28,246	71.7	130	281	605
Metro	Rosecrans Avenue	San Pedro Street to Avalon Boulevard	26,660	71.5	125	270	582
Metro	Rosecrans Avenue	Avalon Boulevard to Stanford Avenue	29,047	71.8	133	286	617
Metro	Rosecrans Avenue	Stanford Avenue to Central Avenue	26,439	71.4	125	269	579
Metro	Compton Avenue	Slauson Avenue to Gage Avenue	18,738	66.8	61	132	284
Metro	Compton Avenue	Gage Avenue to 71st Street	13,680	65.4	50	107	231
Metro	Compton Avenue	Florence Avenue to Nadeau Street	12,510	65.1	47	101	217

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Compton Avenue	Nadeau Street to Manchester Avenue	8,706	63.5	37	79	171
Metro	Compton Avenue	Manchester Avenue to 92nd Street	7,830	63.0	34	74	159
Metro	Compton Avenue	I-105 Freeway to 120th Street	8,389	63.3	36	77	166
Metro	Compton Avenue	120th Street to El Segundo Boulevard	4,184	60.3	23	49	105
Metro	Manchester Avenue	Central Avenue to Hooper Avenue	32,099	72.3	142	306	659
Metro	Firestone Boulevard	Central Avenue to Compton Avenue	18,743	69.9	99	214	460
Metro	Firestone Boulevard	Compton Avenue to Maie Avenue	27,559	71.6	128	276	595
Metro	Firestone Boulevard	Maie Avenue to Metro Blue Line	27,580	71.6	128	276	596
Metro	Firestone Boulevard	Metro Blue Line to Holmes Avenue	27,234	71.6	127	274	591
Metro	Firestone Boulevard	Holmes Avenue to Walnut Drive	30,954	72.1	139	299	643
Metro	Firestone Boulevard	Walnut Drive to Ivy Street	20,640	70.4	106	228	491
Metro	Firestone Boulevard	Ivy Street to Alameda Street	25,458	71.3	122	262	565
Metro	Wilmington Avenue	I-105 Eastbound off-ramp to 120th Street	30,853	72.1	138	298	642
Metro	Wilmington Avenue	120th Street to 124th Street	18,509	69.9	98	212	457
Metro	Wilmington Avenue	124th Street to El Segundo Boulevard	17,536	69.7	95	204	440
Metro	Florence Avenue	Clovis Avenue to Central Avenue	40,760	73.3	166	359	773
Metro	Florence Avenue	Central Avenue to Compton Avenue	26,172	71.4	124	267	575
Metro	Florence Avenue	Compton Avenue to Maie Avenue	28,651	71.8	132	284	611
Metro	Florence Avenue	Maie Avenue to Holmes Avenue	29,528	71.9	134	289	623
Metro	Florence Avenue	Holmes Avenue to Walnut Drive	28,705	71.8	132	284	612
Metro	Florence Avenue	Walnut Drive to Wilmington Avenue	37,760	73.0	158	341	734
Metro	Florence Avenue	Wilmington Avenue to Alameda Street	30,750	72.1	138	297	640
Metro	Florence Avenue	Alameda Street to Santa Fe Avenue	35,999	72.8	153	330	711
Metro	Florence Avenue	Santa Fe Avenue to Pacific Boulevard	35,778	72.8	153	329	708
Metro	Florence Avenue	Pacific Boulevard to Seville Avenue	31,200	72.2	139	300	647
Metro	Florence Avenue	Seville Avenue to Stafford Avenue	28,384	71.7	131	282	607

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Florence Avenue	Stafford Avenue to Soto Street	31,771	72.2	141	304	654
Metro	Florence Avenue	Soto Street to Mountain View Avenue	40,773	73.3	167	359	773
Metro	Redondo Beach Boulevard	Figueroa Street to Broadway	21,736	70.6	109	236	508
Metro	Redondo Beach Boulevard	Broadway to Main Street	18,723	69.9	99	214	460
Metro	Redondo Beach Boulevard	Main Street to San Pedro Street	7,881	66.2	56	120	258
Metro	Redondo Beach Boulevard	San Pedro Street to Avalon Boulevard	7,576	66.0	54	117	252
Metro	Redondo Beach Boulevard	Avalon Boulevard to Compton Boulevard	7,515	66.0	54	116	250
Metro	Compton Boulevard	Figueroa Street to Broadway	7,168	62.6	32	70	150
Metro	Compton Boulevard	Broadway to Main Street	15,755	66.1	55	118	253
Metro	Compton Boulevard	Main Street to San Pedro Street	353	49.6	4	9	20
Metro	Compton Boulevard	San Pedro Street to Avalon Boulevard	8,248	63.2	35	76	165
Metro	Compton Boulevard	Avalon Boulevard to Stanford Avenue	5,012	61.1	25	55	118
Metro	135th Street	Figueroa Street to Broadway	7,022	62.5	32	69	148
Metro	136th Street	Broadway to Main Street	7,615	62.9	34	72	156
Metro	137th Street	Main Street to San Pedro Street	4,423	60.5	23	50	109
Metro	138th Street	San Pedro Street to Avalon Boulevard	2,182	57.5	15	31	68
Metro	Main Street	120th Street to 124th Street	11,781	67.9	73	157	338
Metro	Main Street	124th Street to El Segundo Boulevard	7,869	66.2	56	120	258
Metro	Main Street	El Segundo Boulevard to 135th Street	9,926	67.2	65	140	301
Metro	Main Street	135th Street to Rosecrans Avenue	5,290	64.5	43	92	198
Metro	Main Street	Rosecrans Avenue to Compton Boulevard	14,803	68.9	85	183	393
Metro	Main Street	Compton Boulevard to Redondo Beach Boulevard	4,583	63.8	39	84	180
Metro	Main Street	Redondo Beach Boulevard to Alondra Boulevard	5,610	64.7	44	96	206
Metro	San Pedro Street	120th Street to 124th Street	3,296	59.3	19	41	89

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	San Pedro Street	124th Street to El Segundo Boulevard	2,061	57.2	14	30	65
Metro	San Pedro Street	El Segundo Boulevard to 135th Street	7,114	62.6	32	69	149
Metro	San Pedro Street	135th Street to Rosecrans Avenue	5,747	61.7	28	60	129
Metro	San Pedro Street	Rosecrans Avenue to Compton Boulevard	12,259	65.0	46	99	214
Metro	San Pedro Street	Compton Boulevard to Redondo Beach Boulevard	9,962	64.1	40	87	187
Metro	San Pedro Street	Redondo Beach Boulevard to Avalon Boulevard	14,512	65.7	52	111	240
Metro	Avalon Boulevard	120th Street to 124th Street	8,853	66.7	60	130	279
Metro	Avalon Boulevard	124th Street to El Segundo Boulevard	8,850	66.7	60	130	279
Metro	Avalon Boulevard	El Segundo Boulevard to 135th Street	6,779	65.5	50	108	234
Metro	Avalon Boulevard	135th Street to Rosecrans Avenue	8,665	66.6	59	128	275
Metro	Avalon Boulevard	Rosecrans Avenue to Compton Boulevard	8,855	66.7	60	130	279
Metro	Avalon Boulevard	Compton Boulevard to Redondo Beach Boulevard	9,192	66.9	62	133	286
Metro	Avalon Boulevard	Redondo Beach Boulevard to San Pedro Street	9,131	66.8	61	132	285
Metro	Avalon Boulevard	San Pedro Street to Alondra Boulevard	23,643	71.0	116	249	537
Metro	120st Street	Van Ness Avenue to Western Avenue	21,950	67.5	68	147	316
Metro	120st Street	Western Avenue to Normandie Avenue	14,668	65.7	52	112	241
Metro	120st Street	Normandie Avenue to Vermont Avenue	11,717	64.8	45	96	208
Metro	120st Street	Central Avenue to Success Avenue	7,362	62.7	33	71	153
Metro	120st Street	Success Avenue to Compton Avenue	2,668	58.3	17	36	78
Metro	120st Street	Compton Avenue to Wilmington Avenue	4,084	60.2	22	48	103
Metro	120st Street	Wilmington Avenue to Metro Blue Line	18,218	66.7	60	130	279
Metro	120st Street	Metro Blue Line to Mona Boulevard	243	47.9	3	7	16
Metro	Imperial Highway	Van Ness Avenue to Western Avenue	19,318	70.1	101	218	470

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Imperial Highway	Western Avenue to Normandie Avenue	32,267	72.3	142	307	661
Metro	Imperial Highway	Normandie Avenue to Vermont Avenue	32,277	72.3	142	307	661
Metro	Century Boulevard	Van Ness Avenue to Western Avenue	35,911	72.8	153	330	710
Metro	Century Boulevard	Western Avenue to Normandie Avenue	31,201	72.2	139	300	647
Metro	Gage Avenue	Central Avenue to Hooper Avenue	25,256	68.1	75	161	347
Metro	Gage Avenue	Hooper Avenue to Compton Avenue	23,845	67.9	72	155	334
Metro	Gage Avenue	Compton Avenue to Metro Blue Line	24,632	68.0	74	158	341
Metro	Gage Avenue	Holmes Avenue to Wilmington Avenue	25,883	68.2	76	164	353
Metro	Long Beach Boulevard	Florence Avenue to Broadway	10,737	67.5	68	147	318
Metro	Santa Fe Avenue	Florence Avenue to Nadeau Street	21,184	70.5	108	232	500
Metro	Santa Fe Avenue	Nadeau Street to Broadway	32,007	72.3	142	305	658
Metro	Santa Fe Avenue	Broadway to Sale Place	12,810	68.3	77	166	357
Metro	Santa Fe Avenue	Sale Place to Firestone Boulevard	11,792	67.9	73	157	338
Metro	Nadeau Street	Central Avenue to Hooper Avenue	5,139	61.2	26	56	120
Metro	Nadeau Street	Hooper Avenue to Compton Avenue	15,586	66.0	54	117	251
Metro	Nadeau Street	Compton Avenue to Maie Avenue	17,261	66.5	58	125	269
Metro	Nadeau Street	Maie Avenue to Walnut Drive	18,488	66.7	61	131	282
Metro	Nadeau Street	Walnut Drive to Bell Avenue	21,627	67.4	67	145	313
Metro	Nadeau Street	Bell Avenue to Crockett Boulevard	14,945	65.8	53	113	245
Metro	Nadeau Street	Crockett Boulevard to Alameda Street	17,383	66.5	58	126	270
Metro	Nadeau Street	Alameda Street to Santa Fe Avenue	36,415	69.7	95	206	443
Metro	Hooper Avenue	Slauson Avenue to Gage Avenue	13,155	65.3	48	104	225
Metro	Hooper Avenue	Gage Avenue to Florence Avenue	5,270	61.3	26	57	122
Metro	Hooper Avenue	Florence Avenue to Nadeau Street	10,740	64.4	42	91	196
Metro	Hooper Avenue	Nadeau Street to Manchester Avenue	12,209	64.9	46	99	214
Metro	Central Avenue	Manchester Avenue to 92nd Street	11,482	64.7	44	95	205

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	N Eastern Avenue	City Terrace Drive to Floral Drive	19,878	67.1	64	137	296
Metro	N Eastern Avenue	Floral Drive to Cesar Chavez Avenue	17,396	66.5	58	126	271
Metro	N Eastern Avenue	Cesar Chavez Avenue to 1st Street	20,980	67.3	66	142	307
Metro	N Eastern Avenue	1st Street to SR-60 Freeway	21,573	67.4	67	145	312
Metro	N Eastern Avenue	SR-60 Freeway to Eagle Street	18,363	66.7	60	130	281
Metro	N Eastern Avenue	Eagle Street to Whittier Boulevard	19,484	67.0	63	135	292
Metro	N Eastern Avenue	Whittier Boulevard to I-710 Freeway South off-ramp	24,583	68.0	73	158	341
Metro	N Eastern Avenue	I-710 Freeway South off-ramp to Olympic Boulevard	21,544	67.4	67	145	312
Metro	N Eastern Avenue	Olympic Boulevard to Triggs Street	20,400	67.2	65	140	301
Metro	Atlantic Boulevard	3rd Street/Pomona Boulevard to Beverly Boulevard	29,502	71.9	134	289	623
Metro	Atlantic Boulevard	Beverly Boulevard to Whittier Boulevard	26,672	71.5	125	270	582
Metro	Atlantic Boulevard	Whittier Boulevard to Olympic Boulevard	27,843	71.7	129	278	599
Metro	Atlantic Boulevard	Olympic Boulevard to Ferguson Drive	17,372	69.6	94	203	438
Metro	Floral Drive	Eastern Avenue to Humphreys Avenue	13,632	65.4	50	107	230
Metro	Floral Drive	Humphrey's Avenue to Ford Boulevard	13,072	65.2	48	104	224
Metro	Floral Drive	Ford Boulevard to Corporate Center Drive	11,389	64.6	44	95	204
Metro	Floral Drive	Corporate Center Drive to Mednik Avenue	6,057	61.9	29	62	134
Metro	Floral Drive	Mednik Avenue to Bleakwood Avenue	5,199	61.2	26	56	121
Metro	Cesar Chavez Avenue	Indiana Street to Rowan Avenue	16,733	66.3	57	122	264
Metro	Cesar Chavez Avenue	Rowan Avenue to Gage Avenue	15,370	65.9	54	116	249
Metro	Cesar Chavez Avenue	Gage Avenue to Hazard Avenue	22,824	67.7	70	151	324
Metro	Cesar Chavez Avenue	Hazard Avenue to Eastern Avenue	33,783	69.4	91	195	421
Metro	Cesar Chavez Avenue	Eastern Avenue to Humphreys Avenue	35,506	69.6	94	202	435
Metro	Cesar Chavez Avenue	Humphrey's Avenue to Ford Boulevard	30,124	68.9	84	181	390

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Cesar Chavez Avenue	Ford Boulevard to Mednik Avenue	25,086	68.1	74	160	345
Metro	Cesar Chavez Avenue	Mednik Avenue to Bleakwood Avenue	11,177	64.6	43	94	201
Metro	4th Street	Indiana Street to Rowan Avenue	10,047	64.1	40	87	188
Metro	3rd Street	Rowan Avenue to Gage Avenue	10,295	64.2	41	89	191
Metro	2nd Street	Gage Avenue to Eastern Avenue	12,867	65.2	48	103	221
Metro	1st Street	Eastern Avenue to Humphreys Avenue	13,917	65.5	50	108	233
Metro	0th Street	Ford Boulevard to Mednik Avenue	16,853	66.3	57	123	265
Metro	1st Street	Mednik Avenue to Bleakwood Avenue	4,000	60.1	22	47	102
Metro	3rd Street	Indiana Street to Rowan Avenue	22,384	70.7	112	241	518
Metro	1st Street	Rowan Avenue to Gage Avenue	19,182	70.0	101	217	468
Metro	2nd Street	Gage Avenue to Sunol Drive	23,762	71.0	116	250	539
Metro	3rd Street	Sunol Drive to Eastern Avenue	20,506	70.3	105	227	489
Metro	3rd Street	Eastern Avenue to Humphreys Avenue	13,246	68.4	79	170	365
Metro	3rd Street	Ford Boulevard to Mednik Avenue	11,490	67.8	72	154	332
Metro	3rd Street	Mednik Avenue to Beverly Boulevard	40,717	73.3	166	358	772
Metro	4th Street	Beverly Boulevard to Atlantic Boulevard	15,358	69.1	87	187	403
Metro	5th Street	Atlantic Boulevard to Hillview Avenue	19,262	70.1	101	218	469
Metro	Whittier Boulevard	Indiana Street to Ditman Avenue	25,424	68.1	75	162	348
Metro	Whittier Boulevard	Ditman Avenue to Rowan Avenue	11,103	64.5	43	93	201
Metro	Whittier Boulevard	Rowan Avenue to Sunol Drive	13,316	65.3	49	105	226
Metro	Whittier Boulevard	Sunol Drive to Eastern Avenue	22,310	67.6	69	148	319
Metro	Whittier Boulevard	Ford Boulevard to Arizona Avenue	23,731	67.8	72	154	333
Metro	Whittier Boulevard	Arizona Avenue to Atlantic Boulevard	15,870	66.1	55	118	255
Metro	Whittier Boulevard	Atlantic Boulevard to Belden Avenue	15,203	69.0	86	186	400
Metro	Whittier Boulevard	Belden Avenue to Gethart Avenue	15,820	69.2	89	191	411
Metro	Whittier Boulevard	Gethart Avenue to Hendricks Avenue	15,159	69.0	86	185	400

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Metro	Whittier Boulevard	Hendrick Avenue to Garfield Avenue	13,892	68.6	81	175	377
Metro	Olympic Boulevard	Indiana Street to Rowan Avenue	30,961	72.1	139	299	643
Metro	Olympic Boulevard	Rowan Avenue to Sunol Drive	18,704	69.9	99	213	460
Metro	Olympic Boulevard	Sunol Drive to Eastern Avenue	21,714	70.6	109	236	508
Metro	Olympic Boulevard	Ford Boulevard to Arizona Avenue	27,665	71.6	129	277	597
Metro	Olympic Boulevard	Arizona Avenue to Atlantic Boulevard	19,570	70.1	102	220	474
Metro	Olympic Boulevard	Atlantic Boulevard to Goodrich Boulevard	16,186	69.3	90	194	417
Metro	Olympic Boulevard	Goodrich Boulevard to Gethart Avenue	17,013	69.5	93	200	432
Metro	Olympic Boulevard	Gethart Avenue to Hendricks Avenue	17,013	69.5	93	200	432
Metro	Olympic Boulevard	Hendrick Avenue to Garfield Avenue	17,048	69.5	93	201	432
Santa Monica Mountains	Kanan Dume Road	Latigo Canyon Road to Pacific Coast Highway	9,621	67.1	64	137	295
Santa Monica Mountains	Kanan Dume Road	Mulholland Highway to Latigo Canyon Road	9,621	67.1	64	137	295
Santa Monica Mountains	Kanan Dume Road	Triunfo Canyon Road to Mulholland Highway	10,004	67.2	65	141	303
Santa Monica Mountains	Kanan Road	Sierra Creek Road to Triunfo Canyon Road	21,143	70.5	107	232	499
Santa Monica Mountains	Kanan Road	Troutdale Drive to Sierra Creek Road	20,840	70.4	106	229	494
Santa Monica Mountains	Kanan Road	Cornell Road to Troutdale Drive	13,901	68.6	81	175	377
Santa Monica Mountains	Malibu Canyon Road	Adamson Flat/Palm Canyon Lane to Piuma Road	19,587	70.1	102	220	474
Santa Monica Mountains	Las Virgenes Road	Piuma Road to Mulholland Highway	16,629	69.4	92	197	425
Santa Monica Mountains	Las Virgenes Road	Mulholland Highway to Lost Hills Road	19,523	70.1	102	220	473
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Pacific Coast Highway to Fernwood Pacific Drive	21,994	67.5	68	147	316
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Fernwood Pacific Drive to Old Topanga Canyon Road	24,860	68.0	74	159	343
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Old Topanga Canyon Road to Keller Road	12,562	65.1	47	101	218
Santa Monica Mountains	Mulholland Highway	Lechusa Road to Kanan Road	11,689	74.6	201	434	934

Table 5.12-19 Buildout Year Traffic Noise Levels and Contours

Planning Area	Roadway	Segment	Buildout Year				
					Distance to CNEL Contour (Feet from Centerline)		
			ADT Volumes	CNEL (dBA @ 100ft)	65 (dBA CNEL)	70 (dBA CNEL)	75 (dBA CNEL)
Santa Monica Mountains	Mulholland Highway	Kanan Road to Sierra Creek Road	1,998	66.9	62	134	288
Santa Monica Mountains	Mulholland Highway	Sierra Creek Road to Troutdale Drive	2,302	67.5	68	147	316
Santa Monica Mountains	Mulholland Highway	Troutdale Drive to Lake Vista Drive	9,241	73.5	172	371	799
Santa Monica Mountains	Mulholland Highway	Lake Vista Drive to Cornell Road	2,452	67.8	71	153	330
Santa Monica Mountains	Mulholland Highway	Cornell Road to Udell Road	11,843	74.6	203	437	942
Santa Monica Mountains	Mulholland Highway	Udell Road to Las Virgenes Road	11,843	74.6	203	437	942
Santa Monica Mountains	Mulholland Highway	Las Virgenes Road to Cold Canyon Road	7,507	72.6	150	323	695
Santa Monica Mountains	Mulholland Highway	Cold Canyon Road to Stunt Road	6,895	72.3	142	305	657

Note: Based on traffic data provided by Iteris, 2014. Calculations included in Appendix K.

Impact 5.12-4: The Proposed Project could create elevated levels of groundborne vibration and groundborne noise; both in the short-term (construction) and the long-term (operations). [Threshold N-2]

Impact Analysis:

Transportation-Related Vibration Impacts

Caltrans has studied the effects of propagation of vehicle vibration on sensitive land uses and notes that "heavy trucks, and quite frequently buses, generate the highest earthborn vibrations of normal traffic." Caltrans further notes that the highest traffic-generated vibrations are along freeways and state routes. Their study finds that "vibrations measured on freeway shoulders (five meters from the centerline of the nearest lane) have never exceeded 0.08 inches per second, with the worst combinations of heavy trucks. This level coincides with the maximum recommended safe level for ruins and ancient monuments (and historic buildings)." Typically, trucks do not generate high levels of vibration because they travel on rubber wheels and do not have vertical movement, which generates ground vibration. Thus, transportation routes[6] within Los Angeles County are not expected to generate excessive vibration.

Railroad Vibration Impacts

Vibration levels in Los Angeles County from trains are dependent on site-specific conditions such as geology and the condition of the railroad track and train wheels. Although it is not proposed at this time, if modifications of existing rail tracks are planned, vibration would be addressed in the environmental review for each individual rail improvement project.

As groundborne vibration is associated with any given train pass-by, but then subsides once the train has passed, any increases in number of train movements would only create additional occurrences of pass-by vibration, but not increased amplitudes of vibration levels. Thus, any potential increase in rail traffic would not increase the maximum vibration levels at nearby uses and such potential increases in the frequency of daily rail trips would not result in the generation of excessive vibration.

Implementation of the Proposed Project may add new sensitive uses in areas adjacent to existing and future railroad lines. These developments may result in placing residential or other sensitive uses near the railroad lines which could result in excessive groundborne vibration from train operations. The extent of the exposure to vibration depends on site-specific conditions, location of buildings, and size and design of the proposed buildings. Further specific, project-level review would be required as future developments are proposed. Potential exposure to groundborne vibration is significant.

Industrial Vibration Impacts

The use of heavy equipment associated with industrial operations can create elevated vibration levels in its immediate proximity. Soil conditions have a strong influence on the levels of groundborne vibration and, as a result, vibration typically dissipates rapidly with distance away from the source. Further specific, project-level

[6] Including freeways, highways, major and minor arterials, and most other heavily traveled local roadways.

review would be required as future developments are proposed. Potential exposure to groundborne vibration is significant.

Construction Vibration Impacts

Construction operations can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures, but can achieve the audible and perceptible ranges in buildings close to the construction site. Table 5.12-20 lists vibration levels for construction equipment.

Table 5.12-20 Vibration Levels for Construction Equipment

Equipment	Approximate Velocity Level at 25 Feet (VdB)	Approximate RMS[1] Velocity at 25 Feet (in/sec)
Pile Driver (impact) Upper Range	112	1.518
Pile Driver (impact) Lower Range	104	0.644
Pile Driver (sonic) Upper Range	105	0.734
Pile Driver (sonic) Lower Range	93	0.170
Large Bulldozer	87	0.089
Caisson Drilling	87	0.089
Jackhammer	79	0.035
Small Bulldozer	58	0.003
Loaded Trucks	86	0.076
FTA Criteria – Human Annoyance (Daytime)	78	—
FTA Criteria – Structural Damage	—	0.200

Source: FTA 2006
1 RMS velocity calculated from vibration level (VdB) using the reference of 1 microinch/second.

As shown in Table 5.12-20, vibration generated by construction equipment has the potential to be substantial, since it has the potential to exceed the FTA Criteria for human annoyance of 78 VdB and structural damage of 0.200 in/sec. However, groundborne vibration is almost never annoying to people who are outdoors, so it is usually evaluated in terms of indoor receivers (FTA 2006). Vibration impacts may occur from construction equipment associated with development in accordance with the Proposed Project. This would be a significant impact.

Impact 5.12-5: The proximity of future County developments to an airport or airstrip would not result in exposure of future resident and/or workers to airport-related noise. [Thresholds N-5 and N-6]

Impact Analysis: Buildout of the Proposed Project would involve new development and redevelopment on parcels within the plan areas of adopted Airport Land Use Compatibility Plans (ALUCPs), including the comprehensive Los Angeles County ALUCP and the ALUCP for the General William J. Fox Airfield. However, future development under the Proposed Project would be required to be consistent with any applicable ALUCP constraints pertaining to nearby developments. Furthermore, compliance with policies included in the Land Use Element and Noise Element of the Proposed General Plan Update related to land use compatibility would ensure that development would not conflict with airport land use plans. In particular, Policy LU 7.6 explicitly requires consistency that airport land use plans address conflicts between airport operations and surrounding land uses. Policy N 1.12 requires that land use decisions on parcels adjacent to transportation facilities, including those adjacent to airports, consider existing and future noise levels of the adjacent transportation facilities. Therefore, with the application of Policy LU 7.6 and Policy N 1.12 and review by the Los Angeles County ALUC, future development under the Proposed Project would be consistent with adopted ALUCPs and there would be no significant noise exposure impacts relative to airport or airstrip noise levels.

5.12.5 Cumulative Impacts

Cumulative projects in the Los Angeles County region would have the potential to result in a cumulative noise impact if they would, in combination with regional growth in the immediate area, create excessive community noise levels. The traffic noise levels predicted for buildout conditions and evaluated in Impacts 5.12-2 and 5.12-3 above are based on cumulative traffic conditions that take into account cumulative development in the region. Therefore, these impact discussions inherently incorporate the cumulative scenario by default. Further, cumulative projects under the buildout of the Proposed Project within Los Angeles County would be required to comply with the applicable land use compatibility classification or they would not be approved without a general plan amendment. Therefore, the Proposed Project would not contribute to a significant cumulative noise impact above and beyond what has already been identified above.

5.12.6 Existing Regulations and Standard Conditions

Federal

- FAR Part 150
- Public Law 96 193
- FAA Advisory Circular Number 150 5020 2, entitled "Noise Assessment Guidelines for New Helicopters"

State

- California Code of Regulations, Title 21, Part 1, Public Utilities Code (Regulation of Airports)

- California Code of Regulations, Title 24, Part 11, California Green Building Standards Code.
- California Office of Noise Control. Guidelines for the Preparation and Content of Noise Elements of the General Plan. February 1976.

County of Los Angeles

- Los Angeles County General Plan Noise Element
- Los Angeles County Code of Ordinances, Sections:
  - Title 26, Chapter 12, Section 1207, Sound Transmission
  - Title 12, Chapter 12.08
  - Title 12, Chapter 12.12
  - Title 13, Division 4, Chapter 13.45

5.12.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.12-5 (airport-related noise).

Without mitigation, the following impacts would be **significant** or **potentially significant**:

- Impact 5.12-1 Construction activities associated with any individual development may occur near noise-sensitive receptors and, depending on the project type noise, disturbances may occur for prolonged periods of time.
- Impact 5.12-2 Buildout of the proposed land use plan would result in an increase in traffic on local roadways in Los Angeles County, which would substantially increase the existing ambient noise environment.
- Impact 5.12-3 New noise-sensitive land uses associated with Proposed Project could be exposed to elevated noise levels from mobile sources along roadways.
- Impact 5.12-4 Vibration impacts may occur from construction equipment associated with development in accordance with the Proposed Project.

5.12.8 Mitigation Measures

Impact 5.12-1

N-1 Construction activities associated with new development that occurs near sensitive receptors shall be evaluated for potential noise impacts. Mitigation measures such as installation of temporary sound barriers for construction activities that occur adjacent to occupied noise-sensitive structures, equipping construction equipment with mufflers, and reducing non-

essential idling of construction equipment to no more than five minutes shall be incorporated into the construction operations to reduce construction-related noise to the extent feasible.

Impact 5.12-2

Implementation of the Proposed Project policies would reduce traffic noise impacts to existing noise sensitive uses to the extent feasible. These policies include N 1.1, N 1.4, N 1.6 and N 1.7. However, no additional feasible mitigation measures are available to further reduce impacts. Residential land uses comprise the majority of existing sensitive uses within Los Angeles County that would be impacted by the increase in traffic generated noise levels. Construction of sound barriers would be inappropriate for residential land uses that face the roadway as it would create aesthetic and access concerns. Furthermore, for individual development projects, the cost to mitigate off-site traffic noise impacts to existing uses (such as through the construction of sound walls and/or berms) may often be out of proportion with the level of impact.

Impact 5.12-3

N-2 Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour (i.e., areas in or above 65 dBA CNEL) along major roadways and freeways the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features (e.g., setbacks, berms, or sound walls), and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling) to ensure compliance with the County's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Title 24 of the California Code of Regulations).

Impact 5.12-4

N-3 New development that occurs within 200 feet of a railroad track (according to the FTA's vibration screening distances) shall be evaluated for potential vibration impacts. The project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features and/or required building construction improvements to ensure that vibration impacts would remain below acceptable levels of 0.08 RMS in/sec for residential uses.

N-4 Individual projects that use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors shall be evaluated for potential vibration impacts. If construction-related vibration is determined to be perceptible at vibration-sensitive uses (i.e., exceed the Federal Transit Administrations vibration annoyance criterion of 78 VdB at sensitive receptor locations), additional requirements, such as use of less-vibration-intensive equipment or construction techniques, shall be implemented during construction (e.g., drilled piles to eliminate use of vibration-intensive pile driver).

N-5 Prior to the issuance of building permits, proposed heavy industrial projects are required to provide evidence that vibration due to the operation of machinery would not adversely affect

nearby vibration sensitive uses such as commercial, hotel, institutional, and residential uses. The project property owner/developers shall retain an acoustical engineer to conduct a vibration analysis and identify, where appropriate, project design features and/or required building/ equipment improvements to ensure that vibration impacts would remain below acceptable levels of 78 VdB at sensitive receptor locations. This vibration level is considered to be significant at vibration-sensitive uses. This can be accomplished with vibration-reducing measures such as, but not limited to, equipment placement, equipment selection, vibration dampers, and/or changes to operation modes (speed, power, frequency).

5.12.9 Level of Significance After Mitigation

Impact 5.12-1

Mitigation Measure N-1 (construction-related noise) would reduce impacts associated with construction activities to the extent feasible. However, due to the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities, Impact 5.12-1 (construction noise) would be significant and unavoidable.

Impact 5.12-2

No feasible mitigation measures are available to further reduce traffic noise impacts to existing noise sensitive receptors. Therefore, Impact 5.12-2 would remain significant and unavoidable.

Impact 5.12-3

Implementation of the noise-related policies contained within the Proposed General Plan Update in addition to Mitigation Measure N-2 would reduce exterior noise compatibility impacts. While interior noise levels are required to achieve the 45 dBA CNEL interior noise limit of Title 24 and Title 25, exterior noise levels may still exceed the County noise land use compatibility criteria, despite exterior noise attenuation (i.e., walls and/or berms). Therefore, impacts related to exterior noise compatibility would remain significant and unavoidable.

Impact 5.12-4

Mitigation Measure N-3 (train-related vibration) would reduce potential train-related vibration impacts to new uses below the thresholds (i.e., below 0.08 RMS in/sec for residential uses). Mitigation Measure N-4 (construction-related vibration) would reduce vibration impacts associated with construction activities to the extent feasible. Mitigation Measure N-5 (industrial-related vibration) would reduce potential vibration impacts from industrial uses to less-than-significant levels. However, due to the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities, Impact 5.12–4 (vibration) would remain significant.

Summary

Despite the application of mitigation measures, Impacts 5.12-1, 5.12-2, 5.12-3, and 5.12-4 were determined to still result in Significant and Unavoidable noise impacts.

5.12.10 References

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5.13 POPULATION AND HOUSING

This section examines the existing population, housing, and employment conditions in the unincorporated areas of Los Angeles County (Project Area) and Los Angeles County as a whole. The following section assesses the differences between forecasts based on the Existing General Plan, the Proposed General Plan Update, and regional growth projections. According to Section 15382 of the CEQA Guidelines, "An economic or social change by itself shall not be considered a significant impact on the environment." Socioeconomic characteristics should be considered in an EIR only to the extent that they create adverse impacts on the physical environment.

The Project Area demographics are examined in the context of comparing existing and projected data for the Project Area and Los Angeles County as a whole. The discussion of population, housing, and employment provided below is based on the Existing General Plan, the Proposed General Plan Update, Los Angeles County Housing Element 2014–2021, Southern California Association of Governments (SCAG) 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), California Department of Finance (DOF) estimates, and existing conditions (2013). Historical population, housing, and employment data for the Project Area and Los Angeles County as a whole were provided by the DOF. The buildout of the Proposed Project is at an undefined time, but is expected to occur long after the SCAG 2012–2035 RTP/SCS horizon. The Project Area buildout projections were provided by County of Los Angeles (County) staff and based on the proposed land uses included in the Proposed Project.

5.13.1 Environmental Setting

Population

The County estimates that the 2013 population in the Project Area is 1,066,415 persons, representing approximately 10.9 percent of Los Angeles County's total population. According to the DOF, there were 1,057,194 residents in the Project Area in 2010, representing 10.8 percent of Los Angeles County's total population. Based on DOF estimates, this is a population increase of 7.2 percent from 2000 to 2010. This period significantly outpaced growth in the previous decade—only 1.6 percent growth between 1990 and 2000. The rapid increase in residents between 2000 and 2010 is the result of the housing construction boom and increasing household sizes experienced throughout Southern California in the early 2000s. Since the softening of the housing market, beginning in 2006, the pace of population growth and residential development has slowed. Table 5.13-1 provides population figures for unincorporated, incorporated, and total Los Angeles County in 2000, 2010, and 2013, and SCAG projections for 2020 and 2035.

Table 5.13-1 Population and Housing Units 2000–2035

Jurisdiction	2000[1]	2010[1]	2000–2010 Change	Baseline 2013[2]	2020[3]	2010–2020 Change	2035[3]	2013–2035 Change
Project Area								
Population	986,050	1,057,194	7.2%	1,066,415	1,159,100	9.6%	1,399,500	31.2%
Housing Units	293,304	316,888	8.0%	300,478	336,100	11.6%	405,500	35.0%
Incorporated Los Angeles County								
Population	8,533,280	8,761,411	2.7%	8,917,701 [1]	9,244,900	5.5%	9,953,500	11.6%
Housing Units	2,977,602	3,126,199	5.0%	3,153,787 [1]	3,178,900	1.7%	3,446,500	9.3%
Los Angeles County as a Whole								
Population	9,519,330	9,818,605	3.1%	9,958,091 [1]	10,404,000	6.0%	11,353,000	14.0%
Housing Units	3,270,906	3,443,087	5.3%	3,463,382 [1]	3,513,000	2.0%	3,852,000	11.2%

Note: The numbers shown here for 2035 are SCAG projections. The Los Angeles County General Plan will not be built out within the SCAG RTP/SCS horizon of 2035.
[1] California Department of Finance.
[2] County of Los Angeles 2013.
[3] SCAG 2012–2035 RTP/SCS.

Housing

According to the County, there were 300,478 housing units within the Project Area in 2013, comprising approximately 8.7 percent of all housing units within Los Angeles County. The DOF estimates that there were 316,888 units in 2010. The discrepancy in numbers of housing units reflects differences in data collection and analysis, not demolition permits. According to the DOF, the majority of homes in the Project Area are single-family detached units; however, there are housing opportunities in mobile homes, apartments of varying scales, and single-family attached units, such as townhomes. The high percentage of single-family detached and attached housing units reflects the current suburban nature of several unincorporated areas. Table 5.13-2 shows the mixture of housing types in 2013 as estimated by the DOF.

Table 5.13-2 Composition of the Housing Stock by Percentage of Unit Type 2013

Jurisdiction	Single-Family Detached	Single-Family Attached	Multifamily	Mobile Homes
Project Area	71.0%	5.9%	19.7%	3.4%
Incorporated Cities	47.6%	6.7%	44.2%	1.5%
Los Angeles County	49.7%	6.6%	42.0%	1.7%

Source: California Department of Finance 2014.

Employment

In 2013, the County estimated that there were 252,660 jobs in the Project Area. Based on California Employment Development Department estimates for 2013, the jobs in the Project Area represented approximately 5.6 percent of total Los Angeles County employment (4,506,400 jobs). SCAG projects total Los Angeles County employment to grow to 4,827,000 by 2035, which is an increase of approximately 7.1 percent. Of these jobs, SCAG estimates that 318,100 (6.6 percent of total) will be in the Project Area.

Jobs-Housing Balance

Jobs-housing balance is achieved by increasing opportunities for people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. SCAG uses the jobs-housing balance as a general tool for analyzing where people work, where they live, and how efficiently they can travel between the two. In the Project Area, the existing jobs-housing balance in 2013 averages 0.84, which is considered housing-rich. Individual Planning Areas have a jobs-housing balance that ranges between 0.36 and 19.77 (see Table 5.13-3, below). One of the most cited studies of jobs-housing balance recommends 1.3 to 1.7 as the range for an ideal jobs-housing balance (Ewing 1996).

Table 5.13-3 Buildout Projections by Planning Area

	Existing (2013)				General Plan Buildout (Post 2035)			
Planning Area	Units	Population	Employment	Jobs/Housing Ratio	Units	Population	Employment	Jobs/Housing Ratio
Antelope Valley	24,739	93,490	31,838	1.29	278,158	1,070,571	51,219	0.18
Coastal Islands	44	158	870	19.77	21	0	570	27.14
East San Gabriel Valley	63,825	239,218	29,205	0.46	70,097	255,952	53,231	0.76
Gateway	28,743	104,061	30,328	1.06	34,446	120,358	36,820	1.07
Metro	73,068	235,990	59,359	0.81	92,158	301,073	100,906	1.09
San Fernando Valley	9,039	32,488	20,314	2.25	13,464	47,060	24,741	1.84
Santa Clarita Valley	28,501	104,116	21,470	0.75	77,155	237,638	105,881	1.37
Santa Monica Mountains	5,703	21,757	14,326	2.51	6,788	26,128	28,707	4.23
South Bay	19,952	69,474	17,984	0.90	25,929	86,392	24,530	0.94
West San Gabriel Valley	34,765	125,736	12,713	0.36	43,877	156,685	26,539	0.60
Westside	12,099	39,926	14,252	1.18	17,316	55,033	14,592	0.84
Total	**300,478**	**1,066,414**	**252,659**	**0.84**	**659,409**	**2,356,890**	**467,736**	**0.71**
				Increase over Existing	**358,931**	**1,290,476**	**215,077**	

Source: County of Los Angeles Department of Regional Planning, 2014.

Related Planning Programs

Los Angeles County Housing Element

The Housing Element is one of seven mandatory elements of the County's General Plan. The Housing Element provides an overview of demographics, household, housing stock, economic, and regulatory factors affecting housing development and affordability within the Project Area. The Housing Element sets forth a series of goals and implementing policies to address a variety of housing issues, including identifying vacant and underutilized sites to accommodate the County's Regional Housing Needs Allocation (RHNA). The RHNA is a state-mandated number of units by income category for which a jurisdiction must identify adequate development potential. The Los Angeles County Housing Element, 2014–2021, identifies adequate sites. It was adopted by the County Board of Supervisors and certified by the California Department of Housing and Community Development on May 1, 2014. The Housing Element will guide housing development through 2021. This time frame applies to all housing elements in the SCAG region.

Regional Growth Management Policies: SCAG

SCAG is recognized by the state and federal governments as the regional planning agency for the six-county south coast region that includes Los Angeles County. In 2004, SCAG adopted a voluntary regional growth strategy known as the Compass Blueprint. SCAG's Compass Blueprint is an advisory or voluntary plan that promotes mixed-use development, better access to jobs, conservation of open space, public/private partnerships, and user-fee infrastructure financing, improving the capacity and efficiency of movement of goods, reducing vehicle miles traveled (VMT), improving air quality, improving housing availability and affordability, renovating urban cores, and creating over 500,000 high–paying jobs (SCAG 2007).

In 2012, the Regional Council of SCAG adopted the 2012–2035 RTP/SCS to increase mobility for the region's residents and visitors (SCAG 2012). Furthermore, the 2012–2035 RTP/SCS commits to reducing emissions from transportation sources to comply with SB 375, improving public health, and meeting the National Ambient Air Quality Standards. The SCS envisions combining transportation and land use elements in order to achieve emissions reduction targets set by the California Air Resources Board (CARB) (SCAG 2014).

5.13.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

P-1 Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

P-2 Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere or displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

5.13.3 Relevant General Plan Goals and Policies

Following is a list of the policies of the General Plan Update that are intended to reduce potentially significant adverse effects concerning population and housing.

Housing Element

The following Los Angeles County General Plan Housing Element policies and implementation programs are relevant to potential population and housing impacts.

- **Policy 1.1:** Make available through land use planning and zoning an adequate inventory of vacant and underutilized sites to accommodate the County's Regional Housing Needs Assessment (RHNA) allocation.
- **Policy 2.2:** Encourage mixed use developments along major commercial and transportation corridors.
- **Policy 3.1:** Promote mixed income neighborhoods and a diversity of housing types throughout the unincorporated areas to increase housing choices for all economic segments of the population.
- **Policy 6.2:** Allocate federal and state resources toward the preservation of housing, particularly for low income households, near employment and transit.

Land Use Element

- **Policy LU 5.1:** Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.
- **Policy LU 5.3:** Support a mix of land uses that promote bicycling and walking, and reduce VMTs.
- **Policy LU 5.9:** Preserve key industrially designated land for intensive, employment-based uses.
- **Policy LU 5.10:** Encourage employment opportunities and housing to be developed in proximity to one another.

5.13.4 Environmental Impacts

The following impact analysis addresses thresholds according to Appendix G of the CEQA Guidelines of significance. The applicable thresholds are identified in brackets after the impact statement.

Buildout projections for the Proposed Project, broken down by Planning Area, are shown in previous Table 3-6, *Proposed General Plan Buildout Projections*. The Proposed Project buildout would allow for: 659,409 residential dwelling units; 92 million square feet (2,129 acres) of commercial use; 102 million square feet (5,210 acres) of industrial use; 503 million square feet (80,896 acres) of public/semi-public use; and

714,704 acres of public/open space use. Buildout projections for each Planning Area are shown in Table 5.13-3.

Impact 5.13-1: The Proposed Project would directly result in population growth in the Project Area. [Threshold P-1]

Impact Analysis: The estimated buildout population of the Proposed Project is 2,356,890 residents, which is expected to occur sometime after 2035. SCAG projects the population in the Project Area to increase to 1,399,500 by 2035. The mixture of land uses and densities prescribed in the Proposed Project can accommodate the growth projected by SCAG by 2035; therefore, the project is consistent with SCAG's RTP/SCS.

The Proposed Project accommodates up to 659,409 housing units, and although buildout is not expected to occur by 2035, the opportunities for housing development provided in the Proposed Project are consistent with SCAG growth projections for 405,500 units by 2035. The housing and population growth allowed under the Proposed Project is consistent with SCAG projections and do not constitute a significant adverse environmental impact.

The Proposed Project buildout accommodates up to 467,736 jobs at full buildout. This growth is expected to occur over a long period of time, beyond the 2035 timeframe that is used by SCAG for planning purposes. However, the amount of growth allowed is consistent with SCAG's projection of 318,100 jobs by 2035.

As noted above, a jobs-housing ratio ranging between 1.3 to 1.7 is considered ideal (Ewing 1996). In reviewing Table 5.13-3, the majority of the Planning Areas become more balanced with implementation of the Proposed Project. Four Planning Areas, including the Antelope Valley, Coastal Islands, Santa Monica Mountains, and Westside Planning Areas, become less balanced. The Coastal Islands and Santa Monica Mountains Planning Areas are predominantly open space and not intended as primary growth areas. Therefore, small changes to jobs-housing balance in these areas are not considered significant. The Westside Planning Area becomes more housing-rich, but in terms of the surrounding cities, this is not considered significant because the Westside Cities Council of Governments (COG) subregion (which corresponds with the Westside Planning Area) as a whole is considered jobs-rich. The jobs-housing ratio for the Westside Cities COG subregion in 2010 was 2.12, which worsens to 2.24 in 2035 (SCAG 2012). As a result, implementation of the Proposed Project would improve the jobs-housing balance for the jobs-rich Westside Cities COG subregion by adding additional housing opportunities.

As shown in Table 5.13-3, the Antelope Valley Planning Area goes from an existing jobs-housing ratio of 1.29 to 0.18 at buildout, which is considered housing-rich. This would be considered a significant impact without mitigation. It should be noted that the County is currently updating the Antelope Valley Area Plan, which governs land use in the Antelope Valley Planning Area. Mitigation has been identified below to reduce this jobs-housing imbalance through this planning effort.

Housing Element

As described above, the County's adopted Housing Element includes a number of policies to promote the development of housing for all income levels within the Project Area. Programs to implement Policy 1.1 include facilitating the development of a variety of housing types by providing a supply of land that is adequate to accommodate the RHNA, maintaining an inventory of sites, and making it available to developers. The Housing Element identifies development potential for 21,308 new units in the Newhall Ranch Specific Plan, 1,711 new units in the Marina del Rey Specific Plan, 3,623 new units in the Northlake Specific Plan, and 21,901 new units on vacant and underutilized sites that are not within a specific plan. The Housing Element includes enough adequate sites for 48,543 new homes, well above the RHNA of 30,145.

Programs to implement Policy 2.2 include promoting the County Density Bonus Program to developers through the dissemination of brochures, presentations, and web postings on the Department of Regional Planning website, and by offering technical assistance to the public. The County will also assist in the development of extremely low and very low income rental housing units in unincorporated mixed use areas through gap financing, a revolving loan fund, and technical assistance. Another program to encourage mixed use development is developing tools to facilitate the use of applicable exemptions and streamlining provisions for infill and affordable housing under CEQA.

Programs to implement Policy 3.1 include promoting the County Density Bonus Program, promoting awareness of the County's Infill Sites Program as funds become available (periodic funding up to $500,000 may be provided by the Community Development Commission to assist with pre-development, construction, and permanent financing), advertising the Second Unit Ordinance, establishing a Small Lot Subdivisions Ordinance, and using applicable exemptions and streamlining provisions under CEQA. These programs, along with the variety of densities shown in the Land Use Element, provide the potential for a great range of housing types, sizes, tenure, and affordability.

Programs to implement Policy 6.2 include the Single Family Rehabilitation Loan Program (up to $25,000), Single Family Home Improvement Program (up to $10,000), Residential Sound Insulation Program, and Handyworker Program grants for low income residents.

Through these programs, the County is improving the connection between employment centers and lower income housing while improving access to transit.

Impact 5.13-2: Project implementation would not result in the displacement of people and/or housing. [Threshold P-2]

Impact Analysis: The Project Area is developed with a variety of land uses including residential, commercial, industrial, and open space. However, the Proposed Project would allow existing uses to continue even where new zoning and land use designations are proposed under the Proposed Project. None of the existing uses would be forced to be removed or relocated as a result of the project implementation.

Compliance with the Housing Element will facilitate the development of a variety of housing types by providing a supply of land that is adequate to accommodate the RHNA and maintain an inventory of

housing opportunities sites. The Housing Element identifies development potential for 21,308 new units in the Newhall Ranch Specific Plan, 1,711 new units in the Marina del Rey Specific Plan, 3,623 new units in the Northlake Specific Plan, and 21,901 new units on vacant and underutilized sites that are not within a specific plan. The Housing Element includes enough adequate sites for 48,543 new homes, well above the RHNA of 30,145. Therefore, no significant impact is anticipated.

5.13.5 Cumulative Impacts

The cumulative projects in the Los Angeles County region would have the potential to result in a significant cumulative impact if they would, in combination, directly or indirectly induce substantial population growth. The planning documents, such as general plans prepared by cities, would be subject to regional plans such as SCAG's Regional Comprehensive Plan (RCP) and the RTP/SCS, similar to the Proposed Project. The general plans of adjacent jurisdictions have been prepared to be consistent with the population forecast of the regional planning documents. Thus, these projects would accommodate anticipated future growth, not induce new growth, similar to the Proposed Project. Cumulative growth projections for cities and the Project Area are shown on Table 5.13-4.

Table 5.13-4 Cumulative Growth Projections 2013, 2035, and Post–2035

	Baseline 2013	2035[3]	2013–2035 Change	Post–2035[2]
Project Area (Unincorporated County)				
Housing Units	300,478[2]	405,500	35.0%	668,910
Population	1,066,415[2]	1,399,500	31.2%	2,383,372
Employment	252,660[2]	318,100	25.9%	477,860
Incorporated Los Angeles County				
Housing Units	3,153,787[1]	3,446,500	9.3%	N/A
Population	8,917,701[1]	9,953,500	11.6%	N/A
Employment	4,212,240[1]	4,508,900	7.0%	N/A
Los Angeles County as a Whole				
Housing Units	3,463,382[1]	3,852,000	11.2%	N/A
Population	9,958,091[1]	11,353,000	14.0%	N/A
Employment	4,464,900[1]	4,827,000	8.1%	N/A

Notes:
The numbers shown here for 2035 are SCAG projections. The Los Angeles County General Plan will not be built out within the SCAG RTP/SCS horizon of 2035.
N/A = Data not available.
[1] California Department of Finance.
[2] County of Los Angeles 2013.
[3] SCAG 2012–2035 RTP/SCS.

As shown in Table 5.13-4, the Proposed Project would be adequate to accommodate SCAG's planned growth through 2035; therefore, it is unlikely that the Proposed Project would induce population growth in surrounding jurisdictions. Since cumulative projects would be required to comply with applicable land use plans governing regional growth, a significant cumulative impact would not occur. Therefore, the Proposed Project, in combination with other cumulative growth in Los Angeles County, would not contribute to a significant cumulative population and housing impact.

5.13.6 Existing Regulations and Standard Conditions

Housing Elements are subject to the rules and regulations prescribed under the following California Government Code Sections:

- Housing Element Statutes §§ 65580–65589.9, 65751–65761 (including the Housing Accountability Act), and 65589.5–65589.6
- Prohibition on discrimination against affordable housing: § 65008
- Statute of limitations: § 65009
- Regional transportation plans: §§ 65080–65086.5
- No net loss statute: § 65863
- Least cost zoning statute: §§ 65913–65913.2
- Density bonus law: §§ 65915–65918

5.13.7 Level of Significance Before Mitigation

Without mitigation, the following impacts would be less than significant: 5.13-2.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.13-1** As shown in Table 5.13-3, the Antelope Valley Planning Area goes from an existing jobs-housing ratio of 1.29 to 0.18 at buildout, which is considered housing-rich. This would be considered a significant impact without mitigation.

5.13.8 Mitigation Measures

PH-1 Prior to adoption of the Antelope Valley Area Plan Update, the County shall identify land use changes to achieve a minimum jobs-housing ratio of 1.3 for the Antelope Valley Planning Area.

5.13.9 Level of Significance After Mitigation

The mitigation measure identified above would reduce potential impacts to population and housing to a level that is less than significant.

5.13.10 References

California, State of. 2013. Employment Development Department. Historical Data for Employment in Los Angeles County, 2013. Sacramento, California.

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———. 2013b. General Plan Update Buildout Projections. Los Angeles County, California.

Ewing, Reid. 1996. *Best Development Practices: Doing the Right Thing and Making Money at the Same Time*. Chicago: Planners Press.

Southern California Association of Governments (SCAG). 2012, April. 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). http://rtpscs.scag.ca.gov/Pages/default.aspx.

5.14 PUBLIC SERVICES

This section addresses public services including: Fire Protection and Emergency Services, Law Enforcement, School Services, and Library Services. Park Services are addressed in Section 5.15, *Recreation*. Public and private utilities and service systems, including water, wastewater, and solid waste services and systems, are addressed in Section 5.17.

5.14.1 Fire Protection and Emergency Services

5.14.1.1 ENVIRONMENTAL SETTING

The Los Angeles County Fire Department (LACoFD) serves the unincorporated areas of Los Angeles County (Project Area) as well as 58 cities that choose to have the County of Los Angeles (County) provide fire and EMS services, including the City of La Habra, which is located in Orange County, as shown on Figure 5.14-1. The LACoFD provides fire suppression and emergency medical services to over four million residents within Los Angeles County. The LACoFD operates 170 fire stations within nine divisions. The LACoFD had a total of 4,713 personnel in 2013 (LACoFD 2013). In addition to fire suppression, the LACoFD also provides fire prevention services, emergency medical services (EMS), hazardous materials services, and urban search and rescue (USAR) services.

Under a mutual aid pact covering federal forestlands, responsibility for non-structure fires within the National Forest belong to the United States Forest Service (USFS), while LACoFD has the primary mission of suppressing structure fires. Although these responsibilities are stated in the mutual aid pact, each agency fights both wild and structure fires in actual fire emergencies. In addition, an automatic aid agreement, which is an agreement that allows the closest municipality to provide an initial response to fires that may occur in a part of another municipality, exists between USFS and LACoFD. Firefighting, however, is not the primary function of USFS, and the agency is on duty at only certain times of the day. As a result, LACoFD would be called upon to provide fire service if fires involving structures or brushlands near the National Forest boundary occur after USFS's hours of service.

The LACoFD has several standards to maintain adequate fire protection within their service area. The current standards for response times are:

- 5 minutes or less for response times for urban areas
- 8 minutes or less for suburban areas
- 12 minutes or less for rural areas

Wildland Fire Hazards

LACoFD has designated lands in Los Angeles County with regard to their potential for wildland fires. These designations, determined by the County Forester, are based on an area's accessibility, amount and type of vegetative cover, water availability, and topography. LACoFD uses three wildland fire hazard designations: Moderate Fire Hazard, High Fire Hazard, and Very High Fire Hazard. Areas in Los Angeles County that are

not designated within a fire hazard zone are not considered to be subject to wildland fire hazards. Areas in Los Angeles County that are designated within a fire hazard zone are shown on Figure 5.14-2, *Fire Hazard Severity Zones Policy Map*.

Highly combustible natural vegetation types include chaparral, coastal sage, riparian, and oak woodlands. These plant communities include plant species such as ceanothus, chamise, sumac, sages, and wildland grasses. These plant species, which have adapted to periodic wildland fire conditions, maintain a healthy ecosystem in the region. These plant communities pose the greatest fire threat to expanding urban development due to their high combustibility and their dense biomass. However, in the area where these plant communities border urban development, the frequency of fire events may be diminished as a result of proactive fire prevention and fire suppression measures. Fire prevention measures include prescribed burns, vegetation thinning/removal, and creation of fuel modification zones, whereas fire suppression measures involve controlling fires once they have started through the use of fuel breaks, fire fighting equipment, water drops, and other techniques.

Regulatory Framework

State

California Health and Safety Code (Section 13000 et seq.)

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and child care facility standards, and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all State-owned buildings, State-occupied buildings, and State institutions throughout California.

California Code of Regulations (CCR) Title 24, Part 2 and Part 9

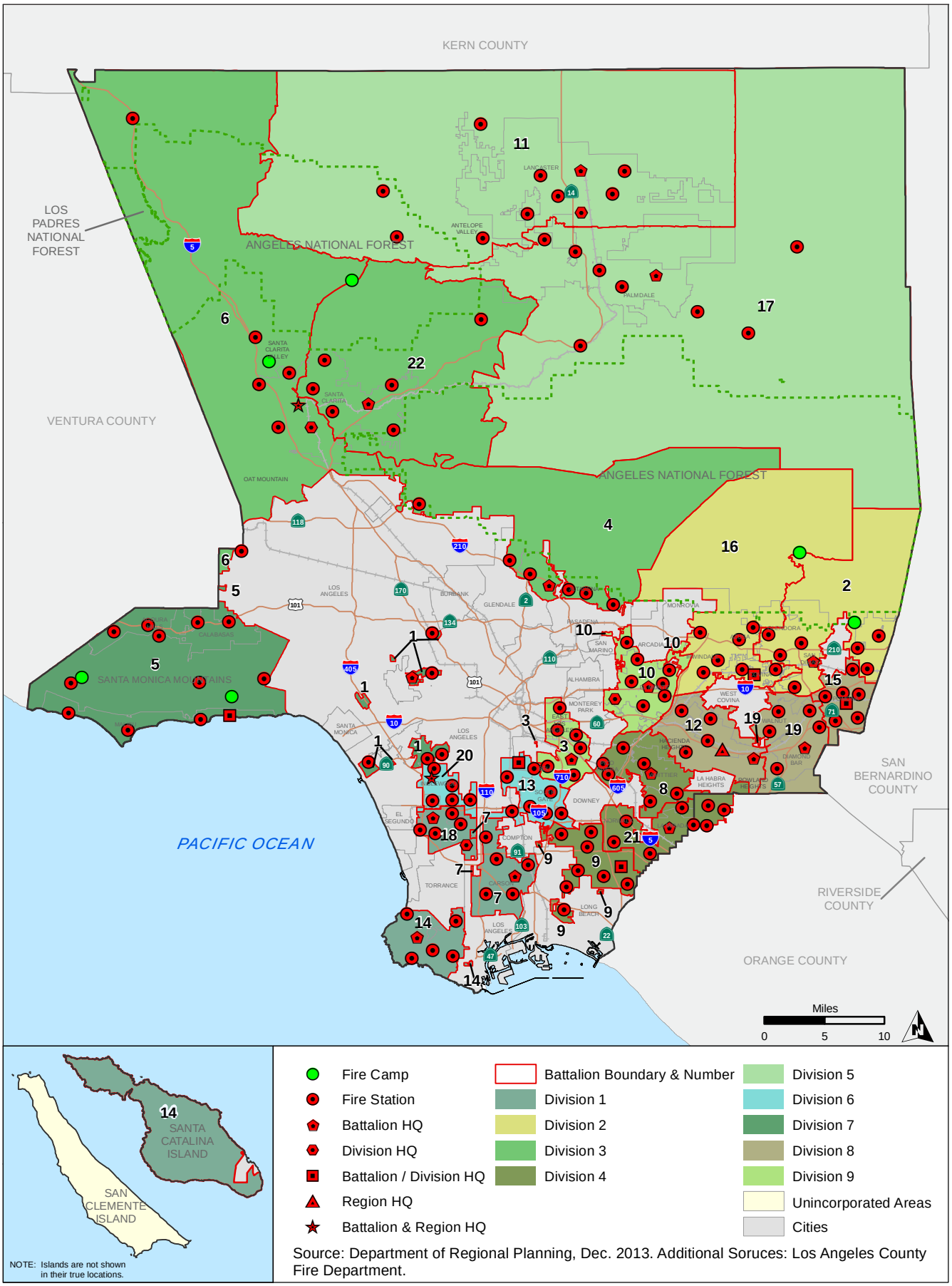
Part 2 of Title 24 of the CCR refers to the California Building Code, which contains complete regulations and general construction building standards of state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains fire-safety-related building standards referenced in other parts of Title 24. This Code is preassembled with the 2000 Uniform Fire Code of the Western Fire Chiefs Association. This Code was revised in January 2008 with a change in the base model/consensus code from the Uniform Fire Code series to the International Fire Code.

California Public Resources Code (PRC) Sections 4201-4204

This section of the PRC was amended in 1982 to require the California Department of Forestry to classify all State Responsibility Areas (SRAs) into fire hazard severity zones. The purpose of this code is to provide classification of lands within SRAs in accordance with the severity of fire hazard present for the purpose of identifying measures to be used to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

FIRE DEPARTMENT BATTALIONS AND STATIONS

FIGURE 5.14-1



Source: Department of Regional Planning, Dec. 2013. Additional Soruces: Los Angeles County Fire Department.

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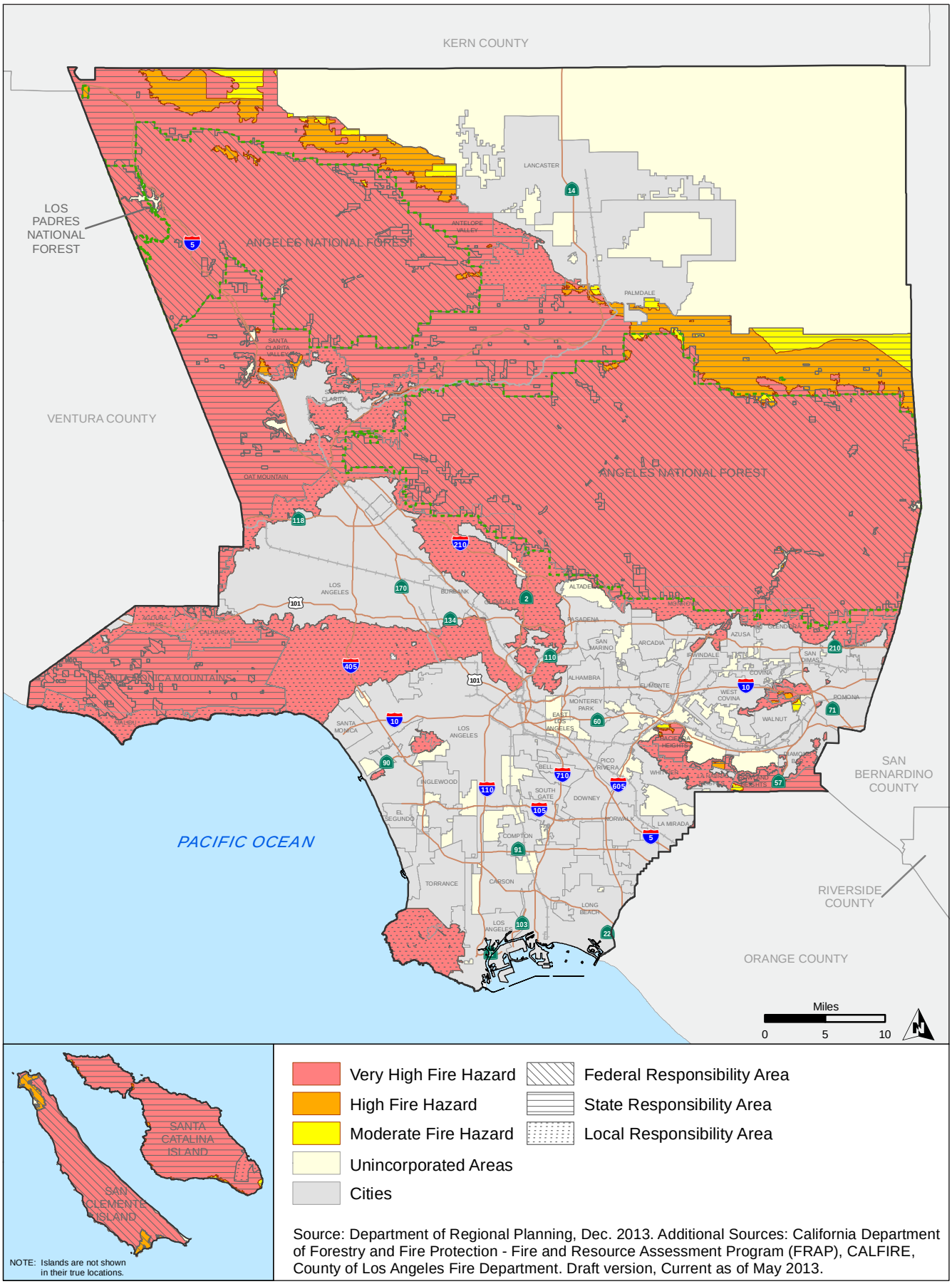
FIRE HAZARD SEVERITY ZONES POLICY MAP

FIGURE 5.14-2



Source: Department of Regional Planning, Dec. 2013. Additional Sources: California Department of Forestry and Fire Protection - Fire and Resource Assessment Program (FRAP), CALFIRE, County of Los Angeles Fire Department. Draft version, Current as of May 2013.

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State Responsibility Area (SRA) Fire Safe Regulations (Title 14 Natural Resources, Department of Forestry and Fire Protection)

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRAs. Title 14 mandates that the future design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures.

Local

LACoFD

County programs for wildland fire prevention include the adoption of the State Fire Code for regulations and standards to be applied toward new development in "hazardous fire areas." Fire prevention items addressed in the County Fire Code include provision of fire apparatus access roads, adequate road widths, all-weather access requirement, fire flow requirement, fire hydrant spacing, and clearance of brush around structures located in hillside areas that are considered primary wildland fire risk areas.

For areas located within the Very High Fire Hazard Severity Zone (VHFHSZ), County Fire Code Sections 325.2.1.2, 328.10, 1117.2.1, and 4908.1 require completion and approval of a land development plan and fuel modification plan. Appendices B and C of the County Fire Code specify that for single-family dwellings located on a lot of one acre or more in a VHFHSZ, the minimum fire flow must be 1,000 gallons per minute for a duration of two hours, and hydrants must be spaced not more than 600 feet apart and serviced from a public water system.

The LACoFD Fuel Modification Unit provides guidelines the VHFHSZ in order to create a defensible space for effective fire protection in newly constructed and/or remodeled homes. Fuel modification zones in the Project Area are strategically placed strips of land where combustible native or ornamental vegetation has been modified or replaced with drought-tolerant, low-fuel-volume plants, creating a buffer to areas of natural vegetation surrounding the perimeter of a single-family dwelling. A fuel modification plan identifies specific zones within a property which are subject to fuel modification. Plans vary in complexity, and fuel modification distances are estimated based on the fire history, the amount and type of vegetation, the arrangement of the fuels, topography, local weather patterns, and construction, design and placement of structures. The plan must also include an irrigation plan, a landscape plan, zone delineation for setbacks, irrigation, and thinning, and the identification of responsible parties for the plan's installation and maintenance.

Developer Fees

In response to increasing demands for new facilities, equipment, and staffing created by new development, the County has implemented a Developer Fee Program to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment in the high-growth areas of Los Angeles County. The developer fees, which are currently $0.8990 per square foot of new development in the Malibu/Santa Monica Mountains Area, $1.0293 per square foot of new development in the Santa Clarita Valley Area, and $0.8426 in the Antelope Valley Area (all land uses), are paid to the Consolidated Fire

Protection District of Los Angeles County (Fire District). This Fire District developer fee is adjusted annually and is charged on all new development, including residential buildings, new detached residential accessory structures, new commercial buildings, and new additions over 2,000 square feet prior to building permit issuance.

5.14.1.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

FP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

5.14.1.3 RELEVANT GENERAL PLAN GOALS AND POLICIES

Following is a list of the goals and policies of the Proposed Project that are intended to reduce potentially significant adverse effects concerning public services and facilities.

Public Services and Facilities Element

Goal PS/F 1: A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.

- **Policy PS/F 1.1:** Discourage development in areas without adequate public services and facilities.
- **Policy PS/F 1.2:** Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.
- **Policy PS/F 1.3:** Ensure coordinated service provision through collaboration between County departments and service providers.
- **Policy PS/F 1.4:** Ensure the adequate maintenance of infrastructure.
- **Policy PS/F 1.5:** Focus infrastructure investment, maintenance and expansion efforts where the General Plan encourages development.
- **Policy PS/F 1.6:** Support multi-faceted public facility expansion efforts, such as substations, mobile units, and satellite offices.
- **Policy PS/F 1.7:** Consider resource preservation in the planning of public facilities.

Safety Element

Goal S 3: An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to fire hazards.

- **Policy S 3.1:** Discourage high density and intensity development in VHFHSZs.
- **Policy S 3.2:** Consider climate change implications in planning for FHSZs.
- **Policy S 3.3:** Ensure that the mitigation of fire related property damage and loss in FHSZs limits impacts to biological and other resources.
- **Policy S 3.4:** Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire resistant building materials and vegetation.
- **Policy S 3.5:** Encourage the use of fire resistant vegetation that is compatible with the area's natural vegetative habitats in fuel modification activities.
- **Policy S 3.6:** Ensure adequate infrastructure, including ingress, egress, and peak load water supply availability for all projects located in FHSZs.
- **Policy S 3.7:** Consider siting and design for developments located within FHSZs, particularly in areas located near ridgelines and on hilltops, to reduce the wildfire risk.
- **Policy S 3.8:** Support the retrofitting of existing structures in FHSZs to help reduce the risk of structural and human loss due to wildfire.
- **Policy S 3.9:** Adopt by reference the County of Los Angeles Fire Department Strategic Fire Plan, as amended.
- **Policy S3.10:** Map oak woodlands in Los Angeles County as part of implementation of the Oak Woodlands Conservation Management Plan.

Goal S 4: Effective County emergency response management capabilities.

- **Policy S 4.1:** Ensure that residents are protected from the public health consequences of natural or man-made disasters through increased readiness and response capabilities, risk communication, and the dissemination of public information.
- **Policy S 4.2:** Support County emergency providers in reaching their response time goals.
- **Policy S 4.3:** Coordinate with other County and public agencies, such as transportation agencies, and health care providers on emergency planning and response activities, and evacuation planning.

- **Policy S 4.4:** Encourage the improvement of hazard prediction and early warning capabilities.
- **Policy S 4.5:** Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.
- **Policy S 4.6:** Ensure that essential public facilities are maintained during natural disasters, such as flooding.

5.14.1.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds according to Appendix G of the CEQA Guidelines. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-1: Buildout of the Proposed Project would introduce new structures, residents and employees into the LACoFD service boundaries, thereby increasing the requirement for fire protection facilities and personnel. [Threshold FP-1]

Impact Analysis: The Proposed Project provides land use designations that would increase population and housing within the unincorporated areas, largely within the Santa Clarita Valley and Antelope Valley Planning Areas. The population and housing increase projected under the Proposed Project would increase the demands on LACoFD to provide fire protection and emergency services. To maintain or achieve acceptable travel time standards for fire protection, it is reasonably foreseeable that the provision of new or physically altered fire facilities would be required, which would have the potential to result in adverse environmental impacts. Existing County policies and regulations and Proposed Project goals and policies are intended to reduce impacts associated with fire protection facilities. Specifically, the County has implemented a Developer Fee Program to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment. As new development occurs, fees will be collected to ensure adequate levels of service for fire protection are maintained. Therefore, the Proposed Project is not anticipated to result in a potentially significant impact to fire protection or emergency services with construction or expansion of fire protection facilities and compliance with the mitigation measures listed below.

It should be noted that the Proposed Project land use changes do not allow more development to occur in very high fire hazard severity zones or more remote and rural areas that could be exposed to higher risks of fire hazards. Although increased intensities are proposed in Transit Oriented Districts, these areas are in existing urban areas with a low fire hazard. Potential fire hazards in other areas of the Project Area are reduced to a less than significant level through compliance with the County Fire Code.

5.14.1.5 CUMULATIVE IMPACTS

Fire protection services within the region often cross jurisdictional boundaries. Cumulative growth within Los Angeles County would result in a need for additional fire protection services to serve new development. Cumulative projects proposed under general plans of surrounding cities and counties, such as commercial, residential, or industrial projects, would require fire protection services from fire agencies within the region. In order to maintain adequate travel times to serve cumulative projects, the construction or expansion of fire

protection facilities would be required, which would have the potential to result in an adverse impact on the environment. While the majority of cumulative projects involve discretionary actions and therefore would be required to demonstrate compliance with CEQA and/or NEPA prior to project approval, they would incrementally increase the need for fire services, which would have the potential to result in a significant cumulative impact. However, these impacts would be mitigated through the County's Developer Fee Program to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment and compliance with the County Fire Code.

5.14.1.6 EXISTING REGULATIONS AND STANDARD CONDITIONS

State

- California Health and Safety Code (Section 13000 et seq.)
- California Code of Regulations (CCR) Title 24, Part 2 and Part 9
- California Public Resources Code (PRC) Sections 4201–4204
- State Responsibility Area (SRA) Fire Safe Regulations (Title 14 Natural Resources, Department of Forestry Fire Protection)

Los Angeles County Code of Ordinances

- Los Angeles County Fire Code, (Ord. 2010-0060 § 4, 2010; Ord. 2002-0080 § 4, 2002)

5.14.1.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.14-1** Buildout of the Proposed Project would introduce new structures, residents, and employees into the Los Angeles County Fire Department service boundaries, thereby increasing the requirement for fire protection facilities and personnel.

5.14.1.8 MITIGATION MEASURES

Impact 5.14-1

PS-1 Prior to issuance of building permits, future project applicants/developers shall pay the Los Angeles County Fire Department Developer Fee in effect at that time.

PS-2 Each subdivision map shall comply with the applicable County Fire Code requirements for fire apparatus access roads, fire flows, and fire hydrants. Final fire flows shall be determined by LACoFD in accordance with Appendix B of the County Fire Code. The required fire apparatus road and water requirements shall be in place prior to construction.

PS-3 Prior to approval of a tentative map, a Fuel Modification Plan shall be prepared for each subdivision map in which urban uses would permanently adjoin a natural area, as required by Section 1117.2.1 of the County Fire Code and approved by LACoFD prior to building permit issuance.

5.14.1.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The existing regulatory programs and mitigation measures identified above would reduce potential impacts associated with fire protection to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to fire protection remain.

5.14.2 Law Enforcement

5.14.2.1 ENVIRONMENTAL SETTING

Law enforcement services in the Project Area are provided by the Los Angeles County Sheriff's Department (LASD). LASD is the largest sheriff's department in the United States, with a budget of $2.8 billion and more than 17,000 employees. LASD provides general-service law enforcement to unincorporated areas of Los Angeles County, serving as the equivalent of the county police for unincorporated areas, as well as cities within Los Angeles County that have contracted with the agency for law-enforcement services. Forty-two of the County's 88 municipalities contract with the Sheriff's Department to provide local police protection. The areas within Los Angeles County served by LASD are shown on Figure 5.14-3, *Sheriff's Department Service Areas.*

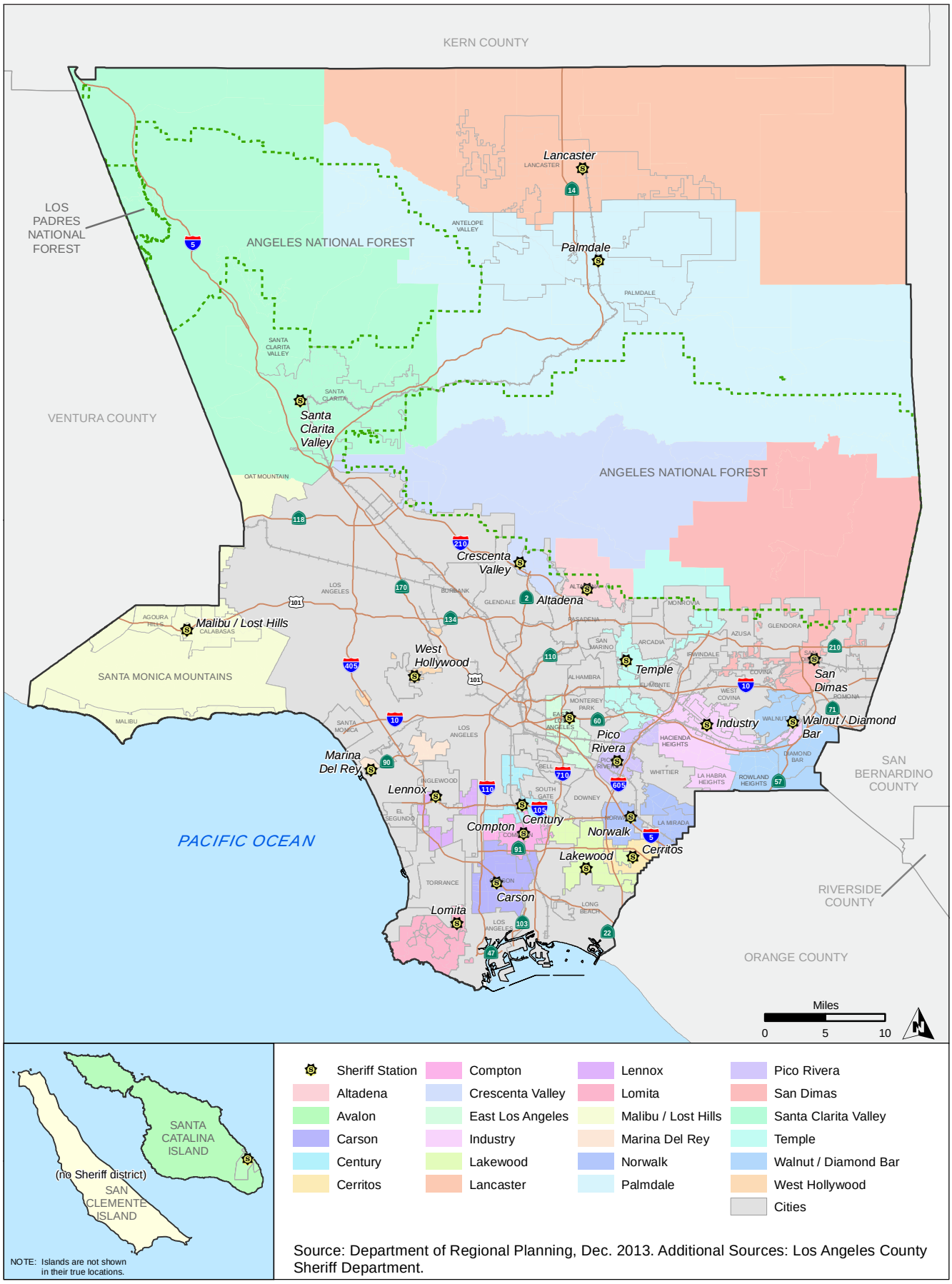
The Sheriff's Department also holds primary jurisdiction over facilities operated by Los Angeles County, such as local parks, marinas and government buildings; provides bailiff service for the Superior Court of Los Angeles County; operates the County jail system; and provides services, such as crime laboratories, homicide investigations, and academy training, to smaller law enforcement agencies within Los Angeles County.

The Los Angeles County Sheriff's Department is also the second largest transit police force in the United States, aside from the NYPD, through policing contracts of the Metro trains and buses of the Los Angeles Metropolitan Transportation Authority and Metrolink. Furthermore, with policing contracts with nine campuses of the Los Angeles Community College and Lancaster Community College District, the LASD is the largest community policing agency in the United States. The department's headquarters are located in the City of Monterey Park.

LASD staff has indicated that an officer-to-population ratio of one officer to every 1,000 residents provides the desired level of service for its service area. This ideal standard typically is applied in EIRs for proposed projects that are served by the Los Angeles County Sheriff's Department as a means to develop a rough assessment of the project's impacts on law enforcement services.

SHERIFF'S DEPARTMENT SERVICE AREAS

FIGURE 5.14-3



Source: Department of Regional Planning, Dec. 2013. Additional Sources: Los Angeles County Sheriff Department.

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The LASD also has established an optimal service response time of 10 minutes or less for emergency response incidents (a crime that is presently occurring and is a life or death situation), 20 minutes or less for priority response incidents (a crime or incident that is currently occurring but which is not a life or death situation), and 60 minutes or less for routine response incidents (a crime that has already occurred and is not a life or death situation). These response times represent the range of time required to handle a service call, which is measured from the time a call is received until the time a patrol car arrives at the incident scene. Response time is variable, particularly because the nearest responding patrol car may be located anywhere within the station's patrol area and may not necessarily respond directly from the station itself.

Regulatory Framework

Law Enforcement Fees for North Los Angeles County.

On May 27, 2008, the County Board of Supervisors adopted law enforcement fees for north Los Angeles County. This mitigation fee is for new residential, commercial, office, and industrial areas located within the unincorporated areas of north Los Angeles County (Santa Clarita, Newhall, and Gorman). In addition, the County approved capital improvement/construction plans for law enforcement facilities for north Los Angeles County. Each of the law enforcement facility areas will have a separate fee, and the amount of the fee will be set at a base level sufficient to provide, or contribute to, a turnkey law enforcement facility and corresponding equipment that is in direct proportion to the population increases from new development that warrant or contribute to the need for a new facility. In areas where a building is not required, the fee will be used to augment existing service capacity through the purchase of equipment directly to serve the new population.

The amount of the fee established must be reviewed annually by the Sheriff's Department in consultation with the County Auditor-Controller. On July 1 of each year, the fee in each law enforcement facility fee area must be adjusted based on the Engineering News Record-Building Construction Cost Index.

The related capital improvement/construction plans setting forth the approximate location, size, time of availability, and estimates of cost for the facilities and improvements to be financed with the fee for the Santa Clarita and Newhall areas will be annually updated by the County Board of Supervisors.

5.14.2.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

PP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for law enforcement services.

5.14.2.3 RELEVANT GENERAL PLAN GOALS AND POLICIES

Please refer to Subsection 5.14.1.3, above.

5.14.2.4 ENVIRONMENTAL IMPACTS

Impact 5.14-2: Buildout of the Proposed Project would introduce new structures, residents and employees into the LASD service boundaries, thereby increasing the requirement for law enforcement facilities and personnel. [Threshold PP-1]

Impact Analysis: Buildout of the Proposed Project would result in construction of residences (single- and multi-family) and nonresidential uses, including commercial, retail, office, business park uses, fire stations, schools, and open areas. The Los Angeles County Sheriff's Department would provide general law enforcement for the Project Area. It is anticipated that the demand for law enforcement services would increase substantially above current levels due to development pursuant to the Proposed Project and the resulting increase in population. At buildout, an additional 1,316,958 residents would be located in the Project Area and require law enforcement services. Without additional staffing and facilities, the projected population increase would decrease the existing level of service of the Sheriff's Department. The need for additional staffing could result in the need to expand or construct new facilities in the unincorporated areas of the Santa Clarita Valley and Antelope Valley Planning Areas.

Using a desired officer-to-population ratio of one officer to every 1,000 residents, identified above, an additional 1,317 officers would be needed at buildout of the Proposed Project. As future development projects are implemented, LASD will review each project for potential impacts to their facilities and personnel. If determined to be necessary, mitigation will be imposed to fund capital facilities and equipment for the LASD. As stated above, on May 27, 2008, the County Board of Supervisors adopted Law Enforcement Fees for north Los Angeles County, including Santa Clarita, Newhall, and Gorman. This fee will provide sufficient revenues to pay for land acquisition, engineering, construction, installation, purchasing, or any other direct costs for capital law enforcement facilities and equipment needed to serve the new development in the Santa Clarita Valley Planning Area.

Operational funding for the Sheriff's Department in Los Angeles County is derived from various types of tax revenue (e.g., property taxes, sales taxes, user taxes, vehicle license fees, deed transfer fees, etc.), which are deposited in the County's General Fund. The County Board of Supervisors then allocates the revenue for various County-provided public services, including Sheriff's services. As future development occurs, tax revenues from property and sales taxes would be generated and deposited in the County's General Fund and the State Treasury. A portion of these revenues would then be allocated to the LASD during the County's annual budget process to maintain staffing and equipment levels to adequately serve project-related increases in service-call demands.

The majority of new development pursuant to the Proposed Project would occur in the Santa Clarita Valley and Antelope Valley Planning Areas (82 percent of future housing units). As described above, a mitigation fee has been adopted for the Santa Clarita Valley to fund capital improvements for law enforcement, and no significant impacts are anticipated. Currently, no mitigation fee has been adopted for the Antelope Valley

Planning Area, which is expected to grow by approximately one million residents. This is considered a potentially significant impact without mitigation. Potential impacts in the remaining Planning Areas are not anticipated to be significant because of they are largely built out, with limited potential for growth.

5.14.2.5 CUMULATIVE IMPACTS

Cumulative projects in Los Angeles County would require increased law enforcement services to serve new development. Cumulative projects proposed under general plans of cities, such as commercial, residential or industrial projects, would require law enforcement services. The increase in demand for law enforcement services from implementation of cumulative projects would have the potential to result in the need to construct or expand existing police facilities, which would have the potential to create an adverse impact on the environment. While the majority of cumulative projects require discretionary actions and would be required to demonstrate compliance with CEQA and/or NEPA prior to project approval, they would incrementally increase the need for law enforcement services, which would have the potential to result in a significant cumulative impact. Operational funding for the Sheriff's Department and the police departments serving cities in Los Angeles County is derived from various types of tax revenue (e.g., property taxes, sales taxes, user taxes, vehicle license fees, deed transfer fees, etc.), which are deposited in the General Fund. Provided that staff and facilities are expanded to serve future development in the Project Area and cities, no significant cumulative impacts to law enforcement are anticipated.

5.14.2.6 EXISTING REGULATIONS AND STANDARD CONDITIONS

There are no existing regulations or standard conditions related to law enforcement.

5.14.2.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.14-2** Currently no mitigation fee has been adopted for the Antelope Valley Planning Area, which is a high growth area. This is considered a potentially significant impact.

5.14.2.8 MITIGATION MEASURES

Impact 5.14-2

PS-4 Prior to adoption of the Antelope Valley Area Plan, the County shall identify an implementation program to ensure adequate funding is available to provide law enforcement services within the Antelope Valley Planning Area. The funding mechanism must provide sufficient revenue to pay for land acquisition, engineering, construction, installation, purchasing, or any other direct costs for capital law enforcement facilities and equipment needed to serve the new development in the Antelope Valley Planning Area.

5.14.2.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measures identified above would reduce potential impacts associated with law enforcement to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to law enforcement services remain.

5.14.3 School Services

5.14.3.1 ENVIRONMENTAL SETTING

The County's role in developing and managing educational facilities and programs is limited. However, the Los Angeles County Office of Education (COE), which is the largest regional education agency in the United States, serves as an intermediary between the local school districts and the California Department of Education. The COE is guided by a seven-member County Board of Education, which is appointed by the County Board of Supervisors. The COE provides a vision statement and strategic opportunities for educational facility development to coordinate the assessment of facility needs and the construction of schools that fall to individual school districts. (County of Los Angeles 2014)

Another role that the County plays in coordinating in public school facilities is through the County subdivision approval process, in which developers are required to assess the need for, and in some cases provide, land for the construction of public schools within their development. Development impact fees, based on the size of a development, are distributed to the appropriate school district for the construction of school facilities before the County issues any building permits. The County also receives population surveys from various school districts, but they are sporadic, and not all districts involve the County in their facilities planning.

The areas served by each school district are shown on Figure5.14-4, *Los Angeles County School Districts*. As shown on Table 5.14-1, there are a total of 1,564,205 students enrolled in public schools within Los Angeles County. Cities and unincorporated areas are served by a total of 88 school districts.

Table 5.14-1 Los Angeles County Public School Enrollment (2013)

Los Angeles County (Total)	**1,564,205**
ABC Unified (School District)	20,845
Acton-Agua Dulce Unified (School District)	1,542
Alhambra Unified (School District)	18,076
Antelope Valley Union High (School District)	24,816
Arcadia Unified (School District)	9,667
Azusa Unified (School District)	9,755
Baldwin Park Unified (School District)	18,845
Bassett Unified (School District)	4,194
Bellflower Unified (School District)	13,721
Beverly Hills Unified (School District)	4,515
Bonita Unified (School District)	9,870
Burbank Unified (School District)	16,546

Table 5.14-1 Los Angeles County Public School Enrollment (2013)

Castaic Union Elementary (School District)	2,864
Centinela Valley Union High (School District)	6,637
Charter Oak Unified (School District)	5,544
Claremont Unified (School District)	7,018
Compton Unified (School District)	24,710
Covina-Valley Unified (School District)	12,980
Culver City Unified (School District)	6,741
Downey Unified (School District)	22,848
Duarte Unified (School District)	3,749
East Whittier City Elementary (School District)	9,106
Eastside Union Elementary (School District)	3,386
El Monte City Elementary (School District)	9,304
El Monte Union High (School District)	9,812
El Rancho Unified (School District)	9,652
El Segundo Unified (School District)	3,415
Garvey Elementary (School District)	5,259
Glendale Unified (School District)	26,187
Glendora Unified (School District)	7,559
Gorman Elementary (School District)	1,740
Hacienda La Puente Unified (School District)	20,358
Hawthorne (School District)	9,027
Hermosa Beach City Elementary (School District)	2,667
Hughes-Elizabeth Lakes Union Elementary (School District)	281
Inglewood Unified (School District)	14,208
Keppel Union Elementary (School District)	2,747
La Canada Unified (School District)	4,119
Lancaster Elementary (School District)	14,713
Las Virgenes Unified (School District)	11,236
Lawndale Elementary (School District)	6,325
Lennox (School District)	7,043
Little Lake City Elementary (School District)	4,642
Long Beach Unified (School District)	82,256
Los Angeles County Office of Education (School District)	9,136
Los Angeles Unified (School District)	655,494
Los Nietos (School District)	1,925
Lowell Joint (School District)	3,169
Lynwood Unified (School District)	15,029
Manhattan Beach Unified (School District)	6,832
Monrovia Unified (School District)	5,936
Montebello Unified (School District)	30,564
Mountain View (School District)	7,618
Newhall (School District)	6,947
Norwalk-La Mirada Unified (School District)	19,770
Palmdale (School District)	21,264

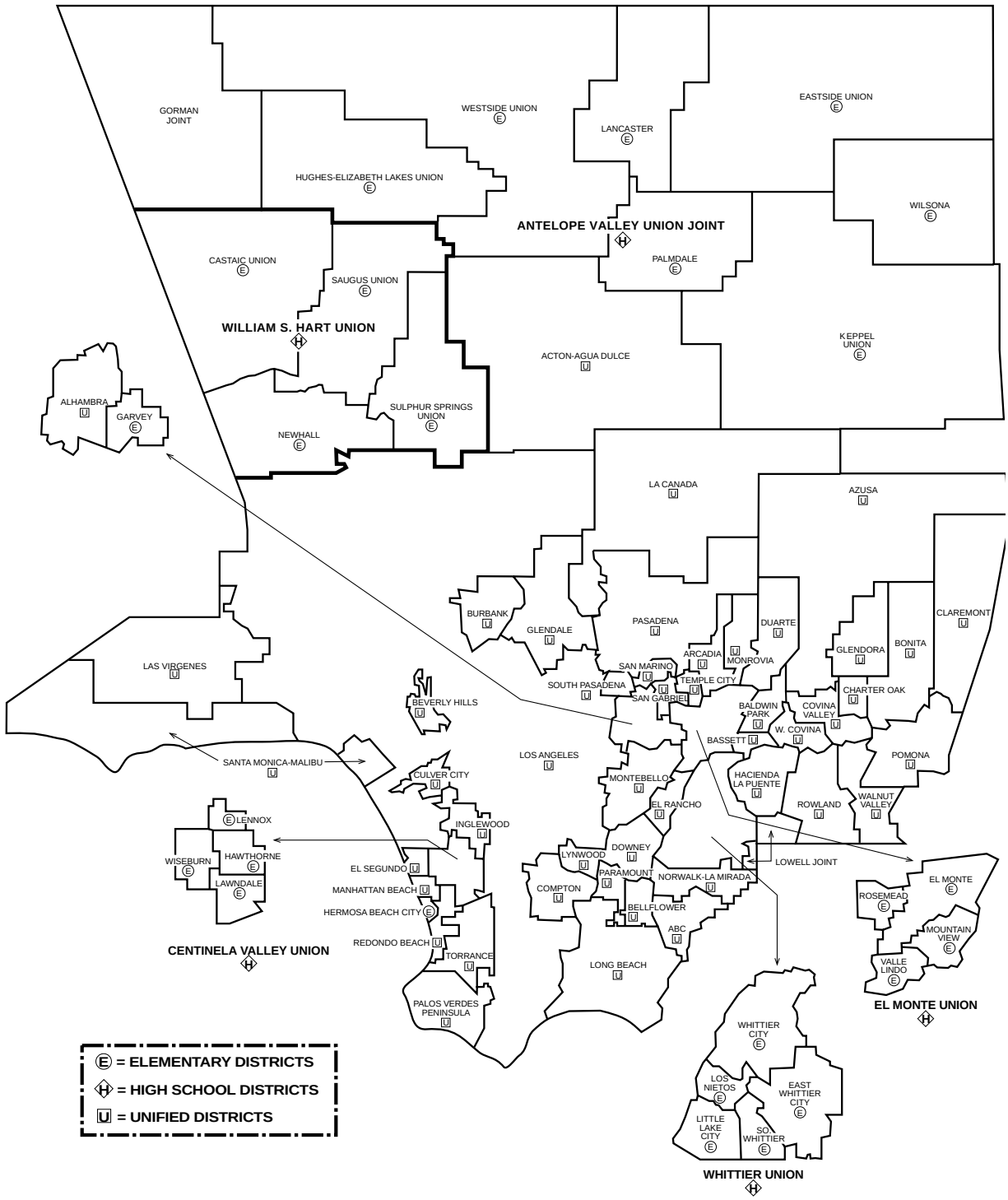
Table 5.14-1 Los Angeles County Public School Enrollment (2013)

Palos Verdes Peninsula Unified (School District)	11,873
Paramount Unified (School District)	15,864
Pasadena Unified (School District)	19,540
Pomona Unified (School District)	27,186
Redondo Beach Unified (School District)	8,967
Rosemead Elementary (School District)	2,778
Rowland Unified (School District)	15,501
SBE - Barack Obama Charter (School District)	333
SBE - Ingenium Charter (School District)	383
SBE - Lifeline Education Charter (School District)	376
SBE - The School of Arts and Enterprise (School District)	419
San Gabriel Unified (School District)	6,573
San Marino Unified (School District)	3,146
Santa Monica-Malibu Unified (School District)	11,417
Saugus Union (School District)	10,178
South Pasadena Unified (School District)	4,652
South Whittier Elementary (School District)	3,303
Sulphur Springs (School District)	5,553
Temple City Unified (School District)	5,799
Torrance Unified (School District)	24,324
Valle Lindo Elementary (School District)	1,240
Walnut Valley Unified (School District)	14,661
West Covina Unified (School District)	14,460
Westside Union Elementary (School District)	8,645
Whittier City Elementary (School District)	6,333
Whittier Union High (School District)	13,486
William S. Hart Union High (School District)	26,373
Wilsona Elementary (School District)	1,393
Wiseburn Elementary (School District)	3,876

Source: kidsdata.org

LOS ANGELES COUNTY SCHOOL DISTRICTS

FIGURE 5.14-4



Source: Los Angeles County Office of Education, 2013. Public Schools Directory

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Regulatory Framework

State regulations, plans, or guidelines related to schools that are potentially applicable to the Proposed Project are summarized below.

State

Senate Bill 50

Senate Bill 50 ("SB 50," also known as Proposition 1A, codified in California Government Code Section 65995 et seq.) was enacted in 1988 to address how schools are financed and how development projects may be assessed for associated school impacts. SB 50 sets forth the "exclusive methods of considering and mitigating impacts on school facilities" resulting from any state or local planning and/or development project, regardless of whether its character is legislative, adjudicative, or both. (Govt. Code § 65996[a]). Section 65995 provides that "[t]he payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995 … are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving but not limited to, the planning, use, or development of real property, or any change in governmental organization… on the provision of adequate school facilities." (Govt. Code § 65995[h]). The reference in Section 65995(h) to fees "imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995" is a reference to per-square-foot school fees that can be imposed by school districts on new residential and commercial and industrial construction at three levels, as follows:

- **Level 1 Fee:** Education Code Section 17620 provides the basic authority for school districts to levy fees against construction for purposes of funding construction or reconstruction of school facilities, subject to limits set forth in Government Code Section 65995. Fees are charged based on "assessable space," which includes all of the square footage within the perimeter of a structure.

- **Level 2 Fee:** The alternative school fee that may be collected pursuant to Government Code Section 65995.5. Certain requirements in accordance with Government Code Section 65995.5 have to be met to collect this level of fees.

- **Level 3 Fee:** The alternative school fee that may be collected pursuant to Government Code Section 65995.7. This fee is collected only when the State Allocation Board is no longer approving apportionments for new construction funding.

5.14.3.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

SS-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to

maintain acceptable service ratios, response times or other performance objectives for school services.

5.14.3.3 RELEVANT GENERAL PLAN GOALS AND POLICIES

Following is a list of the goals and policies of the Proposed Project that are intended to reduce potentially significant adverse effects concerning schools.

Goal PS/F 7: A County with adequate educational facilities.

- **Policy PS/F 7.1:** Encourage the joint-use of school sites for community activities and other appropriate uses.
- **Policy PS/F 7.2:** Proactively work with school facilities and education providers to coordinate land use and facilities planning.
- **Policy PS/F 7.3:** Encourage adequate facilities for early care and education.

5.14.3.4 ENVIRONMENTAL IMPACTS

Impact 5.14-3: Buildout of the Proposed Project would generate new students who would impact the school enrollment capacities of area schools. [Threshold SS-1]

Impact Analysis: Educational facilities within the Project Area have their own state-mandated requirements to ensure a high quality of life for all the citizens of Los Angeles County. School districts offer education to all school-age residents of the region, but operate entirely independent of County government. School districts were created by the State and are subject to the overview of the State Legislature. Elected governing school boards are responsible for budgeting and decision-making. The State Department of Education establishes school site and construction standards.

Table 5.14-2 identifies the housing units and student population projected within each Planning Area and the school districts that serve that Planning Area. As shown in Table 5.14-2, a total of 257,919 additional students are anticipated at buildout of the Proposed Project. The majority of these students would be located in school districts serving the Antelope Valley and Santa Clarita Valley Planning Areas. The Proposed Project would result in housing and population growth throughout the Project Area, which would result in an increase in school enrollment. To maintain acceptable service ratios, the construction of new or expanded school facilities would be required.

Table 5.14-2 Student Population Increases by Planning Area

Planning Area	Existing Units	Projected Units	Increase over Existing	Student Generation Rate	Projected Number of Additional Students	Districts Serving the Planning Area
Antelope Valley	24,739	278,158	253,419	0.7	177,393	Antelope Valley Union High/Eastside Union Elementary School District Antelope Valley Union High/Gorman Elementary School District Antelope Valley Union High/Hughes Elizabeth Lakes Elementary School District Antelope Valley Union High/Keppel Union Elementary School District Antelope Valley Union High/Lancaster Elementary School District Antelope Valley Union High/Palmdale Elementary School District Antelope Valley Union High/Westside Union Elementary School District Antelope Valley Union High/Wilsona Elementary School District Wm. S. Hart Union High/Saugus Union Elementary School District Wm. S. Hart Union High/Sulphur Springs Union Elementary School District Acton-Agua Dulce Unified School District
Coastal Islands	44	21	-23	0.7	0	Long Beach Unified School District
East San Gabriel Valley	63,825	70,097	6,272	0.7	4,390	El Monte Union High/Mountain View Elementary School District Whittier Union High/Whittier City Elementary School District Azusa Unified School District Claremont Unified School District Duarte Unified School District Glendora Unified School District Baldwin Park Unified School District Bassett Unified School District Bonita Unified School District Charter Oak Unified School District Covina Valley Unified School District Hacienda-La Puente Unified School District Pomona Unified School District Rowland Unified School District Walnut Valley Unified School District West Covina Unified School District
Gateway	28,743	34,446	5,703	0.7	3,992	Fullerton Union High/Lowell Joint Elementary School District Whittier Union High/East Whittier City Elementary School District Whittier Union High/Little Lake City Elementary School District Whittier Union High/Los Nietos Elementary School District Whittier Union High/South Whittier Elementary

Table 5.14-2 Student Population Increases by Planning Area

Planning Area	Existing Units	Projected Units	Increase over Existing	Student Generation Rate	Projected Number of Additional Students	Districts Serving the Planning Area
						School District Whittier Union High/Whittier City Elementary School District ABC Unified School District Bellflower Unified School District Downey Unified School District Norwalk-La Mirada Unified School District Compton Unified School District Lynwood Unified School District Paramount Unified School District Long Beach Unified School District Montebello Unified School District El Rancho Unified School District Los Angeles Unified School District
Metro	73,068	94,854	21,786	0.7	15,250	Compton Unified School District Montebello Unified School District Los Angeles Unified School District
San Fernando Valley	9,039	13,464	4,425	0.7	3,098	Wm S Hart Union High/Newhall Elementary School District Glendale Unified School District Burbank Unified School District Las Virgenes Unified School District Los Angeles Unified School District
Santa Clarita Valley	28,501	77,155	48,654	0.7	34,058	Antelope Valley Union High/Gorman Elementary School District Antelope Valley Union High/Hughes Elizabeth Lakes Elementary School District Wm. S. Hart Union High/Castaic Union Elementary School District Wm. S. Hart Union High/Newhall Elementary School District Wm. S. Hart Union High/Saugus Union Elementary School District Wm. S. Hart Union High/Sulphur Springs Union Elementary School District Acton-Agua Dulce Unified School District Los Angeles Unified School District
Santa Monica Mountains	5,703	6,788	1,085	0.7	760	Santa Monica-Malibu Unified School District Las Virgenes Unified School District Los Angeles Unified School District
South Bay	19,952	30,240	10,288	0.7	7,202	Hermosa Beach City Elementary School District Centinela Valley Union High/Hawthorne Elementary School District Centinela Valley Union High/Lawndale Elementary School District Centinela Valley Union High/Lennox Elementary School District

Table 5.14-2 Student Population Increases by Planning Area

Planning Area	Existing Units	Projected Units	Increase over Existing	Student Generation Rate	Projected Number of Additional Students	Districts Serving the Planning Area
						Centinela Valley Union High/Wiseburn Elementary School District Compton Unified School District El Segundo Unified School District Inglewood Unified School District Torrance Unified School District Manhattan Beach Unified School District Redondo Beach Unified School District Palos Verdes Peninsula Unified School District Los Angeles Unified School District
West San Gabriel Valley	34,765	46,371	11,606	0.7	8,124	El Monte Union High/El Monte City Elementary School District El Monte Union High/Mountain View Elementary School District El Monte Union High/Rosemead Elementary School District El Monte Union High/Valle Lindo Elementary School District Whittier Union High/Whittier City Elementary School District Azusa Unified School District Duarte Unified School District Monrovia Unified School District Glendale Unified School District Baldwin Park Unified School District Covina Valley Unified School District Arcadia Unified School District La Canada Unified School District Pasadena Unified School District San Marino Unified School District South Pasadena Unified School District Temple City Unified School District San Gabriel Unified School District Montebello Unified School District Alhambra City High/Alhambra City Elementary School District Alhambra City High/Garvey Elementary School District El Rancho Unified School District Los Angeles Unified School District
Westside	12,099	17,316	5,217	0.7	3,652	Santa Monica-Malibu Unified School District Inglewood Unified School District Beverly Hills Unified School District Culver City Unified School District Los Angeles Unified School District
Total	**300,478**	**668,910**	**368,432**		**257,919**	

Notes:
Buildout projections for each Planning Area were provided by the County of Los Angeles Department of Regional Planning, 2014.
The student generation rate of 0.7 students per unit (K–12) was provided by the California Department of Education, Office of Public School Construction.

Implementation of the Proposed Project could contribute to a potentially significant adverse cumulative impact on school facilities and services. However, under state law, development projects are required to pay established school impact fees in accordance with SB 50 at the time of building permit issuance. The funding program established by SB 50 has been found by the Legislature to constitute "full and complete mitigation of the impacts of any legislative or adjudicative act…on the provision of adequate school facilities" (Government Code Section 65995[h]). The fees authorized for collection under SB 50 are conclusively deemed full and adequate mitigation of impacts on school district facilities. Therefore, the increase in the demand for school facilities and services due to implementation of the Proposed Project would be adequately mitigated by the payment of SB 50 fees.

5.14.3.5 CUMULATIVE IMPACTS

Cumulative development projects that involve residential development would increase the public school population in the region and require the construction or expansion of school facilities so that adequate service ratios are maintained. As described in Section 4.4, *Assumptions Regarding Cumulative Development,* an additional 292,713 dwelling units are anticipated by 2035 within cities within Los Angeles County. This would result in an additional 204,899 students, along with 257,919 additional students associated with the Proposed Project, for a total of 462,818 additional students within Los Angeles County. This increase in student population would require the construction or expansion of school facilities, which would result in adverse environmental impacts. While the majority of cumulative projects require discretionary actions and would be required to demonstrate compliance with CEQA and/or NEPA prior to project approval, they would incrementally increase the need for school facilities, which would have the potential to result in a significant cumulative impact.

As discussed above, under state law, development projects are required to pay established school impact fees in accordance with SB 50 at the time of building permit issuance. The funding program established by SB 50 has been found by the Legislature to constitute "full and complete mitigation of the impacts of any legislative or adjudicative act…on the provision of adequate school facilities" (Government Code Section 65995[h]). The fees authorized for collection under SB 50 are conclusively deemed full and adequate mitigation of impacts on school district facilities. Therefore, the increase in the demand for school facilities and services due to cumulative development would be adequately mitigated to a less than significant level by the payment of SB 50 fees.

5.14.3.6 EXISTING REGULATIONS AND STANDARD CONDITIONS

- Senate Bill 50 ("SB 50," also known as Proposition 1A, codified in California Government Code Section 65995 et seq.)

5.14.3.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.14-3.

5.14.3.8 MITIGATION MEASURES

No mitigation measures are required.

5.14.3.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No significant impacts have been identified, and no significant and unavoidable impacts would occur.

5.14.4 Library Services

5.14.4.1 ENVIRONMENTAL SETTING

The County of Los Angeles Public Library is one of the largest public library systems in the United States. In fiscal year 2011–2012, library staff circulated 16.5 million items to 3.1 million cardholders; answered over 8 million reference questions; provided 18,000 programs to 500,000 children, teens, and adults; and assisted the public with three million internet sessions on the library's public access computers. The library system is a special fund County department operating under the direction of the County Board of Supervisors. Figure 5.14-5 identifies the County libraries and service planning areas.

Supplementing the 7.5 million volume book collection, the library also offers magazines, newspapers, microfilm, government publications, specialized reference materials, magazines, audio-visual media, adult, teen and children programs, downloadable audio and e-books, and internet access, including WiFi.

Library Facility Needs

The majority of the County's 86 libraries are undersized and understocked to meet the service needs of current and projected populations served by the Library system. A study conducted by the Library in April 2001 determined that many of the County's libraries do not meet basic facility and service planning guidelines. The current guideline for library facility space is a minimum of 0.5 gross square foot per capita. The 2001 study determined that 89 percent of existing libraries will not meet that standard in the year 2020. In addition, the study determined that by 2020, 77 percent of existing libraries will not meet the Library's current service level planning guideline of 2.75 items (books and other library materials) per capita.

Many existing County libraries are located in areas with little or no new residential development, and therefore, there are no mitigation fees or other reliable sources of capital funding available to replace or expand them. A permanent source of funding to replace or expand existing facilities is needed to meet the projected population growth in the Library's service areas over the next two decades.

Library Facilities Mitigation Fees

The County applies a library facilities mitigation fee to new residential developments in the unincorporated areas. This fee is intended to mitigate the significant adverse impacts of increased residential development on the Library system. The library facilities mitigation fee is based on the estimated cost of providing the projected library facility needs in each library planning area. Please refer to Section 22.72.030 of the County's Zoning Code for the library facilities mitigation fee in each of the seven library planning areas.

The mitigation fee in each planning area is reviewed annually by the County Librarian, in consultation with the County Auditor-Controller, and is adjusted every July 1. According to the Zoning Code, no adjustment shall increase or decrease the fee to an amount more or less than the amount necessary to recover the cost of providing applicable library facilities and services.

The provisions of the Library Facilities Mitigation Fee Ordinance are applicable to residential projects only. All library facilities mitigation fees received by the County are deposited into a special library capital facilities fund (one for each library planning area) and expended solely for the purposes for which the fees were collected.

5.14.4.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

LS-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services.

5.14.4.3 RELEVANT GENERAL PLAN GOALS AND POLICIES

Following is a list of the goals and policies of the General Plan Update that are intended to reduce potentially significant adverse effects concerning libraries.

Public Services and Facilities Element

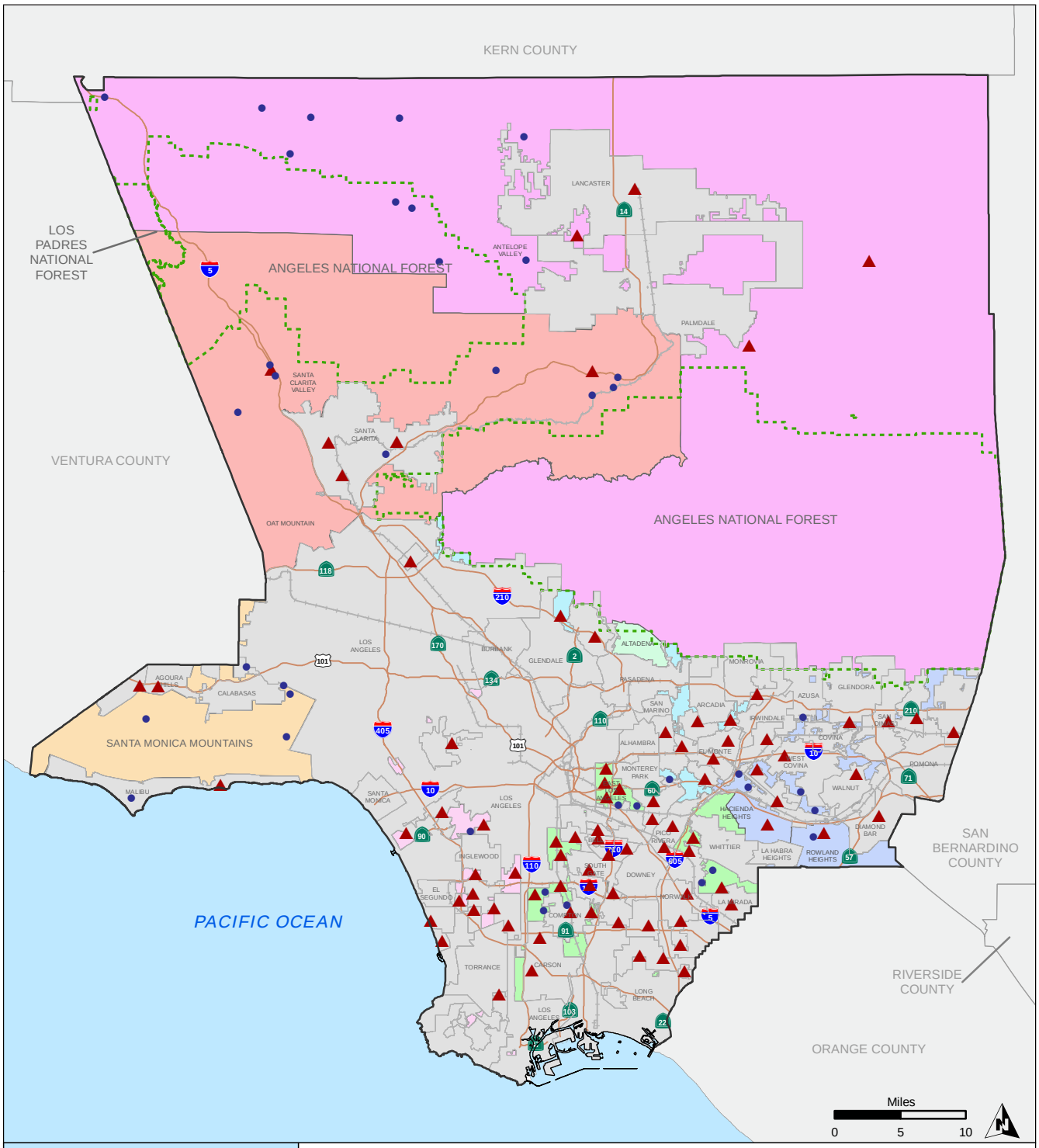
Goal PS/F 8: A comprehensive public library system.

- **Policy PS/F 8.1:** Ensure a desired level of library service through coordinated land use and facilities planning.

- **Policy PS/F 8.2:** Support library mitigation fees that adequately address the impacts of new development.

LIBRARIES

FIGURE 5.14-5



Source: Department of Regional Planning, March, 2014. Additional Sources: Los Angeles County Public Library, March, 2014

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5.14.4.4 ENVIRONMENTAL IMPACTS

Impact 5.14-4: Buildout of the Proposed Project would generate additional population, increasing the service needs for the local libraries. [Threshold LS-1]

Impact Analysis: Implementation of the Proposed Project would result in the potential for increased demand for library services within the Project Area to the extent that expansion and construction of new facilities would be required. The projected increase in population at buildout of the Proposed Project is 1,316,958 persons. As discussed above, the current guideline for library facility space is a minimum of 0.5 gross square foot per capita and 2.75 items (books and other library materials) per capita. To adequately serve future residents within the Project Area, the County library system would need to add 3,621,635 library items and 658,479 square feet of library space.

Future development would generate new tax revenues, and as noted above, funding sources for the County Library consist of property taxes, state assistance, and revenue from fines, fees, and other miscellaneous revenue. According to County Library staff, increased tax revenues funding addresses only library operations, and because of uncertainty regarding General Fund contribution levels, it is not adequate to offset the impact of the project on the County Library's ability to construct new libraries and purchase new items (books, periodicals, audio cassettes, videos, etc.). Consequently, the tax revenues collected would not adequately cover all the costs of serving the project population, and a significant impact on the library system would result.

In order to minimize potentially adverse effects, the County has devised library facilities mitigation fee programs, and future residential projects would be required to remit payment pursuant to the County-wide program to account for library-related construction and acquisition costs. Requiring payment of the library facilities fee in effect at the time development occurs (currently $718.00 per unit of residential development) would mitigate project-related impacts on the County Library to a less-than-significant level.

5.14.4.5 CUMULATIVE IMPACTS

The County of Los Angeles Public Library serves the Project Area and portions of surrounding cities. Cumulative projects that involve residential development would increase the population of library users and result in the need to construct additional or renovate existing library facilities, which would result in a significant environmental impact. Cumulative projects that would contribute to additional library use include residential development proposed under the general plans of cities as well as implementation of the Proposed Project. The increase in demand for library services from implementation of cumulative projects would result in the need to construct additional or expand existing library facilities, which would create an adverse impact on the environment. While the majority of cumulative projects require discretionary actions and would be required to demonstrate compliance with CEQA and/or NEPA prior to project approval, they would incrementally increase the need for library facilities and materials, which would have the potential to result in a significant cumulative impact.

Future cumulative development would generate new tax revenues, and as noted above, funding sources for the County Library and city libraries consist of property taxes, state assistance, and revenue from fines, fees, and other miscellaneous revenue. In order to minimize potentially adverse effects, the County has devised

library facilities mitigation fee programs, and future projects would be required to remit payment pursuant to the County-wide program to account for library-related construction and acquisition costs. Requiring payment of the library facilities fee in effect (currently $718.00 per unit of residential development) would mitigate cumulative impacts on the County Library to a less-than-significant level and are therefore not cumulative considerable.

5.14.4.6 EXISTING REGULATIONS AND STANDARD CONDITIONS

- Library facilities mitigation fee (developer fee) codified as Chapter 22.72 of the Los Angeles County Code.

5.14.4.7 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.14-4.

5.14.4.8 MITIGATION MEASURES

No mitigation measures are required.

5.14.4.9 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No significant impacts have been identified, and no significant and unavoidable impacts would occur.

5.14.5 References

Department of Regional Planning. 2014. Draft 2035 General Plan Update. Los Angeles County, California.

Los Angeles, County of, Fire Department. 2013 Statistical Summary. 2013. Los Angeles County, California.

Southern California Association of Governments (SCAG). 2012, April. 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). http://rtpscs.scag.ca.gov/Pages/default.aspx.

5.15 RECREATION

This section describes the regulatory framework, existing conditions, and the potential for environmental impacts related to parks and recreation.

5.15.1 Environmental Setting

5.15.1.1 REGULATORY SETTING

State Regulations The Quimby Act

Since the passage of the 1975 Quimby Act (California Government Code Section 66477), cities and counties have been authorized to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities (Westrup 2002). A 1982 amendment (AB 1600) requires agencies to clearly show a reasonable relationship between the public's need for the recreation facility or parkland, and the type of development project upon which the fee is imposed. Cities and counties with a high ratio of park space to inhabitants can set a standard of up to five acres per 1,000 people for new development. Cities and counties with a lower ratio can only require the provision of up to three acres of park space per 1,000 people. The calculation of a city or county's park space to population ratio is based on a comparison of the population count of the last federal census to the amount of city/county-owned parkland.

The Mello-Roos Community Facilities Act of 1982

The Mello-Roos Community Facilities Act provides an alternative method of financing certain public capital facilities and services, especially in developing areas and areas undergoing rehabilitation. This state law empowers local agencies to establish Community Facilities Districts (CFDs) as a means of obtaining community funding.

Landscaping and Lighting Act of 1972, California Streets and Highway Code Section 22500–22509

The California Landscaping and Lighting Act of 1972 authorizes local legislative bodies to establish benefit related assessment districts, or Landscaping and Lighting Districts (LLADs) and to levy assessments for the construction, installation, and maintenance of certain public landscaping and lighting improvements. LLADs may be established to maintain local public parks.

Local Regulations

Los Angeles County Code

In addition to containing regulations on the operation of park facilities, the County Code contains provisions that regulate the provision of parklands for new subdivisions, in accordance with the Quimby Act. County Code Section 21.24.340 (Residential Subdivisions, Local Park Space Obligation, Formula) contains the methodology used to determine the amount of parkland required to be dedicated by the subdivider as a part of the subdivision map approval process. In accordance with Section 21.28.140, the developer may also

choose to pay a fee in-lieu of the provision of parkland. Additionally, the developer may choose to provide less than the required amount of parkland, but develop it with amenities equal to the value of what the in-lieu fee would be. In order to determine the local park space obligation for a subdivision, a formula is used, which considers the number of dwelling units in the subdivision, the average household size by Park Planning Area (PPA) (which differs for single family, multifamily, and mobile home developments as well as by PPA), and the adopted ratio of three acres of parkland per 1,000 residents, per the Quimby Act. However, it should be noted that, as discussed in the Existing General Plan, as a condition of zone change approval, General Plan amendment, specific plan approval, or development agreement, the County may require a subdivider to dedicate land according to the General Plan goal of four acres of local parkland per 1,000 residents, and six acres of regional parkland per 1,000 residents.

Once the local park space obligation is determined, County Code Section 21.24.350 (Residential Subdivisions, Provision or Local Park Sites) contains regulations pertaining to the siting of park facilities as well as provisions that give the option to subdividers of 50 units or less to choose to provide the obligatory amount of parkland, any excess of which would be credited to the subdivision, or otherwise allow any remaining obligation to be satisfied by the payment of park fees in accordance with the provisions of Section 21.28.140. Additionally, since only the portions of the land dedicated for parkland that are suitable for park use can be counted against the obligation of the subdivider, attributes of the park space including the slope of the site are used to determine the amount of land which can be counted against the subdivider's obligation. For example, for the portions of the site in excess of 20 percent slope, only 10 percent of the acreage will be counted against the subdivider's obligation whereas all of the land that is less than three percent slope can be counted towards the obligation.

Section 21.28.140 (Park Fees Required When, Computation and Use) contains provisions regarding the payment of in-lieu fees for any portion of the dedication obligation not satisfied by the subdivider. These fees would be enforced as a condition of approval on the final approval of the subdivision. The in-lieu fee is determined by multiplying the amount of park space not satisfied by the representative land value for the appropriate PPA. This section also makes it the responsibility of the Los Angeles County Department of Parks and Recreation (DPR) to develop a schedule specifying how, when, and where it will use the land or fees, or both, from each subdivision to develop park or recreational facilities within the applicable PPA.

Safe Neighborhood Parks Proposition of 1992, 1996, Proposition A

Proposition A created the Los Angeles County Regional Park and Open Space District. The District's boundaries are coterminous with the boundaries of Los Angeles County. The proposition authorized an annual assessment on nearly all of the 2.25 million parcels of real property in Los Angeles County. Proposition A funded $540 million for the acquisition, restoration or rehabilitation of real property for parks and park safety, senior recreation facilities, gang prevention, beaches, recreation, community or cultural facilities, trails, wildlife habitats, or natural lands, and maintenance and servicing of those projects. In 1996, voters approved another Proposition A to fund an additional $319 million for parks and recreation projects and additional funds for maintenance and to service those projects. Proposition A funds may be used to fund the development, acquisition, improvement, restoration and maintenance of parks; recreational, cultural and community facilities; and open space lands.

County of Los Angeles Trails Manual

In May 2011, the Los Angeles County Board of Supervisors adopted the County of Los Angeles Trails manual, which provides guidelines and standards for trail planning, design, development, and maintenance of Los Angeles County trails.

5.15.1.2 EXISTING CONDITIONS

Los Angeles County Parks System

The following section describes and the types of recreational facilities within Los Angeles County that are operated by DPR. Parks in Los Angeles County are classified based on their size, use, and physical characteristics. Additionally, the classification system attempts to account for opportunities for acquisition and development of parks.

Local Park System

Parks in the local park system are intended to serve the daily recreation needs of the communities in which they are located. Community parks, neighborhood parks, pocket parks, and park nodes are all included in this classification. Table 5.15-1 provides a summary of the different categories within the local park system.

Table 5.15-1 Local Park System Summary

Facility	Typical Park Features and Amenities
Community Park Suggested Acreage:10 to 20 acres Service Area:1 to 2 miles	Passive park amenities, including but not limited to: informal open play areas, children's play apparatus, family and group picnic areas with overhead shelters, barbecues. Active sports activities, including but not limited to: lighted sports fields, basketball courts and tennis courts. Additional amenities may include aquatics complex, skate park, arena soccer, roller hockey, community gardens, and dog parks. Park facilities, including but not limited to: public restrooms, concession building, community buildings, maintenance building and onsite parking and information kiosks.
Neighborhood Park Suggested Acreage: 3 to 10 acres Service Area:1/2 mile	Passive park amenities, including but not limited to: informal open play areas, children's play apparatus, group picnic areas with overhead shelters, barbecues. Active park amenities, including but not limited to: practice sports fields, basketball, tennis, and volleyball courts. Park facilities, including but not limited to: public restroom, onsite parking and information kiosks.
Pocket Park Suggested Acreage: less than 3 acres Service Area:1/4 mile	Passive park amenities, including but not limited to: picnic areas and seating areas. Active park amenities, including but not limited to: children's play apparatus.
Park Node Suggested Acreage:1/4 acre or less No service radius area	Varies; can include: plazas, rest areas, playgrounds, landmarks and public art installations.

Source: Los Angeles County Draft General Plan 2014

Regional Park System

Parks in the regional park system are intended to serve the recreation needs or residents and visitors throughout Los Angeles County. Community regional parks, regional parks, and special use facilities are all included in this classification. Table 5.15-2 provides a summary of the different categories within the regional park system.

Table 5.15-2 Regional Park System Summary

Facility	Typical Park Features and Amenities
Community Regional Park Suggested Acreage: 20 to100 acres Service Area: Up to 20 miles	• Passive park amenities, including but not limited to: informal open play areas, children's play apparatus, group picnic areas with overhead shelters, barbecues. • Active sports activities, including but not limited to: lighted sports fields, basketball courts and tennis courts. • Additional amenities may include one or more of the following features: multiple sports facilities, aquatics center, fishing lake, community building and gymnasium, and scenic views and vistas. • Park facilities, including but not limited to: public restrooms, concession building, community buildings, maintenance building and onsite parking and information kiosks.
Regional Park Suggested Acreage: Greater than 100 acres Service Area: 25+ miles	• Passive park amenities, including but not limited to: group picnic areas with overhead shelters, barbecues. • Additional amenities may include one or more of the following features: lakes, wetlands, auditoriums, water bodies for swimming, fishing and boating, and sports fields.
Special Use Facility No size criteria No assigned service radius area	• Generally, single purpose facilities. Can include passive features such as: wilderness parks, nature preserves, botanical gardens and nature centers. • Active uses can include: performing arts, water parks, aquatic facilities, skate parks, golf driving ranges and golf courses.

Source: Los Angeles County Draft General Plan 2014

Table 5.15-3, *Existing County Parkland by Planning Area,* provides a summary of the amount of local and regional parkland in each of the Planning Areas. The County goal for the provision of parkland is four acres of local parkland per 1,000 residents of the population in the unincorporated areas, and six acres of regional parkland per 1,000 residents of the total population of Los Angeles County.

Table 5.15-3 Existing County Parkland by Planning Area

Planning Areas	Local Parkland Goal 4 Acres/ 1,000 Population			Regional Parkland Goal 6 Acres/ 1,000 Population		
	Unincorporated Population	Parkland Acreage	Surplus/ Deficit Acreage	Countywide Population	Parkland Acreage	Surplus/Deficit Acreage
Antelope Valley	93,490	50.41	-324	382,868	3,870	1,573
Coastal Islands	158	0	-1	4,096	41,000	40,975
East San Gabriel Valley	239,218	219.62	-737	933,116	3,440	-2,159
Gateway	104,061	51.40	-365	1,666,588	816	-9,183
Metro	235,990	111.40	-833	1,819,084	398	-10,517
Santa Clarita Valley	104,116	71.41	-346	271,227	14,425	12,798
San Fernando Valley	32,488	8.57	-121	1,768,978	603	-10,011
Santa Monica Mountains	21,757	0	-87	85,785	0	-515
South Bay	69,474	25.61	-252	1,016,674	593	-5,507
West San Gabriel Valley	125,736	48.12	-455	895,543	3,427	-1,946
Westside	39,926	22.14	-138	974,646	414	-5,434
Total	**1,066,414**	**609**	**-3,657**	**9,818,605**	**68,986**	**10,074**

Source: Los Angeles County General Plan, 2014.

The County has a total of 169 parks and recreational facilities. These facilities are owned, operated, and maintained by the County and total 69,595 acres. An additional 541 acres have been dedicated, but not yet developed as parkland. The DPR also maintains parks in the jurisdiction of several cities, and while these facilities serve the local needs of communities in unincorporated areas as well as regional needs countywide, the Proposed General Plan Update only covers the unincorporated areas of Los Angeles County.

The acreage goal identified for local parks in the Existing General Plan is four acres of local parkland per 1,000 residents. The regional parkland goal is six acres per 1,000 residents of the total population of the County. Section 21.24.340 of the County Code has a standard of three acres of local and five acres of regional parkland per 1,000 residents. As shown in Table 5.15-3, *Existing County Parkland*, there are a total of 609 acres of local parkland in the jurisdiction of the County at this time. According to DPR estimates, there are currently a total of 1,066,414 people living in the unincorporated areas. This means that for every 1,000 residents there are a total of approximately 0.57 acres of local parkland. As shown, there is a 3,657-acre deficit and the current acreage of available local parkland does not meet the County's goal for recreational facilities.

In addition to the 609 acres of local parkland, there is a total of 68,986 acres of regional parkland in Los Angeles County at this time. For every 1,000 residents in Los Angeles County, there are a total of approximately 7 acres of regional parkland. As shown in Table 5-15-3, there is a 10,074-acre surplus of regional parkland.

Table 5.15-4, *Los Angeles County Parks and Recreation Inventory,* shows a complete inventory of the parks operated by DPR.

Table 5.15-4 Los Angeles County Parks and Recreation Inventory

Park	Park Planning Area	Park Classification	Type	Acre(s)
Acton Park	1	Community	Local	12
Acton Wash Sanctuary	1	Special Use	Regional	75
Adventure Park	9	Community	Local	15
Alondra Community Regional Park	10	Community Regional	Local	53
Alondra Golf Course	10	Special Use	Regional	151
Alpine Butte Wildlife Sanctuary	1	Special Use	Regional	323
Altadena Golf Course	7	Special Use	Regional	58
Amigo Park	9	Neighborhood	Local	5
Apollo Community Regional Park	1	Community Regional	Regional	54
Arboretum and Botanic Garden	7	Special Use	Regional	119
Arcadia Community Regional Park	7	Community Regional	Regional	53
Athens Park	8	Community Regional	Regional	19
Atlantic Avenue Park	8	Neighborhood	Local	2
Avocado Heights Park	6	Neighborhood	Local	8
Bassett Park	6	Neighborhood	Local	10
Belvedere Community Regional Park	8	Community Regional	Regional	31
Mary McLeod Bethune Park	8	Neighborhood	Local	5
Big Rock Creek Wildlife Sanctuary	1	Special Use	Regional	161
Blalock Sanctuary	1	Special Use	Regional	140
Bill Blevins Park	6	Neighborhood	Local	5
Bodger Park	10	Community	Local	12
Frank G. Bonelli Regional Park	6	Regional	Regional	1,797
Thomas S. Burton Park	6	Neighborhood	Local	12
Butte Valley Wildflower Sanctuary	1	Special Use	Regional	351
Roy Campanella Park	8	Neighborhood	Local	9
George Washington Carver Park	8	Neighborhood	Local	6
Castaic Lake State Recreation Area	2	Regional	Regional	12,658
Castaic Sports Complex	2	Community Regional	Regional	54
Cerritos Community Regional Park	9	Community Regional	Regional	84
Charter Oak Park	6	Community	Local	12
Chesebrough Park	2	Neighborhood	Local	7
City Terrace Park	8	Community	Local	15
Countrywood Park	6	Neighborhood	Local	6
Crescenta Valley Community Regional Park	3	Community Regional	Regional	38
Dalton Park	6	Neighborhood	Local	5

Table 5.15-4 Los Angeles County Parks and Recreation Inventory

Park	Park Planning Area	Park Classification	Type	Acre(s)
Del Aire Park	10	Neighborhood	Local	7
Del Valle Park	2	Neighborhood	Local	5
Descanso Gardens	7	Special Use	Regional	149
Desert Pines Sanctuary	1	Special Use	Regional	99
Devil's Punchbowl Natural Area	1	Special Use	Regional	1,259
Dexter Park	3	Community Regional	Regional	40
Diamond Bar Golf Course	6	Special Use	Regional	172
East Rancho Dominguez Park	9	Neighborhood	Local	6
Eaton Canyon Golf Course	7	Special Use	Regional	66
Eaton Canyon Nature Center	7	Special Use	Regional	198
El Cariso Community Regional Park	2	Community Regional	Regional	80
El Cariso Golf Course	2	Special Use	Regional	83
Enterprise Park	9	Community	Local	10
Fair Oaks Park	2	Neighborhood	Local	6
Charles S. Farnsworth Park	7	Community	Local	15
John Anson Ford Amphitheatre	8	Special Use	Regional	31
Deane Dana Friendship Park and Nature Center	10	Special Use	Regional	119
Ganesha Park	7	Pocket	Local	0.6
Carl O. Gerhardy Wildlife Sanctuary	1	Special Use	Regional	547
Kenneth Hahn State Recreation Area	5	Regional	Regional	308
William S. Hart Regional Park	2	Special Use	Regional	162
Hasley Canyon Equestrian Center	2	Special Use	Regional	67
Hasley Canyon Park	2	Neighborhood	Local	5
Maggie Hathaway Golf Course	8	Special Use	Regional	13
Gloria Heer Park	6	Neighborhood	Local	10
Eastside Eddie Heredia Boxing Club	8	Pocket	Local	0.2
Hollywood Bowl	5	Special Use	Regional	69
Rueben Ingold Parkway	5	Pocket	Local	3
Jackrabbit Flats Wildlife Sanctuary	1	Special Use	Regional	114
Helen Keller Park	8	Neighborhood	Local	7
Knollwood Golf Course	5	Special Use	Regional	150
Knollwood Pool	5	Special Use	Regional	Part of golf course
Jake Kuredjian Park	5	Neighborhood	Local	6
La Mirada Community Regional Park	9	Regional	Regional	76
La Mirada Golf Course	9	Special Use	Regional	127

Table 5.15-4 Los Angeles County Parks and Recreation Inventory

Park	Park Planning Area	Park Classification	Type	Acre(s)
Ladera Park	5	Community	Local	16
Lakewood Golf Course	9	Special Use	Regional	177
George Lane Park	1	Community	Local	14
Lennox Park	10	Neighborhood	Local	6
Loma Alta Park	7	Neighborhood	Local	18
Los Amigos Golf Course	9	Special Use	Regional	146
Los Robles Park	6	Neighborhood	Local	5
Los Verdes Golf Course	10	Special Use	Regional	163
Earvin "Magic" Johnson Park	8	Community Regional	Regional	104
Manzanita Park	6	Community	Local	12
David March Park	2	Neighborhood	Local	12
Marshall Canyon Golf Course	6	Special Use	Regional	157
Marshall Canyon Park	6	Special Use	Regional	119
Allen J. Martin Park	6	Neighborhood	Local	7
Everett Martin Park	1	Neighborhood	Local	6
Amelia Mayberry Park	9	Community	Local	14
McNees Park	9	Pocket	Local	0.6
Mescal Wildlife Sanctuary	1	Special Use	Regional	99
Michillinda Park	7	Pocket	Local	2
Mona Park	8	Neighborhood	Local	8
Monteith Parkway	5	Pocket	Local	0.6
Monument Park	7	Pocket	Local	0.4
Mountain Meadows Golf Course	6	Special Use	Regional	189
Northbridge Park	2	Neighborhood	Local	9
Eugene A. Obregon Park	8	Neighborhood	Local	11
Jesse Owens Community Regional Park	8	Community Regional	Regional	9
Pacific Crest Park	2	Neighborhood	Local	9
Pamela Park	7	Neighborhood	Local	3
Park Learning Grove County Park	10	Pocket	Local	0.5
Parque de los Suenos	8	Pocket	Local	1.6
El Parque Nuestro	8	Pocket	local	0.6
Pathfinder Community Regional Park	6	Community Regional	Regional	29
Theodore Payne Wildlife Sanctuary	1	Special Use	Regional	157
Pearblossom Park	1	Neighborhood	Local	8
Peck Road Water Conservation Park	7	Special Use	Regional	155

Table 5.15-4 Los Angeles County Parks and Recreation Inventory

Park	Park Planning Area	Park Classification	Type	Acre(s)
Pepperbrook Park	6	Neighborhood	Local	5
Phacelia Wildlife Sanctuary	1	Special Use	Regional	160
Pickens Park	3	Pocket	Local	0.2
Pico Canyon Park	2	Neighborhood	Local	21
Placerita Canyon Nature Center	2	Special Use	Regional	507
Rimgrove Park	6	Neighborhood	Local	8
Dr. Richard H. Rioux Memorial Park	2	Community	Local	17
Virginia Robinson Gardens	5	Special Use	Regional	6
Jackie Robinson Park	1	Neighborhood	Local	9
Franklin D. Roosevelt Park	8	Community Regional	Regional	24
Carolyn Rosas Park	6	Neighborhood	Local	6
Rowland Heights County Park	6	Community	Local	6
Ruben F. Salazar Park	8	Neighborhood	Local	8
San Angelo Park	6	Neighborhood	Local	9
San Dimas Canyon Community Regional Park	6	Regional	Regional	19
San Dimas Canyon Nature Center	6	Special Use	Regional	110
Santa Anita Golf Course	7	Special Use	Regional	131
Santa Catalina Island Regional Park	11	Regional	Regional	41,000
Santa Fe Dam Recreational Area	7	Regional	Regional	989
Saybrook Park	8	Neighborhood	Local	6
Peter F. Schabarum Regional Park	6	Regional	Regional	575
Sorensen Park	9	Community	Local	11
Stephen Sorenson Park	2	Community Regional	Regional	108
South Coast Botanic Garden	10	Special Use	Regional	82
William Steinmetz Park	6	Community	Local	12
Sunshine Park	6	Neighborhood	Local	7
Tesoro Adobe Historic Park	2	Special Use	Regional	2
Trailview Park	6	Pocket	Local	51
Tujunga Ponds Wildlife Sanctuary	3	Special Use	Regional	13
Two Strike Park	3	Neighborhood	Local	8
Val Verde Community Regional Park	2	Community Regional	Regional	58
Valleydale Park	6	Neighborhood	Local	9
Vasquez Rocks Natural Area and Nature Sanctuary	2	Special Use	Regional	913
Veterans Memorial Community Regional Park	3	Community Regional	Regional	97
Victoria Community Regional Park	9	Community Regional	Regional	34

Table 5.15-4 Los Angeles County Parks and Recreation Inventory

Park	Park Planning Area	Park Classification	Type	Acre(s)
Victoria Golf Course	9	Special Use	Regional	167
Walnut Creek Community Regional Park	6	Special Use	Regional	55.2
Walnut Nature Park	8	Special Use	Regional	0.4
Chester Washington Golf Course	8	Special Use	Regional	126
Col. Leon H. Washington Park	8	Neighborhood	Local	13
Ted Watkins Memorial Park	8	Community Regional	Regional	28
West Creek Park	2	Community	Local	16.9
Charles White Park	7	Neighborhood	Local	5
Whittier Narrows Golf Course	7	Special Use	Regional	15
Whittier Narrows Nature Center	7	Special Use	Regional	Part of WNRA
Whittier Narrows Recreation Area (WNRA)	7	Regional	Regional	1,293

Source: Los Angeles County Draft General Plan 2014

Trails

With several mountain ranges and a variety of environments, Los Angeles County offers a variety of trails and trail types. The County is responsible for providing parks and recreation facilities to meet the diverse needs of residents and visitors of Los Angeles County, and strives to make all trails multiuse and accessible to all non-motorized users including: pedestrians, equestrians, and mountain bicyclists, where appropriate. Figure 5.15-1 depicts Los Angeles County's regional trail system.

Other Recreational Facilities

In addition to the facilities discussed above, several other categories of recreation facilities exist throughout Los Angeles County, which serve the needs of residents. These facilities include multi-benefit parks, school district facilities, city park facilities, private recreational facilities, and greenways.

Multi-Benefit Parks

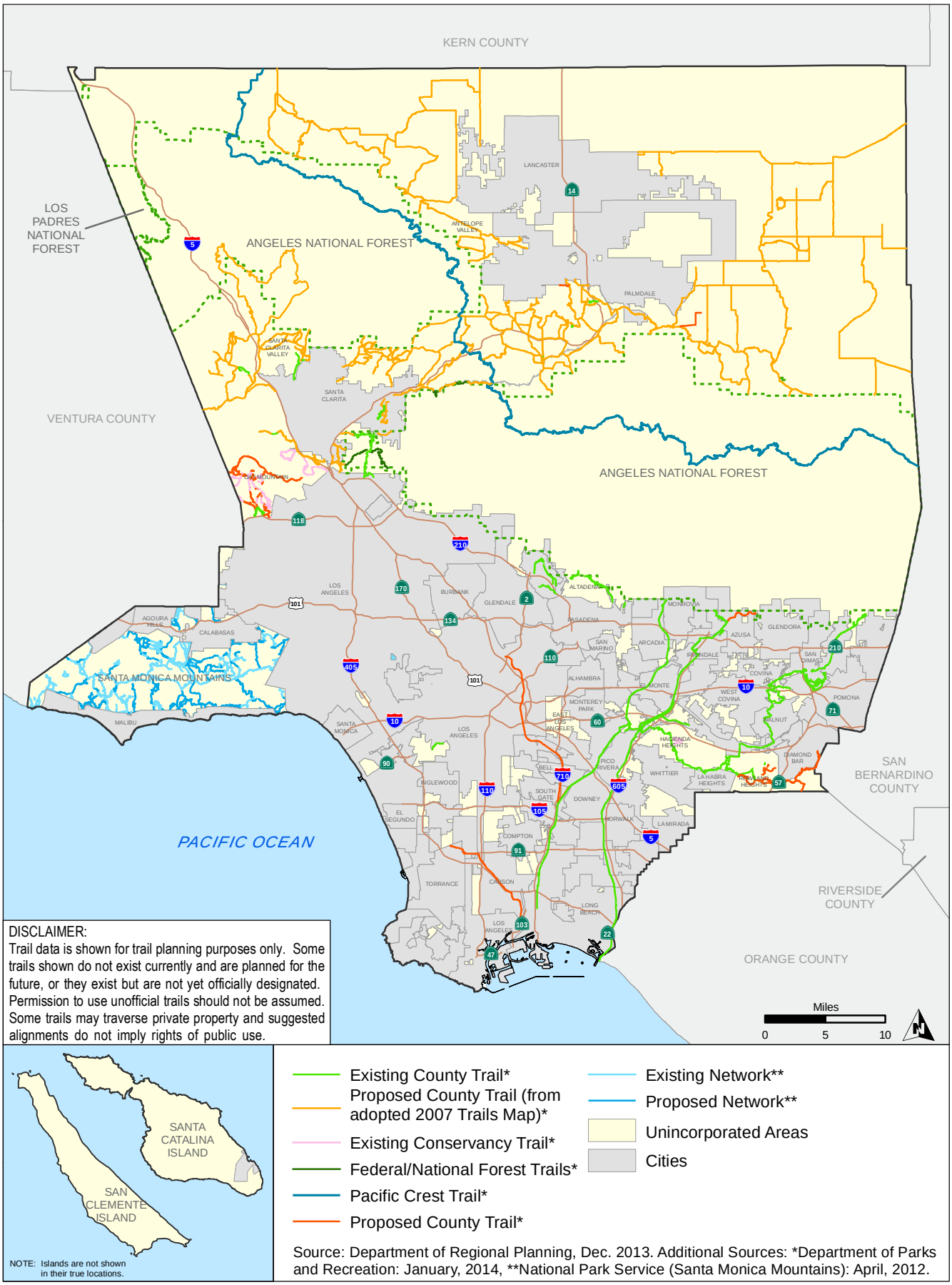
Multi-benefit parks and open spaces are created through collaborative efforts among city, county, state, and federal agencies; private organizations; schools; private landowners; and industries. These parks are characterized as having more than one function and contributing to multiple program goals.

School District Facilities

The County works with school districts to organize, promote, and conduct joint recreational and educational programs. These community recreation agreements are a form of joint-use agreement, where either a school or park facility may be put to some recreational use by the other party in exchange for some facility improvement and/or maintenance. A park does not have to be adjacent to a school (i.e., share a common boundary) for an agreement to be viable.

FIGURE 5.15-1

REGIONAL TRAIL SYSTEM MAP



Source: Department of Regional Planning, Dec. 2013. Additional Sources: *Department of Parks and Recreation: January, 2014, **National Park Service (Santa Monica Mountains): April, 2012.

5. Environmental Analysis
RECREATION

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City Parks and Facilities

City parks and facilities that are located close to the borders of the unincorporated areas are enjoyed by city and county residents alike. Similarly, local Los Angeles County parks that are located within or close to the borders of cities provide recreational amenities for both populations. This overlap in local park service radius is an important factor to consider in the placement of new local Los Angeles County parks.

Private Recreational Facilities

Private recreational facilities play an important role in meeting recreational needs. The network of private recreational facilities consists of churches, health and fitness clubs, and other organizations that offer a variety of programs and facilities. The Parks and Recreation Element of the Proposed General Plan Update does not include an inventory of private recreational facilities, and as the County does not control, maintain, or program private recreational facilities, these resources are not credited toward the County's acreage goals for public parks.

Greenways

Greenways provide a linear area along natural corridors, and often follow features such as rivers, manmade waterways, drainage channels, and utility easements. Greenways can accommodate various modes of uninterrupted pedestrian travel on pathways, including walking, jogging, and bicycling, and can include recreation areas and natural landscape features.[1]

Recreation Programs

In addition to adequate facilities, the availability of recreation programs contributes to the quality of the parks and recreation network in Los Angeles County. These programs include organized sports, tournaments, scheduled classes, and special events, as well as casual leisure activities such as family picnics and walking. Meeting the diverse needs of the community is critical to having successful recreation programs, and this is why the County has programs intended for preschool-aged children, elementary-school-aged youth, middle-school-aged youth, high-school-aged youth, adults, seniors, and households.

5.15.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

R-1 Would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

R-2 Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

[1] Los Angeles County, 2014, Public Review Draft General Plan, Parks and Recreation Element.

5.15.3 Relevant General Plan Goals and Policies

Parks and Recreation Element

Goal P/R 1: Enhanced active and passive park and recreation opportunities for all users.

- **Policy P/R 1.2:** Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.
- **Policy P/R 1.3:** Consider emerging trends in parks and recreation when planning for new parks and recreation programs.
- **Policy P/R 1.4:** Promote efficiency by building on existing recreation programs.
- **Policy P/R 1.5:** Ensure that County parks and recreational facilities are clean, safe, inviting, usable and accessible.
- **Policy P/R 1.6:** Improve existing parks with needed amenities and address deficiencies identified through the park facility inventories.
- **Policy P/R 1.7:** Ensure adequate staffing, funding, and other resources to maintain satisfactory service levels at all County parks and recreational facilities.
- **Policy P/R 1.8:** Enhance existing parks to offer balanced passive and active recreation opportunities through more efficient use of space and the addition of new amenities.

Goal P/R 2: Enhanced multi-agency collaboration to leverage resources.

- **Policy P/R 2.1:** Develop joint-use agreements with other public agencies to expand recreation services.
- **Policy P/R 2.2:** Establish new revenue generating mechanisms to leverage County resources to enhance existing recreational facilities and programs.
- **Policy P/R 2.3:** Build multiagency collaborations with schools, libraries, nonprofit, private, and other public organizations to leverage capital and operational resources.
- **Policy P/R 2.4:** Utilize school and library facilities for County sponsored and community sponsored recreational programs and activities.
- **Policy P/R 2.5:** Support the development of multi-benefit parks and open spaces through collaborative efforts among entities such as cities, the county, state, and federal agencies, private groups, schools, private landowners, and other organizations.

- **Policy P/R 2.6:** Participate in joint powers authorities (JPAs) to develop multi-benefit parks as well as regional recreational facilities.

Goal P/R 3: Acquisition and development of additional parkland.

- **Policy P/R 3.1:** Acquire and develop local and regional parkland to meet the following County goals: four acres of local parkland per 1,000 residents in the unincorporated areas and six acres of regional parkland per 1,000 residents of the total population of the County.

- **Policy P/R 3.2:** For projects that require zone change approvals, general plan amendments, specific plans, or development agreements, work with developers to provide for local and regional parkland above and beyond their Quimby obligations.

- **Policy P/R 3.3:** Provide additional parks in communities with insufficient local parkland as identified through the gap analysis.

- **Policy P/R 3.4:** Expand the supply of regional parks by acquiring land that would: 1) provide a buffer from potential threats that would diminish the quality of the recreational experience; 2) protect watersheds; and 3) offer linkages that enhance wildlife movements and biodiversity.

- **Policy P/R 3.5:** Collaborate with other public, nonprofit, and private organizations to acquire land for parks.

- **Policy P/R 3.6:** Pursue a variety of opportunities to secure property for parks and recreational facilities, including purchase, grant funding, private donation, easements, surplus public lands for park use, and dedication of private land as part of the development review process.

- **Policy P/R 3.9:** The Department of Parks and Recreation does not accept undeveloped park sites from developers. Developers are required to provide a developed park to the County on a "turn-key" basis and receive credit for the costs of developing the public park up to and against any remaining Quimby obligation, after accounting for the net acreage dedicated to the County.

Goal P/R 4: Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and community linkages.

- **Policy P/R 4.1:** Create multi-use trails to accommodate all users.

- **Policy P/R 4.3:** Develop a network of feeder trails into regional trails.

- **Policy P/R 4.5:** Collaborate with other public, nonprofit, and private organizations in the development of a comprehensive trail system.

- **Policy P/R 4.6:** Create new multi-use trails that link community destinations including parks, schools and libraries.

Goal P/R 5: Protection of historical and natural resources on County park properties.

- **Policy P/R 5.1:** Preserve historic resources on County park properties, including buildings, collections, landscapes, bridges, and other physical features.

- **Policy P/R 5.3:** Protect and conserve natural resources on County park properties, including natural areas, sanctuaries, and open space preserves.

- **Policy P/R 5.4:** Ensure maintenance, repair, rehabilitation, restoration, or reconstruction of historical resources in County parks and recreational facilities are carried out in a manner consistent with the most current Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

Goal P/R 6: A sustainable parks and recreation system.

- **Policy P/R 6.3:** Prolong the life of existing buildings and facilities on County park properties through preventative maintenance programs and procedures.

- **Policy P/R 6.5:** Ensure the routine maintenance and operations of County parks and recreational facilities to optimize water and energy conservation.

Implementation Programs

P/R-1 County Parks and Recreation Master Plan

Develop a comprehensive Los Angeles County Parks and Recreation Master Plan in collaboration with partner agencies, community groups and other stakeholders. The Master Plan will include a needs and demands analysis, in-depth gap analysis, evaluation of existing facilities and programs, asset management strategies, and implementation actions, including:

- Park Inventories: Carry out repairs and improvements to existing parks based on the priority established in the park facility inventories. Access related improvements, including upgrades to comply with the Americans with Disabilities Act (ADA), are a priority. As County parks may be used to operate Mass Care Shelters in a major disaster, these shelters must be accessible to persons with disabilities. Compile an inventory of historical resources at all County parks and recreational facilities, including facilities that are listed or eligible to be included on the state and/or national Register of Historic Places. Improve and enhance educational, informational, and regulatory signage at County parks and recreational facilities, as appropriate.

- New Park Opportunities: Identify properties that may be suitable for the development of new parks and expansion of existing parks. Study the possibility of developing multi-benefit parks and trails in areas, such as floodway channels, power line alignments, major water and sewer easements, flood basins and impoundment areas, and transportation rights of way. In addition, evaluate opportunities to develop parks and recreation facilities on brownfields following appropriate cleanup and remediation.
- Policy Development: Draft a countywide policy to require developers of large residential projects to develop new public parks. Survey and mark the boundaries of County-owned wildlife and wildflower sanctuaries to address encroachment by adjacent property owners. Pursue local, state, and/or federal historical registration and/or museum accreditation of additional County parks and recreational facilities, where appropriate.
- Land Acquisition Strategy: Develop a land acquisition strategy as a component of the Master Plan that will establish a framework for evaluating land acquisition priorities, identify funding options for acquisitions, and provide a five-year implementation plan for land acquisition.
- Program Development: Expand the park volunteer program and actively recruit more youth and seniors to conduct recreation programs and services, and identify additional facilities where historical and natural resource programs may be offered.
- Parks Maintenance Master Plan: Develop a Parks Maintenance Master Plan and a computerized maintenance reporting and tracking system to ensure that routine maintenance and operations of County parks and recreational facilities are carried out in a timely, efficient, and sustainable manner. The Maintenance Master Plan will establish benchmarks for all routine park maintenance tasks and future goals based on national standards.
- Revenue Enhancement: Pursue a variety of initiatives to generate additional revenues for parks and recreation including: expanding the Adopt-a-Park program, soliciting donations and sponsorships, applying for grants, and holding more fundraising activities and events.

5.15.4 Environmental Impacts

Impact 5.15-1: The Proposed Project would generate additional residents that would increase the use of existing parks and recreational facilities such that substantial physical deterioration may occur or be accelerated. [Threshold R-1]

Impact Analysis:

An increase in population, regardless of location, would result in increased demand for recreational facilities, which has the potential to result in the deterioration of existing facilities. Table 5.15-5, *Increase in Population and*

Housing Units by Planning Area, identifies the anticipated increase in population by Planning Area under the Proposed Project. As shown in this table, 1,066,414 new residents are anticipated in the unincorporated areas.

Table 5.15-5 Increase in Population and Housing Units by Planning Area

	Residential Units					Population				
Planning Area	Existing	Proposed	Increase Over Existing	Increase within Planning Area (%)	% of Total Increase Over Existing	Existing	Proposed	Increase Over Existing	Difference within Planning Area (%)	% of Total Increase Over Existing
Antelope Valley	24,739	278,158	253,419	1,024	70.6	93,490	1,070,571	977,081	1,045	76
Coastal Islands	44	21	-23	(52)	(6)	158	0	-158	(100)	(0.01)
East San Gabriel Valley	63,825	70,097	6,272	10	1.8	239,218	255,952	16,734	7	1.3
Gateway	28,743	34,446	5,703	20	1.6	104,061	120,358	16,297	16	1.3
Metro	73,068	92,158	19,090	26	5.3	235,990	301,073	65,083	31	5
San Fernando Valley	9,039	13,464	4,425	49	1.2	32,488	47,060	14,572	45	1.1
Santa Clarita Valley	28,501	77,155	48,654	171	13.6	104,116	237,638	133,522	128	10
Santa Monica Mountains	5,703	6,788	1,085	19	.30	21,757	26,128	4,371	20	.34
South Bay	19,952	25,929	5,977	30	1.6	69,474	86,392	16,918	42	1.3
West San Gabriel Valley	34,765	43,877	9,112	26	2.5	125,736	156,685	30,949	30	2.4
Westside	12,099	17,316	5,217	43	1.4	39,926	55,033	15,107	38	1.2
Total	**300,478**	**659,409**	**358,931**			**1,066,414**	**2,356,890**	**1,290,476**		**121**

Source: County of Los Angeles Department of Regional Planning, 2014.

As shown in table 5.5-15, the Planning Areas most likely to experience substantial population growth under the Proposed Project include the Antelope Valley, Santa Clarita Valley, and Metro Planning Area. It is estimated that 84 percent of the projected population growth and 82 percent of new residential units in the unincorporated areas would occur in the Antelope Valley and Santa Clarita Valley Planning Areas. The remaining growth outside of the Antelope Valley and Santa Clarita Valley Planning Areas would occur in the unincorporated islands, which are surrounded by cities with a variety of local and regional recreational facilities. As shown in Table 5.15-5, *Increase in Population and Housing Units by Planning Area*, population growth in the remaining Planning Areas is limited and is expected to be five percent or less per within each Planning Area.

The anticipated increase in population in the northern portion of the Project Area would result in an increase in demand for recreational facilities in this area. Additionally, increases in population in areas that currently do not have adequate recreational facilities would have the potential to accelerate deterioration of existing facilities from intensified overuse.

The recreational acreage goal identified for local parks in the General Plan is four acres of local parkland per 1,000 residents and six acres of regional parkland per 1,000 residents. As shown in Table 5.15-1, *Existing*

County Parkland, meet the County's recreational acreage goals are not met. Recreational acreage goals serve as the baseline level of service standard that guides the planning and monitoring of recreational facilities. Acreage goals are used as planning tools; however, recreational facilities are not automatically considered deficient if these goals are not met.

The Proposed Project's demand for local and regional parkland is shown in Table 5.15-6, *Increases in Population and Demand for County Parkland by Planning Area*.

Table 5.15-6 Increases in Population and Demand for County Parkland by Planning Area

	Local Parkland Goals		Regional Goal	
Planning Areas	Population Increase Over Existing	General Plan (4 ac/1,000 per.)	Population Increase Over Existing	Regional Parkland Acreage (6 ac/1,000 per.)
Antelope Valley	977,081	3,908	977,081	5,862
Coastal Islands	-158	0	-158	0
East San Gabriel Valley	16,734	67	16,734	100
Gateway	16,297	65	16,297	97
Metro	65,083	260	65,083	391
Santa Clarita Valley	133,522	534	133,522	801
San Fernando Valley	14,572	58	14,572	87
Santa Monica Mountains	4,371	18	4,371	26
South Bay	16,918	68	16,918	102
West San Gabriel Valley	30,949	124	30,949	186
Westside	15,107	60	15,107	91
Total	1,290,476	**5,162**	1,290,476	**7,743**

Source: Los Angeles County General Plan, 2014.

Regional Parkland

There is a total of 68,986 acres of regional parkland in Los Angeles County. For every 1,000 residents, there are a total of approximately seven acres of regional parkland. Based on the General Plan's goal, there is a 10,074-acre surplus of regional parkland. The surplus is located in two Planning Areas, Antelope Valley and Coastal Islands. The Coastal Islands Planning Area refers to Santa Catalina Island, which is not as easily accessible as other regional facilities.

As discussed in Section 5.13, *Population and Housing*, Los Angeles at buildout, Los Angeles County is expected to have a total population of 11,353,000. To meet the County's General Plan goal of six acres of regional parkland per 1,000 residents of the total population of Los Angeles County, a total of 68,118 acres of regional parkland would need to be available. As shown in Table 5.15-3, *Existing County Parkland by Planning Area*, there are currently 68,986 acres of regional parkland. At buidout, the ratio would be six acres of regional parkland per 1,000 Los Angeles County residents. This ratio meets the County's General Plan goal for regional parkland. Therefore, the 10,074-acre surplus of regional parkland is sufficient to accommodate the Proposed Project.

Local Parkland

The current ratio of local parkland is .57 acres of local parkland for every 1,000 residents. Based on the County's General Plan desired ratio of four acres of local parkland per 1,000 residents, there is currently a 3,657-acre deficit of local parkland within the unincorporated areas. Although there is an existing local park deficiency, there are a number of other recreation and open-space assets that serve to reduce the demand for local park facilities. The regional parkland reduces the demand for local park facilities. Moreover, as discussed above in the Existing Conditions section of this chapter, the County-maintained trail system as well as other recreation facilities, including multi-benefit parks, school sites, city parks and facilities, private recreational facilities, greenways, and a variety of recreation programs tailored to the diverse needs of the population further reduce the demand for local park facilities.

As shown in Table 5.15-6, the Proposed Project assumes an additional 1,290,476 people would reside in the Plan Area at buildout. To meet the General Plan goal for local parkland for the new population, the County would need 5,162 additional acres of local parkland. The County currently falls sort of its goal for local parkland and would not be able to accommodate the Proposed Project's additional demand through existing local parkland inventory. Given the existing deficiency, the inability of the County to meet the General Plan goal of four acres of local parkland for every 1,000 residents upon buildout of the Proposed Project, would not in and of itself, result in a significant physical deterioration of recreation facilities. Increases in parkland acreage proportional to the increases in population (or sufficient increases in maintenance) would be adequate to assume that a substantial physical deterioration of facilities would not occur.

The extent to which the County can implement parks, trails, and other recreational facilities is related to the availability of funding. As discussed, the Quimby Act is a funding mechanism for parkland acquisition. As allowed by this Act and pursuant to the County Code, residential subdivisions must dedicate parkland or pay in-lieu fees (or both, in some circumstances) to enable the County to acquire a ratio of three acres of local parkland for every 1,000 residents (Section 21.24.340). This provision assures that the funding for parkland acquisition will be proportional to increases in population. Other regulations including the Mello-Roos Community Facilities Act of 1982, the Landscaping and Lighting Act of 1972, as well as Los Angeles County Proposition A (Safe Neighborhood Parks Proposition of 1992 and 1996) would serve as supplemental sources of funding for parkland. Additionally, per Policy P/R 3.3, the County can require the provision of additional parks in communities with insufficient local parkland. The County can require a subdivider to dedicate land according to the General Plan standard of four acres of local parkland per 1,000 residents in unincorporated areas, and six acres of regional parkland per 1,000 residents in the unincorporated areas, per Los Angeles County Ordinance 2013-0009. Enforcement of the General Plan goal of four acres of local parkland for every 1,000 residents as a condition of approval where an appropriate nexus exist would serve to reduce the potential for deterioration of facilities by allowing for adequate funding.

Adherence to County Code Section 21.24.340 would ensure, through funding and/or dedication of land, that approximately 3,871 acres of additional local would be available at Proposed Project buildout. In communities with insufficient local parkland, the County could ensure that additional local parkland is acquired as the unincorporated County islands redevelop. When combined with the 609 acres of exiting local parks, there would be a total of 4,480 acres of local parkland, or 1.9 acres per 1,000 residents. Although this

would still not achieve the adopted parkland dedication ratio of four acres of local parkland for every 1,000 residents, the availability of parkland per 1,000 residents would be significantly improved from .57 acres to 1.9 acres per 1,000 residents. Additional parkland funding per the County code would ensure that additional local parkland is acquired, which in turn would serve to reduce the potential for deterioration of facilities.

The provisions of County Code Section 21.24.340 require three acres of local parkland per 1,000 residents, while General Plan Policy P/R 3.1 sets a goal of four acres per 1,000 residents. As a result, there is an inherent deficit between the ratio of local parkland the County would like to maintain and the amount of parkland it can provide in accordance with County Code Section 21.24.340. Therefore, although much of the demand for local parkland can be accommodated, a deficit of parkland would remain compared to the General Plan's goal.

Proposed General Plan Implementation Program P/R-1 calls for the development of a comprehensive Los Angeles County Parks and Recreation Master Plan. Implementation of the Parks and Recreation Master Plan would include a needs and demands analysis, in-depth gap analysis, evaluation of existing facilities and programs, asset management strategies, and implementation actions, would serve to improve the efficiency of parkland allocation by carefully considering constraints, and would carry out repairs and improvements to existing parks based on the priority established in the park facility inventories. The preparation of an ongoing maintenance program would ensure that all parks and structures are maintained in a safe and healthy manner that would serve to reduce the potential for the projected increases in population to result in a substantial deterioration of parks and recreation facilities. Other documents including the County of Los Angeles Trails manual would contribute to the regulatory and planning framework, which would allow for an efficient allocation of funds for recreation facilities development and maintenance.

Additionally, there are numerous policies in the Proposed General Plan Update that would reduce the significance of this impact including the following:

Park Programming

- **Policy P/R 1.2:** Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.

- **Policy P/R 1.3:** Consider emerging trends in parks and recreation when planning for new parks and recreation programs.

- **Policy P/R 1.4:** Promote efficiency by building on existing recreation programs.

Park Management

- **Policy P/R 1.5:** Ensure that County parks and recreational facilities are clean, safe, inviting, usable and accessible.

- **Policy P/R 1.6:** Improve existing parks with needed amenities and address deficiencies identified through the park facility inventories.

- **Policy P/R 1.7:** Ensure adequate staffing, funding, and other resources to maintain satisfactory service levels at all County parks and recreational facilities.

- **Policy P/R 1.8:** Enhance existing parks to offer balanced passive and active recreation opportunities through more efficient use of space and the addition of new amenities.

Collaboration and Financing

- **Policy P/R 2.1:** Develop joint-use agreements with other public agencies to expand recreation services.

- **Policy P/R 2.2:** Establish new revenue generating mechanisms to leverage County resources to enhance existing recreational facilities and programs.

- **Policy P/R 2.3:** Build multiagency collaborations with schools, libraries, nonprofit, private, and other public organizations to leverage capital and operational resources.

- **Policy P/R 2.4:** Utilize school and library facilities for County sponsored and community sponsored recreational programs and activities.

- **Policy P/R 2.5:** Support the development of multi-benefit parks and open spaces through collaborative efforts among entities such as cities, the county, state, and federal agencies, private groups, schools, private landowners, and other organizations.

- **Policy P/R 2.6:** Participate in joint powers authorities (JPAs) to develop multi-benefit parks as well as regional recreational facilities.

Parkland Acquisition and Dedication

- **Policy P/R 3.1:** Acquire and develop local and regional parkland to meet the following County goals: four acres of local parkland per 1,000 residents in the unincorporated areas and six acres of regional parkland per 1,000 residents of the total population of the County.

- **Policy P/R 3.2:** For projects that require zone change approvals, general plan amendments, specific plans, or development agreements, work with developers to provide for local and regional parkland above and beyond their Quimby obligations.

- **Policy P/R 3.3:** Provide additional parks in communities with insufficient local parkland as identified through the gap analysis.

- **Policy P/R 3.4:** Expand the supply of regional parks by acquiring land that would: 1) provide a buffer from potential threats that would diminish the quality of the recreational experience; 2) protect watersheds; and 3) offer linkages that enhance wildlife movements and biodiversity.

- **Policy P/R 3.5:** Collaborate with other public, nonprofit, and private organizations to acquire land for parks.

- **Policy P/R 3.6:** Pursue a variety of opportunities to secure property for parks and recreational facilities, including purchase, grant funding, private donation, easements, surplus public lands for park use, and dedication of private land as part of the development review process.

Parkland Development

- **Policy P/R 3.9:** The Department of Parks and Recreation does not accept undeveloped park sites from developers. Developers are required to provide a developed park to the County on a "turn-key" basis and receive credit for the costs of developing the public park up to and against any remaining Quimby obligation, after accounting for the net acreage dedicated to the County.

Trail System

- **Policy P/R 4.1:** Create multi-use trails to accommodate all users.

- **Policy P/R 4.3:** Develop a network of feeder trails into regional trails.

- **Policy P/R 4.5:** Collaborate with other public, nonprofit, and private organizations in the development of a comprehensive trail system.

- **Policy P/R 4.6:** Create new multi-use trails that link community destinations including parks, schools and libraries.

Park Resource Preservation

- **Policy P/R 5.1:** Preserve historic resources on County park properties, including buildings, collections, landscapes, bridges, and other physical features.

- **Policy P/R 5.3:** Protect and conserve natural resources on County park properties, including natural areas, sanctuaries, and open space preserves.

- **Policy P/R 5.4:** Ensure maintenance, repair, rehabilitation, restoration, or reconstruction of historical resources in County parks and recreational facilities are carried out in a manner consistent with the most current Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

Sustainable Parks System

- **Policy P/R 6.3:** Prolong the life of existing buildings and facilities on County park properties through preventative maintenance programs and procedures.

- **Policy P/R 6.5:** Ensure the routine maintenance and operations of County parks and recreational facilities to optimize water and energy conservation.

In summary, while the current adopted County Code Section 21.24.340 standard is three acres of local parkland for every 1,000 residents, given the existing local parkland deficit, increases in parkland development and maintenance proportional to future increases in population would be sufficient to prevent a substantial deterioration of recreation facilities. As discussed above, adherence to the regulatory framework and County Code Section 21.24.340 would result in more than a 535 percent increase in local parkland through funding or dedication of land upon buildout of the Proposed Project. Further, as a condition of zone change approval, General Plan amendment, specific plan approval, or development agreement, the County shall work with a subdivider to dedicate land according to the General Plan goal of four acres of local parkland per 1,000 residents in the unincorporated areas, and six acres of regional parkland per 1,000 residents..

The presence of a variety of recreation options beyond local park facilities, a planning framework that would allow for an efficient allocation of funds, and would require funding for parks to be proportional to future increases in population, would all serve to reduce the potential for significant deterioration of recreational facilities associated with buildout of the Proposed Project. Therefore, existing regulations, Proposed General Plan Update policies, and Implementation Programs assure that the funding for parkland acquisition would be proportional to increases in population pursuant to the Quimby Act and impacts would be less than significant.

Impact 5.15-2: Implementation of the Proposed Project would result in the construction or expansion of recreational facilities. [Threshold R-2]

Impact Analysis:

Implementation of the Proposed Project would require the construction and expansion of new recreational facilities to serve the forecasted population growth in the unincorporated areas. Although the Proposed Project does not specifically site or plan recreational facilities, it would allow for the development of future recreational facilities, including parks, trails, athletic fields, and golf courses, within many of the land use designations, including residential and mixed-use.

While the Proposed Project does recognize the need for additional recreational facilities, considering that the Proposed Project is a programmatic planning document, it does not contain actual development proposals with locations or project-specific details. Rather, the Proposed Project sets forth goals and policies, which are intended to guide the development of the unincorporated areas. Development pursuant to the Proposed Project would result in the construction of new or expansion of existing recreational facilities. Development and operation of new recreational facilities may have an adverse physical effect on the environment, including impacts relating to air quality, biological resources, lighting, noise, and traffic. Environmental impacts

associated with construction of new and/or expansion of recreational facilities in accordance with the Proposed Project are addressed separately (see appropriate environmental topical areas in Chapter 5, *Environmental Impacts*). However, it is speculative to determine the location of proposed park facilities and impacts arising from the development of individual park projects. Goals, policies, and actions in the Proposed General Plan Update, including the creation of a County Parks and Recreation Master Plan, a trails program, and Parks Sustainability Program would guide the development of future recreational facilities. Moreover, by directing the County to preserve historic and natural resources on County park properties, Policies P/R 5.1 and 5.3 would serve to reduce the potential for new or expanded facilities to result in adverse physical impacts. Finally, existing federal, state, and local regulations, would mitigate potential adverse impacts to the environment that may result from the expansion of parks, recreational facilities, and trails pursuant to buildout of the Proposed Project. Furthermore, subsequent environmental review would be required for development of park projects under existing regulations. Consequently, the Proposed Project would not result in significant impacts relating to new or expanded recreational facilities.

5.15.5 Cumulative Impacts

Buildout of the Proposed Project would increase use of existing local and regional parks, and could result in the accelerated deterioration of recreational facilities. Some cumulative projects, such as buildout of general plans for adjacent jurisdictions, would have the potential to increase the demand for recreational facilities, which could result in deterioration of existing facilities. As discussed in Section 5.13, *Population and Housing*, Los Angeles County is expected to have a total population of 11,353,000. To meet the County's General Plan goal of six acres of regional parkland per 1,000 residents of the total population of Los Angeles County, a total of 68,118 acres of regional parkland would need to be in place. As shown in Table 5.15-3, *Existing County Parkland by Planning Area*, there are currently 68,986 acres of regional parkland. Therefore, cumulative regional parkland impacts are less than significant. However, the deterioration that would occur to local parks and recreational facilities from regional population growth may be offset with funding from new development such as in-lieu fees for parks or donation of parkland pursuant to the Quimby Act. As discussed, the Quimby Act is a funding mechanism for parkland acquisition for jurisdictions. As allowed by this Act, most cities in Los Angeles County have park dedication ordinances as part of their municipal codes. The park dedication ordinances require most residential subdivisions to dedicate parkland or pay in-lieu fees (or both, in some circumstances) to enable the jurisdictions to acquire local parkland at ratios between three acres and five acres per 1,000 residents. In order to accommodate future demand for park and recreational facilities from population growth in the Los Angeles region, additional park and recreational facilities will be developed and constructed throughout the region. Other cumulative projects, such as schools or residential projects in adjacent jurisdictions, would increase the need for recreational facilities in the region. Cumulative development would still incrementally increase the need for new or expanded facilities, which would have the potential to result in adverse environmental effects. However, as discussed, existing regulations do not assure that the funding for parkland acquisition would be proportional to increases in population. The provisions of County Code Section 21.24.340 require three acres of local parkland per 1,000 residents, while General Plan Policy P/R 3.1 sets a goal of four acres per 1,000 residents. As a result, there is an inherent deficit between the ratio of local parkland the County would like to maintain and the amount of parkland it can provide in accordance with County Code Section 21.24.340. Therefore, although much of the demand for local parkland

can be accommodated, a deficit of parkland would remain compared to the County's goal. Grants from state and county bond sources are available to fund park and recreational facilities in urban areas and funding for maintenance of those facilities would be provided through property assessments and taxes. Other regulations including the Mello-Roos Community Facilities Act of 1982 and the Landscaping and Lighting Act of 1972, would serve as supplemental sources of funding for parkland. Enforcement of existing parkland dedication requirements would serve to reduce the potential for deterioration of facilities by allowing for adequate funding for the provision and maintenance of recreational facilities. Therefore, existing regulations, Proposed General Plan Update policies, and Implementation Programs assure that the funding for parkland acquisition would be proportional to increases in population pursuant to the Quimby Act and impacts would be less than significant.

It is speculative to determine the location of proposed park facilities in Los Angeles County and impacts arising from development of individual park projects. The majority of cumulative projects would be discretionary and would be required to demonstrate compliance with CEQA and/or NEPA prior to project approval; existing federal, state, and local regulations, would mitigate potential adverse impacts to the environment that may result from the expansion of parks, recreational facilities, and trails.

Therefore, the Proposed Project would not result in a cumulatively considerable contribution to a significant cumulative impact associated with deterioration of regional parks and construction recreational facilities; however, it does result in cumulative impact associated with deterioration of local parks.

5.15.6 Existing Regulations and Standard Conditions

State

- Quimby Act (California Government Code 66477)
- The Mello-Roos Community Facilities Act of 1982
- Landscaping and Lighting Act of 1972, California Streets and Highway Code Section 22500 – 22509

Local

- Los Angeles County Code Section 21.24.340
- Los Angeles County Trails Manual (2011)
- Safe Neighborhood Parks Proposition of 1992, 1996, Proposition A

5.15.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, the following impacts would be less than significant: 5.15-1 and 5.15-2.

5.15.8 Mitigation Measures

No mitigation measures are required.

5.15.9 Level of Significance After Mitigation.

No significant impacts have been identified and no significant and unavoidable impacts would occur.

5.15.10 References

Los Angeles County, 2014, Public Review Draft General Plan, Parks and Recreation Element.

Westrup, Laura. 2002. Quimby Act 101: An Abbreviated Overview, Sacramento: California Department of Parks and Recreation, Planning Division, http://www.parks.ca.gov/pages/795/files/quimby101.pdf.

5. Environmental Analysis
RECREATION

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5.16 TRANSPORTATION AND TRAFFIC

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Proposed General Plan Update (Proposed Project) to result in transportation and traffic impacts in the unincorporated areas of Los Angeles County (Project Area). The analysis in this section is based in part on the following technical report(s):

- *Programmatic Traffic Impact Study – County of Los Angeles General Plan Update*, Iteris, June 2014.

A complete copy of this study is included in the Technical Appendices to this Draft EIR (Volume II, Appendix L).

5.16.1 Environmental Setting

5.16.1.1 SOCIOECONOMIC DATA, TRIPS AND TRANSPORTATION PERFORMANCE MEASURES

Table 5.16-1 summarizes key transportation performance measures for the Planning Areas including trips, vehicle miles traveled and vehicle hours of travel. Existing transportation conditions for each Planning Area are summarized in the following section. Trips for the Coastal Islands Planning Area are not shown because existing traffic volumes are negligible.

Table 5.16-1 Existing Unincorporated Areas Travel Performance Measures, by Planning Area (Daily)

Planning Area	Existing Daily Trips	Existing Truck Trips	Existing Vehicle Miles of Travel	Existing Vehicle Hours of Travel
Antelope Valley	260,220		3,868,720	95,263
East San Gabriel Valley	896,100	29,174	10,208,914	281,574
Gateway	422,068	19,796	4,303,181	128,242
Metro	457,054	14,334	3,884,605	120,039
San Fernando Valley	135,360	3,692	1,481,508	41,166
Santa Clarita Valley	339,899	8,732	4,428,105	121,113
Santa Monica Mountains	167,122	4,000	2,424,947	68,105
South Bay	295,360	10,949	2,666,355	79,770
West San Gabriel Valley	443,589	11,855	4,519,194	131,002
Westside	210,707	5,835	1,886,738	63,382

Source: Southern California Association of Governments Regional Travel Demand Model, 2008

Antelope Valley Planning Area

A large portion of the Antelope Valley Planning Area is unincorporated, and includes the City of Lancaster and City of Palmdale. As of 2010, these unincorporated areas had a population of 76,846 and an employment base of 8,800 jobs. This represents approximately 20 percent of the Planning Area's population base and 10 percent of the Planning Area's employment base. These unincorporated areas of the Planning

Area currently generate 260,220 daily trips, 3,868,720 daily VMT, 95,263 daily VHT and 5,792 daily truck trips.

In terms of the roadway network in this Planning Area, the key arterials that pass through the unincorporated areas include the following:

North-South Highways

- 30th Street – ADT 0.04 (s/o Avenue E); Major Highway (between Avenue D and Avenue E)
- Sierra Highway – ADT 4.1 – 4.7 (between Avenue E and Avenue F); Major Highway (between Avenue B and Avenue F)
- 50th Street – ADT 8.9 – 14.6 (between Avenue M and Avenue N); Secondary Highway (between Avenue E and Avenue F); Major Highway (between Avenue M and s/o Avenue P)
- 47th Street – ADT N/A; Secondary Highway (between Pearblossom Highway and Mt. Emma Road)
- 126th Street – ADT N/A; N/A
- 160th Street – ADT N/A; N/A
- 210th Street – ADT N/A; N/A
- 240th Street – ADT N/A; Secondary Highway (between Avenue J and Avenue P); Major Highway (between Avenue P and Palmdale Boulevard)
- Largo Vista Road – ADT N/A; Secondary Highway (between Avenue Y and Big Pines Highway); Limited Secondary Highway (between Avenue Y and Pearblossom Highway)
- San Gabriel Canyon Road (SR-39) – ADT N/A; Limited Secondary Highway
- Mount Wilson Red Box Road – ADT N/A; N/A
- Angeles Forest Highway – ADT 3.4 (w/o Big Tujunga Canyon Road); Major Highway
- Upper Big Tujunga Canyon Road – ADT N/A; N/A

East-West Highways

- Avenue B – ADT N/A; N/A
- Avenue C – ADT N/A; N/A

- Lancaster Road (SR-138) – ADT N/A; N/A
- Avenue D – ADT 2.5 – 2.9 (between w/o 110th Street and e/o 90th Street); N/A
- Avenue J – ADT 1.0 – 2.5 (between 90th Street and e/o 170th Street); Major Highway (between 90th Street and 170th Street); Secondary Highway (between 170th Street and 240th Street)
- Avenue K/Avenue K 8 – ADT 0.5 (e/o 150th Street); Secondary Highway (between 110th Street and 152nd Street)
- Avenue O – ADT 1.0 (e/o 180th Street); Secondary Highway
- Avenue P – ADT N/A: N/A
- Palmdale Boulevard – ADT N/A; Major Highway
- Pearblossom Highway (SR-138 w/o Antelope Highway; SR-18 e/o Antelope Highway) – ADT 15.2 (w/o 82nd Street); Major Highway (between Antelope Highway and 263rd Street)
- Antelope Highway (SR 138) – ADT 8.2 (w/o 263rd Street); N/A
- Big Pines Highway – ADT 0.1 – 0.4 (between MM1.22 and MM10.79); Limited Secondary Highway
- Angeles Crest Highway (SR-2) – ADT N/A; Major Highway (w/o Mt. Wilson Red Box Road); Limited Secondary Highway (e/o Mt. Wilson Red Box Road)

State Highway Network

The Antelope Valley Planning Area is served by portions of the I-5 Freeway and the SR-14 Freeway.

East San Gabriel Valley Planning Area

The East San Gabriel Valley Planning Area includes the following unincorporated areas: South Diamond Bar, Rowland Heights, Hacienda Heights, Avocado Heights, East Irwindale, Covina Islands, Glendora Island, East Azusa, Northeast San Dimas, Northeast La Verne, North Claremont, West Claremont, East San Dimas, North Pomona, Charter Oak, West San Dimas, Walnut Islands, West Puente Valley, Valinda, South San Jose Hills and South Walnut. As of 2010, these unincorporated areas had a population of 231,906 people and an employment base of 29,706 jobs. This represents approximately 25 percent of the Planning Area's population base and 10 percent of the Planning Area's employment base. These unincorporated areas of the Planning Area currently generate 896,100 daily trips, 10,208,914 daily VMT, 281,574 daily VHT and 29,174 daily truck trips.

In terms of the roadway network in this Planning Area, the key arterials that pass through the unincorporated areas include the following:

North-South Highways

- Harbor Boulevard – ADT 32.2 (n/o Wellington Lane); Major Highway
- Azusa Avenue – ADT N/A; (s/o Colima Road); Local Street
- Hacienda Boulevard – ADT 18.9 – 49.8 (between s/o Colima Road and so/ Gale Avenue); Major Highway
- Irwindale Avenue/Sunset Avenue ADT 1.3 – 25.8 (between Cypress Street and Badillo Street); Major Highway

East-West Highways

- Colima Road – ADT 27.4 – 48.6 (between s/o Camino Del Sur and Fullerton Road); Major Highway
- Amar Road – ADT 23.4 – 24.6 (w/o Puente Avenue); ADT 30.1 – 32.2 (between Sunset Avenue and Unruh Avenue); 21.9 (e/o Indian Summer Avenue); Major Highway
- Sunset Avenue – ADT 27.2 (n/o Amar Road); Major Highway
- 7th Street – ADT 34.5 (n/o Gale Avenue); Major Highway
- Badillo Street – ADT 17.5 – 19.2 (between Orange Avenue and e/o Sunset Avenue); Major Highway
- Arrow Highway – ADT 26.4 – 27.1 (between Vincent Avenue and Lark Ellen Avenue); Major Highway
- Baseline Road – ADT N/A; Major Highway
- Temple Avenue – ADT N/A; Major Highway

State Highway Network

The East San Gabriel Valley Planning Area is served by portions of the I-10 Freeway, the SR-210 Freeway, the SR-57 Freeway, the SR-60 Freeway, and the SR-71 Freeway.

Gateway Planning Area

The Gateway Planning Area includes the following unincorporated areas: Long Beach Island, Rancho Dominguez, Lynwood Island, Long Beach Island, Bandini Islands, La Habra Heights Islands, West Whittier-Los Nietos, North Whittier, and South Whittier-Sunshine Acres. These unincorporated areas had a population of 116,079 people and an employment base of 24,516 jobs. This represents approximately 7 percent of the Planning Area's population base and 4 percent of the Planning Area's employment base.

These unincorporated areas of the Planning Area currently generate 422,068 daily trips, 4,303,181 daily VMT, 128,242 daily VHT and 19,796 daily truck trips.

In terms of the roadway network in this Planning Area, the key arterials that pass through the unincorporated areas include the following:

North-South Highways

- Alameda Street – ADT 17.5 – 20.2 (between Del Amo Boulevard and s/o SR-91); Secondary Highway
- Santa Fe Avenue – ADT 6.6 – 16.4 (between Del Amo Boulevard and s/o SR-91); Major Highway
- Norwalk Boulevard – ADT 16.0 – 26.2 (between Slauson Avenue and Whittier Boulevard); Major Highway
- Carmenita Road – ADT 22.1 – 24.0 (between Imperial Highway and n/o Meyer Road); Major Highway
- Painter Avenue – ADT 23.9 (n/o Mulberry Drive); Major Highway
- Valley View Avenue – ADT 15.4 – 23.1 (between Imperial Highway and Telegraph Road); Major Highway
- La Mirada Boulevard – ADT 13.3 – 21.1 (between Leffingwell Road and Colima Road); Major Highway

East-West Highways

- Mulberry Drive – ADT 19.8 – 29.7 (between Painter Avenue and La Mirada Boulevard); Major Highway
- Telegraph Road – ADT 25.1 – 35.0 (between Gunn Avenue and Leffingwell Road); Major Highway
- Mills Avenue – ADT 18.0 – 25.4 (between Telegraph Road and Lambert Road); Secondary Highway

State Highway Network

The Gateway Planning Area is served by portions of the I-710 Freeway, the I-605 Freeway, the I-405 Freeway, the I-105 Freeway, the I-5 Freeway, the SR-91 Freeway, the SR-103 Freeway, and the SR-22 Freeway.

Metro Planning Area

The Metro Planning Area has includes the following unincorporated areas: East Los Angeles, East Rancho Dominguez, Florence-Firestone, Walnut Park, West Athens-Westmont, Willowbrook and West Rancho Dominguez-Victoria. As of 2010, these unincorporated areas had a population of 289,110 people and an employment base of 61,580 jobs. This represents approximately 16 percent of the Planning Area's population base and 10 percent of the Planning Area's employment base. These unincorporated portions of the Metro

Planning Area currently generate 457,054 daily trips, 3,884,605 daily VMT, 120,039 daily VHT and 14,334 daily truck trips.

In terms of the roadway network in this Planning Area, the key arterials that pass through the unincorporated areas include the following:

North-South Highways

- Alameda Street – ADT 37.7 (between Walnut Avenue and Firestone Boulevard); ADT 17.5 (between SR-91 and Del Amo Boulevard); Secondary Highway
- Mountain View Avenue – ADT 6.9 (between Florence Avenue and Santa Ana Street); Local Street
- Central Avenue – ADT 25.0 (between 120th Street and El Segundo Boulevard); Major Highway
- Broadway – ADT 7.8 – 10.8 (between 120th Street and Alondra Boulevard); Major Highway
- Atlantic Avenue – ADT 18.1 – 21.2 (between Rosecrans Avenue and Alondra Boulevard); Major Highway
- Western Avenue – ADT 19.7 – 24.6 (between 108th Street and 124th Street); Major Highway
- Central Avenue – ADT 25.2 (n/o El Segundo Boulevard); 26.2 (123rd Street); Major Highway
- Alameda Street – ADT 30.4 – 34.9 (between Florence Avenue and 83rd Street); Major Highway
- Santa Ana Avenue – ADT 14.4 – 26.3 (between Florence Avenue and Poplar Place); Major Highway
- Atlantic Boulevard – ADT 35.8 – 24.8 (between Pomona Boulevard and Olympic Boulevard); Major Highway

East-West Highways

- Florence Street – ADT 24.8 – 27.2 (between Central Avenue and Alameda Street ranges); Major Highway
- Firestone Boulevard – ADT 27.9 – 31.5 (between Central Avenue and Alameda Street); Major Highway
- Century Boulevard – ADT 30.0 (e/o Normandie Avenue); Major Highway
- Santa Ana Boulevard – ADT 2.3 (e/o Mona Boulevard); Secondary Highway
- Imperial Highway – ADT 27.5 – 29.7 (between Van Ness Avenue and Vermont Avenue); Major Highway
- El Segundo Boulevard – ADT 20.5 – 27.8 (between Figueroa Street and Central Avenue); ADT 15.3 (between Wilmington Avenue and Alameda Street); Major Highway

- Rosecrans Avenue – ADT 23.6 – 29.4 (between Figueroa Street and Central Avenue); ADT 30.5 (e/o Atlantic Boulevard); Major Highway
- Compton Boulevard – ADT 17.4 (w/o Atlantic Avenue); Secondary Highway
- Redondo Beach Boulevard – ADT 10.6 – 24.4 (between Figueroa Street and Compton Boulevard); Major Highway
- Imperial Highway – ADT 27.3 – 30.7 (between Van Ness Boulevard and Vermont Avenue); Major Highway
- Century Boulevard – ADT 30.0 – 32.5 (near Normandie Ave); Major Highway
- El Segundo Boulevard – ADT 20.5 – 27.8 (between Figueroa Street and Central Avenue); ADT 15.8 – 16.1 (between Wilmington Avenue and Mono Boulevard); Major Highway
- Rosecrans Boulevard – ADT 25.1 – 29.4 (between Broadway and Avalon Boulevard); ADT 20.4 (w/o Atlantic Avenue); 33.4 (Atlantic e/o Atlantic Avenue); Major Highway
- Redondo Beach Boulevard – ADT 9.4 – 26.6 (between Figueroa Street and Main Street); Major Highway
- Manchester Avenue – ADT 2.6 (e/o Firestone Boulevard); Major Highway
- Florence Avenue – ADT 24.8 – 29.2 (between Hooper Avenue and Wilmington Avenue); Major Highway
- Olympic Boulevard – ADT 19.1 – 22.0 (between e/o Garfield and Hendricks Avenue); ADT 22.3 – 37.1 (between e/o Indiana Street and e/o Atlantic Boulevard); Major Highway
- Whittier Boulevard – ADT 24.7 – 30.9 (between Alma Avenue and Mobile Avenue); Major Highway
- 3rd Street – ADT 7.5 – 16.5 (between Indiana Street and Woods Avenue); Secondary Highway
- Cesar E Chavez Avenue – ADT 13.9 – 30.0 (between Hicks Avenue and e/o Mednik Avenue); Secondary Highway
- Beverly Boulevard – ADT 16.1 – 20.4 (between Atlantic Boulevard and Sadler Avenue); Major Highway

State Highway Network

The Metro Planning Area is served by portions of the I-110 Freeway, the I-105 Freeway, the I-10 Freeway, the I-5 Freeway, the I-710 Freeway, the SR-60 Freeway, and the US-101 Freeway.

San Fernando Valley Planning Area

The San Fernando Valley Planning Area includes the following unincorporated areas: West Hills, West Chatsworth, Oat Mountain, Twin Lakes, Sylmar Island, Lopez Canyon, Kagel Canyon, La Crescenta Montrose, and Universal City. As of 2010, these unincorporated areas had a population of 19,980 people and an employment base of 5,892 jobs. This represents approximately one percent of the Planning Area's population base and 0.8 percent of the Planning Area's employment base. These unincorporated areas of the Planning Area currently generate 135,360 daily trips, 1,481,509 daily VMT, 8,679 daily VHT and 3,692 daily truck trips.

In terms of the roadway network in this Planning Area, the key arterials that pass through the unincorporated areas include the following:

North-South Highways

- N/A

East-West Highways

- Lake Manor Drive – ADT 5.5 – 7.0 (between Valley Circle Boulevard and e/o Applegate Terrace); Major Highway
- Foothill Boulevard – ADT 18.1 – 25.7 (between Pennsylvania Avenue and Briggs Avenue); Major Highway

State Highway Network

The San Fernando Valley Planning Area is served by portions of the I-210 Freeway, the I-5 Freeway, the I-405 Freeway, the SR-170 Freeway, SR-134 Freeway, SR-118 Freeway, and SR-2 Freeway.

Santa Clarita Valley Planning Area

A large portion of the Santa Clarita Valley Planning Area is unincorporated, and includes the City of Santa Clarita. As of 2010, these unincorporated areas had a population of 95,263 and an employment base of 19,638 jobs. This represents approximately 35 percent of the Planning Area's population base and 19 percent of the Planning Area's employment base. These unincorporated portions of the Santa Clarita Valley currently generate 339,899 daily trips, 4,428,105 daily VMT, 121,113 daily VHT and 8,732 daily truck trips.

In terms of the roadway network in this Planning Area, the key arterials that pass through the unincorporated areas include the following:

North-South Highways

- Sierra Highway – ADT 7.3 – 10.3 (between s/o San Canyon Road and Davenport Road); Major Highway

- Plum Canyon Road – ADT 17.9 – 18.1 (between w/o Via Joyce Drive and e/o La Madrid Drive); Major Highway

East-West Highways

- Henry Mayo Drive – ADT N/A; Expressway
- Cross Valley Connector – ADT N/A; N/A

State Highway Network

The Santa Clarita Valley Planning Area is served by portions of the I-5 Freeway and the SR-14 Freeway.

Santa Monica Mountains Planning Area

A large portion of the Santa Monica Mountains Planning Area is unincorporated, and includes the City of Calabasas, City of Malibu, City of Westlake Village, City of Hidden Hills, and City of Agoura Hills. As of 2010, these unincorporated areas had a population of 18,074 people and an employment base of 13,707 jobs. This represents approximately 21.5 percent of the Planning Area's population base and 24 percent of the Planning Area's employment base. These unincorporated areas of the Planning Area currently generate 167,122 daily trips, 2,424,947 daily VMT, 68,105 daily VHT and 4,000 daily truck trips.

There are no key arterials that pass through the unincorporated areas; however, the Santa Monica Mountains Planning Area is served by portions of the US-101 Freeway.

South Bay Planning Area

The South Bay Planning Area includes the following unincorporated areas: Westfield, La Rambla, Alondra Park, Del Aire, Lennox, Hawthorne Island, and West Carson. As of 2010, these unincorporated areas had a population of 70,770 people and an employment base of 22,430 jobs. The unincorporated areas represent approximately seven percent of the Planning Area's population base and 4.5 percent of the Planning Area's employment base. The unincorporated areas of the Planning Area currently generate 295,360 daily trips, 2,666,355 daily VMT, 79,770 daily VHT and 10,949 daily truck trips.

In terms of the roadway network in this Planning Area, the key arterials that pass through the unincorporated areas include the following (daily traffic is shown in thousands – for example, ADT 37.7 indicates 37,700 daily vehicles on the roadway segment):

North-South Highways

- Vermont Avenue – ADT 17.2 – 24.2 (between Del Amo Boulevard and Lomita Boulevard); Major Highway

- Hawthorne Boulevard (SR-107) – ADT 38.9 (near Lennox Boulevard); Major Highway

- La Cienega Boulevard – ADT 8.8 – 10.6 (between I-105 and El Segundo Boulevard); Major Highway

East-West Highways

- Torrance Boulevard – ADT 30.9 – 31.2 (between Normandie Avenue and Vermont Avenue); Secondary Highway
- Manhattan Beach Boulevard – ADT 17.6 – 21.4 (between Prairie Avenue and Crenshaw Boulevard); Major Highway
- Sepulveda Boulevard – ADT 48.2 (between Normandie Avenue and Vermont Avenue); Major Highway

State Highway Network

The South Bay Planning Area is served by portions of the I-405 Freeway, the I-110 Freeway, the I-105 Freeway, the SR-91 Freeway, and SR-47 Freeway.

West San Gabriel Valley Planning Area

The West San Gabriel Planning Area includes the following unincorporated areas: Whittier Narrows, South San Gabriel, East Pasadena-East San Gabriel, South Monrovia Islands, South El Monte Island, San Pasqual, Kinneloa Mesa, and Altadena. As of 2010, these unincorporated areas had a population of 123,374 people and an employment base of 17,686 jobs. This represents approximately 13 percent of the Planning Area's population base and five percent of the Planning Area's employment base. These unincorporated areas of the Planning Area currently generate 443,589 daily trips, 4,519,194 daily VMT, 131,002 daily VHT and 11,885 daily truck trips.

In terms of the roadway network in this Planning Area, the key arterials that pass through the unincorporated areas include the following:

North-South Highways

- Rosemead Boulevard (SR-19) – ADT 26.4 – 44.7 (between Rush Street and San Gabriel Boulevard); Major Highway
- Rosemead Boulevard (SR-19) – No ADT count data available between 210 Freeway and north of Longden Avenue; Major Highway
- San Gabriel Boulevard – ADT 16.5 (s/o Del Mar Avenue)l; 17.1 (n/o Hill Street); 24.5 (s/o Del Mar Avenue); Major Highway
- Sierra Madre Boulevard – ADT 17.9 (n/o San Pasqual Street); Major Highway
- Peck Road – ADT 26.6 (n/o Rooks Road); Major Highway

- Myrtle Avenue – ADT 21.8 – 22.5 (between s/o El Camino Real and n/o Shrode Ave); Major Highway

East-West Highways

- Potrero Grande Drive – ADT 8.2 (n/o Hill Street); 15.0 (s/o Hill Street); Major Highway
- Live Oak Avenue – ADT 25.6 (w/o 10th Avenue); 25.0 (w/o Peck Avenue); Major Highway
- New York Drive – ADT 13.6 (e/o Altadena Drive); 8.5 – 9.7 (between Altadena Drive and Lake Avenue); Major Highway
- Woodbury Road – ADT 7.6 – 12.9 (between Lake Avenue and Mariposa Street); 12.9—18.4 (between Mariposa Street and Marengo Street); 15.3-21.4 (Marengo Street and Windsor Avenue); Secondary Highway
- Huntington Drive – ADT 27.6 – 34.7 (between Michillinda Avenue and Madres Street); Parkway

State Highway Network

The West San Gabriel Valley Planning Area is served by portions of the I-210 Freeway, the I-605 Freeway, the I-710 Freeway, the SR-110 Freeway, the I-10 Freeway, and the SR-60 Freeway.

Westside Planning Area

The Westside Planning Area includes the following unincorporated areas: Veteran's Administration Hospital area, Marina del Rey, Ballona Wetlands, West Fox Hills, Franklin Canyon, Gilmore Island, and Ladera Heights-Viewpark/Windsor Hills. As of 2010, these unincorporated areas had a population of 27,600 people and an employment base of 18,533 jobs. This represents approximately three percent of the Planning Area's population base and 2.5 percent of the Planning Area's employment base. These unincorporated areas of the Planning Area currently generate 210,707 daily trips, 1,886,738 daily VMT, 63,382 daily VHT and 5,835 daily truck trips.

In terms of the roadway network in this Planning Area, the key arterials that pass through the unincorporated areas include the following:

North-South Highways

- La Brea Avenue – ADT 27.9 – 31.5 (between Slauson Avenue and Stocker Street); Major Highway

East-West Highways

- Slauson Avenue – ADT 35.4 – 87.3 (between Shenandoah Avenue and Overhill Drive); Major Highway
- Stocker Street – ADT 19.4-49.5 (between La Cienega Boulevard to La Brea Avenue); Major Highway

State Highway Network

The Westside Planning Area is served by portions of the I-405 Freeway, the I-10 Freeway, and the SR-90 Freeway.

5.16.1.2 UNINCORPORATED AREAS INTERSECTION STUDY – EXISTING CONDITIONS

The traffic study incorporates analyses at the intersection level for the County designated Congestion Management Program (CMP) intersections. The CMP was created following the passage of Proposition 111, and it is intended to link transportation, land use and air quality decisions for urban areas within California. The CMP assesses transportation operating conditions at key locations for the County, and it is implemented by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP requires monitoring of the CMP roadway system and key intersections. In the unincorporated areas, there are a total of 15 monitoring intersections. Those 15 locations are included in this study and are assessed for both existing conditions and future with and without project conditions. The most recent year that Metro conducted CMP intersection analysis was 2013.

Level of Service (LOS) Criteria

The efficiency of traffic operations at a location is measured in terms of Level of Service (LOS). LOS is a description of traffic performance at intersections. The LOS concept is a measure of average operating conditions at intersections during an hour and it is based on a volume-to-capacity (V/C) ratio. Levels range from 'A' to 'F', with 'A' representing excellent (free-flow) conditions and 'F' representing extreme congestion.

Table 5.16-2 below describes the level of service concept and operating conditions expected under each level of service for signalized intersections.

Table 5.16-2 Intersection Level of Service

LOS	Interpretation
A	Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	The ability to maneuver within the traffic stream is only slightly restricted and control delay at intersections is no significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	The ability to maneuver and change lanes at midsegment locations may be more restricted than at LOS B. Longer queues at intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Small increases in flow may cause substantial increases in delay and decreases in travel speed. The travel speed is between 40% and 50% of the base free-flow speed.
E	Significant delay is commonly experienced. The travel speed is between 30% and 40% of the base free-flow speed.
F	Congestion is likely occurring at intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed.

Source: County of Los Angeles, 2014.

The study intersections, all of which are controlled by the traffic signals, were analyzed using the Intersection Capacity Utilization (ICU) methodology. The ICU methodology is the preferred method to calculate the existing and future level of service at intersection as per the County traffic analysis guidelines. Some of the

inputs that are used in this analysis are existing traffic movement counts, number of lanes and signal control data.

As shown, the levels of service range widely at the 15 CMP intersections, from LOS A at several locations to LOS F at two locations (La Cienega Boulevard/Stocker Street and Rosemead Boulevard/Huntington Drive). The existing conditions level of service results for the 15 CMP intersections are included in Table 5.16-3. In summary, 11 locations operate at LOS D or better in both peak hours, one location has LOS E in the PM peak hour and three locations have LOS F in one or more peak hours. The most congested location is La Cienega Boulevard/Stocker Street, with LOS F during both the AM and PM peak hours.

Table 5.16-3 CMP Study Intersections Within the Unincorporated Areas – Existing (2013) Level of Service

			AM Peak Hour		PM Peak Hour	
	CMP Route	Cross Street	V/C Ratio	Level of Service	V/C Ratio	Level of Service
1	Avenue D	60th Street West	0.249	A	0.277	A
2	Azusa Avenue	Colima Road	0.627	B	0.802	D
3	Colima Road	Hacienda Boulevard	0.687	B	0.818	D
4	Henry Mayo Drive	Chiquito Canyon Road	0.386	A	0.399	A
5	Imperial Highway	Carmenita Road	0.740	C	0.942	E
6	La Cienega Boulevard	Stocker Street	1.311	F	1.133	F
7	Lancaster Road	300th Street West	0.184	A	0.195	A
8	Pacific Coast Highway	Topanga Canyon Boulevard	0.899	D	0.845	D
9	Pearblossom Highway	82nd Street East	0.478	A	0.629	B
10	Pearblossom Highway	Antelope Highway	0.363	A	0.392	A
11	Rosemead Boulevard	Huntington Drive	0.712	C	1.013	F
12	Rosemead Boulevard	San Gabriel Boulevard	0.737	C	1.041	F
13	Sierra Highway	Red Rover Mine Road	0.320	A	0.213	A
14	Sierra Highway	Sand Canyon Road	0.535	A	0.814	D
15	Whittier Boulevard	Atlantic Avenue	0.703	B	0.869	D

Source: Metro, 2013.

5.16.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project could:

T-1 Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation

system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

T-2 Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

T-3 Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

T-4 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-5 Result in inadequate emergency access.

T-6 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

These potential impact areas are discussed in this chapter. In addition, this chapter includes a program level analysis of the potential impacts to the County's highways themselves based on potential growth due to the Proposed Project, as well as based on Highway Plan amendments.

Individual development projects are reviewed in accordance with the County's Traffic Impact Analysis Report Guidelines. However, the Proposed Project is a policy level document that must be evaluated differently than a single development project. This is because it is only possible to make generalized estimates of development activity at this time. The specific location or intensity of development throughout the Project Area is unknown. The Proposed Project guides where growth will occur and to what level, but actual development patterns will likely differ somewhat from the Proposed Project. In addition, the specific timing and other details such as driveway locations, mix of land uses and intensity are not known at this time. Therefore, a different and broader standard for measuring impacts is appropriate for this program level impact analysis.

The County does not specify an acceptable LOS for the purpose of long-range planning. However, in conformance with the Los Angeles County Congestion Management Program (CMP), the maximum acceptable level of service on arterial roads (i.e., major, secondary, and limited secondary highways) is LOS E, except where base year LOS is worse than LOS E. In such cases, the base year LOS is the standard. Thus, for this analysis, LOS E is considered to be the measuring point for significant impacts. Any action that causes an LOS F condition to worsen by 0.02 or greater is considered a significant impact for purposes of this analysis.

5.16.3 Relevant General Plan Goals and Policies

The following is a list of applicable goals and policies of the Proposed Project that are intended to reduce potentially significant adverse effects concerning transportation and traffic.

Mobility Element

Goal M 1: Street designs that incorporate the needs of all users.

- **Policy M 1.1:** Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.

- **Policy M 1.2:** Ensure that streets are safe for sensitive users, such as seniors and children.

- **Policy M 1.3:** Utilize industry standard rating systems to assess sustainability and effectiveness of street systems for all users.

Goal M 2: Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.

- **Policy M 2.1:** Provide transportation corridors/networks that accommodate pedestrians, equestrians and bicyclists, and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.

- **Policy M 2.2:** Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following street designs, whenever appropriate and feasible:

  - Lane width reductions to 10 or 11 feet in low speed environments with a low volume of heavy vehicles.

  - Wider lanes may still be required for lanes adjacent to the curb, and where buses and trucks are expected.

  - Low-speed designs.

  - Access management practices developed through a community-driven process.

  - Back in angle parking at locations that have available roadway width and bike lanes, where appropriate.

- **Policy M 2.3:** Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following intersection designs, whenever appropriate and feasible:

  - Right angle intersections that reduce intersection skew.

  - Smaller corner radii to reduce crossing distances and slow turning vehicles.

- Traffic calming measures, such as bulb-outs, sharrows, medians, roundabouts, and narrowing or reducing the number of lanes (road diets) on streets.
- Crossings at all legs of an intersection.
- Shorter crossing distances for pedestrians.
- Right-turn channelization islands. Sharper angles of slip lanes may also be utilized.
- Signal progression at speeds that support the target speed of the corridor.
- Pedestrian push buttons when pedestrian signals are not automatically recalled.
- Walk interval on recall for short crossings.
- Left-turn phasing.
- Prohibit right turn on red.
- Signs to remind drivers to yield to pedestrians.

- **Policy M 2.4:** Ensure a comfortable walking environment for pedestrians by implementing thefollowing, whenever appropriate and feasible:
  - Designs that limit dead-end streets and dead-end sidewalks.
  - Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops.
  - Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA).
  - Perpendicular curb ramps at locations where it is feasible.
  - Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.)
  - Approved devices to extend the pedestrian clearance times at signalized intersections.
  - Accessible Pedestrian Signals (APS) at signalized intersections.
  - Pedestrian crossings at signalized intersections without double or triple left or right turn lanes.
  - Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections.
  - Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes.

- Advance stop lines at signalized intersections.
- Pedestrian Hybrid Beacons.
- Medians or crossing islands to divide long crossings.
- High visibility crosswalks.
- Pedestrian signage.
- Advanced yield lines for uncontrolled crosswalks.
- Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic.
- Safe and convenient crossing locations at transit stations and transit stops located at safe intersections.

- **Policy M 2.5:** Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible:
  - Bicycle signal heads at intersections.
  - Bicycle signal detection at all signalized intersections.
  - Wayfinding signage.
  - Road diet techniques, such as lane narrowing, lane removal, and parking removal/restriction.
  - Appropriate lighting on all bikeways, including those in rural areas.
  - Designs, or other similar features, such as: shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.
- **Policy M 2.6:** Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible.
- **Policy M 2.7:** Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.
- **Policy M 2.8:** Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.

- **Policy M 2.9:** Encourage the planting of trees along streets and other forms of landscaping to enliven streetscapes by blending natural features with built features.

- **Policy M 2.10:** Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.

- **Policy M 2.11:** In urban and suburban areas, promote the continuity of streets and sidewalks through design features, such as limiting mid-block curb cuts, encouraging access through side streets or alleys, and promoting shorter block lengths.

Goal M 3: Streets that incorporate innovative designs.

- **Policy M 3.1:** Facilitate safe roadway designs that protect users, preserve state and federal funding, and provide reasonable protection from liability.

- **Policy M 3.2:** Consider innovative designs when part of an accepted standard, or when properly vetted through an appropriate engineering/design review, in compliance with all state and federal laws.

- **Policy M 3.3:** Complete the following studies prior to the implementation of innovative design concepts**:**

    - An analysis of the current and future context of the community and neighborhood in which they are proposed;

    - A balanced assessment of the needs of all users and travel modes (i.e., pedestrian, bicycle, transit, vehicular, and equestrian, where appropriate);

    - A technical assessment of the operational and safety characteristics for each mode; and

    - A consistency check with transportation network plans, including the Highway Plan, Bicycle Master Plan, and Community Pedestrian Plans.

- **Policy M 3.4:** Support legislation that minimizes or eliminates liability associated with the implementation of innovative street designs that accommodate all users.

Goal M 4: An efficient multimodal transportation system that serves the needs of all residents.

- **Policy M 4.1:** Expand transportation options that reduce automobile dependence.

- **Policy M 4.2:** Expand shuttle services to connect major transit centers to community points of interest.

- **Policy M 4.3:** Maintain transit services within the unincorporated areas that are affordable, timely, cost-effective, and responsive to growth patterns and community input.

- **Policy M 4.4:** Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.

- **Policy M 4.5:** Encourage continuous, direct routes through a connected system of streets, with small blocks and minimal dead ends (cul-de-sacs), as feasible.

- **Policy M 4.6:** Support alternative LOS standards that account for a multimodal transportation system.

- **Policy M 4.7:** Maintain a minimum LOS D, where feasible; however, allow LOS below D on a case by case basis in order to further other General Plan goals and policies, such as those related to environmental protection, infill development, and active transportation.

- **Policy M 4.8:** Provide and maintain appropriate signage for streets, roads and transit.

- **Policy M 4.9:** Ensure the participation of all potentially affected communities in the transportation planning and decision-making process.

- **Policy M 4.10:** Support the linkage of regional and community-level transportation systems, including multimodal networks.

- **Policy M 4.11:** Improve the efficiency of the public transportation system with bus lanes, signal prioritization, and connections to the larger regional transportation network.

- **Policy M 4.12:** Work with adjacent jurisdictions to ensure connectivity and the creation of an integrated regional network.

- **Policy M 4.13:** Coordinate with adjacent jurisdictions in the review of land development projects near jurisdictional borders to ensure appropriate roadway transitions and multimodal connectivity.

- **Policy M 4.14:** Coordinate with Caltrans on mobility and land use decisions that may affect state transportation facilities.

- **Policy M 4.15:** Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting.

- **Policy M 4.16:** Promote mobility management practices, including incentives to change transit behavior and using technologies, to reduce VMTs.

Goal M 5: Land use planning and transportation management that facilitates the use of transit.

- **Policy M 5.1:** Facilitate transit-oriented land uses and pedestrian-oriented design to encourage transit ridership.

- **Policy M 5.2:** Implement parking strategies that facilitate transit use and reduce automobile dependence.
- **Policy M 5.3:** Maintain transportation right-of-way corridors for future transportation uses, including bikeways, or new passenger rail or bus services.
- **Policy M 5.4:** Support and pursue funding for the construction, maintenance and improvement of roadway, public transit, and equestrian, pedestrian and bicycle transportation systems.
- **Policy M 5.5:** Encourage financing programs, such as congestion pricing, bonding, increasing parking costs, fair share programs for each community, to implement local and state transportation systems and facilities.

5.16.4 Environmental Impacts

The following impact analysis addresses thresholds according to Appendix G of the CEQA Guidelines of significance. The applicable thresholds are identified in brackets after the impact statement.

County Highway Plan Network Summary

The Los Angeles County Department of Public Works is generally responsible for the design, construction, operation, maintenance and repair of roads in the Project Area, as well as in a number of jurisdictions that contract with the County of Los Angeles (County) for these services. The primary transportation focus of the County is on the portions of the highway system that fall within the unincorporated areas. Primary responsibility for transportation planning in Los Angeles County is the Los Angeles County Metropolitan Transportation Authority (Metro). As a result, the County is not directly responsible for overall transportation planning or service provision in Los Angeles County. The County's Highway Plan designates the functional classifications of the County's highway system. It incorporates the originally adopted plan plus proposed updates to the Proposed Project. The Highway Plan illustrates existing and proposed locations of major arterial highways throughout Los Angeles County. It is intended to provide a highway system consistent with the distribution of land uses as depicted in the Land Use Element of the Proposed General Plan Update by providing adequate highways to serve future needs.

The proposed Highway Plan includes the following roadway classifications:

Major Highway

This classification includes urban and rural highways that are of countywide significance and are, or are projected to be, the most highly traveled routes. These roads generally require four or more lanes of moving traffic, channelized medians and, to the extent possible, access control and limits on intersecting streets.

In urban areas, the typical right-of-way width for these highways is 100 feet. Alternative major highway sections may be established by the County to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.

In rural areas, major highways are intended to maintain a rural appearance (without curb, gutter, and/or sidewalk) to reflect the rural character of various communities throughout Los Angeles County. The typical right-of-way width of a rural major highway is 108 feet. Additional right-of-way may be required to accommodate other transportation uses. In addition, beyond the ultimate road right-of-way, there may be a need for additional dedications for trail purposes, to accommodate equestrian and other non-vehicular uses.

Secondary Highway

This classification includes urban and rural routes that serve or are planned to serve an areawide or countywide function, but are less heavily traveled than major highways. Secondary highways also frequently act as oversized collector roads that feed the countywide system. In this capacity, the routes serve to remove heavy traffic from local streets, especially in residential areas. Access control, especially to residential property and minor streets, is desirable along these roads.

In urban areas, secondary highways generally have four lanes of vehicular traffic on 80 feet of right-of-way. However, configuration and width may vary with traffic demand and existing conditions. In a few cases, routes that carry major highway levels of traffic are classified as secondary highways because it is impractical to widen them to major highway standards. Alternative secondary highway sections may be established by the County to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.

In rural areas, certain connector highways to and between rural communities are also classified as secondary highways. These highways are intended to maintain a rural appearance (without curb, gutter, and/or sidewalk) to reflect the rural character of various communities throughout Los Angeles County. The typical right-of-way width of rural secondary highways is 86 feet. Additional right-of-way may be required to accommodate other transportation uses. In addition, beyond the ultimate road right-of-way, there may be a need for additional dedications for trail purposes, to accommodate equestrian and other non-vehicular uses.

Limited Secondary Highway

This classification includes urban and rural routes that provide access to low-density areas.

In urban areas, limited secondary highways generally feature lower traffic volumes and multimodal transportation facilities. The typical right-of-way width of these highways generally ranges between 64-80 feet. Alternative secondary highway sections may be established by the County to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.

In rural areas, limited secondary highways are generally located in rural communities and remote foothill, mountain and canyon areas. These highways are intended to maintain a rural appearance (without curb, gutter, and/or sidewalk) to reflect the rural character of various communities throughout Los Angeles County. The typical right-of-way width of rural limited secondary highways is 64 feet. Additional right-of-way width may be required to accommodate left-turn pockets and passing lanes may be provided when required for traffic safety. The right-of-way may be increased for additional improvements where traffic or drainage conditions

warrant. In addition, beyond the ultimate road right-of-way, there may be a need for additional dedications for trail purposes, to accommodate equestrian and other non-vehicular uses.

Parkway

This classification includes urban and rural routes that have park-like features either within or adjacent to the roadway. The right-of-way width required varies as necessary to incorporate these features, typically with a minimum of 80 feet. Roadway improvements vary depending on the composition and volume of traffic carried.

Expressway

This classification includes urban and rural controlled-access highways connecting communities. Expressways can generally accommodate six to ten traffic lanes and are intended for thru-traffic, featuring full or partial control of access. The right-of-way required varies as necessary to incorporate these features, but is typically 180 feet in width. Roadway improvements vary depending upon the composition and volume of traffic carried.

While the Highway Plan maps display a majority of the arterial highways in Los Angeles County, these designations officially apply only to the Project Area. The contiguous segments of roadways that fall within city areas are governed by the applicable city plans. For example, South Vermont Avenue in the unincorporated portion of the South Bay Planning Area is designated as a Major Highway in the Highway Plan. To the north is the City of Torrance, and to the south is the City of Lomita. Those cities classify Vermont Avenue based on the respective city's functional designation. In many cases, the functional classification types between cities and the Highway Plan match, as do the right-of-way designations. In some cases, however, the Highway Plan designation may differ from the adjacent city designation. In other cases, although the name of the classification may be different, the underlying key features, such as number of lanes and right-of-way width, match. For example, some cities label Secondary Highways as Secondary Arterials, although both classifications operate and function identically to one another. Throughout this document, when references are made to the County Highway Plan, the intent is to refer to the portion of the highway system that is located in the unincorporated areas.

In the northern portion of Los Angeles County, the Highway Plan governs a relatively larger portion of highway mileage than the areas to the south. This is because in the northern portion, particularly the Antelope Valley, a larger proportion of the land area is unincorporated. Also, in these areas, the potential for significant land use change and growth is greater because the highways fall within undeveloped areas. This is especially true in the areas west of I-5 near the City of Santa Clarita, the areas paralleling SR-14 between the City of Santa Clarita and City of Palmdale, and the areas east of the City of Palmdale and the City of Lancaster.

Throughout much of the Project Area south of the City of Santa Clarita, most Major and Secondary Highways are fully built to their ultimate cross sections, and further widening would not be feasible. In some cases, turn lanes (left-and right-turn lanes) can be added at intersections to provide additional capacity, but in most cases the roadways will not be significantly widened. However, in the Santa Clarita Valley and Antelope

Valley Planning Areas, there will be opportunity to widen many of the roadways to their designated width to accommodate the planned growth in housing, employment and commercial activities that will occur.

General Plan Land Use Growth Analysis

Buildout projections for the Proposed Project, broken down by Planning Area, are shown in previous Table 3-6, *Proposed General Plan Buildout Projections*. The Proposed Project buildout would allow for: 668,911 residential dwelling units; 97 million square feet (3,793 acres) of commercial use; 102 million square feet (5,210 acres) of industrial use; 503 million square feet (80,896 acres) of public/semi-public use; and 714,704 acres of public/open space use. Of the total projected growth within the Project Area, approximately 82 percent is projected to occur in the Santa Clarita Valley and Antelope Valley Planning Areas.

The unincorporated areas will experience some level of change in land use (as reflected in population and employment) over the horizon of the Proposed Project. There are many unincorporated areas throughout Los Angeles County. In those unincorporated areas, the transportation system is also affected to a large extent by activity in the surrounding cities. In the northern portion of Los Angeles County (in the Santa Clarita Valley and the Antelope Valley) there is a much larger proportion of unincorporated areas. In those areas, it is expected that the growth will have a proportionally larger effect on the transportation system.

To assess the effects of potential land use changes on the transportation system, SCAG's regional travel demand model has been applied. The SCAG model covers the six county areas (Los Angeles, plus Orange, Ventura, Riverside, San Bernardino and Imperial). Within Los Angeles County, the model includes both cities and unincorporated areas. Thus, the model is the appropriate tool to test changes in land uses through the Proposed Project, and to also take into account changes and growth in the surrounding cities. The SCAG model includes a 2008 base year and a 2035 future horizon year. Both models were used for this analysis. The 2008 model is used for the "Existing plus Project" analysis for the purposes of CEQA review, and the future 2035 model was also reviewed to understand future build-out land uses at 2035. The following scenarios have been run using the model and the results are presented in the traffic analysis report (Appendix L):

- Existing 2008
- Existing 2008 plus Project (Project buildout)
- 2035 No-Project
- 2035 plus Project (Project buildout)

To apply the model, a series of steps were taken to ensure that the Proposed Project is properly reflected in the model input data. Those steps are as follows:

- County staff provided SCAG with updated versions of Proposed Project buildout projections for the unincorporated areas.

- SCAG removed the socioeconomic data in the regional model within the unincorporated areas and replaced it with the County staff buildout estimates for the Proposed Project. This was done on top of the 2008 data for the existing plus project analysis and also on top of the 2035 dataset for the 2035 plus

project analysis. It should be noted that the Proposed Project is not expected to be fully built out within SCAG's 2035 horizon year.

- Thus, the Proposed Project buildout projections were applied to the SCAG regional model zones as appropriate based on County demographic projections to create final 2008 and 2035 datasets.

- The SCAG generated 2035 demographic data assumptions for cities formed the basis for the Existing plus Project as well as 2035 with the Project model runs performed by Iteris for the Community Climate Action Plan as well as the analysis for the rest of the Proposed Project.

The SCAG modeling results were then used to assess the potential project impacts due to the "Existing plus Project" and "2035 with Project" scenarios. Table 5.16-4 presents the results of the SCAG regional modeling analysis of Proposed Project growth for Existing Plus Project and Table 5.16-5 presents the results of the SCAG regional modeling analysis of Proposed Project growth for 2035 Plus Project. For each Planning Area, the Secondary Highways, Limited Secondary Highways, Major Highways Parkways, and Expressways have been reviewed to determine the model volumes under existing conditions, Existing Plus Project, 2035 No Project, and 2035 Plus Project. The Existing plus Project and 2035 Plus Project daily traffic volumes were compared to the County's designated LOS E capacity for each facility type. If the Existing plus Project or 2035 Plus Project daily volume falls under the County's designated LOS E capacity, it was determined that there would be no significant impact because this roadway would continue to operate at acceptable conditions. This is true by definition since only roadway links at LOS E capacity or worse are determined to potentially experience a significant impact. For those roadways below the LOS E threshold (i.e., better than LOS E), it was determined that the planned roadway capacity is adequate to handle the volumes (under Existing plus Project) within acceptable operating conditions. For segments that are shown to exceed the LOS E designated capacity, the links were further reviewed to determine if the project-related change in volume/capacity ratio is large enough to be considered significant (0.02 or greater change in V/C). The number of roadway segments that the model results indicate will both be at LOS F and also will exceed the 0.02 threshold of significant impact are shown below.

Tables 5.16-4 and 5.16-5 display the detailed information that was used to develop the project impact findings below for the Existing plus Project and Year 2035 plus Project scenarios. These tables include the following for each segment on the Highway Plan in each Planning Area:

- Highway Classification

- Orientation

- Limits of the segment

- Existing volume (from the model)

- Existing plus project volumes (from the model)

- Number of lanes
- Designated maximum capacity at LOS E
- Existing V/C
- Existing plus Project V/C
- Change in V/C due to the Proposed Project
- Whether the change in V/C exceeds the significant impact threshold (where the segment has a volume greater than LOS E capacity AND the change in V/C is 0.02 or greater).

The results of the analysis show that nearly all of the roadway segments in the unincorporated areas are not expected to exceed the designated LOS E threshold under the Existing plus Project scenario. Eight segments are projected to be significantly impacted under the Existing plus Project scenario and 18 segments are projected to be significantly impacted under the 2035 plus project scenario, as discussed below.

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Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
South Bay	Crenshaw Boulevard	Major Highway	N/S	Palos Verdes Lane	Silver Spur Road	14,949	8,900	9,040	140	2%	15,163	9,080	9,190	110	1%	30,112	30,362	4	6-8	54,000	0.56	0.56	0.00	No
South Bay	Vermont Street	Major Highway	N/S	Lomita Boulevard	Sepulveda Boulevard	14,219	11,850	11,680	-170	-1%	12,269	12,510	11,530	-980	-8%	26,488	25,338	4	6-8	54,000	0.49	0.47	-0.02	No
South Bay	Vermont Street	Major Highway	N/S	Sepulveda Boulevard	W 228th Street	8,854	2,920	3,980	1,060	36%	8,370	6,210	6,580	370	6%	17,224	18,654	4	6-8	54,000	0.32	0.35	0.03	No
South Bay	Vermont Street	Major Highway	N/S	W 228th Street	W 223rd Street	8,799	7,980	9,570	1,590	20%	9,619	11,610	12,400	790	7%	18,418	20,798	4	6-8	54,000	0.34	0.39	0.04	No
South Bay	Vermont Street*	Major Highway	N/S	W 223rd Street	W 220th Street		4,210	6,310	2,100	50%		6,090	7,440	1,350	22%	10,300	13,750	4	6-8	54,000	0.19	0.25	0.06	No
South Bay	Vermont Street*	Major Highway	N/S	W 220th Street	Carson Street		2,250	1,650	-600	-27%		3,910	3,080	-830	-21%	6,160	4,730	4	6-8	54,000	0.11	0.09	-0.03	No
South Bay	Vermont Street	Major Highway	N/S	Carson Street	Torrance Boulevard	7,484	3,660	6,500	2,840	78%	7,947	4,120	6,200	2,080	50%	15,431	20,351	4	6-8	54,000	0.29	0.38	0.09	No
South Bay	Vermont Street	Major Highway	N/S	Torrance Boulevard	Del Amo Boulevard	8,331	5,550	7,030	1,480	27%	9,623	5,450	6,430	980	18%	17,954	20,414	4	6-8	54,000	0.33	0.38	0.05	No
South Bay	Manhattan Beach Blvd	Major Highway	E/W	Prairie Avenue	Crenshaw Boulevard	6,691	5,000	5,140	140	3%	7,123	4,360	4,290	-70	-2%	13,814	13,884	4	6-8	54,000	0.26	0.26	0.00	No
South Bay	Lennox Boulevard	Secondary Highway	E/W	La Cienega Boulevard	Inglewood Avenue	3,160	4,600	4,950	350	8%	3,803	4,140	4,630	490	12%	6,963	7,803	2	4	36,000	0.19	0.22	0.02	No
South Bay	Lennox Boulevard	Secondary Highway	E/W	Inglewood Avenue	Hawthorne Boulevard	4,651	2,470	2,650	180	7%	5,440	1,820	2,420	600	33%	10,091	10,871	2	4	36,000	0.28	0.30	0.02	No
South Bay	Lennox Boulevard	Secondary Highway	E/W	Hawthorne Boulevard	Freeman Avenue	3,527	1,120	1,080	-40	-4%	4,305	1,450	1,770	320	22%	7,832	8,112	4	4	36,000	0.22	0.23	0.01	No
South Bay	W 220th Street*	Secondary Highway	E/W	Normandie Avenue	Meyler Street		2,080	4,590	2,510	121%		2,160	4,870	2,710	125%	4,240	9,460	4	4	36,000	0.12	0.26	0.15	No
South Bay	W 220th Street*	Secondary Highway	E/W	Meyler Street	Vermont Avenue		1,960	4,660	2,700	138%		2,180	4,370	2,190	100%	4,140	9,030	4	4	36,000	0.12	0.25	0.14	No
South Bay	Normandie Avenue*	Secondary Highway	N/S	Sepulveda Boulevard	Lomita Boulevard		4,440	5,110	670	15%		4,280	4,390	110	3%	8,720	9,500	4	4	36,000	0.24	0.26	0.02	No
South Bay	Normandie Avenue*	Secondary Highway	N/S	W 228th Street	Sepulveda Boulevard		4,690	5,780	1,090	23%		5,270	5,840	570	11%	9,960	11,620	4	4	36,000	0.28	0.32	0.05	No
South Bay	Normandie Avenue*	Secondary Highway	N/S	W 223rd Street	W 228th Street		3,580	4,520	940	26%		4,310	4,900	590	14%	7,890	9,420	4	4	36,000	0.22	0.26	0.04	No
South Bay	Normandie Avenue*	Secondary Highway	N/S	W 220th Street	W 223rd Street		5,440	7,330	1,890	35%		5,980	7,710	1,730	29%	11,420	15,040	4	4	36,000	0.32	0.42	0.10	No
South Bay	Normandie Avenue*	Secondary Highway	N/S	Carson Street	W 220th Street		2,110	1,510	-600	-28%		2,750	2,090	-660	-24%	4,860	3,600	4	4	36,000	0.14	0.10	-0.04	No
South Bay	Normandie Avenue*	Secondary Highway	N/S	Torrance Boulevard	Carson Street		3,400	4,350	950	28%		4,280	5,550	1,270	30%	7,680	9,900	4	4	36,000	0.21	0.28	0.06	No
South Bay	Normandie Avenue*	Secondary Highway	N/S	Del Amo Boulevard	Torrance Boulevard		7,100	8,200	1,100	15%		8,340	9,220	880	11%	15,440	17,420	4	4	36,000	0.43	0.48	0.06	No
South Bay	Sepulveda Boulevard *	Major Highway	E/W	Normandie Avenue	Vermont Avenue		18,630	18,940	310	2%		20,720	21,670	950	5%	39,350	40,610	6	6-8	54,000	0.73	0.75	0.02	No

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.16-4 Existing vs. Existing Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound					Southbound/Eastbound					2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth									
South Bay	Sepulveda Boulevard *	Major Highway	E/W	Vermont Avenue	I-110 South Off-ramp		27,630	28,360	730	3%		32,670	34,050	1,380	4%	60,300	62,410	6	6-8	54,000	1.12	1.16	0.04	Yes
South Bay	Sepulveda Boulevard *	Major Highway	E/W	I-110 South Off-ramp	Figueroa St		19,730	19,730	0	0%		16,860	16,180	-680	-4%	36,590	35,910	6	6-8	54,000	0.68	0.67	-0.01	No
Antelope Valley	W Avenue J	Major Highway	E/W	90th Street E	100th Street E	1,051	1,660	5,230	3,570	215%	1,129	1,590	5,380	3,790	238%	2,180	9,540	2	6-8	54,000	0.04	0.18	0.14	No
Antelope Valley	W Avenue J *	Major Highway	E/W	100th Street E	110th Street E		2,050	8,040	5,990	292%		1,990	8,280	6,290	316%	4,040	16,320	2	6-8	54,000	0.07	0.30	0.23	No
Antelope Valley	W Avenue J *	Major Highway	E/W	110th Street E	140th Street E		1,800	8,970	7,170	398%		1,760	9,650	7,890	448%	3,560	18,620	2	6-8	54,000	0.07	0.34	0.28	No
Antelope Valley	W Avenue J *	Major Highway	E/W	140th Street E	150th Street E		2,500	8,820	6,320	253%		2,300	9,030	6,730	293%	4,800	17,850	2	6-8	54,000	0.09	0.33	0.24	No
Antelope Valley	W Avenue J *	Major Highway	E/W	150th Street E	170th Street E		2,630	9,390	6,760	257%		2,310	9,210	6,900	299%	4,940	18,600	2	6-8	54,000	0.09	0.34	0.25	No
Antelope Valley	W Avenue J *	Major Highway	E/W	170th Street E	200th Street E		2,650	9,580	6,930	262%		2,320	9,300	6,980	301%	4,970	18,880	2	6-8	54,000	0.09	0.35	0.26	No
Antelope Valley	Lancaster Road*	Expressway	E/W	Pine Canyon Road	W Avenue I		0	0	0	N/A		0	0	0	N/A	0	0	6	4-8	66,000	0.00	0.00	0.00	No
Antelope Valley	Lancaster Road*	Expressway	E/W	W Avenue I	190th Street W		0	1,530	1,530	N/A		0	1,710	1,710	N/A	0	3,240	6	4-8	66,000	0.00	0.05	0.05	No
Antelope Valley	Lancaster Road*	Expressway	E/W	190th Street W	170th Street W		0	30	30	N/A		0	30	30	N/A	0	60	6	4-8	66,000	0.00	0.00	0.00	No
Antelope Valley	Lancaster Road*	Expressway	E/W	170th Street W	110th Street W		600	11,430	10,830	1805%		590	11,220	10,630	1802%	1,190	22,650	6	4-8	66,000	0.02	0.34	0.33	No
Antelope Valley	Lancaster Road*	Expressway	E/W	110th Street W	90th Street W		340	6,060	5,720	1682%		330	6,210	5,880	1782%	670	12,270	6	4-8	66,000	0.01	0.19	0.18	No
Antelope Valley	Lancaster Road*	Expressway	E/W	90th Street W	70th Street W		1,610	5,580	3,970	247%		1,450	5,710	4,260	294%	3,060	11,290	6	4-8	66,000	0.05	0.17	0.12	No
Antelope Valley	Lancaster Road*	Expressway	E/W	70th Street W	60th Street W		2,110	6,710	4,600	218%		2,050	6,610	4,560	222%	4,160	13,320	6	4-8	66,000	0.06	0.20	0.14	No
Antelope Valley	170th Street E*	Secondary Highway	N/S	Avenue T	Avenue W		0	0	0	N/A		0	0	0	N/A	0	0	2	4	36,000	0.00	0.00	0.00	No
Antelope Valley	170th Street E*	Secondary Highway	N/S	Avenue W	165th Street		0	0	0	N/A		0	0	0	N/A	0	0	2	4	36,000	0.00	0.00	0.00	No
Antelope Valley	Elizabeth Lake Road	Major Highway	E/W	Johnson Road	San Francisquito Canyon Road	1,814	4,800	15,350	10,550	220%	1,851	4,780	16,290	11,510	241%	3,665	25,725	2	6-8	54,000	0.07	0.48	0.41	No
Antelope Valley	Elizabeth Lake Road*	Major Highway	E/W	San Francisquito Canyon Road	Bouquet Canyon Road		1,110	4,430	3,320	299%		1,180	4,440	3,260	276%	2,290	8,870	2	6-8	54,000	0.04	0.16	0.12	No
Antelope Valley	Elizabeth Lake Road*	Major Highway	E/W	Bouquet Canyon Road	Godde Hill Road		4,350	13,700	9,350	215%		4,260	13,290	9,030	212%	8,610	26,990	2	6-8	54,000	0.16	0.50	0.34	No
Antelope Valley	W Avenue P*	Major Highway	E/W	15th Street E	20th Street E		3,130	8,880	5,750	184%		3,270	8,490	5,220	160%	6,400	17,370	4	6-8	54,000	0.12	0.32	0.20	No
Antelope Valley	W Avenue P*	Major Highway	E/W	20th Street E	25th Street E		3,130	8,890	5,760	184%		3,270	8,500	5,230	160%	6,400	17,390	4	6-8	54,000	0.12	0.32	0.20	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Antelope Valley	W Avenue P*	Major Highway	E/W	25th Street E	30th Street E		720	5,720	5,000	694%		690	3,180	2,490	361%	1,410	8,900	4	6-8	54,000	0.03	0.16	0.14	No
Antelope Valley	W Avenue P*	Major Highway	E/W	30th Street E	40th Street E		1,260	4,610	3,350	266%		1,410	4,850	3,440	244%	2,670	9,460	2	6-8	54,000	0.05	0.18	0.13	No
Antelope Valley	W Avenue P*	Major Highway	E/W	40th Street E	47th Street E		850	4,710	3,860	454%		1,050	4,980	3,930	374%	1,900	9,690	2	6-8	54,000	0.04	0.18	0.14	No
Antelope Valley	W Avenue P*	Major Highway	E/W	47th Street E	70th Street E		1,240	8,620	7,380	595%		1,620	8,420	6,800	420%	2,860	17,040	2	6-8	54,000	0.05	0.32	0.26	No
Antelope Valley	200th Street E*	Secondary Highway	N/S	E Avenue G	E Avenue J		1,150	19,220	18,070	1571%		1,140	18,650	17,510	1536%	2,290	37,870	2	4	36,000	0.06	1.05	0.99	Yes
Antelope Valley	E Palmdale Boulevard	Major Highway	E/W	90th Street E	95th Street E	3,639	5,200	10,060	4,860	93%	4,272	5,320	9,970	4,650	87%	7,911	17,421	2	6-8	54,000	0.15	0.32	0.18	No
Antelope Valley	E Palmdale Boulevard*	Major Highway	E/W	95th Street E	100th Street E		4,680	7,810	3,130	67%		4,770	7,790	3,020	63%	9,450	15,600	2	6-8	54,000	0.18	0.29	0.11	No
Antelope Valley	E Palmdale Boulevard*	Major Highway	E/W	100th Street E	105th Street E		3,150	6,390	3,240	103%		3,240	5,890	2,650	82%	6,390	12,280	2	6-8	54,000	0.12	0.23	0.11	No
Antelope Valley	E Palmdale Boulevard*	Major Highway	E/W	105th Street E	110 Street E		3,150	6,250	3,100	98%		3,240	5,740	2,500	77%	6,390	11,990	2	6-8	54,000	0.12	0.22	0.10	No
Antelope Valley	W Avenue G *	Expressway	E/W	SR-14 Antelope Valley Freeway	15th Street W		960	4,210	3,250	339%		1,170	4,480	3,310	283%	2,130	8,690	2	4-8	44,000	0.05	0.20	0.15	No
Antelope Valley	W Avenue G *	Expressway	E/W	15th Street W	10th Street W		340	2,630	2,290	674%		400	2,720	2,320	580%	740	5,350	2	4-8	44,000	0.02	0.12	0.10	No
Antelope Valley	W Avenue G *	Expressway	E/W	10th Street W	Sierra Highway		510	3,920	3,410	669%		600	4,380	3,780	630%	1,110	8,300	2	4-8	44,000	0.03	0.19	0.16	No
Antelope Valley	W Avenue G *	Expressway	E/W	Sierra Highway	Division Street		680	5,160	4,480	659%		690	5,640	4,950	717%	1,370	10,800	2	4-8	44,000	0.03	0.25	0.21	No
Antelope Valley	E Avenue O*	Major Highway	E/W	145th Street E	150th Street E		890	8,120	7,230	812%		960	8,520	7,560	788%	1,850	16,640	2	6-8	54,000	0.03	0.31	0.27	No
Antelope Valley	E Avenue O	Major Highway	E/W	150th Street E	170th Street E	2,326	350	2,370	2,020	577%	2,108	280	2,510	2,230	796%	4,434	8,684	2	6-8	54,000	0.08	0.16	0.08	No
Antelope Valley	E Avenue O	Major Highway	E/W	170th Street E	175th Street E	1,569	320	2,300	1,980	619%	1,533	280	2,460	2,180	779%	3,102	7,262	2	6-8	54,000	0.06	0.13	0.08	No
Antelope Valley	E Avenue O	Major Highway	E/W	175th Street E	180th Street E	600	450	3,140	2,690	598%	646	380	3,430	3,050	803%	1,246	6,986	2	6-8	54,000	0.02	0.13	0.11	No
Antelope Valley	E Avenue O	Secondary Highway	E/W	180th Street E	200th Street E	486	1,670	8,310	6,640	398%	505	1,470	8,410	6,940	472%	991	14,571	2	4	36,000	0.03	0.40	0.38	No
Antelope Valley	E Avenue O*	Secondary Highway	E/W	200th Street E	210 Street E		1,660	8,940	7,280	439%		1,450	9,350	7,900	545%	3,110	18,290	2	4	36,000	0.09	0.51	0.42	No
Antelope Valley	E Avenue O*	Secondary Highway	E/W	210 Street E	240th Street E		1,980	2,520	540	27%		1,690	2,310	620	37%	3,670	4,830	2	4	36,000	0.10	0.13	0.03	No
Antelope Valley	W Avenue L*	Expressway	E/W	Rancho Vista Road	45th Street W		6,170	7,900	1,730	28%		6,250	8,010	1,760	28%	12,420	15,910	4	4-8	44,000	0.28	0.36	0.08	No
Antelope Valley	W Avenue L*	Expressway	E/W	45th Street W	40th Street W		4,600	5,340	740	16%		4,980	5,960	980	20%	9,580	11,300	4	4-8	44,000	0.22	0.26	0.04	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Antelope Valley	Pearblossom Highway (SR-138)*	Major Highway	E/W	70th Street E	E Avenue T 8		10,360	23,840	13,480	130%		10,790	24,000	13,210	122%	21,150	47,840	4	6-8	54,000	0.39	0.89	0.49	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	E Avenue T 8	82nd Street E	7,388	10,360	23,550	13,190	127%	7,834	10,790	23,640	12,850	119%	15,222	41,262	4	6-8	54,000	0.28	0.76	0.48	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	82nd Street E	87th Street E	7,503	9,010	18,620	9,610	107%	7,173	8,640	18,610	9,970	115%	14,676	34,256	4	6-8	54,000	0.27	0.63	0.36	No
Antelope Valley	Pearblossom Highway (SR-138)*	Major Highway	E/W	87th Street E	96th Street E		9,070	18,610	9,540	105%		8,720	18,680	9,960	114%	17,790	37,290	4	6-8	54,000	0.33	0.69	0.36	No
Antelope Valley	Pearblossom Highway (SR-138)*	Major Highway	E/W	96th Street E	106th Street E		10,270	22,060	11,790	115%		9,750	22,190	12,440	128%	20,020	44,250	4	6-8	54,000	0.37	0.82	0.45	No
Antelope Valley	Pearblossom Highway (SR-138)*	Major Highway	E/W	106th Street E	116th Street E		10,170	19,990	9,820	97%		9,680	20,110	10,430	108%	19,850	40,100	4	6-8	54,000	0.37	0.74	0.38	No
Antelope Valley	Pearblossom Highway (SR-138)*	Major Highway	E/W	116th Street E	126th Street E		9,570	18,930	9,360	98%		8,990	18,250	9,260	103%	18,560	37,180	4	6-8	54,000	0.34	0.69	0.34	No
Antelope Valley	Pearblossom Highway (SR-138)*	Major Highway	E/W	126th Street E	131st Street E		10,410	22,240	11,830	114%		9,900	20,720	10,820	109%	20,310	42,960	4	6-8	54,000	0.38	0.80	0.42	No
Antelope Valley	Pearblossom Highway (SR-138)*	Major Highway	E/W	131st Street E	170th Street E		12,270	30,220	17,950	146%		12,180	30,450	18,270	150%	24,450	60,670	4	6-8	54,000	0.45	1.12	0.67	Yes
Antelope Valley	Fort Tejon Road*	Secondary Highway	E/W	87th Street E	Mount Emma Road		1,630	6,690	5,060	310%		2,330	6,680	4,350	187%	3,960	13,370	2	4	36,000	0.11	0.37	0.26	No
Antelope Valley	Fort Tejon Road *	Secondary Highway	E/W	Mount Emma Road	96th Street		2,990	8,030	5,040	169%		4,170	8,280	4,110	99%	7,160	16,310	2	4	36,000	0.20	0.45	0.25	No
Antelope Valley	Fort Tejon Road *	Secondary Highway	E/W	96th Street	106th Street		3,100	8,840	5,740	185%		4,320	9,140	4,820	112%	7,420	17,980	2	4	36,000	0.21	0.50	0.29	No
Antelope Valley	Fort Tejon Road*	Secondary Highway	E/W	106th Street	131 Street E		2,040	2,420	380	19%		3,170	2,400	-770	-24%	5,210	4,820	2	4	36,000	0.14	0.13	-0.01	No
Santa Clarita Valley	Pico Canyon Road*	Major Highway	E/W	The Old Road	I-5 South Off-ramp		14,560	21,750	7,190	49%		19,930	28,170	8,240	41%	34,490	49,920	4	6-8	54,000	0.64	0.92	0.29	No
Santa Clarita Valley	Pico Canyon Road*	Major Highway	E/W	Constitution Drive	The Old Road		18,720	25,070	6,350	34%		20,100	28,460	8,360	42%	38,820	53,530	4	6-8	54,000	0.72	0.99	0.27	No
Santa Clarita Valley	Pico Canyon Road*	Major Highway	E/W	Stevenson Ranch Parkway	Constitution Drive		18,720	25,070	6,350	34%		20,100	28,460	8,360	42%	38,820	53,530	4	6-8	54,000	0.72	0.99	0.27	No
Santa Clarita Valley	Pico Canyon Road*	Major Highway	E/W	Whispering Oaks Drive	Stevenson Ranch Parkway		14,370	26,280	11,910	83%		14,180	26,250	12,070	85%	28,550	52,530	4	6-8	54,000	0.53	0.97	0.44	No
Santa Clarita Valley	Copper Hill Drive*	Major Highway	E/W	Avenida Rancho Tesoro	E/O McBean Parkway		4,300	11,210	6,910	161%		4,890	11,200	6,310	129%	9,190	22,410	4	6-8	54,000	0.17	0.42	0.24	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Santa Clarita Valley	Copper Hill Drive	Major Highway	E/W	Decoro Drive	Avenida Rancho Tesoro	14,694	4,000	7,570	3,570	89%	14,713	3,330	6,310	2,980	89%	29,407	35,957	6	6-8	54,000	0.54	0.67	0.12	No
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Expressway	E/W	Commerce Center Drive	I-5 South Off-ramp	2,223	22,910	44,020	21,110	92%	1,543	21,250	39,770	18,520	87%	3,766	43,396	6	4-8	66,000	0.06	0.66	0.60	No
Santa Clarita Valley	Henry Mayo Drive (SR-126)*	Expressway	E/W	Del Valle Road	Commerce Center Drive		13,390	23,210	9,820	73%		13,970	20,990	7,020	50%	27,360	44,200	6	4-8	66,000	0.41	0.67	0.26	No
Santa Clarita Valley	Henry Mayo Drive (SR-126)*	Expressway	E/W	San Martinez Grande Canyon Road	Del Valle Road		16,070	29,460	13,390	83%		17,000	30,340	13,340	78%	33,070	59,800	4	4-8	44,000	0.75	1.36	0.61	Yes
Santa Clarita Valley	Bouquet Canyon Road*	Major Highway	N/S	Vasquez Canyon Road	Shadow Valley Lane		3,030	7,400	4,370	144%		3,270	7,050	3,780	116%	6,300	14,450	2	6-8	54,000	0.12	0.27	0.15	No
Santa Clarita Valley	Bouquet Canyon Road*	Major Highway	N/S	Texas Canyon Road	Vasquez Canyon Road		2,800	9,890	7,090	253%		2,810	9,040	6,230	222%	5,610	18,930	2	6-8	54,000	0.10	0.35	0.25	No
Santa Clarita Valley	Sierra Highway	Major Highway	N/S	Sand Canyon Road	Ryan Lane	3,576	3,980	13,480	9,500	239%	4,379	3,390	12,390	9,000	265%	7,955	26,455	4	6-8	54,000	0.15	0.49	0.34	No
Santa Clarita Valley	Sierra Highway*	Major Highway	N/S	Vasquez Canyon Road	Sand Canyon Road		2,940	14,940	12,000	408%		2,750	13,420	10,670	388%	5,690	28,360	4	6-8	54,000	0.11	0.53	0.42	No
Santa Clarita Valley	Sierra Highway	Major Highway	N/S	Davenport Road	Vasquez Canyon Road	4,267	1,370	7,880	6,510	475%	3,867	1,210	6,200	4,990	412%	8,134	19,634	4	6-8	54,000	0.15	0.36	0.21	No
Santa Clarita Valley	Sierra Highway	Major Highway	N/S	Agua Dulce Canyon Road	Davenport Road	2,835	850	4,770	3,920	461%	2,624	730	3,830	3,100	425%	5,459	12,479	2	6-8	54,000	0.10	0.23	0.13	No
Santa Clarita Valley	Vasquez Canyon Road*	Major Highway	E/W	Bouquet Canyon Road	Sierra Highway		1,080	5,830	4,750	440%		890	5,540	4,650	522%	1,970	11,370	2	6-8	54,000	0.04	0.21	0.17	No
Santa Clarita Valley	Plum Canyon Road	Major Highway	E/W	Via Joyce Drive	Santa Catarina Road	8,863	6,320	9,190	2,870	45%	8,935	6,020	8,920	2,900	48%	17,798	23,568	6	6-8	54,000	0.33	0.44	0.11	No
Santa Clarita Valley	Plum Canyon Road	Major Highway	E/W	Santa Catarina Road	La Madrid Drive	8,247	6,500	10,010	3,510	54%	8,232	6,160	10,300	4,140	67%	16,479	24,129	6	6-8	54,000	0.31	0.45	0.14	No
Santa Clarita Valley	Plum Canyon Road	Major Highway	E/W	La Madrid Drive	Farrell Road	7,391	7,100	10,580	3,480	49%	7,282	6,670	10,710	4,040	61%	14,673	22,193	6	6-8	54,000	0.27	0.41	0.14	No
Santa Clarita Valley	Plum Canyon Road*	Major Highway	E/W	Farrell Road	Ashboro Road		6,100	7,870	1,770	29%		5,660	7,930	2,270	40%	11,760	15,800	6	6-8	54,000	0.22	0.29	0.07	No
Santa Clarita Valley	Commerce Center Drive*	Major Highway	N/S	The Old Road	Hasley Canyon Road		12,600	23,460	10,860	86%		13,160	21,130	7,970	61%	25,760	44,590	4	6-8	54,000	0.48	0.83	0.35	No
Santa Clarita Valley	Commerce Center Drive*	Major Highway	N/S	Hasley Canyon Road	Live Oak Road		2,730	8,310	5,580	204%		3,100	8,500	5,400	174%	5,830	16,810	4	6-8	54,000	0.11	0.31	0.20	No
Santa Clarita Valley	Commerce Center Drive*	Major Highway	N/S	Live Oak Road	Henry Mayo Drive		3,580	12,600	9,020	252%		3,140	13,090	9,950	317%	6,720	25,690	4	6-8	54,000	0.12	0.48	0.35	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Camino Del Sur	Hacienda Boulevard		23,590	25,660	2,070	9%		23,130	25,070	1,940	8%	46,720	50,730	6	6-8	54,000	0.87	0.94	0.07	No

Table 5.16-4 Existing vs. Existing Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound					Southbound/Eastbound					2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth									
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Hacienda Boulevard	Stimson Avenue		14,080	13,190	-890	-6%		16,130	14,540	-1,590	-10%	30,210	27,730	6	6-8	54,000	0.56	0.51	-0.05	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Stimson Avenue	Haliburton Road		16,550	16,260	-290	-2%		18,860	17,630	-1,230	-7%	35,410	33,890	6	6-8	54,000	0.66	0.63	-0.03	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Halliburton Road	Azusa Avenue		17,580	17,300	-280	-2%		20,430	19,410	-1,020	-5%	38,010	36,710	6	6-8	54,000	0.70	0.68	-0.02	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Azusa Avenue	Albatross Road		18,360	20,460	2,100	11%		18,520	18,640	120	1%	36,880	39,100	6	6-8	54,000	0.68	0.72	0.04	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Albatross Road	Stoner Creek Road		8,210	8,940	730	9%		8,510	8,460	-50	-1%	16,720	17,400	6	6-8	54,000	0.31	0.32	0.01	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Stoner Creek Road	Larkvane Road		14,670	15,150	480	3%		14,790	16,010	1,220	8%	29,460	31,160	6	6-8	54,000	0.55	0.58	0.03	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	S Larkvane Road	Fullerton Road		14,670	15,150	480	3%		14,790	16,010	1,220	8%	29,460	31,160	6	6-8	54,000	0.55	0.58	0.03	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Fullerton Road	Batson Avenue		15,360	22,210	6,850	45%		14,820	19,400	4,580	31%	30,180	41,610	6	6-8	54,000	0.56	0.77	0.21	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Batson Avenue	Nogales Street		8,940	11,280	2,340	26%		9,530	10,470	940	10%	18,470	21,750	6	6-8	54,000	0.34	0.40	0.06	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Nogales Street	Otterbein Avenue		11,700	12,280	580	5%		10,190	11,110	920	9%	21,890	23,390	6	6-8	54,000	0.41	0.43	0.03	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Otterbein Avenue	Fairway Drive		8,180	8,400	220	3%		6,480	7,020	540	8%	14,660	15,420	6	6-8	54,000	0.27	0.29	0.01	No
East San Gabriel Valley	Colima Road*	Major Highway	E/W	Fairway Drive	Lake Canyon Drive		4,010	5,340	1,330	33%		3,510	3,580	70	2%	7,520	8,920	4	6-8	54,000	0.14	0.17	0.03	No
East San Gabriel Valley	Amar Road	Major Highway	E/W	Echelon Avenue	Valinda Avenue	11,009	9,390	7,890	-1,500	-16%	10,911	10,440	8,640	-1,800	-17%	21,920	18,620	4	6-8	54,000	0.41	0.34	-0.06	No
East San Gabriel Valley	Amar Road	Major Highway	E/W	Valinda Avenue	Lark Ellen Avenue	12,793	13,130	11,230	-1,900	-14%	12,069	13,510	12,090	-1,420	-11%	24,862	21,542	6	6-8	54,000	0.46	0.40	-0.06	No
East San Gabriel Valley	Amar Road	Major Highway	E/W	Lark Ellen Avenue	Azusa Avenue	14,372	15,390	14,100	-1,290	-8%	14,490	16,090	14,520	-1,570	-10%	28,862	26,002	6	6-8	54,000	0.53	0.48	-0.05	No
East San Gabriel Valley	Nogales Street*	Major Highway	N/S	Gale Street	SR-60 Freeway Westbound Off-ramp		17,570	13,840	-3,730	-21%		17,540	12,230	-5,310	-30%	35,110	26,070	4	6-8	54,000	0.65	0.48	-0.17	No
East San Gabriel Valley	Nogales Street*	Major Highway	N/S	SR-60 Freeway Eastbound Off-ramp	Daisetta Street		16,839	17,966	1,127	7%		19,710	18,970	-740	-4%	36,549	36,936	6	6-8	54,000	0.68	0.68	0.01	No
East San Gabriel Valley	Nogales Street*	Major Highway	N/S	Daisetta Street	Colima Road		19,980	21,260	1,280	6%		19,710	18,970	-740	-4%	39,690	40,230	4	6-8	54,000	0.74	0.75	0.01	No
East San Gabriel Valley	Nogales Street	Major Highway	N/S	Colima Road	Pathfinder Road	7,436	9,060	9,530	470	5%	8,913	10,840	8,420	-2,420	-22%	16,349	14,399	4	6-8	54,000	0.30	0.27	-0.04	No
East San Gabriel Valley	Hacienda Boulevard*	Major Highway	N/S	Gale Avenue	SR-60 Freeway Westbound Off-ramp		22,570	18,860	-3,710	-16%		24,760	20,560	-4,200	-17%	47,330	39,420	6	6-8	54,000	0.88	0.73	-0.15	No
East San Gabriel Valley	Hacienda Boulevard*	Major Highway	N/S	SR-60 Freeway Westbound Off-ramp	SR-60 Freeway Eastbound Off-ramp		26,060	27,770	1,710	7%		24,410	26,180	1,770	7%	50,470	53,950	6	6-8	54,000	0.93	1.00	0.06	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
East San Gabriel Valley	Hacienda Boulevard*	Major Highway	N/S	SR-60 Freeway Eastbound Off-ramp	Halliburton Road		20,360	26,990	6,630	33%		23,280	28,880	5,600	24%	43,640	55,870	6	6-8	54,000	0.81	1.03	0.23	Yes
East San Gabriel Valley	Hacienda Boulevard	Major Highway	N/S	Halliburton Road	Las Lomitas Drive	20,928	18,770	23,490	4,720	25%	20,616	20,120	25,810	5,690	28%	41,544	51,954	6	6-8	54,000	0.77	0.96	0.19	No
East San Gabriel Valley	Hacienda Boulevard*	Major Highway	N/S	Las Lomitas Drive	Colima Road		17,040	20,180	3,140	18%		18,260	22,650	4,390	24%	35,300	42,830	6	6-8	54,000	0.65	0.79	0.14	No
East San Gabriel Valley	Hacienda Boulevard*	Major Highway	N/S	Colima Road	Glenmark Drive		13,440	6,470	-6,970	-52%		12,230	6,080	-6,150	-50%	25,670	12,550	4	6-8	54,000	0.48	0.23	-0.24	No
East San Gabriel Valley	Grand Avenue	Major Highway	N/S	Holt Avenue	Cameron Avenue	15,534	14,840	14,320	-520	-4%	15,409	12,900	12,100	-800	-6%	30,943	29,623	4	6-8	54,000	0.57	0.55	-0.02	No
East San Gabriel Valley	Cypress Street*	Secondary Highway	E/W	Ellen Drive	Vincent Avenue		3,120	2,550	-570	-18%		4,270	2,840	-1,430	-33%	7,390	5,390	2	4	36,000	0.21	0.15	-0.06	No
East San Gabriel Valley	Cypress Street*	Secondary Highway	E/W	Vincent Avenue	Lark Ellen Avenue		2,520	2,250	-270	-11%		4,020	2,440	-1,580	-39%	6,540	4,690	2	4	36,000	0.18	0.13	-0.05	No
East San Gabriel Valley	Arrow Highway*	Major Highway	E/W	Glendora Avenue	Bonnie Cove Avenue		9,110	8,190	-920	-10%		10,230	9,190	-1,040	-10%	19,340	17,380	4	6-8	54,000	0.36	0.32	-0.04	No
East San Gabriel Valley	Arrow Highway*	Major Highway	E/W	Bonnie Cove Avenue	Sunflower Avenue		8,940	8,210	-730	-8%		10,090	9,230	-860	-9%	19,030	17,440	4	6-8	54,000	0.35	0.32	-0.03	No
East San Gabriel Valley	Arrow Highway	Major Highway	E/W	Sunflower Avenue	Valley Center Avenue	12,033	8,110	7,420	-690	-9%	10,517	9,920	8,700	-1,220	-12%	22,550	20,640	4	6-8	54,000	0.42	0.38	-0.04	No
East San Gabriel Valley	Cienega Avenue*	Secondary Highway	E/W	Glendora Avenue	Bonnie Cove Avenue		210	280	70	33%		690	410	-280	-41%	900	690	4	4	36,000	0.03	0.02	-0.01	No
East San Gabriel Valley	Cienega Avenue*	Secondary Highway	E/W	Bonnie Cove Avenue	Sunflower Avenue		200	280	80	40%		690	410	-280	-41%	890	690	4	4	36,000	0.02	0.02	-0.01	No
East San Gabriel Valley	Cienega Avenue*	Secondary Highway	E/W	Sunflower Avenue	Valley Center Avenue		10	0	-10	-100%		210	120	-90	-43%	220	120	4	4	36,000	0.01	0.00	0.00	No
Gateway	Alameda Street (SR-47)*	Major Highway	N/S	Laurel Park Road	Del Amo Boulevard		4,690	4,530	-160	-3%		4,890	5,280	390	8%	9,580	9,810	6	6-8	54,000	0.18	0.18	0.00	No
Gateway	Alameda Street (SR-47)*	Major Highway	N/S	Manville Street	Laurel Park Road		4,080	4,010	-70	-2%		3,840	3,790	-50	-1%	7,920	7,800	6	6-8	54,000	0.15	0.14	0.00	No
Gateway	Santa Fe Avenue*	Major Highway	N/S	Las Hermanas Street	Victoria Street		9,040	7,870	-1,170	-13%		7,230	6,350	-880	-12%	16,270	14,220	4	6-8	54,000	0.30	0.26	-0.04	No
Gateway	Santa Fe Avenue*	Major Highway	N/S	Victoria Street	Santa Fe Avenue		3,820	2,900	-920	-24%		3,220	2,560	-660	-20%	7,040	5,460	4	6-8	54,000	0.13	0.10	-0.03	No
Gateway	Norwalk Boulevard*	Major Highway	N/S	Whittier Boulevard	Townley Drive		8,000	5,290	-2,710	-34%		6,620	6,670	50	1%	14,620	11,960	4	6-8	54,000	0.27	0.22	-0.05	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Townley Drive	Mines Boulevard	9,771	11,150	10,300	-850	-8%	10,597	9,040	9,860	820	9%	20,368	20,338	4	6-8	54,000	0.38	0.38	0.00	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Mines Boulevard	Saragosa Street	9,860	7,750	7,440	-310	-4%	10,825	5,770	5,670	-100	-2%	20,685	20,275	4	6-8	54,000	0.38	0.38	-0.01	No

Table 5.16-4 Existing vs. Existing Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound					Southbound/Eastbound					2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth									
Gateway	Norwalk Boulevard	Major Highway	N/S	Saragosa Street	Washington Boulevard	11,545	7,340	5,400	-1,940	-26%	12,108	8,510	1,400	-7,110	-84%	23,653	14,603	4	6-8	54,000	0.44	0.27	-0.17	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Broadway	Slauson Avenue	12,596	16,100	10,040	-6,060	-38%	10,978	15,410	9,100	-6,310	-41%	23,574	11,204	2	6-8	54,000	0.44	0.21	-0.23	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Slauson Avenue	Los Nietos Road	10,967	12,680	7,530	-5,150	-41%	11,381	12,850	8,230	-4,620	-36%	22,348	12,578	2	6-8	54,000	0.41	0.23	-0.18	No
Gateway	Washington Boulevard*	Major Highway	E/W	Broadway	Sorensen Avenue		13,260	13,100	-160	-1%		13,300	12,580	-720	-5%	26,560	25,680	4	6-8	54,000	0.49	0.48	-0.02	No
Gateway	Washington Boulevard*	Major Highway	E/W	Sorensen Avenue	Calobar Avenue		9,560	7,940	-1,620	-17%		9,370	7,680	-1,690	-18%	18,930	15,620	4	6-8	54,000	0.35	0.29	-0.06	No
Gateway	Washington Boulevard*	Major Highway	E/W	Calobar Avenue	Rivera Road		10,090	8,250	-1,840	-18%		9,750	8,000	-1,750	-18%	19,840	16,250	4	6-8	54,000	0.37	0.30	-0.07	No
Gateway	Slauson Avenue*	Major Highway	E/W	Sal Avenue	I-605 Southbound Off-ramp		27,230	23,060	-4,170	-15%		26,220	19,620	-6,600	-25%	53,450	42,680	4	6-8	54,000	0.99	0.79	-0.20	No
Gateway	Slauson Avenue	Major Highway	E/W	I-605 Southbound	Pioneer Boulevard	13,155	22,870	22,060	-810	-4%	18,215	26,270	22,310	-3,960	-15%	31,370	26,600	4	6-8	54,000	0.58	0.49	-0.09	No
Gateway	Slauson Avenue	Major Highway	E/W	Pioneer Boulevard	Norwalk Boulevard	15,958	13,480	12,560	-920	-7%	18,804	15,320	14,700	-620	-4%	34,762	33,222	6	6-8	54,000	0.64	0.62	-0.03	No
Gateway	Mulberry Drive	Major Highway	E/W	Painter Avenue	Calmada Avenue	12,857	13,500	13,730	230	2%	13,519	14,670	14,600	-70	0%	26,376	26,536	6	6-8	54,000	0.49	0.49	0.00	No
Gateway	Mulberry Drive*	Major Highway	E/W	Calmada Avenue	Gunn Avenue		13,350	13,200	-150	-1%		14,430	14,060	-370	-3%	27,780	27,260	6	6-8	54,000	0.51	0.50	-0.01	No
Gateway	Mulberry Drive	Major Highway	E/W	Gunn Avenue	Mills Avenue	11,871	13,450	13,680	230	2%	13,468	14,510	14,760	250	2%	25,339	25,819	6	6-8	54,000	0.47	0.48	0.01	No
Gateway	Mulberry Drive*	Major Highway	E/W	Mills Avenue	Colima Road		8,800	8,340	-460	-5%		9,160	8,950	-210	-2%	17,960	17,290	6	6-8	54,000	0.33	0.32	-0.01	No
Gateway	Mulberry Drive	Major Highway	E/W	Colima Road	LA Mirada Boulevard	9,890	7,850	7,310	-540	-7%	10,940	7,940	7,510	-430	-5%	20,830	19,860	4	6-8	54,000	0.39	0.37	-0.02	No
Gateway	Mulberry Drive	Major Highway	E/W	La Mirada Boulevard	Scott Avenue	7,113	3,250	3,210	-40	-1%	7,299	3,180	3,270	90	3%	14,412	14,462	2	6-8	54,000	0.27	0.27	0.00	No
Gateway	Colima Road	Secondary Highway	N/S	Telegraph Road	Broadway	14,538	8,980	8,510	-470	-5%	15,696	7,780	7,940	160	2%	30,234	29,924	2	4	36,000	0.84	0.83	-0.01	No
Gateway	Colima Road*	Secondary Highway	N/S	Broadway	Mulberry Drive		10,160	10,060	-100	-1%		9,110	9,680	570	6%	19,270	19,740	2	4	36,000	0.54	0.55	0.01	No
Gateway	Colima Road*	Secondary Highway	N/S	Mulberry Drive	La Mirada Boulevard		8,350	7,720	-630	-8%		7,250	7,130	-120	-2%	15,600	14,850	2	4	36,000	0.43	0.41	-0.02	No
Gateway	Colima Road	Secondary Highway	N/S	La Mirada Boulevard	Lambert Road	13,534	16,930	17,520	590	3%	14,555	15,640	16,880	1,240	8%	28,089	29,919	4	4	36,000	0.78	0.83	0.05	No
Gateway	Carmenita Road*	Secondary Highway	N/S	Telegraph Road	Florence Avenue		8,660	9,150	490	6%		8,450	9,550	1,100	13%	17,110	18,700	4	4	36,000	0.48	0.52	0.04	No
Gateway	Carmenita Road*	Secondary Highway	N/S	Florence Avenue	Lakeland Road		9,130	10,620	1,490	16%		9,300	11,140	1,840	20%	18,430	21,760	4	4	36,000	0.51	0.60	0.09	No
Gateway	Carmenita Road*	Secondary Highway	N/S	Lakeland Road	Meyer Road		7,950	9,120	1,170	15%		8,190	9,650	1,460	18%	16,140	18,770	4	4	36,000	0.45	0.52	0.07	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Gateway	Carmenita Road*	Secondary Highway	N/S	Meyer Road	Leffingwell Road		9,600	10,130	530	6%		9,870	10,890	1,020	10%	19,470	21,020	4	4	36,000	0.54	0.58	0.04	No
Gateway	Carmenita Road*	Secondary Highway	N/S	Leffingwell Road	Imperial Highway		12,740	15,190	2,450	19%		13,190	15,760	2,570	19%	25,930	30,950	4	4	36,000	0.72	0.86	0.14	No
Gateway	Telegraph Road*	Major Highway	E/W	Carmenita Road	Gunn Avenue		19,800	13,970	-5,830	-29%		19,910	13,350	-6,560	-33%	39,710	27,320	4	6-8	54,000	0.74	0.51	-0.23	No
Gateway	Telegraph Road*	Major Highway	E/W	Gunn Avenue	Mills Avenue		18,520	13,150	-5,370	-29%		18,770	12,390	-6,380	-34%	37,290	25,540	4	6-8	54,000	0.69	0.47	-0.22	No
Gateway	Telegraph Road*	Major Highway	E/W	Mills Avenue	Valley View Avenue		22,510	16,730	-5,780	-26%		22,720	16,390	-6,330	-28%	45,230	33,120	4	6-8	54,000	0.84	0.61	-0.22	No
Gateway	Telegraph Road*	Major Highway	E/W	Valley View Avenue	Colima Road		12,610	8,770	-3,840	-30%		12,570	8,840	-3,730	-30%	25,180	17,610	4	6-8	54,000	0.47	0.33	-0.14	No
Gateway	Telegraph Road*	Major Highway	E/W	Colima Road	Leffingwell Road		15,550	12,740	-2,810	-18%		15,340	12,820	-2,520	-16%	30,890	25,560	4	6-8	54,000	0.57	0.47	-0.10	No
Gateway	Telegraph Road*	Major Highway	E/W	Leffingwell Road	Imperial Highway		12,200	8,770	-3,430	-28%		11,670	8,740	-2,930	-25%	23,870	17,510	4	6-8	54,000	0.44	0.32	-0.12	No
Gateway	Imperial Highway*	Major Highway	E/W	Shoemaker Avenue	Leffingwell Road		24,450	20,280	-4,170	-17%		25,840	20,120	-5,720	-22%	50,290	40,400	4	6-8	54,000	0.93	0.75	-0.18	No
Gateway	Imperial Highway*	Major Highway	E/W	Leffingwell Road	Carmenita Road		13,860	10,660	-3,200	-23%		14,610	10,480	-4,130	-28%	28,470	21,140	4	6-8	54,000	0.53	0.39	-0.14	No
Gateway	Imperial Highway*	Major Highway	E/W	Carmenita Road	Shopping Center Driveway		15,730	12,610	-3,120	-20%		16,190	12,720	-3,470	-21%	31,920	25,330	4	6-8	54,000	0.59	0.47	-0.12	No
Gateway	Imperial Highway	Major Highway	E/W	Shopping Center Driveway	Meyer Road	14,563	13,360	10,330	-3,030	-23%	14,176	14,170	10,620	-3,550	-25%	28,739	22,159	4	6-8	54,000	0.53	0.41	-0.12	No
Gateway	Imperial Highway*	Major Highway	E/W	Meyer Road	Valley View Avenue		16,770	14,170	-2,600	-16%		18,590	14,880	-3,710	-20%	35,360	29,050	4	6-8	54,000	0.65	0.54	-0.12	No
Gateway	Imperial Highway	Major Highway	E/W	Valley View Avenue	Biola Avenue	13,522	16,110	12,260	-3,850	-24%	13,143	16,490	12,620	-3,870	-23%	26,665	18,945	4	6-8	54,000	0.49	0.35	-0.14	No
Gateway	Imperial Highway*	Major Highway	E/W	Biola Avenue	Telegraph Road		17,370	13,770	-3,600	-21%		18,310	14,250	-4,060	-22%	35,680	28,020	4	6-8	54,000	0.66	0.52	-0.14	No
Westside	La Cienega Boulevard*	Major Highway	N/S	Stocker Street	Slauson Avenue		31,300	32,180	880	3%		31,180	31,490	310	1%	62,480	63,670	6	6-8	54,000	1.16	1.18	0.02	Yes
Westside	La Cienega Boulevard*	Major Highway	N/S	Rodeo Place	Stocker Street		25,150	24,610	-540	-2%		24,780	23,890	-890	-4%	49,930	48,500	6	6-8	54,000	0.92	0.90	-0.03	No
Westside	La Brea Avenue*	Major Highway	N/S	Veronica Street	Overhill Drive		24,880	24,940	60	0%		24,340	23,340	-1,000	-4%	49,220	48,280	6	6-8	54,000	0.91	0.89	-0.02	No
Westside	La Brea Avenue*	Major Highway	N/S	Overhill Drive	Slauson Avenue		28,290	27,510	-780	-3%		27,440	25,210	-2,230	-8%	55,730	52,720	4	6-8	54,000	1.03	0.98	-0.06	No
Westside	La Brea Avenue	Major Highway	N/S	Slauson Avenue	Centinela Avenue	14,452	13,610	13,500	-110	-1%	13,463	14,030	15,220	1,190	8%	27,915	28,995	4	6-8	54,000	0.52	0.54	0.02	No
Westside	Slauson Avenue*	Major Highway	E/W	Corning Avenue	La Cienega Boulevard		31,490	32,370	880	3%		28,030	28,580	550	2%	59,520	60,950	6	6-8	54,000	1.10	1.13	0.03	Yes
Westside	Slauson Avenue	Major Highway	E/W	La Cienega Boulevard	Fairfax Boulevard	17,281	31,400	30,570	-830	-3%	19,952	33,490	33,170	-320	-1%	37,233	36,083	6	6-8	54,000	0.69	0.67	-0.02	No

Table 5.16-4 Existing vs. Existing Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound					Southbound/Eastbound					2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth									
Westside	Slauson Avenue*	Major Highway	E/W	Fairfax Boulevard	La Brea Avenue		38,910	36,230	-2,680	-7%		37,400	37,830	430	1%	76,310	74,060	6	6-8	54,000	1.41	1.37	-0.04	No
Westside	Slauson Avenue*	Major Highway	E/W	La Brea Avenue	Overhill Drive		21,890	22,310	420	2%		19,340	19,720	380	2%	41,230	42,030	6	6-8	54,000	0.76	0.78	0.01	No
Westside	Stocker Street	Major Highway	E/W	La Cienega Boulevard	Fairfax Boulevard	12,234	12,500	14,760	2,260	18%	15,400	12,160	14,540	2,380	20%	27,634	32,274	4	6-8	54,000	0.51	0.60	0.09	No
Westside	Stocker Street*	Major Highway	E/W	Fairfax Boulevard	Overhill Drive/La Brea Avenue		11,070	13,520	2,450	22%		10,840	13,290	2,450	23%	21,910	26,810	4	6-8	54,000	0.41	0.50	0.09	No
San Fernando Valley	Foothill Boulevard*	Major Highway	E/W	Pennsylvania Avenue	La Crescenta Avenue		8,290	9,290	1,000	12%		7,120	7,770	650	9%	15,410	17,060	4	6-8	54,000	0.29	0.32	0.03	No
San Fernando Valley	Foothill Boulevard*	Major Highway	E/W	La Crescenta Avenue	Rosemont Avenue		2,290	3,280	990	43%		1,970	2,360	390	20%	4,260	5,640	4	6-8	54,000	0.08	0.10	0.03	No
San Fernando Valley	Foothill Boulevard*	Major Highway	E/W	Rosemont Avenue	Briggs Avenue		8,940	12,300	3,360	38%		9,110	10,930	1,820	20%	18,050	23,230	4	6-8	54,000	0.33	0.43	0.10	No
San Fernando Valley	Rosemont Avenue*	Secondary Highway	N/S	Rockdell Street	Orange Avenue		4,140	6,300	2,160	52%		4,190	6,160	1,970	47%	8,330	12,460	2	4	36,000	0.23	0.35	0.11	No
San Fernando Valley	Rosemont Avenue	Secondary Highway	N/S	Orange Avenue	Foothill Boulevard	2,565	3,890	5,740	1,850	48%	2,784	3,760	5,350	1,590	42%	5,349	8,789	2	4	36,000	0.15	0.24	0.10	No
San Fernando Valley	Rosemont Avenue*	Secondary Highway	N/S	Foothill Boulevard	Foothill Freeway		450	1,860	1,410	313%		410	2,080	1,670	407%	860	3,940	4	4	36,000	0.02	0.11	0.09	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	Colorado Boulevard	Del Mar Boulevard		18,230	19,660	1,430	8%		18,610	19,280	670	4%	36,840	38,940	4	6-8	54,000	0.68	0.72	0.04	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	Del Mar Boulevard	San Pasqual Street		17,950	16,850	-1,100	-6%		18,750	16,770	-1,980	-11%	36,700	33,620	4	6-8	54,000	0.68	0.62	-0.06	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	San Pasqual Street	California Boulevard		18,030	19,120	1,090	6%		18,920	19,340	420	2%	36,950	38,460	4	6-8	54,000	0.68	0.71	0.03	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	E California Boulevard	Huntington Drive		17,090	20,460	3,370	20%		16,630	18,860	2,230	13%	33,720	39,320	4	6-8	54,000	0.62	0.73	0.10	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	Huntington Drive	Huntington Drive		13,400	15,390	1,990	15%		16,640	18,230	1,590	10%	30,040	33,620	4	6-8	54,000	0.56	0.62	0.07	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	Huntington Drive	Duarte Road		12,600	13,520	920	7%		12,820	13,910	1,090	9%	25,420	27,430	4	6-8	54,000	0.47	0.51	0.04	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	Duarte Road	Ardendale Avenue		14,720	15,180	460	3%		14,380	15,220	840	6%	29,100	30,400	4	6-8	54,000	0.54	0.56	0.02	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
West San Gabriel Valley	Huntington Drive	Expressway	E/W	San Gabriel Boulevard	Madre Street	16,320	22,810	26,030	3,220	14%	16,338	22,250	25,310	3,060	14%	32,658	38,938	8	4-8	88,000	0.37	0.44	0.07	No
West San Gabriel Valley	Huntington Drive*	Expressway	E/W	Madre Street	Madre Street		0	0	0	N/A		0	0	0	N/A	0	0	8	4-8	88,000	0.00	0.00	0.00	No
West San Gabriel Valley	Huntington Drive	Expressway	E/W	Madre Street	Rosemead Boulevard	17,184	18,520	19,060	540	3%	14,487	19,070	20,530	1,460	8%	31,671	33,671	8	4-8	88,000	0.36	0.38	0.02	No
West San Gabriel Valley	Huntington Drive	Expressway	E/W	Rosemead Boulevard	Michillinda Avenue	15,565	22,230	23,510	1,280	6%	17,763	22,350	23,190	840	4%	33,328	35,448	8	4-8	88,000	0.38	0.40	0.02	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	E California Boulevard	Lombardy Road	14,080	15,180	14,910	-270	-2%	14,395	15,090	14,500	-590	-4%	28,475	27,615	4	6-8	54,000	0.53	0.51	-0.02	No
West San Gabriel Valley	San Gabriel Boulevard*	Major Highway	N/S	Lombardy Road	Huntington Drive		15,210	14,910	-300	-2%		15,300	14,690	-610	-4%	30,510	29,600	4	6-8	54,000	0.57	0.55	-0.02	No
West San Gabriel Valley	San Gabriel Boulevard*	Major Highway	N/S	Huntington Drive	Duarte Road		16,660	17,320	660	4%		18,370	18,970	600	3%	35,030	36,290	4	6-8	54,000	0.65	0.67	0.02	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	Duarte Road	Longden Avenue	13,465	16,360	16,360	0	0%	14,705	17,500	17,200	-300	-2%	28,170	27,870	4	6-8	54,000	0.52	0.52	-0.01	No
West San Gabriel Valley	San Gabriel Boulevard*	Major Highway	N/S	Longden Avenue	Las Tunas Drive		16,510	16,810	300	2%		17,140	17,190	50	0%	33,650	34,000	4	6-8	54,000	0.62	0.63	0.01	No
West San Gabriel Valley	Duarte Boulevard	Major Highway	E/W	San Gabriel Boulevard	Muscatel Avenue	5,579	1,850	2,130	280	15%	5,274	2,400	2,840	440	18%	10,853	11,573	2	6-8	54,000	0.20	0.21	0.01	No
West San Gabriel Valley	Duarte Boulevard	Major Highway	E/W	Muscatel Avenue	Madre Street	5,504	2,830	3,100	270	10%	5,649	3,050	3,420	370	12%	11,153	11,793	2	6-8	54,000	0.21	0.22	0.01	No
West San Gabriel Valley	Duarte Boulevard*	Major Highway	E/W	Madre Street	Rosemead Boulevard		750	930	180	24%		930	1,140	210	23%	1,680	2,070	2	6-8	54,000	0.03	0.04	0.01	No
West San Gabriel Valley	Duarte Boulevard*	Major Highway	E/W	Rosemead Boulevard	Oaks Avenue		2,690	3,050	360	13%		3,150	3,450	300	10%	5,840	6,500	4	6-8	54,000	0.11	0.12	0.01	No
West San Gabriel Valley	New York Drive	Secondary Highway	E/W	Lake Avenue	Holliston Avenue	4,540	4,580	5,150	570	12%	4,555	4,610	5,190	580	13%	9,095	10,245	2	4	36,000	0.25	0.28	0.03	No
West San Gabriel Valley	New York Drive*	Secondary Highway	E/W	Holliston Avenue	Hill Avenue		5,460	6,390	930	17%		5,440	6,370	930	17%	10,900	12,760	2	4	36,000	0.30	0.35	0.05	No
West San Gabriel Valley	New York Drive	Secondary Highway	E/W	Hill Avenue	Allen Avenue	3,925	2,330	2,230	-100	-4%	3,989	2,040	1,960	-80	-4%	7,914	7,734	2	4	36,000	0.22	0.21	-0.01	No
West San Gabriel Valley	New York Drive	Secondary Highway	E/W	Allen Avenue	Altadena Drive	4,062	4,890	5,550	660	13%	4,494	4,840	5,320	480	10%	8,556	9,696	2	4	36,000	0.24	0.27	0.03	No
West San Gabriel Valley	Fair Oaks Avenue	Major Highway	N/S	Loma Alta Drive	Terrace Street	2,085	3,730	4,470	740	20%	2,401	3,460	4,400	940	27%	4,486	6,166	2	6-8	54,000	0.08	0.11	0.03	No
West San Gabriel Valley	Fair Oaks Avenue	Major Highway	N/S	Terrace Street	Ventura Street	5,204	3,890	4,970	1,080	28%	5,518	3,830	4,930	1,100	29%	10,722	12,902	4	6-8	54,000	0.20	0.24	0.04	No
West San Gabriel Valley	Fair Oaks Avenue*	Major Highway	N/S	Ventura Street	Woodbury Road		4,800	5,380	580	12%		5,040	5,480	440	9%	9,840	10,860	4	6-8	54,000	0.18	0.20	0.02	No
West San Gabriel Valley	Lake Avenue	Secondary Highway	N/S	Loma Alta Drive	Altadena Drive	3,098	330	500	170	52%	3,074	320	600	280	88%	6,172	6,622	4	4	36,000	0.17	0.18	0.01	No
West San Gabriel Valley	Lake Avenue	Secondary Highway	N/S	Altadena Drive	Mendocino Lane	5,854	4,500	6,510	2,010	45%	4,390	4,410	6,340	1,930	44%	10,244	14,184	4	4	36,000	0.28	0.39	0.11	No

Table 5.16-4 Existing vs. Existing Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound					Southbound/Eastbound					2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth									
West San Gabriel Valley	Lake Avenue*	Secondary Highway	N/S	Menocino Lane	Calaveras Street		2,540	2,520	-20	-1%		2,540	2,900	360	14%	5,080	5,420	4	4	36,000	0.14	0.15	0.01	No
West San Gabriel Valley	Lake Avenue*	Secondary Highway	N/S	Calaveras Street	New York Drive		2,540	2,520	-20	-1%		2,540	2,900	360	14%	5,080	5,420	4	4	36,000	0.14	0.15	0.01	No
West San Gabriel Valley	Marengo Avenue	Secondary Highway	N/S	Loma Alta Drive	Altadena Drive	370	160	170	10	6%	293	100	90	-10	-10%	663	663	2	4	36,000	0.02	0.02	0.00	No
West San Gabriel Valley	Marengo Avenue	Secondary Highway	N/S	Altadena Drive	Woodbury Road	1,971	260	620	360	138%	1,901	170	340	170	100%	3,872	4,402	2	4	36,000	0.11	0.12	0.01	No
West San Gabriel Valley	Woodbury Road	Secondary Highway	E/W	Windsor Avenue	Lincoln Avenue	7,424	6,580	8,360	1,780	27%	7,495	6,690	8,130	1,440	22%	14,919	18,139	4	4	36,000	0.41	0.50	0.09	No
West San Gabriel Valley	Woodbury Road*	Secondary Highway	E/W	Lincoln Avenue	Fair Oaks Road		8,970	14,070	5,100	57%		10,630	15,490	4,860	46%	19,600	29,560	4	4	36,000	0.54	0.82	0.28	No
West San Gabriel Valley	Woodbury Road*	Secondary Highway	E/W	Fair Oaks Road	Marengo Avenue		8,500	12,430	3,930	46%		9,280	13,350	4,070	44%	17,780	25,780	4	4	36,000	0.49	0.72	0.22	No
West San Gabriel Valley	Woodbury Road*	Secondary Highway	E/W	Marengo Avenue	Mariposa Street		6,300	7,240	940	15%		6,800	7,730	930	14%	13,100	14,970	2	4	36,000	0.36	0.42	0.05	No
West San Gabriel Valley	Woodbury Road*	Secondary Highway	E/W	Mariposa Street	Los Robles Avenue		6,280	6,880	600	10%		6,380	6,880	500	8%	12,660	13,760	2	4	36,000	0.35	0.38	0.03	No
West San Gabriel Valley	Woodbury Road*	Secondary Highway	E/W	Los Robles Avenue	El Molina Avenue		3,660	4,130	470	13%		3,750	4,030	280	7%	7,410	8,160	2	4	36,000	0.21	0.23	0.02	No
West San Gabriel Valley	Woodbury Road*	Secondary Highway	E/W	El Molina Avenue	Lake Avenue		5,660	7,060	1,400	25%		5,570	6,910	1,340	24%	11,230	13,970	2	4	36,000	0.31	0.39	0.08	No
West San Gabriel Valley	Lincoln Avenue	Secondary Highway	N/S	Loma Alta Drive	Terrace Street	4,199	4,470	5,940	1,470	33%	3,961	4,350	5,460	1,110	26%	8,160	10,740	4	4	36,000	0.23	0.30	0.07	No
West San Gabriel Valley	Lincoln Avenue*	Secondary Highway	N/S	Terrace Street	Ventura Street		3,180	3,290	110	3%		2,040	2,750	710	35%	5,220	6,040	2	4	36,000	0.15	0.17	0.02	No
West San Gabriel Valley	Lincoln Avenue*	Secondary Highway	N/S	Ventura Street	Woodbury Road		3,180	3,290	110	3%		2,040	2,750	710	35%	5,220	6,040	2	4	36,000	0.15	0.17	0.02	No
West San Gabriel Valley	Allen Avenue	Secondary Highway	N/S	Altadena Drive	Mendocino Lane	1,636	2,940	4,570	1,630	55%	1,473	3,040	4,910	1,870	62%	3,109	6,609	2	4	36,000	0.09	0.18	0.10	No
West San Gabriel Valley	Allen Avenue*	Secondary Highway	N/S	Mendocino Lane	New York Drive		2,040	3,770	1,730	85%		2,300	4,160	1,860	81%	4,340	7,930	2	4	36,000	0.12	0.22	0.10	No
West San Gabriel Valley	Allen Avenue*	Secondary Highway	N/S	New York Drive	Washington Boulevard		2,680	4,380	1,700	63%		2,900	4,740	1,840	63%	5,580	9,120	2	4	36,000	0.16	0.25	0.10	No
West San Gabriel Valley	San Gabriel Boulevard*	Major Highway	N/S	Pomona Freeway (SR-60)	Town Center Drive		19,980	19,730	-250	-1%		21,680	22,780	1,100	5%	41,660	42,510	4	6-8	54,000	0.77	0.79	0.02	No
West San Gabriel Valley	San Gabriel Boulevard*	Major Highway	N/S	Town Center Drive	Plaza Drive		14,440	13,780	-660	-5%		17,290	16,000	-1,290	-7%	31,730	29,780	4	6-8	54,000	0.59	0.55	-0.04	No
West San Gabriel Valley	San Gabriel Boulevard*	Major Highway	N/S	Plaza Drive	E Lincoln Avenue		17,820	16,310	-1,510	-8%		20,740	18,830	-1,910	-9%	38,560	35,140	4	6-8	54,000	0.71	0.65	-0.06	No
West San Gabriel Valley	San Gabriel Boulevard*	Major Highway	N/S	E Lincoln Avenue	Rosemead Boulevard (SR-19)		18,950	20,690	1,740	9%		22,290	17,600	-4,690	-21%	41,240	38,290	4	6-8	54,000	0.76	0.71	-0.05	No
West San Gabriel Valley	Durfee Avenue	Major Highway	E/W	Rosemead Boulevard (SR-19)	Santa Anita Avenue	4,337	4,090	3,880	-210	-5%	6,746	6,940	6,180	-760	-11%	11,083	10,113	4	6-8	54,000	0.21	0.19	-0.02	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
West San Gabriel Valley	Durfee Avenue*	Major Highway	E/W	Santa Anita Avenue	Peck Road		3,720	4,090	370	10%		6,580	5,820	-760	-12%	10,300	9,910	4	6-8	54,000	0.19	0.18	-0.01	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	Rush Street	Town Center Drive		27,230	27,160	-70	0%		24,860	25,300	440	2%	52,090	52,460	6	6-8	54,000	0.96	0.97	0.01	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	Town Center Drive	Durfee Avenue		12,800	12,210	-590	-5%		10,460	9,910	-550	-5%	23,260	22,120	6	6-8	54,000	0.43	0.41	-0.02	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	Durfee Avenue	Legg Lake Bus Stop		27,920	25,640	-2,280	-8%		25,860	24,090	-1,770	-7%	53,780	49,730	4	6-8	54,000	1.00	0.92	-0.08	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)*	Major Highway	N/S	Legg Lake Bus Stop	Gallatin Road		27,920	25,640	-2,280	-8%		25,860	24,090	-1,770	-7%	53,780	49,730	4	6-8	54,000	1.00	0.92	-0.08	No
Metro	Western Avenue	Major Highway	N/S	108th Street	Imperial Highway	12,739	6,260	7,220	960	15%	11,855	6,260	7,180	920	15%	24,594	26,474	4	6-8	54,000	0.46	0.49	0.03	No
Metro	Western Avenue	Major Highway	N/S	Imperial Highway	120th Street	13,024	10,330	11,640	1,310	13%	11,768	10,960	12,570	1,610	15%	24,792	27,712	4	6-8	54,000	0.46	0.51	0.05	No
Metro	Western Avenue	Major Highway	N/S	120th Street	El Segundo Boulevard	10,016	10,470	11,380	910	9%	10,414	10,500	11,190	690	7%	20,430	22,030	4	6-8	54,000	0.38	0.41	0.03	No
Metro	Normandie Avenue*	Secondary Highway	N/S	Manchester Avenue	92nd Street		4,060	2,400	-1,660	-41%		3,660	2,690	-970	-27%	7,720	5,090	2	4	36,000	0.21	0.14	-0.07	No
Metro	Normandie Avenue*	Secondary Highway	N/S	92nd Street	95th Street		6,110	4,690	-1,420	-23%		5,770	4,490	-1,280	-22%	11,880	9,180	2	4	36,000	0.33	0.26	-0.08	No
Metro	Normandie Avenue	Secondary Highway	N/S	95th Street	Century Boulevard	9,770	5,190	3,490	-1,700	-33%	8,847	4,970	3,430	-1,540	-31%	18,617	15,377	2	4	36,000	0.52	0.43	-0.09	No
Metro	Normandie Avenue	Secondary Highway	N/S	Century Boulevard	108th Street	9,760	5,890	4,620	-1,270	-22%	9,354	5,730	5,010	-720	-13%	19,114	17,124	2	4	36,000	0.53	0.48	-0.06	No
Metro	Normandie Avenue*	Secondary Highway	N/S	108th Street	Imperial Highway		5,110	3,350	-1,760	-34%		4,950	3,550	-1,400	-28%	10,060	6,900	2	4	36,000	0.28	0.19	-0.09	No
Metro	Normandie Avenue*	Secondary Highway	N/S	Imperial Highway	120th Street		6,830	4,260	-2,570	-38%		7,550	4,410	-3,140	-42%	14,380	8,670	2	4	36,000	0.40	0.24	-0.16	No
Metro	Normandie Avenue*	Secondary Highway	N/S	120th Street	El Segundo Boulevard		5,930	3,360	-2,570	-43%		6,010	3,360	-2,650	-44%	11,940	6,720	2	4	36,000	0.33	0.19	-0.15	No
Metro	Vermont Avenue*	Major Highway	N/S	Manchester Avenue	90th Street		13,690	14,260	570	4%		13,510	13,550	40	0%	27,200	27,810	6	6-8	54,000	0.50	0.52	0.01	No
Metro	Vermont Avenue*	Major Highway	N/S	90th Street	92nd Street		10,740	11,160	420	4%		10,580	10,500	-80	-1%	21,320	21,660	6	6-8	54,000	0.39	0.40	0.01	No
Metro	Vermont Avenue*	Major Highway	N/S	92nd Street	Colden Avenue		12,630	12,880	250	2%		12,670	12,700	30	0%	25,300	25,580	6	6-8	54,000	0.47	0.47	0.01	No
Metro	Vermont Avenue*	Major Highway	N/S	Colden Avenue	Century Boulevard		11,480	11,220	-260	-2%		11,140	11,120	-20	0%	22,620	22,340	6	6-8	54,000	0.42	0.41	-0.01	No
Metro	Vermont Avenue*	Major Highway	N/S	Century Boulevard	108th Street		14,300	13,370	-930	-7%		12,880	13,290	410	3%	27,180	26,660	6	6-8	54,000	0.50	0.49	-0.01	No

Table 5.16-4 Existing vs. Existing Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound					Southbound/Eastbound					2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth									
Metro	Vermont Avenue	Major Highway	N/S	108th Street	111th Street	15,995	13,440	12,040	-1,400	-10%	13,950	12,040	11,910	-130	-1%	29,945	28,415	6	6-8	54,000	0.55	0.53	-0.03	No
Metro	Vermont Avenue*	Major Highway	N/S	111th Street	Imperial Highway		13,200	11,770	-1,430	-11%		11,590	11,790	200	2%	24,790	23,560	6	6-8	54,000	0.46	0.44	-0.02	No
Metro	Vermont Avenue*	Major Highway	N/S	Imperial Highway	120th Street		15,890	14,870	-1,020	-6%		16,850	17,780	930	6%	32,740	32,650	6	6-8	54,000	0.61	0.60	0.00	No
Metro	Vermont Avenue*	Major Highway	N/S	120th Street	El Segundo Boulevard		16,390	14,080	-2,310	-14%		16,420	15,420	-1,000	-6%	32,810	29,500	6	6-8	54,000	0.61	0.55	-0.06	No
Metro	Broadway*	Major Highway	N/S	120th Street	124th Street		4,860	5,380	520	11%		4,840	4,880	40	1%	9,700	10,260	4	6-8	54,000	0.18	0.19	0.01	No
Metro	Broadway	Major Highway	N/S	124th Street	El Segundo Boulevard	6,105	4,860	5,370	510	10%	3,370	4,840	4,870	30	1%	9,475	10,015	4	6-8	54,000	0.18	0.19	0.01	No
Metro	Broadway	Major Highway	N/S	El Segundo Boulevard	135th Street	4,318	3,450	3,690	240	7%	3,967	3,020	2,930	-90	-3%	8,285	8,435	4	6-8	54,000	0.15	0.16	0.00	No
Metro	Broadway	Major Highway	N/S	135th Street	Rosecrans Avenue	4,503	2,680	2,750	70	3%	4,909	2,980	2,690	-290	-10%	9,412	9,192	4	6-8	54,000	0.17	0.17	0.00	No
Metro	Broadway	Major Highway	N/S	Rosecrans Avenue	Compton Boulevard	3,732	4,130	2,750	-1,380	-33%	4,255	4,540	2,400	-2,140	-47%	7,987	4,467	4	6-8	54,000	0.15	0.08	-0.07	No
Metro	Broadway*	Major Highway	N/S	Compton Boulevard	Redondo Beach Boulevard		3,960	4,320	360	9%		4,300	4,020	-280	-7%	8,260	8,340	4	6-8	54,000	0.15	0.15	0.00	No
Metro	Broadway	Major Highway	N/S	Redondo Beach Boulevard	Alondra Boulevard	3,003	2,950	2,890	-60	-2%	7,059	3,280	2,990	-290	-9%	10,062	9,712	4	6-8	54,000	0.19	0.18	-0.01	No
Metro	El Segundo Boulevard*	Major Highway	E/W	Figueroa Street	Broadway		11,120	12,650	1,530	14%		9,560	11,260	1,700	18%	20,680	23,910	6	6-8	54,000	0.38	0.44	0.06	No
Metro	El Segundo Boulevard*	Major Highway	E/W	Broadway	Main Street		11,010	12,080	1,070	10%		9,860	10,950	1,090	11%	20,870	23,030	6	6-8	54,000	0.39	0.43	0.04	No
Metro	El Segundo Boulevard*	Major Highway	E/W	Main Street	San Pedro Street		9,810	10,890	1,080	11%		9,200	10,130	930	10%	19,010	21,020	6	6-8	54,000	0.35	0.39	0.04	No
Metro	El Segundo Boulevard*	Major Highway	E/W	San Pedro Street	Avalon Boulevard		10,770	12,460	1,690	16%		10,410	11,910	1,500	14%	21,180	24,370	6	6-8	54,000	0.39	0.45	0.06	No
Metro	El Segundo Boulevard	Major Highway	E/W	Avalon Boulevard	Central Avenue	11,885	9,010	9,720	710	8%	9,816	8,700	9,240	540	6%	21,701	22,951	6	6-8	54,000	0.40	0.43	0.02	No
Metro	El Segundo Boulevard*	Major Highway	E/W	Wilmington Avenue	Metro Blue Line		5,220	5,720	500	10%		3,750	4,130	380	10%	8,970	9,850	4	6-8	54,000	0.17	0.18	0.02	No
Metro	El Segundo Boulevard*	Major Highway	E/W	Metro Blue Line	Mona Boulevard		3,480	4,280	800	23%		2,750	3,280	530	19%	6,230	7,560	4	6-8	54,000	0.12	0.14	0.02	No
Metro	El Segundo Boulevard*	Major Highway	E/W	Mona Boulevard	Alameda Street		5,420	7,740	2,320	43%		4,310	6,710	2,400	56%	9,730	14,450	4	6-8	54,000	0.18	0.27	0.09	No
Metro	Rosecrans Avenue*	Major Highway	E/W	Figueroa Street	Broadway		12,170	12,170	0	0%		12,190	11,570	-620	-5%	24,360	23,740	6	6-8	54,000	0.45	0.44	-0.01	No
Metro	Rosecrans Avenue*	Major Highway	E/W	Broadway	Main Street		10,870	11,520	650	6%		10,780	11,220	440	4%	21,650	22,740	6	6-8	54,000	0.40	0.42	0.02	No
Metro	Rosecrans Avenue*	Major Highway	E/W	Main Street	San Pedro Street		13,010	13,290	280	2%		12,810	12,860	50	0%	25,820	26,150	6	6-8	54,000	0.48	0.48	0.01	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Rosecrans Avenue*	Major Highway	E/W	San Pedro Street	Avalon Boulevard		11,680	12,380	700	6%		11,590	12,210	620	5%	23,270	24,590	6	6-8	54,000	0.43	0.46	0.02	No
Metro	Rosecrans Avenue*	Major Highway	E/W	Avalon Boulevard	Stanford Avenue		13,000	13,520	520	4%		12,930	13,390	460	4%	25,930	26,910	6	6-8	54,000	0.48	0.50	0.02	No
Metro	Rosecrans Avenue*	Major Highway	E/W	Stanford Avenue	Central Avenue		11,930	12,130	200	2%		12,120	12,380	260	2%	24,050	24,510	6	6-8	54,000	0.45	0.45	0.01	No
Metro	Compton Avenue*	Secondary Highway	N/S	Slauson Avenue	Gage Avenue		7,030	8,740	1,710	24%		7,810	8,780	970	12%	14,840	17,520	4	4	36,000	0.41	0.49	0.07	No
Metro	Compton Avenue	Secondary Highway	N/S	Gage Avenue	71st Street	8,443	4,620	6,040	1,420	31%	8,555	5,600	6,160	560	10%	16,998	18,978	4	4	36,000	0.47	0.53	0.06	No
Metro	Compton Avenue	Secondary Highway	N/S	Florence Avenue	Nadeau Street	7,905	4,950	6,140	1,190	24%	8,735	4,830	5,420	590	12%	16,640	18,420	4	4	36,000	0.46	0.51	0.05	No
Metro	Compton Avenue	Secondary Highway	N/S	Nadeau Street	Manchester Avenue	8,173	3,660	4,090	430	12%	7,863	3,550	3,590	40	1%	16,036	16,506	4	4	36,000	0.45	0.46	0.01	No
Metro	Compton Avenue	Secondary Highway	N/S	Manchester Avenue	92nd Street	5,944	2,980	3,810	830	28%	6,051	2,480	3,100	620	25%	11,995	13,445	4	4	36,000	0.33	0.37	0.04	No
Metro	Compton Avenue*	Secondary Highway	N/S	I-105 Freeway	120th Street		2,950	3,100	150	5%		4,650	4,960	310	7%	7,600	8,060	4	4	36,000	0.21	0.22	0.01	No
Metro	Compton Avenue*	Secondary Highway	N/S	120th Street	El Segundo Boulevard		1,830	2,160	330	18%		1,930	1,860	-70	-4%	3,760	4,020	4	4	36,000	0.10	0.11	0.01	No
Metro	Manchester Avenue*	Major Highway	E/W	Central Avenue	Hooper Avenue		18,140	15,360	-2,780	-15%		18,380	15,070	-3,310	-18%	36,520	30,430	4	6-8	54,000	0.68	0.56	-0.11	No
Metro	Firestone Boulevard	Major Highway	E/W	Central Avenue	Compton Avenue	15,112	11,790	8,740	-3,050	-26%	16,126	12,110	8,700	-3,410	-28%	31,238	24,778	4	6-8	54,000	0.58	0.46	-0.12	No
Metro	Firestone Boulevard*	Major Highway	E/W	Compton Avenue	Maie Avenue		15,160	12,720	-2,440	-16%		15,990	13,040	-2,950	-18%	31,150	25,760	4	6-8	54,000	0.58	0.48	-0.10	No
Metro	Firestone Boulevard*	Major Highway	E/W	Maie Avenue	Metro Blue Line		15,280	12,870	-2,410	-16%		16,370	13,210	-3,160	-19%	31,650	26,080	4	6-8	54,000	0.59	0.48	-0.10	No
Metro	Firestone Boulevard*	Major Highway	E/W	Metro Blue Line	Holmes Avenue		15,090	12,570	-2,520	-17%		16,210	13,020	-3,190	-20%	31,300	25,590	4	6-8	54,000	0.58	0.47	-0.11	No
Metro	Firestone Boulevard*	Major Highway	E/W	Holmes Avenue	Walnut Drive		16,660	14,430	-2,230	-13%		17,850	14,580	-3,270	-18%	34,510	29,010	4	6-8	54,000	0.64	0.54	-0.10	No
Metro	Firestone Boulevard	Major Highway	E/W	Walnut Drive	Ivy Street	13,240	11,770	9,220	-2,550	-22%	14,917	13,050	9,800	-3,250	-25%	28,157	22,357	4	6-8	54,000	0.52	0.41	-0.11	No
Metro	Firestone Boulevard*	Major Highway	E/W	Ivy Street	Alameda Street		13,490	11,620	-1,870	-14%		14,870	12,230	-2,640	-18%	28,360	23,850	4	6-8	54,000	0.53	0.44	-0.08	No
Metro	Wilmington Avenue*	Major Highway	N/S	I-105 Eastbound off-ramp	120th Street		13,420	14,770	1,350	10%		14,210	14,800	590	4%	27,630	29,570	6	6-8	54,000	0.51	0.55	0.04	No
Metro	Wilmington Avenue*	Major Highway	N/S	120th Street	124th Street		8,320	8,930	610	7%		7,860	8,670	810	10%	16,180	17,600	4	6-8	54,000	0.30	0.33	0.03	No
Metro	Wilmington Avenue*	Major Highway	N/S	124th Street	El Segundo Boulevard		8,320	9,100	780	9%		6,720	7,590	870	13%	15,040	16,690	4	6-8	54,000	0.28	0.31	0.03	No
Metro	Florence Avenue*	Major Highway	E/W	Clovis Avenue	Central Avenue		14,680	18,720	4,040	28%		14,580	18,840	4,260	29%	29,260	37,560	6	6-8	54,000	0.54	0.70	0.15	No

Table 5.16-4 Existing vs. Existing Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound					Southbound/Eastbound					2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth									
Metro	Florence Avenue	Major Highway	E/W	Central Avenue	Compton Avenue	3,208	10,370	11,860	1,490	14%	3,158	11,050	11,920	870	8%	6,366	8,726	6	6-8	54,000	0.12	0.16	0.04	No
Metro	Florence Avenue*	Major Highway	E/W	Compton Avenue	Maie Avenue		10,480	12,710	2,230	21%		12,570	14,250	1,680	13%	23,050	26,960	4	6-8	54,000	0.43	0.50	0.07	No
Metro	Florence Avenue*	Major Highway	E/W	Maie Avenue	Holmes Avenue		12,700	14,390	1,690	13%		10,820	13,360	2,540	23%	23,520	27,750	4	6-8	54,000	0.44	0.51	0.08	No
Metro	Florence Avenue*	Major Highway	E/W	Holmes Avenue	Walnut Drive		12,110	13,960	1,850	15%		10,840	13,260	2,420	22%	22,950	27,220	4	6-8	54,000	0.43	0.50	0.08	No
Metro	Florence Avenue	Major Highway	E/W	Walnut Drive	Wilmington Avenue	12,809	15,350	18,120	2,770	18%	12,455	14,450	18,030	3,580	25%	25,264	31,614	4	6-8	54,000	0.47	0.59	0.12	No
Metro	Florence Avenue*	Major Highway	E/W	Wilmington Avenue	Alameda Street		12,730	14,770	2,040	16%		12,010	14,850	2,840	24%	24,740	29,620	4	6-8	54,000	0.46	0.55	0.09	No
Metro	Florence Avenue*	Major Highway	E/W	Alameda Street	Santa Fe Avenue		15,860	17,420	1,560	10%		15,160	17,010	1,850	12%	31,020	34,430	4	6-8	54,000	0.57	0.64	0.06	No
Metro	Florence Avenue*	Major Highway	E/W	Santa Fe Avenue	Pacific Boulevard		16,310	17,050	740	5%		15,800	16,930	1,130	7%	32,110	33,980	4	6-8	54,000	0.59	0.63	0.03	No
Metro	Florence Avenue*	Major Highway	E/W	Pacific Boulevard	Seville Avenue		14,020	14,860	840	6%		13,440	14,680	1,240	9%	27,460	29,540	4	6-8	54,000	0.51	0.55	0.04	No
Metro	Florence Avenue*	Major Highway	E/W	Seville Avenue	Stafford Avenue		12,870	13,660	790	6%		12,390	13,510	1,120	9%	25,260	27,170	4	6-8	54,000	0.47	0.50	0.04	No
Metro	Florence Avenue*	Major Highway	E/W	Stafford Avenue	Soto Street		14,650	15,400	750	5%		14,100	15,140	1,040	7%	28,750	30,540	4	6-8	54,000	0.53	0.57	0.03	No
Metro	Florence Avenue*	Major Highway	E/W	Soto Street	Mountain View Avenue		18,670	19,400	730	4%		18,510	19,410	900	5%	37,180	38,810	4	6-8	54,000	0.69	0.72	0.03	No
Metro	Redondo Beach Boulevard*	Major Highway	E/W	Figueroa Street	Broadway		9,690	10,480	790	8%		9,540	10,410	870	9%	19,230	20,890	4	6-8	54,000	0.36	0.39	0.03	No
Metro	Redondo Beach Boulevard*	Major Highway	E/W	Broadway	Main Street		8,670	9,440	770	9%		8,530	8,990	460	5%	17,200	18,430	4	6-8	54,000	0.32	0.34	0.02	No
Metro	Redondo Beach Boulevard*	Major Highway	E/W	Main Street	San Pedro Street		3,510	3,730	220	6%		3,530	3,540	10	0%	7,040	7,270	4	6-8	54,000	0.13	0.13	0.00	No
Metro	Redondo Beach Boulevard*	Major Highway	E/W	San Pedro Street	Avalon Boulevard		3,380	3,600	220	7%		3,350	3,340	-10	0%	6,730	6,940	4	6-8	54,000	0.12	0.13	0.00	No
Metro	Redondo Beach Boulevard*	Major Highway	E/W	Avalon Boulevard	Compton Boulevard		3,610	3,320	-290	-8%		3,470	3,050	-420	-12%	7,080	6,370	4	6-8	54,000	0.13	0.12	-0.01	No
Metro	Compton Boulevard*	Secondary Highway	E/W	Figueroa Street	Broadway		2,110	3,230	1,120	53%		1,950	3,200	1,250	64%	4,060	6,430	4	4	36,000	0.11	0.18	0.07	No
Metro	Compton Boulevard*	Secondary Highway	E/W	Broadway	Main Street		7,100	7,370	270	4%		7,010	7,290	280	4%	14,110	14,660	4	4	36,000	0.39	0.41	0.02	No
Metro	Compton Boulevard*	Secondary Highway	E/W	Main Street	San Pedro Street		50	70	20	40%		110	60	-50	-45%	160	130	4	4	36,000	0.00	0.00	0.00	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Compton Boulevard*	Secondary Highway	E/W	San Pedro Street	Avalon Boulevard		3,540	3,990	450	13%		3,480	3,960	480	14%	7,020	7,950	4	4	36,000	0.20	0.22	0.03	No
Metro	Compton Boulevard*	Secondary Highway	E/W	Avalon Boulevard	Stanford Avenue		2,240	2,460	220	10%		2,210	2,380	170	8%	4,450	4,840	4	4	36,000	0.12	0.13	0.01	No
Metro	135th Street*	Secondary Highway	E/W	Figueroa Street	Broadway		2,220	2,570	350	16%		3,340	3,770	430	13%	5,560	6,340	4	4	36,000	0.15	0.18	0.02	No
Metro	135th Street*	Secondary Highway	E/W	Broadway	Main Street		2,810	3,420	610	22%		3,300	3,900	600	18%	6,110	7,320	4	4	36,000	0.17	0.20	0.03	No
Metro	135th Street*	Secondary Highway	E/W	Main Street	San Pedro Street		1,160	1,510	350	30%		1,430	1,720	290	20%	2,590	3,230	4	4	36,000	0.07	0.09	0.02	No
Metro	135th Street*	Secondary Highway	E/W	San Pedro Street	Avalon Boulevard		690	930	240	35%		950	1,080	130	14%	1,640	2,010	4	4	36,000	0.05	0.06	0.01	No
Metro	Main Street*	Major Highway	N/S	120th Street	124th Street		5,050	5,180	130	3%		5,500	5,280	-220	-4%	10,550	10,460	4	6-8	54,000	0.20	0.19	0.00	No
Metro	Main Street	Major Highway	N/S	124th Street	El Segundo Boulevard	4,749	3,440	3,390	-50	-1%	3,804	3,510	3,200	-310	-9%	8,553	8,193	4	6-8	54,000	0.16	0.15	-0.01	No
Metro	Main Street	Major Highway	N/S	El Segundo Boulevard	135th Street	4,054	4,490	4,630	140	3%	3,644	4,280	4,250	-30	-1%	7,698	7,808	4	6-8	54,000	0.14	0.14	0.00	No
Metro	Main Street	Major Highway	N/S	135th Street	Rosecrans Avenue	4,252	2,250	2,150	-100	-4%	3,614	2,280	2,160	-120	-5%	7,866	7,646	4	6-8	54,000	0.15	0.14	0.00	No
Metro	Main Street	Major Highway	N/S	Rosecrans Avenue	Compton Boulevard	4,579	6,810	6,620	-190	-3%	3,983	6,980	6,740	-240	-3%	8,562	8,132	4	6-8	54,000	0.16	0.15	-0.01	No
Metro	Main Street*	Major Highway	N/S	Compton Boulevard	Redondo Beach Boulevard		1,960	1,730	-230	-12%		2,180	1,890	-290	-13%	4,140	3,620	4	6-8	54,000	0.08	0.07	-0.01	No
Metro	Main Street	Major Highway	N/S	Redondo Beach Boulevard	Alondra Boulevard	7,176	2,750	2,520	-230	-8%	5,712	2,740	2,450	-290	-11%	12,888	12,368	4	6-8	54,000	0.24	0.23	-0.01	No
Metro	San Pedro Street*	Secondary Highway	N/S	120th Street	124th Street		1,630	1,240	-390	-24%		1,780	1,060	-720	-40%	3,410	2,300	4	4	36,000	0.09	0.06	-0.03	No
Metro	San Pedro Street*	Secondary Highway	N/S	124th Street	El Segundo Boulevard		1,090	620	-470	-43%		1,280	490	-790	-62%	2,370	1,110	4	4	36,000	0.07	0.03	-0.04	No
Metro	San Pedro Street*	Secondary Highway	N/S	El Segundo Boulevard	135th Street		3,000	3,360	360	12%		2,990	3,040	50	2%	5,990	6,400	4	4	36,000	0.17	0.18	0.01	No
Metro	San Pedro Street*	Secondary Highway	N/S	135th Street	Rosecrans Avenue		2,550	2,330	-220	-9%		2,630	2,240	-390	-15%	5,180	4,570	4	4	36,000	0.14	0.13	-0.02	No
Metro	San Pedro Street*	Secondary Highway	N/S	Rosecrans Avenue	Compton Boulevard		5,710	5,650	-60	-1%		5,820	5,400	-420	-7%	11,530	11,050	4	4	36,000	0.32	0.31	-0.01	No
Metro	San Pedro Street*	Secondary Highway	N/S	Compton Boulevard	Redondo Beach Boulevard		4,560	4,370	-190	-4%		4,880	4,390	-490	-10%	9,440	8,760	4	4	36,000	0.26	0.24	-0.02	No
Metro	San Pedro Street*	Secondary Highway	N/S	Redondo Beach Boulevard	Avalon Boulevard		6,200	6,340	140	2%		7,100	6,890	-210	-3%	13,300	13,230	4	4	36,000	0.37	0.37	0.00	No
Metro	Avalon Boulevard	Major Highway	N/S	120th Street	124th Street	8,849	1,970	4,020	2,050	104%	8,490	1,830	3,990	2,160	118%	17,339	21,549	4	6-8	54,000	0.32	0.40	0.08	No
Metro	Avalon Boulevard	Major Highway	N/S	124th Street	El Segundo Boulevard	9,598	1,960	4,020	2,060	105%	9,006	1,830	3,990	2,160	118%	18,604	22,824	4	6-8	54,000	0.34	0.42	0.08	No

Table 5.16-4 Existing vs. Existing Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound					Southbound/Eastbound					2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth									
Metro	Avalon Boulevard	Major Highway	N/S	El Segundo Boulevard	135th Street	8,770	2,290	2,920	630	28%	7,304	2,110	2,820	710	34%	16,074	17,414	4	6-8	54,000	0.30	0.32	0.02	No
Metro	Avalon Boulevard	Major Highway	N/S	135th Street	Rosecrans Avenue	7,825	3,010	3,930	920	31%	7,136	2,960	3,830	870	29%	14,961	16,751	4	6-8	54,000	0.28	0.31	0.03	No
Metro	Avalon Boulevard	Major Highway	N/S	Rosecrans Avenue	Compton Boulevard	8,390	3,700	4,050	350	9%	6,717	3,620	3,910	290	8%	15,107	15,747	4	6-8	54,000	0.28	0.29	0.01	No
Metro	Avalon Boulevard*	Major Highway	N/S	Compton Boulevard	Redondo Beach Boulevard		3,620	4,210	590	16%		3,600	4,270	670	19%	7,220	8,480	4	6-8	54,000	0.13	0.16	0.02	No
Metro	Avalon Boulevard	Major Highway	N/S	Redondo Beach Boulevard	San Pedro Street	7,458	3,780	3,920	140	4%	6,906	3,870	3,990	120	3%	14,364	14,624	4	6-8	54,000	0.27	0.27	0.00	No
Metro	Avalon Boulevard*	Major Highway	N/S	San Pedro Street	Alondra Boulevard		9,990	10,260	270	3%		10,970	10,880	-90	-1%	20,960	21,140	6	6-8	54,000	0.39	0.39	0.00	No
Metro	120th Street*	Secondary Highway	E/W	Van Ness Avenue	Western Avenue		10,440	10,580	140	1%		9,440	9,320	-120	-1%	19,880	19,900	4	4	36,000	0.55	0.55	0.00	No
Metro	120st Street	Secondary Highway	E/W	Western Avenue	Normandie Avenue	3,604	6,620	6,870	250	4%	3,446	6,230	6,710	480	8%	7,050	7,780	4	4	36,000	0.20	0.22	0.02	No
Metro	120nd Street	Secondary Highway	E/W	Normandie Avenue	Vermont Avenue	4,058	6,100	5,600	-500	-8%	4,233	5,540	5,080	-460	-8%	8,291	7,331	4	4	36,000	0.23	0.20	-0.03	No
Metro	120rd Street	Secondary Highway	E/W	Central Avenue	Success Avenue	6,166	3,300	3,800	500	15%	6,208	3,080	3,650	570	19%	12,374	13,444	4	4	36,000	0.34	0.37	0.03	No
Metro	120th Street*	Secondary Highway	E/W	Success Avenue	Compton Avenue		990	1,220	230	23%		1,050	1,280	230	22%	2,040	2,500	4	4	36,000	0.06	0.07	0.01	No
Metro	120th Street	Secondary Highway	E/W	Compton Avenue	Wilmington Avenue	5,093	1,700	1,940	240	14%	5,926	1,740	1,970	230	13%	11,019	11,489	4	4	36,000	0.31	0.32	0.01	No
Metro	120th Street*	Secondary Highway	E/W	Wilmington Avenue	Metro Blue Line		4,940	7,580	2,640	53%		8,010	10,240	2,230	28%	12,950	17,820	2	4	36,000	0.36	0.50	0.14	No
Metro	120th Street*	Secondary Highway	E/W	Metro Blue Line	Mona Boulevard		260	120	-140	-54%		120	120	0	0%	380	240	2	4	36,000	0.01	0.01	0.00	No
Metro	Imperial Highway	Major Highway	E/W	Van Ness Avenue	Western Avenue	13,365	9,350	8,720	-630	-7%	14,215	8,210	7,880	-330	-4%	27,580	26,620	6	6-8	54,000	0.51	0.49	-0.02	No
Metro	Imperial Highway	Major Highway	E/W	Western Avenue	Normandie Avenue	13,870	15,580	15,450	-130	-1%	13,453	13,770	13,720	-50	0%	27,323	27,143	6	6-8	54,000	0.51	0.50	0.00	No
Metro	Imperial Highway	Major Highway	E/W	Normandie Avenue	Vermont Avenue	15,053	15,070	15,790	720	5%	14,482	12,580	14,070	1,490	12%	29,535	31,745	6	6-8	54,000	0.55	0.59	0.04	No
Metro	Century Boulevard*	Major Highway	E/W	Van Ness Avenue	Western Avenue		15,160	17,050	1,890	12%		14,340	16,390	2,050	14%	29,500	33,440	6	6-8	54,000	0.55	0.62	0.07	No
Metro	Century Boulevard*	Major Highway	E/W	Western Avenue	Normandie Avenue		12,940	14,710	1,770	14%		12,720	14,850	2,130	17%	25,660	29,560	4	6-8	54,000	0.48	0.55	0.07	No
Metro	Gage Avenue*	Secondary Highway	E/W	Central Avenue	Hooper Avenue		9,930	11,630	1,700	17%		10,580	12,150	1,570	15%	20,510	23,780	4	4	36,000	0.57	0.66	0.09	No
Metro	Gage Avenue	Secondary Highway	E/W	Hooper Avenue	Compton Avenue	13,454	9,520	10,760	1,240	13%	13,176	10,170	11,050	880	9%	26,630	28,750	4	4	36,000	0.74	0.80	0.06	No
Metro	Gage Avenue*	Secondary Highway	E/W	Compton Avenue	Metro Blue Line		9,720	11,290	1,570	16%		9,830	11,380	1,550	16%	19,550	22,670	4	4	36,000	0.54	0.63	0.09	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Gage Avenue*	Secondary Highway	E/W	Holmes Avenue	Wilmington Avenue		10,740	11,910	1,170	11%		10,560	11,820	1,260	12%	21,300	23,730	4	4	36,000	0.59	0.66	0.07	No
Metro	Long Beach Boulevard*	Major Highway	N/S	Florence Avenue	Broadway		4,740	4,600	-140	-3%		5,220	5,050	-170	-3%	9,960	9,650	4	6-8	54,000	0.18	0.18	-0.01	No
Metro	Santa Fe Avenue	Major Highway	N/S	Florence Avenue	Nadeau Street	10,947	9,680	9,450	-230	-2%	11,518	9,910	9,930	20	0%	22,465	22,255	4	6-8	54,000	0.42	0.41	0.00	No
Metro	Santa Fe Avenue*	Major Highway	N/S	Nadeau Street	Broadway		11,630	14,970	3,340	29%		12,030	15,260	3,230	27%	23,660	30,230	4	6-8	54,000	0.44	0.56	0.12	No
Metro	Santa Fe Avenue	Major Highway	N/S	Broadway	Sale Place	7,901	3,720	5,420	1,700	46%	8,485	4,380	5,800	1,420	32%	16,386	19,506	4	6-8	54,000	0.30	0.36	0.06	No
Metro	Santa Fe Avenue	Major Highway	N/S	Sale Place	Firestone Boulevard	6,600	5,390	5,610	220	4%	6,872	5,650	5,230	-420	-7%	13,472	13,272	4	6-8	54,000	0.25	0.25	0.00	No
Metro	Nadeau Street*	Secondary Highway	E/W	Central Avenue	Hooper Avenue		2,960	2,100	-860	-29%		3,350	2,620	-730	-22%	6,310	4,720	4	4	36,000	0.18	0.13	-0.04	No
Metro	Nadeau Street	Secondary Highway	E/W	Hooper Avenue	Compton Avenue	9,611	5,030	6,590	1,560	31%	7,335	5,510	6,770	1,260	23%	16,946	19,766	4	4	36,000	0.47	0.55	0.08	No
Metro	Nadeau Street*	Secondary Highway	E/W	Compton Avenue	Maie Avenue		5,600	7,670	2,070	37%		6,120	7,820	1,700	28%	11,720	15,490	4	4	36,000	0.33	0.43	0.10	No
Metro	Nadeau Street*	Secondary Highway	E/W	Maie Avenue	Walnut Drive		6,120	8,320	2,200	36%		6,330	8,400	2,070	33%	12,450	16,720	4	4	36,000	0.35	0.46	0.12	No
Metro	Nadeau Street*	Secondary Highway	E/W	Walnut Drive	Bell Avenue		7,730	9,880	2,150	28%		7,860	9,640	1,780	23%	15,590	19,520	4	4	36,000	0.43	0.54	0.11	No
Metro	Nadeau Street	Secondary Highway	E/W	Bell Avenue	Crockett Boulevard	9,988	5,120	6,500	1,380	27%	9,487	5,350	6,610	1,260	24%	19,475	22,115	4	4	36,000	0.54	0.61	0.07	No
Metro	Nadeau Street*	Secondary Highway	E/W	Crockett Boulevard	Alameda Street		6,240	7,700	1,460	23%		6,340	7,610	1,270	20%	12,580	15,310	4	4	36,000	0.35	0.43	0.08	No
Metro	Nadeau Street*	Secondary Highway	E/W	Alameda Street	Santa Fe Avenue		13,080	17,460	4,380	33%		13,230	17,180	3,950	30%	26,310	34,640	4	4	36,000	0.73	0.96	0.23	No
Metro	Hooper Avenue	Secondary Highway	N/S	Slauson Avenue	Gage Avenue	5,476	4,670	5,730	1,060	23%	6,161	5,000	5,680	680	14%	11,637	13,377	4	4	36,000	0.32	0.37	0.05	No
Metro	Hooper Avenue*	Secondary Highway	N/S	Gage Avenue	Florence Avenue		1,610	2,270	660	41%		1,960	2,380	420	21%	3,570	4,650	2	4	36,000	0.10	0.13	0.03	No
Metro	Hooper Avenue	Secondary Highway	N/S	Florence Avenue	Nadeau Street	6,141	2,950	4,740	1,790	61%	6,837	3,370	4,530	1,160	34%	12,978	15,928	4	4	36,000	0.36	0.44	0.08	No
Metro	Hooper Avenue	Secondary Highway	N/S	Nadeau Street	Manchester Avenue	7,064	5,500	5,700	200	4%	5,505	5,640	5,560	-80	-1%	12,569	12,689	4	4	36,000	0.35	0.35	0.00	No
Metro	Central Avenue*	Secondary Highway	N/S	Manchester Avenue	92nd Street		8,430	5,000	-3,430	-41%		8,240	5,670	-2,570	-31%	16,670	10,670	4	4	36,000	0.46	0.30	-0.17	No
Metro	N Eastern Avenue*	Secondary Highway	N/S	City Terrace Drive	Floral Drive		8,710	8,300	-410	-5%		7,920	8,580	660	8%	16,630	16,880	4	4	36,000	0.46	0.47	0.01	No
Metro	N Eastern Avenue*	Secondary Highway	N/S	Floral Drive	Cesar Chavez Avenue		6,740	7,040	300	4%		5,610	7,740	2,130	38%	12,350	14,780	4	4	36,000	0.34	0.41	0.07	No
Metro	N Eastern Avenue	Secondary Highway	N/S	Cesar Chavez Avenue	1st Street	6,627	7,740	9,430	1,690	22%	7,803	6,210	9,130	2,920	47%	14,430	19,040	4	4	36,000	0.40	0.53	0.13	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	N Eastern Avenue*	Secondary Highway	N/S	1st Street	SR-60 Freeway		8,210	9,340	1,130	14%		7,020	9,580	2,560	36%	15,230	18,920	4	4	36,000	0.42	0.53	0.10	No
Metro	N Eastern Avenue*	Secondary Highway	N/S	SR-60 Freeway	Eagle Street		5,560	7,620	2,060	37%		4,770	7,870	3,100	65%	10,330	15,490	4	4	36,000	0.29	0.43	0.14	No
Metro	N Eastern Avenue*	Secondary Highway	N/S	Eagle Street	Whittier Boulevard		5,560	7,610	2,050	37%		5,660	9,030	3,370	60%	11,220	16,640	4	4	36,000	0.31	0.46	0.15	No
Metro	N Eastern Avenue*	Secondary Highway	N/S	Whittier Boulevard	I-710 Freeway South off-ramp		6,780	9,220	2,440	36%		8,460	12,770	4,310	51%	15,240	21,990	4	4	36,000	0.42	0.61	0.19	No
Metro	N Eastern Avenue*	Secondary Highway	N/S	I-710 Freeway South off-ramp	Olympic Boulevard		5,750	9,490	3,740	65%		9,700	9,590	-110	-1%	15,450	19,080	4	4	36,000	0.43	0.53	0.10	No
Metro	N Eastern Avenue*	Secondary Highway	N/S	Olympic Boulevard	Triggs Street		7,840	9,110	1,270	16%		9,250	9,000	-250	-3%	17,090	18,110	4	4	36,000	0.47	0.50	0.03	No
Metro	Atlantic Boulevard*	Major Highway	N/S	3rd Street/Pomona Boulevard	Beverly Boulevard		20,010	14,570	-5,440	-27%		18,950	13,930	-5,020	-26%	38,960	28,500	4	6-8	54,000	0.72	0.53	-0.19	No
Metro	Atlantic Boulevard	Major Highway	N/S	Beverly Boulevard	Whittier Boulevard	11,884	17,460	12,710	-4,750	-27%	13,206	16,560	12,760	-3,800	-23%	25,090	16,540	4	6-8	54,000	0.46	0.31	-0.16	No
Metro	Atlantic Boulevard	Major Highway	N/S	Whittier Boulevard	Olympic Boulevard	10,964	17,620	13,580	-4,040	-23%	13,144	16,710	13,260	-3,450	-21%	24,108	16,618	6	6-8	54,000	0.45	0.31	-0.14	No
Metro	Atlantic Boulevard	Major Highway	N/S	Olympic Boulevard	Ferguson Drive	8,068	16,630	8,480	-8,150	-49%	12,285	17,210	8,620	-8,590	-50%	20,353	3,613	2	6-8	54,000	0.38	0.07	-0.31	No
Metro	Floral Drive	Secondary Highway	E/W	Eastern Avenue	Humphreys Avenue	3,208	6,240	6,700	460	7%	3,158	6,640	6,510	-130	-2%	6,366	6,696	2	4	36,000	0.18	0.19	0.01	No
Metro	Floral Drive*	Secondary Highway	E/W	Humphrey's Avenue	Ford Boulevard		6,070	6,040	-30	0%		4,320	6,070	1,750	41%	10,390	12,110	2	4	36,000	0.29	0.34	0.05	No
Metro	Floral Drive*	Secondary Highway	E/W	Ford Boulevard	Corporate Center Drive		4,730	5,440	710	15%		5,280	5,020	-260	-5%	10,010	10,460	2	4	36,000	0.28	0.29	0.01	No
Metro	Floral Drive*	Secondary Highway	E/W	Corporate Center Drive	Mednik Avenue		2,810	2,990	180	6%		2,650	2,200	-450	-17%	5,460	5,190	4	4	36,000	0.15	0.14	-0.01	No
Metro	Floral Drive*	Secondary Highway	E/W	Mednik Avenue	Bleakwood Avenue		2,180	2,350	170	8%		2,540	2,500	-40	-2%	4,720	4,850	2	4	36,000	0.13	0.13	0.00	No
Metro	Cesar Chavez Avenue*	Secondary Highway	E/W	Indiana Street	Rowan Avenue		8,310	7,780	-530	-6%		8,740	7,680	-1,060	-12%	17,050	15,460	4	4	36,000	0.47	0.43	-0.04	No
Metro	Cesar Chavez Avenue*	Secondary Highway	E/W	Rowan Avenue	Gage Avenue		6,760	7,470	710	11%		7,280	7,300	20	0%	14,040	14,770	4	4	36,000	0.39	0.41	0.02	No
Metro	Cesar Chavez Avenue*	Secondary Highway	E/W	Gage Avenue	Hazard Avenue		9,720	10,850	1,130	12%		10,390	10,880	490	5%	20,110	21,730	4	4	36,000	0.56	0.60	0.05	No
Metro	Cesar Chavez Avenue*	Secondary Highway	E/W	Hazard Avenue	Eastern Avenue		13,380	15,670	2,290	17%		13,610	16,070	2,460	18%	26,990	31,740	4	4	36,000	0.75	0.88	0.13	No
Metro	Cesar Chavez Avenue*	Secondary Highway	E/W	Eastern Avenue	Humphreys Avenue		14,080	16,000	1,920	14%		14,940	17,820	2,880	19%	29,020	33,820	4	4	36,000	0.81	0.94	0.13	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Cesar Chavez Avenue*	Secondary Highway	E/W	Humphrey's Avenue	Ford Boulevard		13,130	16,110	2,980	23%		10,640	13,820	3,180	30%	23,770	29,930	4	4	36,000	0.66	0.83	0.17	No
Metro	Cesar Chavez Avenue*	Secondary Highway	E/W	Ford Boulevard	Mednik Avenue		9,650	12,020	2,370	25%		9,460	11,790	2,330	25%	19,110	23,810	4	4	36,000	0.53	0.66	0.13	No
Metro	Cesar Chavez Avenue*	Secondary Highway	E/W	Mednik Avenue	Bleakwood Avenue		4,310	4,610	300	7%		5,210	5,190	-20	0%	9,520	9,800	4	4	36,000	0.26	0.27	0.01	No
Metro	1st Street*	Secondary Highway	E/W	Indiana Street	Rowan Avenue		5,280	4,080	-1,200	-23%		6,470	4,650	-1,820	-28%	11,750	8,730	4	4	36,000	0.33	0.24	-0.08	No
Metro	1st Street*	Secondary Highway	E/W	Rowan Avenue	Gage Avenue		6,540	3,950	-2,590	-40%		7,570	4,560	-3,010	-40%	14,110	8,510	4	4	36,000	0.39	0.24	-0.16	No
Metro	1st Street*	Secondary Highway	E/W	Gage Avenue	Eastern Avenue		5,030	5,280	250	5%		4,970	5,650	680	14%	10,000	10,930	4	4	36,000	0.28	0.30	0.03	No
Metro	1st Street*	Secondary Highway	E/W	Eastern Avenue	Humphreys Avenue		5,010	6,310	1,300	26%		4,600	6,140	1,540	33%	9,610	12,450	4	4	36,000	0.27	0.35	0.08	No
Metro	1st Street*	Secondary Highway	E/W	Ford Boulevard	Mednik Avenue		4,920	6,540	1,620	33%		6,150	8,120	1,970	32%	11,070	14,660	4	4	36,000	0.31	0.41	0.10	No
Metro	1st Street	Secondary Highway	E/W	Mednik Avenue	Bleakwood Avenue	11,558	1,960	1,670	-290	-15%	6,639	3,000	1,650	-1,350	-45%	18,197	16,557	2	4	36,000	0.51	0.46	-0.05	No
Metro	3rd Street	Major Highway	E/W	Indiana Street	Rowan Avenue	4,682	3,390	8,880	5,490	162%	3,707	4,530	9,760	5,230	115%	8,389	19,109	4	6-8	54,000	0.16	0.35	0.20	No
Metro	3rd Street*	Major Highway	E/W	Rowan Avenue	Gage Avenue		2,930	7,610	4,680	160%		4,910	9,010	4,100	84%	7,840	16,620	4	6-8	54,000	0.15	0.31	0.16	No
Metro	3rd Street*	Major Highway	E/W	Gage Avenue	Sunol Drive		8,660	13,180	4,520	52%		6,950	8,940	1,990	29%	15,610	22,120	4	6-8	54,000	0.29	0.41	0.12	No
Metro	3rd Street	Major Highway	E/W	Sunol Drive	Eastern Avenue	5,253	4,720	8,840	4,120	87%	6,792	4,960	9,620	4,660	94%	12,045	20,825	4	6-8	54,000	0.22	0.39	0.16	No
Metro	3rd Street	Major Highway	E/W	Eastern Avenue	Humphreys Avenue	5,315	2,930	5,270	2,340	80%	7,739	3,400	6,880	3,480	102%	13,054	18,874	4	6-8	54,000	0.24	0.35	0.11	No
Metro	3rd Street	Major Highway	E/W	Ford Boulevard	Mednik Avenue	6,076	1,790	4,850	3,060	171%	6,294	2,170	5,600	3,430	158%	12,370	18,860	2	6-8	54,000	0.23	0.35	0.12	No
Metro	3rd Street	Major Highway	E/W	Mednik Avenue	Beverly Boulevard	7,291	8,600	17,320	8,720	101%	8,648	9,030	19,460	10,430	116%	15,939	35,089	6	6-8	54,000	0.30	0.65	0.35	No
Metro	3rd Street*	Major Highway	E/W	Beverly Boulevard	Atlantic Boulevard		2,390	6,090	3,700	155%		2,870	7,960	5,090	177%	5,260	14,050	6	6-8	54,000	0.10	0.26	0.16	No
Metro	3rd Street*	Major Highway	E/W	Atlantic Boulevard	Hillview Avenue		9,890	11,070	1,180	12%		6,900	7,440	540	8%	16,790	18,510	4	6-8	54,000	0.31	0.34	0.03	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Indiana Street	Ditman Avenue	10,981	10,770	13,760	2,990	28%	9,219	9,410	9,810	400	4%	20,200	23,590	4	4	36,000	0.56	0.66	0.09	No
Metro	Whittier Boulevard*	Secondary Highway	E/W	Ditman Avenue	Rowan Avenue		3,480	3,930	450	13%		7,680	6,440	-1,240	-16%	11,160	10,370	4	4	36,000	0.31	0.29	-0.02	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Whittier Boulevard*	Secondary Highway	E/W	Rowan Avenue	Sunol Drive		3,480	4,860	1,380	40%		6,810	6,830	20	0%	10,290	11,690	4	4	36,000	0.29	0.32	0.04	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Sunol Drive	Eastern Avenue	15,654	7,900	9,490	1,590	20%	11,254	10,490	11,680	1,190	11%	26,908	29,688	4	4	36,000	0.75	0.82	0.08	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Ford Boulevard	Arizona Avenue	14,211	9,190	10,830	1,640	18%	12,151	9,710	10,720	1,010	10%	26,362	29,012	4	4	36,000	0.73	0.81	0.07	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Arizona Avenue	Atlantic Boulevard	11,927	7,910	6,960	-950	-12%	11,873	8,470	7,090	-1,380	-16%	23,800	21,470	4	4	36,000	0.66	0.60	-0.06	No
Metro	Whittier Boulevard*	Major Highway	E/W	Atlantic Boulevard	Belden Avenue		7,000	6,580	-420	-6%		7,580	7,000	-580	-8%	14,580	13,580	4	6-8	54,000	0.27	0.25	-0.02	No
Metro	Whittier Boulevard*	Major Highway	E/W	Belden Avenue	Gethart Avenue		6,600	6,850	250	4%		7,450	7,380	-70	-1%	14,050	14,230	4	6-8	54,000	0.26	0.26	0.00	No
Metro	Whittier Boulevard*	Major Highway	E/W	Gethart Avenue	Hendricks Avenue		6,680	6,560	-120	-2%		7,470	7,190	-280	-4%	14,150	13,750	4	6-8	54,000	0.26	0.25	-0.01	No
Metro	Whittier Boulevard	Major Highway	E/W	Hendrick Avenue	Garfield Avenue	10,480	6,330	6,520	190	3%	11,265	7,470	6,840	-630	-8%	21,745	21,305	4	6-8	54,000	0.40	0.39	-0.01	No
Metro	Olympic Boulevard*	Major Highway	E/W	Indiana Street	Rowan Avenue		12,200	13,090	890	7%		13,070	15,650	2,580	20%	25,270	28,740	4	6-8	54,000	0.47	0.53	0.06	No
Metro	Olympic Boulevard	Major Highway	E/W	Rowan Avenue	Sunol Drive	11,109	7,740	9,280	1,540	20%	11,219	7,760	7,990	230	3%	22,328	24,098	4	6-8	54,000	0.41	0.45	0.03	No
Metro	Olympic Boulevard	Major Highway	E/W	Sunol Drive	Eastern Avenue	22,087	10,370	10,990	620	6%	12,158	9,000	9,360	360	4%	34,245	35,225	4	6-8	54,000	0.63	0.65	0.02	No
Metro	Olympic Boulevard*	Major Highway	E/W	Ford Boulevard	Arizona Avenue		11,820	12,100	280	2%		12,960	13,970	1,010	8%	24,780	26,070	4	6-8	54,000	0.46	0.48	0.02	No
Metro	Olympic Boulevard	Major Highway	E/W	Arizona Avenue	Atlantic Boulevard	12,262	8,270	8,180	-90	-1%	11,924	10,400	9,700	-700	-7%	24,186	23,396	4	6-8	54,000	0.45	0.43	-0.01	No
Metro	Olympic Boulevard*	Major Highway	E/W	Atlantic Boulevard	Goodrich Boulevard		6,440	6,690	250	4%		7,120	7,630	510	7%	13,560	14,320	4	6-8	54,000	0.25	0.27	0.01	No
Metro	Olympic Boulevard*	Major Highway	E/W	Goodrich Boulevard	Gethart Avenue		9,300	7,840	-1,460	-16%		9,420	7,960	-1,460	-15%	18,720	15,800	4	6-8	54,000	0.35	0.29	-0.05	No
Metro	Olympic Boulevard	Major Highway	E/W	Gethart Avenue	Hendricks Avenue	9,367	9,300	7,840	-1,460	-16%	10,632	9,420	7,960	-1,460	-15%	19,999	17,079	4	6-8	54,000	0.37	0.32	-0.05	No
Metro	Olympic Boulevard	Major Highway	E/W	Hendrick Avenue	Garfield Avenue	9,295	8,770	7,700	-1,070	-12%	10,582	8,900	7,830	-1,070	-12%	19,877	17,737	4	6-8	54,000	0.37	0.33	-0.04	No
Santa Monica Mountains	Kanan Dume Road*	Major Highway	N/S	Latigo Canyon Road	Pacific Coast Highway		4,810	4,170	-640	-13%		4,650	4,190	-460	-10%	9,460	8,360	2	6-8	54,000	0.18	0.15	-0.02	No
Santa Monica Mountains	Kanan Dume Road*	Major Highway	N/S	Mulholland Highway	Latigo Canyon Road		4,810	4,170	-640	-13%		4,650	4,190	-460	-10%	9,460	8,360	2	6-8	54,000	0.18	0.15	-0.02	No
Santa Monica Mountains	Kanan Dume Road*	Major Highway	N/S	Triunfo Canyon Road	Mullholland Highway		3,840	4,710	870	23%		3,950	4,800	850	22%	7,790	9,510	2	6-8	54,000	0.14	0.18	0.03	No
Santa Monica Mountains	Kanan Road	Major Highway	N/S	Sierra Creek Road	Triunfo Canyon Road	6,702	9,100	10,000	900	10%	6,651	9,850	10,540	690	7%	13,353	14,943	2	6-8	54,000	0.25	0.28	0.03	No
Santa Monica Mountains	Kanan Road	Major Highway	N/S	Troutdale Drive	Sierra Creek Road	7,814	9,080	9,940	860	9%	7,895	9,820	10,390	570	6%	15,709	17,139	2	6-8	54,000	0.29	0.32	0.03	No

Table 5.16-4 Existing vs. Existing Plus Project

				Street Limits		Northbound/Westbound					Southbound/Eastbound												
Planning Area	Street Name	Classification	Direction	From	To	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	Existing ADT (Counts)	Existing Model ADT	Existing Plus Project ADT	Difference	Percent Growth	2-Way Existing ADT [1]	2-Way Existing Plus Project ADT [1]	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Existing V/C [1]	Existing Plus Project V/C [1]	Difference in V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Santa Monica Mountains	Kanan Road*	Major Highway	N/S	Cornell Road	Troutdale Drive		5,860	6,290	430	7%		6,800	7,070	270	4%	12,660	13,360	2	6-8	54,000	0.23	0.25	0.01	No
Santa Monica Mountains	Malibu Canyon Road	Major Highway	N/S	Adamson Flat/Palm Canyon Lane	Piuma Road	9,594	7,020	9,580	2,560	36%	9,805	6,710	9,220	2,510	37%	19,399	24,469	2	6-8	54,000	0.36	0.45	0.09	No
Santa Monica Mountains	Las Virgenes Road	Major Highway	N/S	Piuma Road	Mullholland Highway	11,581	6,380	8,060	1,680	26%	7,972	6,300	8,400	2,100	33%	19,553	23,333	2	6-8	54,000	0.36	0.43	0.07	No
Santa Monica Mountains	Las Virgenes Road*	Major Highway	N/S	Mullholland Highway	Lost Hills Road		7,640	9,470	1,830	24%		8,290	9,430	1,140	14%	15,930	18,900	2	6-8	54,000	0.30	0.35	0.06	No
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)*	Secondary Highway	N/S	Pacific Coast Highway	Fernwood Pacific Drive		8,820	9,440	620	7%		9,200	9,980	780	8%	18,020	19,420	2	4	36,000	0.50	0.54	0.04	No
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)*	Secondary Highway	N/S	Fernwood Pacific Drive	Old Topanga Canyon Road		10,200	11,280	1,080	11%		10,630	12,000	1,370	13%	20,830	23,280	2	4	36,000	0.58	0.65	0.07	No
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)*	Secondary Highway	N/S	Old Tapanga Canyon Road	Keller Road		4,530	5,600	1,070	24%		4,770	5,640	870	18%	9,300	11,240	2	4	36,000	0.26	0.31	0.05	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Lechusa Road	Kanan Road	1,387	3,470	5,580	2,110	61%	1,321	3,070	5,380	2,310	75%	2,708	7,128	2	4-8	44,000	0.06	0.16	0.10	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Kanan Road	Sierra Creek Road	736	630	950	320	51%	732	500	810	310	62%	1,468	2,098	2	4-8	44,000	0.03	0.05	0.01	No
Santa Monica Mountains	Mulholland Highway*	Expressway	E/W	Sierra Creek Road	Troutdale Drive		660	1,100	440	67%		520	870	350	67%	1,180	1,970	2	4-8	44,000	0.03	0.04	0.02	No
Santa Monica Mountains	Mulholland Highway*	Expressway	E/W	Troutdale Drive	Lake Vista Drive		3,680	4,410	730	20%		3,740	4,520	780	21%	7,420	8,930	2	4-8	44,000	0.17	0.20	0.03	No
Santa Monica Mountains	Mulholland Highway*	Expressway	E/W	Lake Vista Drive	Cornell Road		670	950	280	42%		760	1,100	340	45%	1,430	2,050	2	4-8	44,000	0.03	0.05	0.01	No
Santa Monica Mountains	Mulholland Highway*	Expressway	E/W	Cornell Road	Udell Road		5,150	5,020	-130	-3%		4,510	5,550	1,040	23%	9,660	10,570	2	4-8	44,000	0.22	0.24	0.02	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Udell Road	Las Virgenes Road	541	5,150	5,020	-130	-3%	609	4,510	5,550	1,040	23%	1,150	2,060	2	4-8	44,000	0.03	0.05	0.02	No
Santa Monica Mountains	Mulholland Highway*	Expressway	E/W	Las Virgenes Road	Cold Canyon Road		2,820	3,530	710	25%		2,900	3,670	770	27%	5,720	7,200	2	4-8	44,000	0.13	0.16	0.03	No
Santa Monica Mountains	Mulholland Highway*	Expressway	E/W	Cold Canyon Road	Stunt Road		2,110	2,490	380	18%		2,420	3,270	850	35%	4,530	5,760	2	4-8	44,000	0.10	0.13	0.03	No

Note: * Existing ADT count not available. Existing model volume used.
(1) Existing ADT counts taken by the County between 2011 and 2013 were used, where available, to calculate the existing and Existing plus Project V/C ratios. On segments where existing ADT counts were not available, the existing model ADT volumes were used.

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
South Bay	Crenshaw Boulevard	Major Highway	N/S	Palos Verdes Lane	Silver Spur Road	9,368	9,476	108	1%	9,542	9,626	84	1%	19,102	4	6-8	54,000	0.35	0.35	0.00	No
South Bay	Vermont Street	Major Highway	N/S	Lomita Bouelvard	Sepulveda Boulevard	12,274	12,339	65	1%	12,637	12,563	-74	-1%	24,902	4	6-8	54,000	0.46	0.46	0.00	No
South Bay	Vermont Street	Major Highway	N/S	Sepulveda Boulevard	W 228th Street	3,658	4,286	628	17%	6,286	6,688	402	6%	10,974	4	6-8	54,000	0.18	0.20	0.02	No
South Bay	Vermont Street	Major Highway	N/S	W 228th Street	W 223rd Street	9,113	10,063	950	10%	11,962	12,645	683	6%	22,708	4	6-8	54,000	0.39	0.42	0.03	No
South Bay	Vermont Street	Major Highway	N/S	W 223rd Street	W 220th Street	5,577	6,903	1,326	24%	6,940	7,869	929	13%	14,772	4	6-8	54,000	0.23	0.27	0.04	No
South Bay	Vermont Street	Major Highway	N/S	W 220th Street	Carson Street	2,012	1,971	-41	-2%	3,413	3,030	-383	-11%	5,001	4	6-8	54,000	0.10	0.09	-0.01	No
South Bay	Vermont Street	Major Highway	N/S	Carson Street	Torrance Boulevard	5,072	6,611	1,539	30%	5,176	5,939	763	15%	12,550	4	6-8	54,000	0.19	0.23	0.04	No
South Bay	Vermont Street	Major Highway	N/S	Torrance Boulevard	Del Amo Boulevard	6,825	7,490	665	10%	6,129	6,574	445	7%	14,064	4	6-8	54,000	0.24	0.26	0.02	No
South Bay	Manhattan Beach Blvd	Major Highway	E/W	Prairie Avenue	Crenshaw Boulevard	5,820	5,926	106	2%	4,997	4,962	-35	-1%	10,888	4	6-8	54,000	0.20	0.20	0.00	No
South Bay	Lennox Boulevard	Secondary Highway	E/W	La Cienega Boulevard	Inglewood Avenue	5,324	5,457	133	2%	4,719	4,848	129	3%	10,305	2	4	36,000	0.28	0.29	0.01	No
South Bay	Lennox Boulevard	Secondary Highway	E/W	Inglewood Avenue	Hawthorne Boulevard	2,843	2,864	21	1%	2,505	2,624	119	5%	5,488	2	4	36,000	0.15	0.15	0.00	No
South Bay	Lennox Boulevard	Secondary Highway	E/W	Hawthorne Boulevard	Freeman Avenue	1,279	1,263	-16	-1%	2,019	2,011	-8	0%	3,274	4	4	36,000	0.09	0.09	0.00	No
South Bay	W 220th Street	Secondary Highway	E/W	Normandie Avenue	Meyler Street	3,469	4,591	1,122	32%	3,678	4,904	1,226	33%	9,495	4	4	36,000	0.20	0.26	0.07	No
South Bay	W 220th Street	Secondary Highway	E/W	Meyler Street	Vermont Avenue	3,565	4,932	1,367	38%	3,527	4,839	1,312	37%	9,771	4	4	36,000	0.20	0.27	0.07	No
South Bay	Normandie Avenue	Secondary Highway	N/S	Sepulveda Boulevard	Lomita Boulevard	5,163	5,630	467	9%	4,599	4,912	313	7%	10,542	4	4	36,000	0.27	0.29	0.02	No
South Bay	Normandie Avenue	Secondary Highway	N/S	W 228th Street	Sepulveda Boulevard	5,803	6,225	422	7%	5,928	6,219	291	5%	12,444	4	4	36,000	0.33	0.35	0.02	No
South Bay	Normandie Avenue	Secondary Highway	N/S	W 223rd Street	W 228th Street	4,368	4,887	519	12%	4,844	5,376	532	11%	10,263	4	4	36,000	0.26	0.29	0.03	No
South Bay	Normandie Avenue	Secondary Highway	N/S	W 220th Street	W 223rd Street	6,764	7,668	904	13%	7,235	8,273	1,038	14%	15,941	4	4	36,000	0.39	0.44	0.05	No
South Bay	Normandie Avenue	Secondary Highway	N/S	Carson Street	W 220th Street	1,938	1,694	-244	-13%	2,464	2,356	-108	-4%	4,050	4	4	36,000	0.12	0.11	-0.01	No
South Bay	Normandie Avenue	Secondary Highway	N/S	Torrance Boulevard	Carson Street	4,017	4,624	607	15%	4,954	5,695	741	15%	10,319	4	4	36,000	0.25	0.29	0.04	No
South Bay	Normandie Avenue	Secondary Highway	N/S	Del Amo Boulevard	Torrance Boulevard	8,335	8,860	525	6%	9,416	9,843	427	5%	18,703	4	4	36,000	0.49	0.52	0.03	No
South Bay	Sepulvada Boulevard	Major Highway	E/W	Normandie Avenue	Vermont Avenue	20,573	20,639	66	0%	22,635	22,932	297	1%	43,571	6	6-8	54,000	0.80	0.81	0.01	No
South Bay	Sepulvada Boulevard	Major Highway	E/W	Vermont Avenue	I-110 South Offramp	30,507	30,962	455	1%	35,056	35,683	627	2%	66,645	6	6-8	54,000	1.21	1.23	0.02	Yes
South Bay	Sepulvada Boulevard	Major Highway	E/W	I-110 South Offramp	Figueroa St	21,522	22,230	708	3%	17,765	18,197	432	2%	40,427	6	6-8	54,000	0.73	0.75	0.02	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Antelope Valley	W Avenue J	Major Highway	E/W	90th Street E	100th Street E	4,386	6,894	2,508	57%	3,606	6,492	2,886	80%	13,386	2	6-8	54,000	0.15	0.25	0.10	No
Antelope Valley	W Avenue J	Major Highway	E/W	100th Street E	110th Street E	5,149	8,687	3,538	69%	4,353	8,356	4,003	92%	17,043	2	6-8	54,000	0.18	0.32	0.14	No
Antelope Valley	W Avenue J	Major Highway	E/W	110th Street E	140th Street E	6,093	10,117	4,024	66%	4,750	9,743	4,993	105%	19,860	2	6-8	54,000	0.20	0.37	0.17	No
Antelope Valley	W Avenue J	Major Highway	E/W	140th Street E	150th Street E	7,262	10,840	3,578	49%	5,058	9,613	4,555	90%	20,453	2	6-8	54,000	0.23	0.38	0.15	No
Antelope Valley	W Avenue J	Major Highway	E/W	150th Street E	170th Street E	8,258	11,956	3,698	45%	5,911	10,731	4,820	82%	22,687	2	6-8	54,000	0.26	0.42	0.16	No
Antelope Valley	W Avenue J	Major Highway	E/W	170th Street E	200th Street E	8,300	12,264	3,964	48%	5,953	10,972	5,019	84%	23,236	2	6-8	54,000	0.26	0.43	0.17	No
Antelope Valley	Lancaster Road	Expressway	E/W	Pine Canyon Road	W Avenue I			0	N/A			0	N/A	0	6	4-8	66,000	0.00	0.00	0.00	No
Antelope Valley	Lancaster Road	Expressway	E/W	W Avenue I	190th Street W	6,879	8,065	1,186	17%	9,667	9,044	-623	-6%	17,109	6	4-8	66,000	0.25	0.26	0.01	No
Antelope Valley	Lancaster Road	Expressway	E/W	190th Street W	170th Street W	6,879	1,392	-5,487	-80%	9,670	3,080	-6,590	-68%	4,472	6	4-8	66,000	0.25	0.07	-0.18	No
Antelope Valley	Lancaster Road	Expressway	E/W	170th Street W	110th Street W	11,826	19,582	7,756	66%	14,211	21,331	7,120	50%	40,913	6	4-8	66,000	0.39	0.62	0.23	No
Antelope Valley	Lancaster Road	Expressway	E/W	110th Street W	90th Street W	7,949	10,586	2,637	33%	9,759	11,319	1,560	16%	21,905	6	4-8	66,000	0.27	0.33	0.06	No
Antelope Valley	Lancaster Road	Expressway	E/W	90th Street W	70th Street W	7,688	8,925	1,237	16%	8,183	9,241	1,058	13%	18,166	6	4-8	66,000	0.24	0.28	0.03	No
Antelope Valley	Lancaster Road	Expressway	E/W	70th Street W	60th Street W	7,781	9,691	1,910	25%	8,547	9,601	1,054	12%	19,292	6	4-8	66,000	0.25	0.29	0.04	No
Antelope Valley	170th Street E	Secondary Highway	N/S	Avenue T	Avenue W			0	N/A			0	N/A	0	2	4	36,000	0.00	0.00	0.00	No
Antelope Valley	170th Street E	Secondary Highway	N/S	Avenue W	165th Street			0	N/A			0	N/A	0	2	4	36,000	0.00	0.00	0.00	No
Antelope Valley	Elizabeth Lake Road	Major Highway	E/W	Johnson Road	San Francisquito Canyon Road	10,647	15,747	5,100	48%	10,006	17,090	7,084	71%	32,837	2	6-8	54,000	0.38	0.61	0.23	No
Antelope Valley	Elizabeth Lake Road	Major Highway	E/W	San Francisquito Canyon Road	Bouquet Canyon Road	5,579	5,699	120	2%	5,809	5,438	-371	-6%	11,137	2	6-8	54,000	0.21	0.21	0.00	No
Antelope Valley	Elizabeth Lake Road	Major Highway	E/W	Bouquet Canyon Road	Godde Hill Road	12,122	16,436	4,314	36%	12,795	16,224	3,429	27%	32,660	2	6-8	54,000	0.46	0.60	0.14	No
Antelope Valley	W Avenue P	Major Highway	E/W	15th Street E	20th Street E	10,601	12,742	2,141	20%	9,410	11,594	2,184	23%	24,336	4	6-8	54,000	0.37	0.45	0.08	No
Antelope Valley	W Avenue P	Major Highway	E/W	20th Street E	25th Street E	7,801	10,110	2,309	30%	6,991	9,310	2,319	33%	19,420	4	6-8	54,000	0.27	0.36	0.09	No
Antelope Valley	W Avenue P	Major Highway	E/W	25th Street E	30th Street E	5,806	8,122	2,316	40%	2,908	5,095	2,187	75%	13,217	4	6-8	54,000	0.16	0.24	0.08	No
Antelope Valley	W Avenue P	Major Highway	E/W	30th Street E	40th Street E	4,421	5,583	1,162	26%	4,145	5,793	1,648	40%	11,376	2	6-8	54,000	0.16	0.21	0.05	No

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.16-5 Future 2035 vs. 2035 Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound				Southbound/Eastbound				2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth								
Antelope Valley	W Avenue P	Major Highway	E/W	40th Street E	47th Street E	3,796	6,567	2,771	73%	3,463	7,753	4,290	124%	14,320	2	6-8	54,000	0.13	0.27	0.13	No
Antelope Valley	W Avenue P	Major Highway	E/W	47th Street E	70th Street E	4,339	11,810	7,471	172%	4,381	11,065	6,684	153%	22,875	2	6-8	54,000	0.16	0.42	0.26	No
Antelope Valley	200th Street E	Secondary Highway	N/S	E Avenue G	E Avenue J	5,682	19,801	14,119	248%	5,735	19,582	13,847	241%	39,383	2	4	36,000	0.32	1.09	0.78	Yes
Antelope Valley	E Palmdale Boulevard	Major Highway	E/W	90th Street E	95th Street E	7,686	10,993	3,307	43%	7,238	10,613	3,375	47%	21,606	2	6-8	54,000	0.28	0.40	0.12	No
Antelope Valley	E Palmdale Boulevard	Major Highway	E/W	95th Street E	100th Street E	6,833	8,904	2,071	30%	6,471	8,483	2,012	31%	17,387	2	6-8	54,000	0.25	0.32	0.08	No
Antelope Valley	E Palmdale Boulevard	Major Highway	E/W	100th Street E	105th Street E	5,323	7,569	2,246	42%	4,579	6,747	2,168	47%	14,316	2	6-8	54,000	0.18	0.27	0.08	No
Antelope Valley	E Palmdale Boulevard	Major Highway	E/W	105th Street E	110 Street E	4,982	6,779	1,797	36%	4,429	6,130	1,701	38%	12,909	2	6-8	54,000	0.17	0.24	0.06	No
Antelope Valley	W Avenue G	Expressway	E/W	SR-14 Antelope Valley Freeway	15th Street W	4,152	5,882	1,730	42%	4,583	6,459	1,876	41%	12,341	2	4-8	44,000	0.20	0.28	0.08	No
Antelope Valley	W Avenue G	Expressway	E/W	15th Street W	10th Street W	3,050	4,072	1,022	34%	3,183	4,140	957	30%	8,212	2	4-8	44,000	0.14	0.19	0.04	No
Antelope Valley	W Avenue G	Expressway	E/W	10th Street W	Sierra Highway	3,771	4,961	1,190	32%	3,814	5,069	1,255	33%	10,030	2	4-8	44,000	0.17	0.23	0.06	No
Antelope Valley	W Avenue G	Expressway	E/W	Sierra Highway	Division Street	5,865	7,923	2,058	35%	6,053	8,303	2,250	37%	16,226	2	4-8	44,000	0.27	0.37	0.10	No
Antelope Valley	E Avenue O	Major Highway	E/W	145th Street E	150th Street E	4,765	9,142	4,377	92%	4,229	9,009	4,780	113%	18,151	2	6-8	54,000	0.17	0.34	0.17	No
Antelope Valley	E Avenue O	Major Highway	E/W	150th Street E	170th Street E	3,817	3,690	-127	-3%	3,163	3,023	-140	-4%	6,713	2	6-8	54,000	0.13	0.12	0.00	No
Antelope Valley	E Avenue O	Major Highway	E/W	170th Street E	175th Street E	3,635	3,573	-62	-2%	3,160	2,971	-189	-6%	6,544	2	6-8	54,000	0.13	0.12	0.00	No
Antelope Valley	E Avenue O	Major Highway	E/W	175th Street E	180th Street E	3,870	4,590	720	19%	3,191	4,330	1,139	36%	8,920	2	6-8	54,000	0.13	0.17	0.03	No
Antelope Valley	E Avenue O	Secondary Highway	E/W	180th Street E	200th Street E	8,198	11,137	2,939	36%	6,557	10,213	3,656	56%	21,350	2	4	36,000	0.41	0.59	0.18	No
Antelope Valley	E Avenue O	Secondary Highway	E/W	200th Street E	210 Street E	7,401	10,652	3,251	44%	6,320	10,216	3,896	62%	20,868	2	4	36,000	0.38	0.58	0.20	No
Antelope Valley	E Avenue O	Secondary Highway	E/W	210 Street E	240th Street E	6,893	5,108	-1,785	-26%	5,558	4,091	-1,467	-26%	9,199	2	4	36,000	0.35	0.26	-0.09	No
Antelope Valley	W Avenue L	Expressway	E/W	Rancho Vista Road	45th Street W	10,613	10,117	-496	-5%	11,528	12,214	686	6%	22,331	4	4-8	44,000	0.50	0.51	0.00	No
Antelope Valley	W Avenue L	Expressway	E/W	45th Street W	40th Street W	7,744	8,225	481	6%	9,919	10,699	780	8%	18,924	4	4-8	44,000	0.40	0.43	0.03	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	70th Street E	E Avenue T 8	20,233	27,693	7,460	37%	18,132	26,453	8,321	46%	54,146	4	6-8	54,000	0.71	1.00	0.29	Yes

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	E Avenue T 8	82nd Street E	20,221	27,054	6,833	34%	18,120	25,835	7,715	43%	52,889	4	6-8	54,000	0.71	0.98	0.27	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	82nd Street E	87th Street E	17,181	21,870	4,689	27%	15,015	20,973	5,958	40%	42,843	4	6-8	54,000	0.60	0.79	0.20	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	87th Street E	96th Street E	17,125	21,897	4,772	28%	14,987	20,956	5,969	40%	42,853	4	6-8	54,000	0.59	0.79	0.20	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	96th Street E	106th Street E	19,057	25,290	6,233	33%	17,003	24,441	7,438	44%	49,731	4	6-8	54,000	0.67	0.92	0.25	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	106th Street E	116th Street E	16,373	21,955	5,582	34%	18,895	23,276	4,381	23%	45,231	4	6-8	54,000	0.65	0.84	0.18	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	116th Street E	126th Street E	17,690	22,797	5,107	29%	15,230	20,765	5,535	36%	43,562	4	6-8	54,000	0.61	0.81	0.20	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	126th Street E	131st Street E	19,442	24,782	5,340	27%	16,515	21,864	5,349	32%	46,646	4	6-8	54,000	0.67	0.86	0.20	No
Antelope Valley	Pearblossom Highway (SR-138)	Major Highway	E/W	131 Street E	170th Street E	30,511	38,104	7,593	25%	26,263	35,190	8,927	34%	73,294	4	6-8	54,000	1.05	1.36	0.31	Yes
Antelope Valley	Fort Tejon Road	Secondary Highway	E/W	87th Street E	Mount Emma Road	4,255	7,766	3,511	83%	3,993	7,173	3,180	80%	14,939	2	4	36,000	0.23	0.41	0.19	No
Antelope Valley	Fort Tejon Road	Secondary Highway	E/W	Mount Emma Road	96th Street	5,157	9,458	4,301	83%	5,178	9,155	3,977	77%	18,613	2	4	36,000	0.29	0.52	0.23	No
Antelope Valley	Fort Tejon Road	Secondary Highway	E/W	96th Street	106th Street	5,647	10,251	4,604	82%	5,521	9,826	4,305	78%	20,077	2	4	36,000	0.31	0.56	0.25	No
Antelope Valley	Fort Tejon Road	Secondary Highway	E/W	106th Street	131 Street E	3,925	5,115	1,190	30%	4,210	4,246	36	1%	9,361	2	4	36,000	0.23	0.26	0.03	No
Santa Clarita Valley	Pico Canyon Road	Major Highway	E/W	The Old Road	I-5 South Offramp	19,561	23,164	3,603	18%	24,096	27,710	3,614	15%	50,874	4	6-8	54,000	0.81	0.94	0.13	No
Santa Clarita Valley	Pico Canyon Road	Major Highway	E/W	Constitution Drive	The Old Road	23,851	26,847	2,996	13%	23,964	27,820	3,856	16%	54,667	4	6-8	54,000	0.89	1.01	0.13	Yes
Santa Clarita Valley	Pico Canyon Road	Major Highway	E/W	Stevenson Ranch Parkway	Constitution Drive	23,851	26,847	2,996	13%	23,964	27,820	3,856	16%	54,667	4	6-8	54,000	0.89	1.01	0.13	Yes
Santa Clarita Valley	Pico Canyon Road	Major Highway	E/W	Whispering Oaks Drive	Stevenson Rach Parkway	21,575	26,457	4,882	23%	21,357	26,551	5,194	24%	53,008	4	6-8	54,000	0.80	0.98	0.19	No
Santa Clarita Valley	Copper Hill Drive	Major Highway	E/W	Avenida Rancho Tesoro	E/O McBean Parkway	8,911	12,987	4,076	46%	11,118	13,283	2,165	19%	26,270	4	6-8	54,000	0.37	0.49	0.12	No
Santa Clarita Valley	Copper Hill Drive	Major Highway	E/W	Decoro Drive	Avenida Rancho Tesoro	5,599	6,799	1,200	21%	5,976	8,174	2,198	37%	14,973	6	6-8	54,000	0.21	0.28	0.06	No

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.16-5 Future 2035 vs. 2035 Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound				Southbound/Eastbound				2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth								
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Expressway	E/W	Commerce Center Drive	I-5 South Offramp	43,215	50,486	7,271	17%	37,127	45,089	7,962	21%	95,575	6	4-8	66,000	1.22	1.45	0.23	Yes
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Expressway	E/W	Del Valle Road	Commerce Center Drive	31,231	33,508	2,277	7%	26,038	29,592	3,554	14%	63,100	6	4-8	66,000	0.87	0.96	0.09	No
Santa Clarita Valley	Henry Mayo Drive (SR-126)	Expressway	E/W	San Martinez Grande Canyon Road	Del Valle Road	36,636	40,689	4,053	11%	33,189	38,374	5,185	16%	79,063	4	4-8	44,000	1.59	1.80	0.21	Yes
Santa Clarita Valley	Bouquet Canyon Road	Major Highway	N/S	Vasquez Canyon Road	Shadow Valley Lane	6,639	9,169	2,530	38%	6,349	8,935	2,586	41%	18,104	2	6-8	54,000	0.24	0.34	0.09	No
Santa Clarita Valley	Bouquet Canyon Road	Major Highway	N/S	Texas Canyon Road	Vasquez Canyon Road	7,300	12,309	5,009	69%	6,666	11,248	4,582	69%	23,557	2	6-8	54,000	0.26	0.44	0.18	No
Santa Clarita Valley	Sierra Highway	Major Highway	N/S	Sand Canyon Road	Ryan Lane	10,126	16,771	6,645	66%	9,835	16,535	6,700	68%	33,306	4	6-8	54,000	0.37	0.62	0.25	No
Santa Clarita Valley	Sierra Highway	Major Highway	N/S	Vasquez Canyon Road	Sand Canyon Road	10,004	17,879	7,875	79%	9,559	17,009	7,450	78%	34,888	4	6-8	54,000	0.36	0.65	0.28	No
Santa Clarita Valley	Sierra Highway	Major Highway	N/S	Davenport Road	Vasquez Canyon Road	5,012	10,369	5,357	107%	4,610	9,700	5,090	110%	20,069	4	6-8	54,000	0.18	0.37	0.19	No
Santa Clarita Valley	Sierra Highway	Major Highway	N/S	Agua Dulce Canyon Road	Davenport Road	2,056	6,463	4,407	214%	2,040	5,246	3,206	157%	11,709	2	6-8	54,000	0.08	0.22	0.14	No
Santa Clarita Valley	Vasquez Canyon Road	Major Highway	E/W	Bouquet Canyon Road	Sierra Highway	4,026	7,001	2,975	74%	3,685	6,326	2,641	72%	13,327	2	6-8	54,000	0.14	0.25	0.10	No
Santa Clarita Valley	Plum Canyon Road	Major Highway	E/W	Via Joyce Drive	Santa Catarina Road	8,603	10,245	1,642	19%	8,414	9,849	1,435	17%	20,094	6	6-8	54,000	0.32	0.37	0.06	No
Santa Clarita Valley	Plum Canyon Road	Major Highway	E/W	Santa Catarina Road	La Madrid Drive	9,066	11,189	2,123	23%	9,226	11,343	2,117	23%	22,532	6	6-8	54,000	0.34	0.42	0.08	No
Santa Clarita Valley	Plum Canyon Road	Major Highway	E/W	La Madrid Drive	Farrell Road	9,918	11,840	1,922	19%	9,799	11,842	2,043	21%	23,682	6	6-8	54,000	0.37	0.44	0.07	No
Santa Clarita Valley	Plum Canyon Road	Major Highway	E/W	Farrell Road	Ashboro Road	7,870	9,175	1,305	17%	7,786	9,205	1,419	18%	18,380	6	6-8	54,000	0.29	0.34	0.05	No
Santa Clarita Valley	Commerce Center Drive	Major Highway	N/S	The Old Road	Hasley Canyon Road	21,697	24,375	2,678	12%	19,089	23,961	4,872	26%	48,336	4	6-8	54,000	0.76	0.90	0.14	No
Santa Clarita Valley	Commerce Center Drive	Major Highway	N/S	Hasley Canyon Road	Live Oak Road	4,733	8,789	4,056	86%	4,637	8,768	4,131	89%	17,557	4	6-8	54,000	0.17	0.33	0.15	No
Santa Clarita Valley	Commerce Center Drive	Major Highway	N/S	Live Oak Road	Henry Mayo Drive	6,715	13,334	6,619	99%	6,822	13,478	6,656	98%	26,812	4	6-8	54,000	0.25	0.50	0.25	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Camino Del Sur	Hacienda Boulevard	26,393	27,229	836	3%	25,523	26,689	1,166	5%	53,918	6	6-8	54,000	0.96	1.00	0.04	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Hacienda Boulevard	Stimson Avenue	14,314	14,720	406	3%	15,569	16,099	530	3%	30,819	6	6-8	54,000	0.55	0.57	0.02	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Stimson Avenue	Haliburton Road	17,088	17,769	681	4%	18,378	19,180	802	4%	36,949	6	6-8	54,000	0.66	0.68	0.03	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Halliburton Road	Azusa Avenue	18,480	19,116	636	3%	20,375	21,139	764	4%	40,255	6	6-8	54,000	0.72	0.75	0.03	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Azusa Avenue	Albatross Road	19,430	21,688	2,258	12%	17,713	19,660	1,947	11%	41,348	6	6-8	54,000	0.69	0.77	0.08	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
East San Gabriel Valley	Colima Road	Major Highway	E/W	Albatross Road	Stoner Creek Road	8,989	10,238	1,249	14%	8,512	9,596	1,084	13%	19,834	6	6-8	54,000	0.32	0.37	0.04	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Stoner Creek Road	Larkvane Road	14,453	16,229	1,776	12%	15,344	16,618	1,274	8%	32,847	6	6-8	54,000	0.55	0.61	0.06	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	S Larkvane Road	Fullerton Road	14,453	16,229	1,776	12%	15,344	16,618	1,274	8%	32,847	6	6-8	54,000	0.55	0.61	0.06	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Fullerton Road	Batson Avenue	19,025	21,950	2,925	15%	16,577	19,699	3,122	19%	41,649	6	6-8	54,000	0.66	0.77	0.11	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Batson Avenue	Nogales Street	10,889	12,130	1,241	11%	10,230	11,624	1,394	14%	23,754	6	6-8	54,000	0.39	0.44	0.05	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Nogales Street	Otterbein Avenue	11,676	12,937	1,261	11%	10,656	12,098	1,442	14%	25,035	6	6-8	54,000	0.41	0.46	0.05	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Otterbein Avenue	Fairway Drive	8,021	9,148	1,127	14%	6,795	8,091	1,296	19%	17,239	6	6-8	54,000	0.27	0.32	0.04	No
East San Gabriel Valley	Colima Road	Major Highway	E/W	Fairway Drive	Lake Canyon Drive	5,579	6,204	625	11%	4,037	4,642	605	15%	10,846	4	6-8	54,000	0.18	0.20	0.02	No
East San Gabriel Valley	Amar Road	Major Highway	E/W	Echelon Avenue	Valinda Avenue	8,501	8,518	17	0%	9,200	9,286	86	1%	17,804	4	6-8	54,000	0.33	0.33	0.00	No
East San Gabriel Valley	Amar Road	Major Highway	E/W	Valinda Avenue	Lark Ellen Avenue	12,239	12,351	112	1%	12,975	13,051	76	1%	25,402	6	6-8	54,000	0.47	0.47	0.00	No
East San Gabriel Valley	Amar Road	Major Highway	E/W	Lark Ellen Avenue	Azusa Avenue	15,756	15,958	202	1%	15,580	15,631	51	0%	31,589	6	6-8	54,000	0.58	0.58	0.00	No
East San Gabriel Valley	Nogales Street	Major Highway	N/S	Gale Street	SR-60 Freeway Westbound Offramp	13,702	14,511	809	6%	12,262	12,979	717	6%	27,490	4	6-8	54,000	0.48	0.51	0.03	No
East San Gabriel Valley	Nogales Street	Major Highway	N/S	SR-60 Freeway Eastbound Offramp	Daisetta Street	16,466	18,441	1,975	12%	17,823	19,724	1,901	11%	38,165	6	6-8	54,000	0.63	0.71	0.07	No
East San Gabriel Valley	Nogales Street	Major Highway	N/S	Daisetta Street	Colima Road	19,821	21,891	2,070	10%	17,823	19,724	1,901	11%	41,615	4	6-8	54,000	0.70	0.77	0.07	No
East San Gabriel Valley	Nogales Street	Major Highway	N/S	Colima Road	Pathfinder Road	9,489	9,915	426	4%	8,417	8,720	303	4%	18,635	4	6-8	54,000	0.33	0.35	0.01	No
East San Gabriel Valley	Hacienda Boulevard	Major Highway	N/S	Gale Avenue	SR-60 Freeway Westbound Offramp	18,558	19,421	863	5%	19,959	20,959	1,000	5%	40,380	6	6-8	54,000	0.71	0.75	0.03	No
East San Gabriel Valley	Hacienda Boulevard	Major Highway	N/S	SR-60 Freeway Westbound Offramp	SR-60 Freeway Eastbound Offramp	26,846	28,062	1,216	5%	24,940	26,747	1,807	7%	54,809	6	6-8	54,000	0.96	1.01	0.06	Yes
East San Gabriel Valley	Hacienda Boulevard	Major Highway	N/S	SR-60 Freeway Eastbound Offramp	Halliburton Road	26,311	28,056	1,745	7%	28,248	29,777	1,529	5%	57,833	6	6-8	54,000	1.01	1.07	0.06	Yes
East San Gabriel Valley	Hacienda Boulevard	Major Highway	N/S	Halliburton Road	Las Lomitas Drive	22,868	24,994	2,126	9%	24,998	27,121	2,123	8%	52,115	6	6-8	54,000	0.89	0.97	0.08	No
East San Gabriel Valley	Hacienda Boulevard	Major Highway	N/S	Las Lomitas Drive	Colima Road	20,526	21,287	761	4%	23,213	23,679	466	2%	44,966	6	6-8	54,000	0.81	0.83	0.02	No

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.16-5 Future 2035 vs. 2035 Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound				Southbound/Eastbound				2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth								
East San Gabriel Valley	Hacienda Boulevard	Major Highway	N/S	Colima Road	Glenmark Drive	7,485	7,970	485	6%	6,887	7,093	206	3%	15,063	4	6-8	54,000	0.27	0.28	0.01	No
East San Gabriel Valley	Grand Avenue	Major Highway	N/S	Holt Avenue	Cameron Avenue	14,832	14,920	88	1%	12,592	12,624	32	0%	27,544	4	6-8	54,000	0.51	0.51	0.00	No
East San Gabriel Valley	Cypress Street	Secondary Highway	E/W	Ellen Drive	Vincent Avenue	3,169	3,167	-2	0%	3,264	3,314	50	2%	6,481	2	4	36,000	0.18	0.18	0.00	No
East San Gabriel Valley	Cypress Street	Secondary Highway	E/W	Vincent Avenue	Lark Ellen Avenue	2,760	2,840	80	3%	2,733	2,810	77	3%	5,650	2	4	36,000	0.15	0.16	0.00	No
East San Gabriel Valley	Arrow Highway	Major Highway	E/W	Glendora Avenue	Bonnie Cove Avenue	9,269	9,383	114	1%	10,021	10,295	274	3%	19,678	4	6-8	54,000	0.36	0.36	0.01	No
East San Gabriel Valley	Arrow Highway	Major Highway	E/W	Bonnie Cove Avenue	Sunflower Avenue	9,389	9,511	122	1%	10,205	10,437	232	2%	19,948	4	6-8	54,000	0.36	0.37	0.01	No
East San Gabriel Valley	Arrow Highway	Major Highway	E/W	Sunflower Avenue	Valley Center Avenue	8,519	8,629	110	1%	10,022	10,427	405	4%	19,056	4	6-8	54,000	0.34	0.35	0.01	No
East San Gabriel Valley	Cienega Avenue	Secondary Highway	E/W	Glendora Avenue	Bonnie Cove Avenue	300	334	34	11%	512	750	238	46%	1,084	4	4	36,000	0.02	0.03	0.01	No
East San Gabriel Valley	Cienega Avenue	Secondary Highway	E/W	Bonnie Cove Avenue	Sunflower Avenue	300	334	34	11%	513	742	229	45%	1,076	4	4	36,000	0.02	0.03	0.01	No
East San Gabriel Valley	Cienega Avenue	Secondary Highway	E/W	Sunflower Avenue	Valley Center Avenue	71	61	-10	-14%	170	225	55	32%	286	4	4	36,000	0.01	0.01	0.00	No
Gateway	Alameda Street (SR-47)	Major Highway	N/S	Laurel Park Road	Del Amo Boulevard	4,732	5,229	497	11%	5,473	6,039	566	10%	11,268	6	6-8	54,000	0.19	0.21	0.02	No
Gateway	Alameda Street (SR-47)	Major Highway	N/S	Manville Street	Laurel Park Road	4,104	4,713	609	15%	3,969	4,399	430	11%	9,112	6	6-8	54,000	0.15	0.17	0.02	No
Gateway	Santa Fe Avenue	Major Highway	N/S	Las Hermanas Street	Victoria Street	7,818	8,531	713	9%	6,435	7,021	586	9%	15,552	4	6-8	54,000	0.26	0.29	0.02	No
Gateway	Santa Fe Avenue	Major Highway	N/S	Victoria Street	Santa Fe Avenue	3,739	3,758	19	1%	3,013	3,035	22	1%	6,793	4	6-8	54,000	0.13	0.13	0.00	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Whittier Boulevard	Townley Drive	5,686	6,099	413	7%	6,834	7,365	531	8%	13,464	4	6-8	54,000	0.23	0.25	0.02	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Townley Drive	Mines Boulevard	10,215	11,076	861	8%	9,336	10,482	1,146	12%	21,558	4	6-8	54,000	0.36	0.40	0.04	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Mines Boulevard	Saragosa Street	7,476	8,041	565	8%	5,512	6,169	657	12%	14,210	4	6-8	54,000	0.24	0.26	0.02	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Saragosa Street	Washington Boulevard	5,641	5,702	61	1%	1,693	1,772	79	5%	7,474	4	6-8	54,000	0.14	0.14	0.00	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Broadway	Slauson Avenue	10,255	10,600	345	3%	9,037	9,331	294	3%	19,931	2	6-8	54,000	0.36	0.37	0.01	No
Gateway	Norwalk Boulevard	Major Highway	N/S	Slauson Avenue	Los Nietos Road	7,689	7,833	144	2%	8,237	8,501	264	3%	16,334	2	6-8	54,000	0.29	0.30	0.01	No
Gateway	Washington Boulevard	Major Highway	E/W	Broadway	Sorensen Avenue	13,516	13,995	479	4%	12,968	13,374	406	3%	27,369	4	6-8	54,000	0.49	0.51	0.02	No
Gateway	Washington Boulevard	Major Highway	E/W	Sorensen Avenue	Calobar Avenue	8,028	8,177	149	2%	7,919	8,092	173	2%	16,269	4	6-8	54,000	0.30	0.30	0.01	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Gateway	Washington Boulevard	Major Highway	E/W	Calobar Avenue	Rivera Road	8,627	8,990	363	4%	8,536	8,830	294	3%	17,820	4	6-8	54,000	0.32	0.33	0.01	No
Gateway	Slauson Avenue	Major Highway	E/W	Sal Avenue	I-605 Southbound Offramp	23,083	23,941	858	4%	20,106	20,748	642	3%	44,689	4	6-8	54,000	0.80	0.83	0.03	No
Gateway	Slauson Avenue	Major Highway	E/W	I-605 Southbound	Poineer Boulevard	21,835	22,670	835	4%	22,881	23,668	787	3%	46,338	4	6-8	54,000	0.83	0.86	0.03	No
Gateway	Slauson Avenue	Major Highway	E/W	Poineer Boulevard	Norwalk Boulevard	13,065	13,121	56	0%	15,209	15,432	223	1%	28,553	6	6-8	54,000	0.52	0.53	0.01	No
Gateway	Mulberry Drive	Major Highway	E/W	Painter Avenue	Calmada Avenue	13,953	14,950	997	7%	14,719	15,719	1,000	7%	30,669	6	6-8	54,000	0.53	0.57	0.04	No
Gateway	Mulberry Drive	Major Highway	E/W	Calmada Avenue	Gunn Avenue	13,365	14,543	1,178	9%	14,112	15,301	1,189	8%	29,844	6	6-8	54,000	0.51	0.55	0.04	No
Gateway	Mulberry Drive	Major Highway	E/W	Gunn Avenue	Mills Avenue	13,633	14,894	1,261	9%	14,573	15,884	1,311	9%	30,778	6	6-8	54,000	0.52	0.57	0.05	No
Gateway	Mulberry Drive	Major Highway	E/W	Mills Avenue	Colima Road	8,788	9,543	755	9%	9,216	9,951	735	8%	19,494	6	6-8	54,000	0.33	0.36	0.03	No
Gateway	Mulberry Drive	Major Highway	E/W	Colima Road	Lamirada Boulevard	7,980	8,522	542	7%	8,011	8,584	573	7%	17,106	4	6-8	54,000	0.30	0.32	0.02	No
Gateway	Mulberry Drive	Major Highway	E/W	La Mirada Boulevard	Scott Avenue	3,301	3,650	349	11%	3,206	3,546	340	11%	7,196	2	6-8	54,000	0.12	0.13	0.01	No
Gateway	Colima Road	Secondary Highway	N/S	Telegraph Road	Broadway	8,592	8,958	366	4%	7,921	8,215	294	4%	17,173	2	4	36,000	0.46	0.48	0.02	No
Gateway	Colima Road	Secondary Highway	N/S	Broadway	Mulberry Drive	9,982	10,545	563	6%	9,456	9,975	519	5%	20,520	2	4	36,000	0.54	0.57	0.03	No
Gateway	Colima Road	Secondary Highway	N/S	Mulberry Drive	La Mirada Boulevard	8,025	8,184	159	2%	7,313	7,458	145	2%	15,642	2	4	36,000	0.43	0.43	0.01	No
Gateway	Colima Road	Secondary Highway	N/S	La Mirada Boulevard	Lambert Road	17,816	18,462	646	4%	17,083	17,582	499	3%	36,044	4	4	36,000	0.97	1.00	0.03	Yes
Gateway	Carmenita Road	Secondary Highway	N/S	Telegraph Road	Florence Avenue	9,468	9,849	381	4%	9,742	10,063	321	3%	19,912	4	4	36,000	0.53	0.55	0.02	No
Gateway	Carmenita Road	Secondary Highway	N/S	Florence Avenue	Lakeland Road	10,547	11,396	849	8%	10,952	11,938	986	9%	23,334	4	4	36,000	0.60	0.65	0.05	No
Gateway	Carmenita Road	Secondary Highway	N/S	Lakeland Road	Meyer Road	9,450	9,959	509	5%	9,979	10,344	365	4%	20,303	4	4	36,000	0.54	0.56	0.02	No
Gateway	Carmenita Road	Secondary Highway	N/S	Meyer Road	Leffingwell Road	10,173	10,760	587	6%	11,097	11,635	538	5%	22,395	4	4	36,000	0.59	0.62	0.03	No
Gateway	Carmenita Road	Secondary Highway	N/S	Leffingwell Road	Imperial Highway	15,048	16,000	952	6%	15,705	16,530	825	5%	32,530	4	4	36,000	0.85	0.90	0.05	No
Gateway	Telegraph Road	Major Highway	E/W	Carmenita Road	Gunn Avenue	14,548	15,223	675	5%	14,087	14,818	731	5%	30,041	4	6-8	54,000	0.53	0.56	0.03	No
Gateway	Telegraph Road	Major Highway	E/W	Gunn Avenue	Mills Avenue	13,597	14,233	636	5%	13,034	13,610	576	4%	27,843	4	6-8	54,000	0.49	0.52	0.02	No
Gateway	Telegraph Road	Major Highway	E/W	Mills Avenue	Valley View Avenue	17,196	17,899	703	4%	16,878	17,649	771	5%	35,548	4	6-8	54,000	0.63	0.66	0.03	No
Gateway	Telegraph Road	Major Highway	E/W	Valley View Avenue	Colima Road	10,053	9,977	-76	-1%	10,125	9,997	-128	-1%	19,974	4	6-8	54,000	0.37	0.37	0.00	No
Gateway	Telegraph Road	Major Highway	E/W	Colima Road	Leffingwell Road	12,982	14,019	1,037	8%	13,034	14,020	986	8%	28,039	4	6-8	54,000	0.48	0.52	0.04	No

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Gateway	Telegraph Road	Major Highway	E/W	Leffingwell Road	Imperial Highway	9,653	10,152	499	5%	9,560	9,973	413	4%	20,125	4	6-8	54,000	0.36	0.37	0.02	No
Gateway	Imperial Highway	Major Highway	E/W	Shoemaker Avenue	Leffingwell Road	20,328	20,856	528	3%	20,290	20,870	580	3%	41,726	4	6-8	54,000	0.75	0.77	0.02	No
Gateway	Imperial Highway	Major Highway	E/W	Leffingwell Road	Carmenita Road	10,894	10,750	-144	-1%	11,004	10,846	-158	-1%	21,596	4	6-8	54,000	0.41	0.40	-0.01	No
Gateway	Imperial Highway	Major Highway	E/W	Carmenita Road	Shopping Center Driveway	12,931	13,047	116	1%	13,267	13,375	108	1%	26,422	4	6-8	54,000	0.49	0.49	0.00	No
Gateway	Imperial Highway	Major Highway	E/W	Shopping Center Driveway	Meyer Road	10,427	10,514	87	1%	10,891	10,994	103	1%	21,508	4	6-8	54,000	0.39	0.40	0.00	No
Gateway	Imperial Highway	Major Highway	E/W	Meyer Road	Valley View Avenue	14,732	15,137	405	3%	15,464	15,794	330	2%	30,931	4	6-8	54,000	0.56	0.57	0.01	No
Gateway	Imperial Highway	Major Highway	E/W	Valley View Avenue	Biola Avenue	12,245	12,491	246	2%	12,705	12,858	153	1%	25,349	4	6-8	54,000	0.46	0.47	0.01	No
Gateway	Imperial Highway	Major Highway	E/W	Biola Avenue	Telegraph Road	13,714	13,976	262	2%	14,347	14,719	372	3%	28,695	4	6-8	54,000	0.52	0.53	0.01	No
Westside	La Cienega Boulevard	Major Highway	N/S	Stocker Street	Slauson Avenue	34,357	34,793	436	1%	33,052	33,258	206	1%	68,051	6	6-8	54,000	1.25	1.26	0.01	No
Westside	La Cienega Boulevard	Major Highway	N/S	Rodeo Place	Stocker Street	26,310	26,865	555	2%	25,354	25,635	281	1%	52,500	6	6-8	54,000	0.96	0.97	0.02	No
Westside	La Brea Avenue	Major Highway	N/S	Veronica Street	Overhill Drive	26,127	27,149	1,022	4%	24,791	25,561	770	3%	52,710	6	6-8	54,000	0.94	0.98	0.03	No
Westside	La Brea Avenue	Major Highway	N/S	Overhill Drive	Slauson Avenue	29,012	29,154	142	0%	27,009	27,143	134	0%	56,297	4	6-8	54,000	1.04	1.04	0.01	No
Westside	La Brea Avenue	Major Highway	N/S	Slauson Avenue	Centinela Avenue	14,560	14,782	222	2%	16,422	16,834	412	3%	31,616	4	6-8	54,000	0.57	0.59	0.01	No
Westside	Slauson Avenue	Major Highway	E/W	Corning Avenue	La Cienega Boulevard	34,740	34,819	79	0%	30,466	30,558	92	0%	65,377	6	6-8	54,000	1.21	1.21	0.00	No
Westside	Slauson Avenue	Major Highway	E/W	La Cienega Boulevard	Fairfax Boulevard	32,578	32,891	313	1%	34,689	34,880	191	1%	67,771	6	6-8	54,000	1.25	1.26	0.01	No
Westside	Slauson Avenue	Major Highway	E/W	Fairfax Boulevard	La Brea Avenue	38,536	38,940	404	1%	39,482	39,788	306	1%	78,728	6	6-8	54,000	1.44	1.46	0.01	No
Westside	Slauson Avenue	Major Highway	E/W	La Brea Avenue	Overhill Drive	24,452	24,640	188	1%	21,368	21,197	-171	-1%	45,837	6	6-8	54,000	0.85	0.85	0.00	No
Westside	Stocker Street	Major Highway	E/W	La Cienega Boulevard	Fairfax Boulevard	14,899	15,806	907	6%	15,244	15,966	722	5%	31,772	4	6-8	54,000	0.56	0.59	0.03	No
Westside	Stocker Street	Major Highway	E/W	Fairfax Boulevard	Overhill Drive/La Brea Avenue	13,334	14,105	771	6%	13,842	14,513	671	5%	28,618	4	6-8	54,000	0.50	0.53	0.03	No
San Fernando Valley	Foothill Boulevard	Major Highway	E/W	Pennsylvania Avenue	La Crescenta Avenue	9,466	10,334	868	9%	8,148	8,971	823	10%	19,305	4	6-8	54,000	0.33	0.36	0.03	No
San Fernando Valley	Foothill Boulevard	Major Highway	E/W	La Crescenta Avenue	Rosemont Avenue	3,214	4,161	947	29%	2,504	3,358	854	34%	7,519	4	6-8	54,000	0.11	0.14	0.03	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
San Fernando Valley	Foothill Boulevard	Major Highway	E/W	Rosemont Avenue	Briggs Avenue	11,517	13,184	1,667	14%	10,564	11,949	1,385	13%	25,133	4	6-8	54,000	0.41	0.47	0.06	No
San Fernando Valley	Rosemont Avenue	Secondary Highway	N/S	Rockdell Street	Orange Avenue	5,348	6,106	758	14%	5,358	6,029	671	13%	12,135	2	4	36,000	0.30	0.34	0.04	No
San Fernando Valley	Rosemont Avenue	Secondary Highway	N/S	Orange Avenue	Foothill Boulevard	5,028	5,794	766	15%	4,712	5,229	517	11%	11,023	2	4	36,000	0.27	0.31	0.04	No
San Fernando Valley	Rosemont Avenue	Secondary Highway	N/S	Foothill Boulevard	Foothill Freeway	1,550	2,311	761	49%	1,859	2,445	586	32%	4,756	4	4	36,000	0.09	0.13	0.04	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	Colorado Boulevard	Del Mar Boulevard	19,556	20,420	864	4%	19,444	20,030	586	3%	40,450	4	6-8	54,000	0.72	0.75	0.03	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	Del Mar Boulevard	San Pasqual Street	17,382	17,651	269	2%	17,668	17,767	99	1%	35,418	4	6-8	54,000	0.65	0.66	0.01	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	San Pasqual Street	California Boulevard	19,571	20,400	829	4%	19,961	20,720	759	4%	41,120	4	6-8	54,000	0.73	0.76	0.03	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	E California Boulevard	Huntington Drive	20,752	22,107	1,355	7%	18,906	19,529	623	3%	41,636	4	6-8	54,000	0.73	0.77	0.04	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	Huntington Drive	Huntington Drive	14,817	16,086	1,269	9%	18,809	19,023	214	1%	35,109	4	6-8	54,000	0.62	0.65	0.03	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	Huntington Drive	Duarte Road	13,356	14,030	674	5%	13,899	14,650	751	5%	28,680	4	6-8	54,000	0.50	0.53	0.03	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	Duarte Road	Ardendale Avenue	15,517	16,027	510	3%	15,487	16,056	569	4%	32,083	4	6-8	54,000	0.57	0.59	0.02	No
West San Gabriel Valley	Huntington Drive	Expressway	E/W	San Gabriel Boulevard	Madre Street	27,395	27,553	158	1%	26,484	26,378	-106	0%	53,931	8	4-8	88,000	0.61	0.61	0.00	No
West San Gabriel Valley	Huntington Drive	Expressway	E/W	Madre Street	Madre Street			0	N/A			0	N/A	0	8	4-8	88,000	0.00	0.00	0.00	No
West San Gabriel Valley	Huntington Drive	Expressway	E/W	Madre Street	Rosemead Boulevard	20,527	20,738	211	1%	22,081	22,534	453	2%	43,272	8	4-8	88,000	0.48	0.49	0.01	No
West San Gabriel Valley	Huntington Drive	Expressway	E/W	Rosemead Boulevard	Michillinda Avenue	26,365	26,253	-112	0%	25,811	25,081	-730	-3%	51,334	8	4-8	88,000	0.59	0.58	-0.01	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	E California Boulevard	Lombardy Road	15,575	16,161	586	4%	15,205	15,572	367	2%	31,733	4	6-8	54,000	0.57	0.59	0.02	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	Lombardy Road	Huntington Drive	15,575	16,165	590	4%	15,461	15,843	382	2%	32,008	4	6-8	54,000	0.57	0.59	0.02	No

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.16-5 Future 2035 vs. 2035 Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound				Southbound/Eastbound				2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth								
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	Huntington Drive	Duarte Road	17,570	18,130	560	3%	19,209	20,003	794	4%	38,133	4	6-8	54,000	0.68	0.71	0.03	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	Duarte Road	Longden Avenue	16,803	17,455	652	4%	17,552	18,388	836	5%	35,843	4	6-8	54,000	0.64	0.66	0.03	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	Longden Avenue	Las Tunas Drive	17,250	17,903	653	4%	17,457	18,284	827	5%	36,187	4	6-8	54,000	0.64	0.67	0.03	No
West San Gabriel Valley	Duarte Boulevard	Major Highway	E/W	San Gabriel Boulevard	Muscatel Avenue	2,141	2,208	67	3%	2,966	3,033	67	2%	5,241	2	6-8	54,000	0.09	0.10	0.00	No
West San Gabriel Valley	Duarte Boulevard	Major Highway	E/W	Muscatel Avenue	Madre Street	3,201	3,457	256	8%	3,645	3,853	208	6%	7,310	2	6-8	54,000	0.13	0.14	0.01	No
West San Gabriel Valley	Duarte Boulevard	Major Highway	E/W	Madre Street	Rosemead Boulevard	964	1,003	39	4%	1,191	1,221	30	3%	2,224	2	6-8	54,000	0.04	0.04	0.00	No
West San Gabriel Valley	Duarte Boulevard	Major Highway	E/W	Rosemead Boulevard	Oaks Avenue	3,211	3,257	46	1%	3,790	3,853	63	2%	7,110	4	6-8	54,000	0.13	0.13	0.00	No
West San Gabriel Valley	New York Drive	Secondary Highway	E/W	Lake Avenue	Holliston Avenue	5,071	5,495	424	8%	5,309	5,707	398	7%	11,202	2	4	36,000	0.29	0.31	0.02	No
West San Gabriel Valley	New York Drive	Secondary Highway	E/W	Holliston Avenue	Hill Avenue	6,078	6,726	648	11%	6,241	6,917	676	11%	13,643	2	4	36,000	0.34	0.38	0.04	No
West San Gabriel Valley	New York Drive	Secondary Highway	E/W	Hill Avenue	Allen Avenue	2,545	2,737	192	8%	2,457	2,595	138	6%	5,332	2	4	36,000	0.14	0.15	0.01	No
West San Gabriel Valley	New York Drive	Secondary Highway	E/W	Allen Avenue	Altadena Drive	5,564	6,131	567	10%	5,384	5,816	432	8%	11,947	2	4	36,000	0.30	0.33	0.03	No
West San Gabriel Valley	Fair Oaks Avenue	Major Highway	N/S	Loma Alta Drive	Terrace Street	4,031	4,188	157	4%	4,039	4,253	214	5%	8,441	2	6-8	54,000	0.15	0.16	0.01	No
West San Gabriel Valley	Fair Oaks Avenue	Major Highway	N/S	Terrace Street	Ventura Street	4,799	5,297	498	10%	4,615	5,121	506	11%	10,418	4	6-8	54,000	0.17	0.19	0.02	No
West San Gabriel Valley	Fair Oaks Avenue	Major Highway	N/S	Ventura Street	Woodbury Road	5,114	5,172	58	1%	5,352	5,384	32	1%	10,556	4	6-8	54,000	0.19	0.20	0.00	No
West San Gabriel Valley	Lake Avenue	Secondary Highway	N/S	Loma Alta Drive	Altadena Drive	507	567	60	12%	576	632	56	10%	1,199	4	4	36,000	0.03	0.03	0.00	No
West San Gabriel Valley	Lake Avenue	Secondary Highway	N/S	Altadena Drive	Mendocino Lane	5,743	6,398	655	11%	5,798	6,286	488	8%	12,684	4	4	36,000	0.32	0.35	0.03	No
West San Gabriel Valley	Lake Avenue	Secondary Highway	N/S	Menocino Lane	Calaveras Street	2,362	2,372	10	0%	2,825	2,969	144	5%	5,341	4	4	36,000	0.14	0.15	0.00	No
West San Gabriel Valley	Lake Avenue	Secondary Highway	N/S	Calaveras Street	New York Drive	2,362	2,372	10	0%	2,825	2,969	144	5%	5,341	4	4	36,000	0.14	0.15	0.00	No
West San Gabriel Valley	Marengo Avenue	Secondary Highway	N/S	Loma Alta Drive	Altadena Drive	110	207	97	88%	73	104	31	42%	311	2	4	36,000	0.01	0.01	0.00	No
West San Gabriel Valley	Marengo Avenue	Secondary Highway	N/S	Altadena Drive	Woodbury Road	554	682	128	23%	280	340	60	21%	1,022	2	4	36,000	0.02	0.03	0.01	No
West San Gabriel Valley	Woodbury Road	Secondary Highway	E/W	Windsor Avenue	Lincoln Avenue	7,972	9,053	1,081	14%	8,253	9,177	924	11%	18,230	4	4	36,000	0.45	0.51	0.06	No
West San Gabriel Valley	Woodbury Road	Secondary Highway	E/W	Lincoln Avenue	Fair Oaks Road	12,035	14,484	2,449	20%	13,519	15,939	2,420	18%	30,423	4	4	36,000	0.71	0.85	0.14	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound				Southbound/Eastbound				2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth								
West San Gabriel Valley	Woodbury Road	Secondary Highway	E/W	Fair Oaks Road	Marengo Avenue	10,731	12,854	2,123	20%	11,752	14,071	2,319	20%	26,925	4	4	36,000	0.62	0.75	0.12	No
West San Gabriel Valley	Woodbury Road	Secondary Highway	E/W	Marengo Avenue	Mariposa Street	7,152	7,765	613	9%	7,612	8,383	771	10%	16,148	2	4	36,000	0.41	0.45	0.04	No
West San Gabriel Valley	Woodbury Road	Secondary Highway	E/W	Mariposa Street	Los Robles Avenue	6,948	7,474	526	8%	7,030	7,520	490	7%	14,994	2	4	36,000	0.39	0.42	0.03	No
West San Gabriel Valley	Woodbury Road	Secondary Highway	E/W	Los Robles Avenue	El Molina Avenue	4,204	4,721	517	12%	4,254	4,702	448	11%	9,423	2	4	36,000	0.23	0.26	0.03	No
West San Gabriel Valley	Woodbury Road	Secondary Highway	E/W	El Molina Avenue	Lake Avenue	6,759	7,436	677	10%	6,609	7,245	636	10%	14,681	2	4	36,000	0.37	0.41	0.04	No
West San Gabriel Valley	Lincoln Avenue	Secondary Highway	N/S	Loma Alta Drive	Terrace Street	5,666	6,078	412	7%	5,101	5,533	432	8%	11,611	4	4	36,000	0.30	0.32	0.02	No
West San Gabriel Valley	Lincoln Avenue	Secondary Highway	N/S	Terrace Street	Ventura Street	3,415	3,201	-214	-6%	2,700	2,673	-27	-1%	5,874	2	4	36,000	0.17	0.16	-0.01	No
West San Gabriel Valley	Lincoln Avenue	Secondary Highway	N/S	Ventura Street	Woodbury Road	3,415	3,201	-214	-6%	2,700	2,673	-27	-1%	5,874	2	4	36,000	0.17	0.16	-0.01	No
West San Gabriel Valley	Allen Avenue	Secondary Highway	N/S	Altadena Drive	Mendocino Lane	4,103	4,654	551	13%	4,280	4,906	626	15%	9,560	2	4	36,000	0.23	0.27	0.03	No
West San Gabriel Valley	Allen Avenue	Secondary Highway	N/S	Mendocino Lane	New York Drive	3,443	3,862	419	12%	3,758	4,110	352	9%	7,972	2	4	36,000	0.20	0.22	0.02	No
West San Gabriel Valley	Allen Avenue	Secondary Highway	N/S	New York Drive	Washington Boulevard	4,089	4,530	441	11%	4,347	4,719	372	9%	9,249	2	4	36,000	0.23	0.26	0.02	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	Pomona Freeway (SR-60)	Town Center Drive	20,685	21,305	620	3%	23,940	24,350	410	2%	45,655	4	6-8	54,000	0.83	0.85	0.02	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	Town Center Drive	Plaza Drive	14,552	14,904	352	2%	16,403	16,875	472	3%	31,779	4	6-8	54,000	0.57	0.59	0.02	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	Plaza Drive	E Lincoln Avenue	17,158	17,606	448	3%	19,493	19,994	501	3%	37,600	4	6-8	54,000	0.68	0.70	0.02	No
West San Gabriel Valley	San Gabriel Boulevard	Major Highway	N/S	E Lincoln Avenue	Rosemead Boulevard (SR-19)	21,477	22,009	532	2%	18,535	18,977	442	2%	40,986	4	6-8	54,000	0.74	0.76	0.02	No
West San Gabriel Valley	Durfee Avenue	Major Highway	E/W	Rosemead Boulevard (SR-19)	Santa Anita Avenue	4,486	4,739	253	6%	6,900	7,425	525	8%	12,164	4	6-8	54,000	0.21	0.23	0.01	No
West San Gabriel Valley	Durfee Avenue	Major Highway	E/W	Santa Anita Avenue	Peck Road	4,315	4,503	188	4%	6,078	6,496	418	7%	10,999	4	6-8	54,000	0.19	0.20	0.01	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	Rush Street	Town Center Drive	28,095	28,728	633	2%	26,088	26,933	845	3%	55,661	6	6-8	54,000	1.00	1.03	0.03	Yes
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	Town Center Drive	Durfee Avenue	12,785	12,888	103	1%	10,257	10,494	237	2%	23,382	6	6-8	54,000	0.43	0.43	0.01	No
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	Durfee Avenue	Legg Lake Bus Stop	26,917	27,243	326	1%	24,850	25,152	302	1%	52,395	4	6-8	54,000	0.96	0.97	0.01	No

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.16-5 Future 2035 vs. 2035 Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound				Southbound/Eastbound				2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth								
West San Gabriel Valley	Rosemead Boulevard (SR -19)	Major Highway	N/S	Legg Lake Bus Stop	Gallatin Road	26,917	27,243	326	1%	24,850	25,152	302	1%	52,395	4	6-8	54,000	0.96	0.97	0.01	No
Metro	Western Avenue	Major Highway	N/S	108th Street	Imperial Highway	7,665	7,914	249	3%	7,634	7,838	204	3%	15,752	4	6-8	54,000	0.28	0.29	0.01	No
Metro	Western Avenue	Major Highway	N/S	Imperial Highway	120th Street	11,762	12,448	686	6%	12,622	13,359	737	6%	25,807	4	6-8	54,000	0.45	0.48	0.03	No
Metro	Western Avenue	Major Highway	N/S	120th Street	El Segundo Boulevard	11,699	12,101	402	3%	11,584	11,984	400	3%	24,085	4	6-8	54,000	0.43	0.45	0.01	No
Metro	Normandie Avenue	Secondary Highway	N/S	Manchester Avenue	92nd Street	2,649	2,809	160	6%	2,845	3,003	158	6%	5,812	2	4	36,000	0.15	0.16	0.01	No
Metro	Normandie Avenue	Secondary Highway	N/S	92nd Street	95th Street	4,497	4,948	451	10%	4,382	4,719	337	8%	9,667	2	4	36,000	0.25	0.27	0.02	No
Metro	Normandie Avenue	Secondary Highway	N/S	95th Street	Century Boulevard	3,654	3,737	83	2%	3,608	3,648	40	1%	7,385	2	4	36,000	0.20	0.21	0.00	No
Metro	Normandie Avenue	Secondary Highway	N/S	Centruy Boulevard	108th Street	4,276	4,807	531	12%	4,585	5,346	761	17%	10,153	2	4	36,000	0.25	0.28	0.04	No
Metro	Normandie Avenue	Secondary Highway	N/S	108th Street	Imperial Highway	3,330	3,730	400	12%	3,484	3,955	471	14%	7,685	2	4	36,000	0.19	0.21	0.02	No
Metro	Normandie Avenue	Secondary Highway	N/S	Imperial Highway	120th Street	3,982	4,395	413	10%	4,181	4,552	371	9%	8,947	2	4	36,000	0.23	0.25	0.02	No
Metro	Normandie Avenue	Secondary Highway	N/S	120th Street	El Segundo Boulevard	3,237	3,567	330	10%	3,280	3,486	206	6%	7,053	2	4	36,000	0.18	0.20	0.01	No
Metro	Vermont Avenue	Major Highway	N/S	Manchester Avenue	90th Street	15,690	16,551	861	5%	14,956	15,659	703	5%	32,210	6	6-8	54,000	0.57	0.60	0.03	No
Metro	Vermont Avenue	Major Highway	N/S	90th Street	92nd Street	12,610	13,331	721	6%	11,885	12,502	617	5%	25,833	6	6-8	54,000	0.45	0.48	0.02	No
Metro	Vermont Avenue	Major Highway	N/S	92nd Street	Colden Avenue	14,173	15,014	841	6%	13,848	14,601	753	5%	29,615	6	6-8	54,000	0.52	0.55	0.03	No
Metro	Vermont Avenue	Major Highway	N/S	Colden Avenue	Century Boulevard	12,601	13,224	623	5%	12,459	13,026	567	5%	26,250	6	6-8	54,000	0.46	0.49	0.02	No
Metro	Vermont Avenue	Major Highway	N/S	Centruy Boulevard	108th Street	14,131	14,882	751	5%	13,801	14,432	631	5%	29,314	6	6-8	54,000	0.52	0.54	0.03	No
Metro	Vermont Avenue	Major Highway	N/S	108th Street	111th Street	12,634	13,556	922	7%	12,304	13,149	845	7%	26,705	6	6-8	54,000	0.46	0.49	0.03	No
Metro	Vermont Avenue	Major Highway	N/S	111th Street	Imperial Highway	12,458	13,423	965	8%	12,218	13,196	978	8%	26,619	6	6-8	54,000	0.46	0.49	0.04	No
Metro	Vermont Avenue	Major Highway	N/S	Imperial Highway	120th Street	15,206	16,437	1,231	8%	17,844	18,955	1,111	6%	35,392	6	6-8	54,000	0.61	0.66	0.04	No
Metro	Vermont Avenue	Major Highway	N/S	120th Street	El Segundo Boulevard	14,781	15,675	894	6%	15,996	16,892	896	6%	32,567	6	6-8	54,000	0.57	0.60	0.03	No
Metro	Broadway	Major Highway	N/S	120th Street	124th Street	5,830	6,133	303	5%	5,333	5,576	243	5%	11,709	4	6-8	54,000	0.21	0.22	0.01	No
Metro	Broadway	Major Highway	N/S	124th Street	El Segundo Boulevard	5,826	6,126	300	5%	5,329	5,571	242	5%	11,697	4	6-8	54,000	0.21	0.22	0.01	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Broadway	Major Highway	N/S	El Segundo Boulevard	135th Street	3,867	4,314	447	12%	3,003	3,433	430	14%	7,747	4	6-8	54,000	0.13	0.14	0.02	No
Metro	Broadway	Major Highway	N/S	135th Street	Rosecrans Avenue	3,141	3,357	216	7%	2,976	3,213	237	8%	6,570	4	6-8	54,000	0.11	0.12	0.01	No
Metro	Broadway	Major Highway	N/S	Rosecrans Avenue	Compton Boulevard	3,216	3,295	79	2%	2,670	2,845	175	7%	6,140	4	6-8	54,000	0.11	0.11	0.00	No
Metro	Broadway	Major Highway	N/S	Compton Boulevard	Redondo Beach Boulevard	4,681	4,972	291	6%	4,671	4,889	218	5%	9,861	4	6-8	54,000	0.17	0.18	0.01	No
Metro	Broadway	Major Highway	N/S	Redondo Beach Boulevard	Alondra Boulevard	3,264	3,495	231	7%	3,141	3,355	214	7%	6,850	4	6-8	54,000	0.12	0.13	0.01	No
Metro	El Segundo Boulevard	Major Highway	E/W	Figueroa Street	Broadway	12,393	13,507	1,114	9%	11,065	11,998	933	8%	25,505	6	6-8	54,000	0.43	0.47	0.04	No
Metro	El Segundo Boulevard	Major Highway	E/W	Broadway	Main Street	11,796	12,841	1,045	9%	10,835	11,658	823	8%	24,499	6	6-8	54,000	0.42	0.45	0.03	No
Metro	El Segundo Boulevard	Major Highway	E/W	Main Street	San Pedro Street	11,032	11,973	941	9%	10,449	11,122	673	6%	23,095	6	6-8	54,000	0.40	0.43	0.03	No
Metro	El Segundo Boulevard	Major Highway	E/W	San Pedro Street	Avalon Boulevard	12,171	13,300	1,129	9%	11,743	12,668	925	8%	25,968	6	6-8	54,000	0.44	0.48	0.04	No
Metro	El Segundo Boulevard	Major Highway	E/W	Avalon Boulevard	Central Avenue	10,098	10,725	627	6%	9,596	10,065	469	5%	20,790	6	6-8	54,000	0.36	0.39	0.02	No
Metro	El Segundo Boulevard	Major Highway	E/W	Wilmington Avenue	Metro Blue Line	5,919	6,489	570	10%	4,302	4,559	257	6%	11,048	4	6-8	54,000	0.19	0.20	0.02	No
Metro	El Segundo Boulevard	Major Highway	E/W	Metro Blue Line	Mona Boulevard	4,578	4,725	147	3%	3,443	3,561	118	3%	8,286	4	6-8	54,000	0.15	0.15	0.00	No
Metro	El Segundo Boulevard	Major Highway	E/W	Mona Boulevard	Alameda Street	7,893	8,632	739	9%	6,397	7,214	817	13%	15,846	4	6-8	54,000	0.26	0.29	0.03	No
Metro	Rosecrans Avanue	Major Highway	E/W	Figueroa Street	Broadway	12,025	13,005	980	8%	11,620	12,386	766	7%	25,391	6	6-8	54,000	0.44	0.47	0.03	No
Metro	Rosecrans Avanue	Major Highway	E/W	Broadway	Main Street	11,414	12,328	914	8%	11,390	12,015	625	5%	24,343	6	6-8	54,000	0.42	0.45	0.03	No
Metro	Rosecrans Avanue	Major Highway	E/W	Main Street	San Pedro Street	13,545	14,318	773	6%	13,272	13,928	656	5%	28,246	6	6-8	54,000	0.50	0.52	0.03	No
Metro	Rosecrans Avanue	Major Highway	E/W	San Pedro Street	Avalon Boulevard	12,300	13,409	1,109	9%	12,193	13,251	1,058	9%	26,660	6	6-8	54,000	0.45	0.49	0.04	No
Metro	Rosecrans Avanue	Major Highway	E/W	Avalon Boulevard	Stanford Avenue	13,379	14,669	1,290	10%	13,256	14,378	1,122	8%	29,047	6	6-8	54,000	0.49	0.54	0.04	No
Metro	Rosecrans Avanue	Major Highway	E/W	Stanford Avenue	Central Avenue	12,174	13,103	929	8%	12,462	13,336	874	7%	26,439	6	6-8	54,000	0.46	0.49	0.03	No
Metro	Compton Avenue	Secondary Highway	N/S	Slauson Avenue	Gage Avenue	9,178	9,322	144	2%	9,295	9,416	121	1%	18,738	4	4	36,000	0.51	0.52	0.01	No
Metro	Compton Avenue	Secondary Highway	N/S	Gage Avenue	71st Street	6,737	6,810	73	1%	6,916	6,870	-46	-1%	13,680	4	4	36,000	0.38	0.38	0.00	No
Metro	Compton Avenue	Secondary Highway	N/S	Florence Avenue	Nadeau Street	7,074	6,678	-396	-6%	6,208	5,832	-376	-6%	12,510	4	4	36,000	0.37	0.35	-0.02	No

5. Environmental Analysis
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Table 5.16-5 Future 2035 vs. 2035 Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound				Southbound/Eastbound				2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth								
Metro	Compton Avenue	Secondary Highway	N/S	Nadeau Street	Manchester Avenue	4,678	4,572	-106	-2%	4,107	4,134	27	1%	8,706	4	4	36,000	0.24	0.24	0.00	No
Metro	Compton Avenue	Secondary Highway	N/S	Manchester Avenue	92nd Street	3,951	4,243	292	7%	3,222	3,587	365	11%	7,830	4	4	36,000	0.20	0.22	0.02	No
Metro	Compton Avenue	Secondary Highway	N/S	I-105 Freeway	120th Street	3,308	3,406	98	3%	5,044	4,983	-61	-1%	8,389	4	4	36,000	0.23	0.23	0.00	No
Metro	Compton Avenue	Secondary Highway	N/S	120th Street	El Segundo Boulevard	1,879	2,227	348	19%	1,931	1,957	26	1%	4,184	4	4	36,000	0.11	0.12	0.01	No
Metro	Manchester Avenue	Major Highway	E/W	Central Avenue	Hooper Avenue	16,165	16,241	76	0%	15,981	15,858	-123	-1%	32,099	4	6-8	54,000	0.60	0.59	0.00	No
Metro	Firestone Boulevard	Major Highway	E/W	Central Avenue	Compton Avenue	8,935	9,431	496	6%	8,918	9,312	394	4%	18,743	4	6-8	54,000	0.33	0.35	0.02	No
Metro	Firestone Boulevard	Major Highway	E/W	Compton Avenue	Maie Avenue	13,778	13,649	-129	-1%	14,125	13,910	-215	-2%	27,559	4	6-8	54,000	0.52	0.51	-0.01	No
Metro	Firestone Boulevard	Major Highway	E/W	Maie Avenue	Metro Blue Line	13,544	13,620	76	1%	13,895	13,960	65	0%	27,580	4	6-8	54,000	0.51	0.51	0.00	No
Metro	Firestone Boulevard	Major Highway	E/W	Metro Blue Line	Holmes Avenue	13,490	13,458	-32	0%	13,787	13,776	-11	0%	27,234	4	6-8	54,000	0.51	0.50	0.00	No
Metro	Firestone Boulevard	Major Highway	E/W	Holmes Avenue	Walnut Drive	15,329	15,432	103	1%	15,373	15,522	149	1%	30,954	4	6-8	54,000	0.57	0.57	0.00	No
Metro	Firestone Boulevard	Major Highway	E/W	Walnut Drive	Ivy Street	9,871	10,043	172	2%	10,363	10,597	234	2%	20,640	4	6-8	54,000	0.37	0.38	0.01	No
Metro	Firestone Boulevard	Major Highway	E/W	Ivy Street	Alameda Street	12,396	12,443	47	0%	12,865	13,015	150	1%	25,458	4	6-8	54,000	0.47	0.47	0.00	No
Metro	Wilminton Avenue	Major Highway	N/S	I-105 Eastbound offramp	120th Street	14,170	15,285	1,115	8%	14,331	15,568	1,237	9%	30,853	6	6-8	54,000	0.53	0.57	0.04	No
Metro	Wilminton Avenue	Major Highway	N/S	120th Street	124th Street	8,805	9,448	643	7%	7,944	9,061	1,117	14%	18,509	4	6-8	54,000	0.31	0.34	0.03	No
Metro	Wilminton Avenue	Major Highway	N/S	124th Street	El Segundo Boulevard	8,820	9,656	836	9%	6,954	7,880	926	13%	17,536	4	6-8	54,000	0.29	0.32	0.03	No
Metro	Florence Avenue	Major Highway	E/W	Clovis Avenue	Central Avenue	19,530	20,338	808	4%	19,931	20,422	491	2%	40,760	6	6-8	54,000	0.73	0.75	0.02	No
Metro	Florence Avenue	Major Highway	E/W	Central Avenue	Compton Avenue	12,662	13,061	399	3%	12,681	13,111	430	3%	26,172	6	6-8	54,000	0.47	0.48	0.02	No
Metro	Florence Avenue	Major Highway	E/W	Compton Avenue	Maie Avenue	12,990	13,522	532	4%	14,731	15,129	398	3%	28,651	4	6-8	54,000	0.51	0.53	0.02	No
Metro	Florence Avenue	Major Highway	E/W	Maie Avenue	Holmes Avenue	15,141	15,519	378	2%	13,527	14,009	482	4%	29,528	4	6-8	54,000	0.53	0.55	0.02	No
Metro	Florence Avenue	Major Highway	E/W	Holmes Avenue	Walnut Drive	14,408	14,896	488	3%	13,228	13,809	581	4%	28,705	4	6-8	54,000	0.51	0.53	0.02	No
Metro	Florence Avenue	Major Highway	E/W	Walnut Drive	Wilmington Avenue	18,662	19,059	397	2%	18,154	18,701	547	3%	37,760	4	6-8	54,000	0.68	0.70	0.02	No
Metro	Florence Avenue	Major Highway	E/W	Wilmington Avenue	Alameda Street	15,803	15,474	-329	-2%	15,522	15,276	-246	-2%	30,750	4	6-8	54,000	0.58	0.57	-0.01	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Florence Avenue	Major Highway	E/W	Alameda Street	Santa Fe Avenue	17,382	18,225	843	5%	16,793	17,774	981	6%	35,999	4	6-8	54,000	0.63	0.67	0.03	No
Metro	Florence Avenue	Major Highway	E/W	Santa Fe Avenue	Pacific Boulevard	17,782	17,974	192	1%	17,614	17,804	190	1%	35,778	4	6-8	54,000	0.66	0.66	0.01	No
Metro	Florence Avenue	Major Highway	E/W	Pacific Boulevard	Seville Avenue	15,467	15,754	287	2%	15,211	15,446	235	2%	31,200	4	6-8	54,000	0.57	0.58	0.01	No
Metro	Florence Avenue	Major Highway	E/W	Seville Avenue	Stafford Avenue	14,094	14,366	272	2%	13,752	14,018	266	2%	28,384	4	6-8	54,000	0.52	0.53	0.01	No
Metro	Florence Avenue	Major Highway	E/W	Stafford Avenue	Soto Street	15,932	16,065	133	1%	15,570	15,706	136	1%	31,771	4	6-8	54,000	0.58	0.59	0.00	No
Metro	Florence Avenue	Major Highway	E/W	Soto Street	Mountian View Avenue	20,364	20,396	32	0%	20,399	20,377	-22	0%	40,773	4	6-8	54,000	0.75	0.76	0.00	No
Metro	Redondo Beach Boulevard	Major Highway	E/W	Figueroa Street	Broadway	10,446	11,017	571	5%	10,125	10,719	594	6%	21,736	4	6-8	54,000	0.38	0.40	0.02	No
Metro	Redondo Beach Boulevard	Major Highway	E/W	Broadway	Main Street	8,912	9,482	570	6%	8,705	9,241	536	6%	18,723	4	6-8	54,000	0.33	0.35	0.02	No
Metro	Redondo Beach Boulevard	Major Highway	E/W	Main Street	San Pedro Street	3,702	4,046	344	9%	3,527	3,835	308	9%	7,881	4	6-8	54,000	0.13	0.15	0.01	No
Metro	Redondo Beach Boulevard	Major Highway	E/W	San Pedro Street	Avalon Boulevard	3,567	3,929	362	10%	3,318	3,647	329	10%	7,576	4	6-8	54,000	0.13	0.14	0.01	No
Metro	Redondo Beach Boulevard	Major Highway	E/W	Avalon Boulevard	Compton Boulevard	3,732	3,898	166	4%	3,478	3,617	139	4%	7,515	4	6-8	54,000	0.13	0.14	0.01	No
Metro	Compton Boulevard	Secondary Highway	E/W	Figueroa Street	Broadway	3,152	3,603	451	14%	3,267	3,565	298	9%	7,168	4	4	36,000	0.18	0.20	0.02	No
Metro	Compton Boulevard	Secondary Highway	E/W	Broadway	Main Street	7,550	8,080	530	7%	7,129	7,675	546	8%	15,755	4	4	36,000	0.41	0.44	0.03	No
Metro	Compton Boulevard	Secondary Highway	E/W	Main Street	San Pedro Street	98	177	79	81%	68	176	108	159%	353	4	4	36,000	0.00	0.01	0.01	No
Metro	Compton Boulevard	Secondary Highway	E/W	San Pedro Street	Avalon Boulevard	3,746	4,122	376	10%	3,773	4,126	353	9%	8,248	4	4	36,000	0.21	0.23	0.02	No
Metro	Compton Boulevard	Secondary Highway	E/W	Avalon Boulevard	Stanford Avenue	2,364	2,487	123	5%	2,429	2,525	96	4%	5,012	4	4	36,000	0.13	0.14	0.01	No
Metro	135th Street	Secondary Highway	E/W	Figueroa Street	Broadway	2,456	2,895	439	18%	3,651	4,127	476	13%	7,022	4	4	36,000	0.17	0.20	0.03	No
Metro	135th Street	Secondary Highway	E/W	Broadway	Main Street	2,977	3,560	583	20%	3,473	4,055	582	17%	7,615	4	4	36,000	0.18	0.21	0.03	No
Metro	135th Street	Secondary Highway	E/W	Main Street	San Pedro Street	1,752	2,140	388	22%	1,954	2,283	329	17%	4,423	4	4	36,000	0.10	0.12	0.02	No
Metro	135th Street	Secondary Highway	E/W	San Pedro Street	Avalon Boulevard	765	1,001	236	31%	892	1,181	289	32%	2,182	4	4	36,000	0.05	0.06	0.01	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Main Street	Major Highway	N/S	120th Street	124th Street	5,267	5,799	532	10%	5,537	5,982	445	8%	11,781	4	6-8	54,000	0.20	0.22	0.02	No
Metro	Main Street	Major Highway	N/S	124th Street	El Segundo Boulevard	3,556	3,990	434	12%	3,539	3,879	340	10%	7,869	4	6-8	54,000	0.13	0.15	0.01	No
Metro	Main Street	Major Highway	N/S	El Segundo Boulevard	135th Street	4,765	5,119	354	7%	4,508	4,807	299	7%	9,926	4	6-8	54,000	0.17	0.18	0.01	No
Metro	Main Street	Major Highway	N/S	135th Street	Rosecrans Avenue	2,457	2,546	89	4%	2,581	2,744	163	6%	5,290	4	6-8	54,000	0.09	0.10	0.00	No
Metro	Main Street	Major Highway	N/S	Rosecrans Avenue	Compton Boulevard	6,752	7,273	521	8%	7,096	7,530	434	6%	14,803	4	6-8	54,000	0.26	0.27	0.02	No
Metro	Main Street	Major Highway	N/S	Compton Boulevard	Redondo Beach Boulevard	2,052	2,171	119	6%	2,348	2,412	64	3%	4,583	4	6-8	54,000	0.08	0.08	0.00	No
Metro	Main Street	Major Highway	N/S	Redondo Beach Boulevard	Alondra Boulevard	2,714	2,879	165	6%	2,616	2,731	115	4%	5,610	4	6-8	54,000	0.10	0.10	0.01	No
Metro	San Perdro Street	Secondary Highway	N/S	120th Street	124th Street	1,440	1,758	318	22%	1,255	1,538	283	23%	3,296	4	4	36,000	0.07	0.09	0.02	No
Metro	San Perdro Street	Secondary Highway	N/S	124th Street	El Segundo Boulevard	860	1,115	255	30%	724	946	222	31%	2,061	4	4	36,000	0.04	0.06	0.01	No
Metro	San Perdro Street	Secondary Highway	N/S	El Segundo Boulevard	135th Street	3,296	3,720	424	13%	3,062	3,394	332	11%	7,114	4	4	36,000	0.18	0.20	0.02	No
Metro	San Perdro Street	Secondary Highway	N/S	135th Street	Rosecrans Avenue	2,682	2,974	292	11%	2,641	2,773	132	5%	5,747	4	4	36,000	0.15	0.16	0.01	No
Metro	San Perdro Street	Secondary Highway	N/S	Rosecrans Avenue	Compton Boulevard	5,889	6,300	411	7%	5,800	5,959	159	3%	12,259	4	4	36,000	0.32	0.34	0.02	No
Metro	San Perdro Street	Secondary Highway	N/S	Compton Boulevard	Redondo Beach Boulevard	4,714	5,058	344	7%	4,753	4,904	151	3%	9,962	4	4	36,000	0.26	0.28	0.01	No
Metro	San Perdro Street	Secondary Highway	N/S	Redondo Beach Boulevard	Alavon Boulevard	6,526	6,969	443	7%	7,280	7,543	263	4%	14,512	4	4	36,000	0.38	0.40	0.02	No
Metro	Avalon Boulevard	Major Highway	N/S	120th Street	124th Street	4,131	4,495	364	9%	4,049	4,358	309	8%	8,853	4	6-8	54,000	0.15	0.16	0.01	No
Metro	Avalon Boulevard	Major Highway	N/S	124th Street	El Segundo Boulevard	4,128	4,492	364	9%	4,049	4,358	309	8%	8,850	4	6-8	54,000	0.15	0.16	0.01	No
Metro	Avalon Boulevard	Major Highway	N/S	El Segundo Boulevard	135th Street	3,154	3,439	285	9%	3,161	3,340	179	6%	6,779	4	6-8	54,000	0.12	0.13	0.01	No
Metro	Avalon Boulevard	Major Highway	N/S	135th Street	Rosecrans Avenue	3,905	4,373	468	12%	3,906	4,292	386	10%	8,665	4	6-8	54,000	0.14	0.16	0.02	No
Metro	Avalon Boulevard	Major Highway	N/S	Rosecrans Avenue	Compton Boulevard	4,183	4,401	218	5%	4,200	4,454	254	6%	8,855	4	6-8	54,000	0.16	0.16	0.01	No
Metro	Avalon Boulevard	Major Highway	N/S	Compton Boulevard	Redondo Beach Boulevard	3,926	4,542	616	16%	3,972	4,650	678	17%	9,192	4	6-8	54,000	0.15	0.17	0.02	No
Metro	Avalon Boulevard	Major Highway	N/S	Redondo Beach Boulevard	San Pedro Street	4,086	4,512	426	10%	4,136	4,619	483	12%	9,131	4	6-8	54,000	0.15	0.17	0.02	No
Metro	Avalon Boulevard	Major Highway	N/S	San Pedro Street	Alondra Boulevard	10,612	11,481	869	8%	11,417	12,162	745	7%	23,643	6	6-8	54,000	0.41	0.44	0.03	No
Metro	120th Street	Secondary Highway	E/W	Van Ness Avenue	Western Avenue	10,930	11,610	680	6%	9,602	10,340	738	8%	21,950	4	4	36,000	0.57	0.61	0.04	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	120st Street	Secondary Highway	E/W	Western Avenue	Normandie Avenue	6,981	7,483	502	7%	6,632	7,185	553	8%	14,668	4	4	36,000	0.38	0.41	0.03	No
Metro	120nd Street	Secondary Highway	E/W	Normandie Avenue	Vermont Avenue	5,763	6,092	329	6%	5,307	5,625	318	6%	11,717	4	4	36,000	0.31	0.33	0.02	No
Metro	120rd Street	Secondary Highway	E/W	Central Avenue	Success Avenue	3,693	3,760	67	2%	3,529	3,602	73	2%	7,362	4	4	36,000	0.20	0.20	0.00	No
Metro	120th Street	Secondary Highway	E/W	Success Avenue	Compton Avenue	1,134	1,348	214	19%	1,188	1,320	132	11%	2,668	4	4	36,000	0.06	0.07	0.01	No
Metro	120th Street	Secondary Highway	E/W	Compton Avenue	Wilmington Avenue	1,853	2,071	218	12%	1,881	2,013	132	7%	4,084	4	4	36,000	0.10	0.11	0.01	No
Metro	120th Street	Secondary Highway	E/W	Wilmington Avenue	Metro Blue Line	6,072	7,738	1,666	27%	9,046	10,480	1,434	16%	18,218	2	4	36,000	0.42	0.51	0.09	No
Metro	120th Street	Secondary Highway	E/W	Metro Blue Line	Mona Boulevard	125	119	-6	-5%	124	124	0	0%	243	2	4	36,000	0.01	0.01	0.00	No
Metro	Imperial Highway	Major Highway	E/W	Van Ness Avenue	Western Avenue	9,648	10,136	488	5%	8,904	9,182	278	3%	19,318	6	6-8	54,000	0.34	0.36	0.01	No
Metro	Imperial Highway	Major Highway	E/W	Western Avenue	Normandie Avenue	16,492	17,080	588	4%	14,828	15,187	359	2%	32,267	6	6-8	54,000	0.58	0.60	0.02	No
Metro	Imperial Highway	Major Highway	E/W	Normandie Avenue	Vermont Avenue	16,189	17,093	904	6%	14,374	15,184	810	6%	32,277	6	6-8	54,000	0.57	0.60	0.03	No
Metro	Century Boulevard	Major Highway	E/W	Van Ness Avenue	Western Avenue	17,301	18,386	1,085	6%	16,645	17,525	880	5%	35,911	6	6-8	54,000	0.63	0.67	0.04	No
Metro	Century Boulevard	Major Highway	E/W	Western Avenue	Normandie Avenue	14,665	15,707	1,042	7%	14,809	15,494	685	5%	31,201	4	6-8	54,000	0.55	0.58	0.03	No
Metro	Gage Avenue	Secondary Highway	E/W	Central Avenue	Hooper Avenue	11,678	12,182	504	4%	12,766	13,074	308	2%	25,256	4	4	36,000	0.68	0.70	0.02	No
Metro	Gage Avenue	Secondary Highway	E/W	Hooper Avenue	Compton Avenue	11,392	11,658	266	2%	12,180	12,187	7	0%	23,845	4	4	36,000	0.65	0.66	0.01	No
Metro	Gage Avenue	Secondary Highway	E/W	Compton Avenue	Metro Blue Line	12,078	12,165	87	1%	12,385	12,467	82	1%	24,632	4	4	36,000	0.68	0.68	0.00	No
Metro	Gage Avenue	Secondary Highway	E/W	Holmes Avenue	Wilmington Avenue	12,645	12,905	260	2%	12,781	12,978	197	2%	25,883	4	4	36,000	0.71	0.72	0.01	No
Metro	Long Beach Boulevard	Major Highway	N/S	Florence Avenue	Broadway	4,968	5,165	197	4%	5,329	5,572	243	5%	10,737	4	6-8	54,000	0.19	0.20	0.01	No
Metro	Santa Fe Avenue	Major Highway	N/S	Florence Avenue	Nadeau Street	10,384	10,222	-162	-2%	11,036	10,962	-74	-1%	21,184	4	6-8	54,000	0.40	0.39	0.00	No
Metro	Santa Fe Avenue	Major Highway	N/S	Nadeau Street	Broadway	14,618	15,683	1,065	7%	15,124	16,324	1,200	8%	32,007	4	6-8	54,000	0.55	0.59	0.04	No
Metro	Santa Fe Avenue	Major Highway	N/S	Broadway	Sale Place	5,923	6,073	150	3%	6,460	6,737	277	4%	12,810	4	6-8	54,000	0.23	0.24	0.01	No
Metro	Santa Fe Avenue	Major Highway	N/S	Sale Place	Firestone Boulevard	5,619	5,983	364	6%	5,120	5,809	689	13%	11,792	4	6-8	54,000	0.20	0.22	0.02	No
Metro	Nadeau Street	Secondary Highway	E/W	Central Avenue	Hooper Avenue	2,072	2,242	170	8%	2,722	2,897	175	6%	5,139	4	4	36,000	0.13	0.14	0.01	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound				Southbound/Eastbound				2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth								
Metro	Nadeau Street	Secondary Highway	E/W	Hooper Avenue	Compton Avenue	6,700	7,629	929	14%	6,948	7,957	1,009	15%	15,586	4	4	36,000	0.38	0.43	0.05	No
Metro	Nadeau Street	Secondary Highway	E/W	Compton Avenue	Maie Avenue	7,822	8,566	744	10%	7,952	8,695	743	9%	17,261	4	4	36,000	0.44	0.48	0.04	No
Metro	Nadeau Street	Secondary Highway	E/W	Maie Avenue	Walnut Drive	8,487	9,215	728	9%	8,573	9,273	700	8%	18,488	4	4	36,000	0.47	0.51	0.04	No
Metro	Nadeau Street	Secondary Highway	E/W	Walnut Drive	Bell Avenue	10,259	10,948	689	7%	10,074	10,679	605	6%	21,627	4	4	36,000	0.56	0.60	0.04	No
Metro	Nadeau Street	Secondary Highway	E/W	Bell Avenue	Crockett Boulevard	7,402	7,400	-2	0%	7,574	7,545	-29	0%	14,945	4	4	36,000	0.42	0.42	0.00	No
Metro	Nadeau Street	Secondary Highway	E/W	Crockett Boulevard	Alameda Street	8,661	8,786	125	1%	8,594	8,597	3	0%	17,383	4	4	36,000	0.48	0.48	0.00	No
Metro	Nadeau Street	Secondary Highway	E/W	Alameda Street	Santa Fe Avenue	17,306	18,312	1,006	6%	17,126	18,103	977	6%	36,415	4	4	36,000	0.96	1.01	0.06	Yes
Metro	Hooper Avenue	Secondary Highway	N/S	Slauson Avenue	Gage Avenue	6,261	6,692	431	7%	6,237	6,463	226	4%	13,155	4	4	36,000	0.35	0.37	0.02	No
Metro	Hooper Avenue	Secondary Highway	N/S	Gage Avenue	Florence Avenue	2,548	2,588	40	2%	2,718	2,682	-36	-1%	5,270	2	4	36,000	0.15	0.15	0.00	No
Metro	Hooper Avenue	Secondary Highway	N/S	Florence Avenue	Nadeau Street	5,520	5,484	-36	-1%	5,358	5,256	-102	-2%	10,740	4	4	36,000	0.30	0.30	0.00	No
Metro	Hooper Avenue	Secondary Highway	N/S	Nadeau Street	Manchester Avenue	5,430	6,189	759	14%	5,306	6,020	714	13%	12,209	4	4	36,000	0.30	0.34	0.04	No
Metro	Central Avenue	Secondary Highway	N/S	Manchester Avenue	92nd Street	5,229	5,348	119	2%	5,857	6,134	277	5%	11,482	4	4	36,000	0.31	0.32	0.01	No
Metro	N Eastern Avenue	Secondary Highway	N/S	City Terrace Drive	Floral Drive	10,627	9,896	-731	-7%	11,132	9,982	-1,150	-10%	19,878	4	4	36,000	0.60	0.55	-0.05	No
Metro	N Eastern Avenue	Secondary Highway	N/S	Floral Drive	Cesar Chavez Avenue	8,540	8,473	-67	-1%	8,790	8,923	133	2%	17,396	4	4	36,000	0.48	0.48	0.00	No
Metro	N Eastern Avenue	Secondary Highway	N/S	Cesar Chavez Avenue	1st Street	9,469	10,912	1,443	15%	8,743	10,068	1,325	15%	20,980	4	4	36,000	0.51	0.58	0.08	No
Metro	N Eastern Avenue	Secondary Highway	N/S	1st Street	SR-60 Freeway	9,042	10,875	1,833	20%	9,099	10,698	1,599	18%	21,573	4	4	36,000	0.50	0.60	0.10	No
Metro	N Eastern Avenue	Secondary Highway	N/S	SR-60 Freeway	Eagle Street	7,760	8,979	1,219	16%	8,794	9,384	590	7%	18,363	4	4	36,000	0.46	0.51	0.05	No
Metro	N Eastern Avenue	Secondary Highway	N/S	Eagle Street	Whittier Boulevard	7,760	8,977	1,217	16%	9,862	10,507	645	7%	19,484	4	4	36,000	0.49	0.54	0.05	No
Metro	N Eastern Avenue	Secondary Highway	N/S	Whittier Boulevard	I-710 Freeway South offramp	8,351	10,491	2,140	26%	12,693	14,092	1,399	11%	24,583	4	4	36,000	0.58	0.68	0.10	No
Metro	N Eastern Avenue	Secondary Highway	N/S	I-710 Freeway South offramp	Olympic Boulevard	9,207	10,974	1,767	19%	9,912	10,570	658	7%	21,544	4	4	36,000	0.53	0.60	0.07	No
Metro	N Eastern Avenue	Secondary Highway	N/S	Olympic Boulevard	Triggs Street	10,930	10,473	-457	-4%	9,338	9,927	589	6%	20,400	4	4	36,000	0.56	0.57	0.00	No
Metro	Atlantic Boulevard	Major Highway	N/S	3rd Street/Pomona Boulevard	Beverly Boulevard	14,456	15,321	865	6%	13,785	14,181	396	3%	29,502	4	6-8	54,000	0.52	0.55	0.02	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Atlantic Boulevard	Major Highway	N/S	Beverly Boulevard	Whittier Boulevard	12,614	13,513	899	7%	12,563	13,159	596	5%	26,672	4	6-8	54,000	0.47	0.49	0.03	No
Metro	Atlantic Boulevard	Major Highway	N/S	Whittier Boulevard	Olympic Boulevard	13,536	14,223	687	5%	13,350	13,620	270	2%	27,843	6	6-8	54,000	0.50	0.52	0.02	No
Metro	Atlantic Boulevard	Major Highway	N/S	Olympic Boulevard	Ferguson Drive	8,507	8,690	183	2%	8,795	8,682	-113	-1%	17,372	2	6-8	54,000	0.32	0.32	0.00	No
Metro	Floral Drive	Secondary Highway	E/W	Eastern Avenue	Humphreys Avenue	6,496	6,827	331	5%	6,746	6,805	59	1%	13,632	2	4	36,000	0.37	0.38	0.01	No
Metro	Floral Drive	Secondary Highway	E/W	Humphrey's Avenue	Ford Boulevard	6,502	6,587	85	1%	5,877	6,485	608	10%	13,072	2	4	36,000	0.34	0.36	0.02	No
Metro	Floral Drive	Secondary Highway	E/W	Ford Boulevard	Corporate Center Drive	5,573	5,883	310	6%	5,178	5,506	328	6%	11,389	2	4	36,000	0.30	0.32	0.02	No
Metro	Floral Drive	Secondary Highway	E/W	Corporate Center Drive	Mednik Avenue	3,070	3,486	416	14%	2,541	2,571	30	1%	6,057	4	4	36,000	0.16	0.17	0.01	No
Metro	Floral Drive	Secondary Highway	E/W	Mednik Avenue	Bleakwood Avenue	2,504	2,515	11	0%	2,700	2,684	-16	-1%	5,199	2	4	36,000	0.14	0.14	0.00	No
Metro	Cesar Chavez Avenue	Secondary Highway	E/W	Indiana Street	Rowan Avenue	7,949	8,407	458	6%	7,786	8,326	540	7%	16,733	4	4	36,000	0.44	0.46	0.03	No
Metro	Cesar Chavez Avenue	Secondary Highway	E/W	Rowan Avenue	Gage Avenue	7,593	7,812	219	3%	7,215	7,558	343	5%	15,370	4	4	36,000	0.41	0.43	0.02	No
Metro	Cesar Chavez Avenue	Secondary Highway	E/W	Gage Avenue	Hazard Avenue	10,764	11,537	773	7%	10,396	11,287	891	9%	22,824	4	4	36,000	0.59	0.63	0.05	No
Metro	Cesar Chavez Avenue	Secondary Highway	E/W	Hazard Avenue	Eastern Avenue	14,913	16,854	1,941	13%	14,930	16,929	1,999	13%	33,783	4	4	36,000	0.83	0.94	0.11	No
Metro	Cesar Chavez Avenue	Secondary Highway	E/W	Eastern Avenue	Humphreys Avenue	15,711	16,912	1,201	8%	17,097	18,594	1,497	9%	35,506	4	4	36,000	0.91	0.99	0.07	No
Metro	Cesar Chavez Avenue	Secondary Highway	E/W	Humphrey's Avenue	Ford Boulevard	14,495	16,046	1,551	11%	12,566	14,078	1,512	12%	30,124	4	4	36,000	0.75	0.84	0.09	No
Metro	Cesar Chavez Avenue	Secondary Highway	E/W	Ford Boulevard	Mednik Avenue	11,474	12,475	1,001	9%	11,380	12,611	1,231	11%	25,086	4	4	36,000	0.63	0.70	0.06	No
Metro	Cesar Chavez Avenue	Secondary Highway	E/W	Mednik Avenue	Bleakwood Avenue	5,125	5,393	268	5%	5,410	5,784	374	7%	11,177	4	4	36,000	0.29	0.31	0.02	No
Metro	1st Street	Secondary Highway	E/W	Indiana Street	Rowan Avenue	4,163	4,857	694	17%	4,677	5,190	513	11%	10,047	4	4	36,000	0.25	0.28	0.03	No
Metro	1st Street	Secondary Highway	E/W	Rowan Avenue	Gage Avenue	4,073	4,857	784	19%	4,891	5,438	547	11%	10,295	4	4	36,000	0.25	0.29	0.04	No
Metro	1st Street	Secondary Highway	E/W	Gage Avenue	Eastern Avenue	4,809	6,159	1,350	28%	5,412	6,708	1,296	24%	12,867	4	4	36,000	0.28	0.36	0.07	No
Metro	1st Street	Secondary Highway	E/W	Eastern Avenue	Humphreys Avenue	6,109	7,017	908	15%	5,929	6,900	971	16%	13,917	4	4	36,000	0.33	0.39	0.05	No
Metro	1st Street	Secondary Highway	E/W	Ford Boulevard	Mednik Avenue	6,847	7,759	912	13%	7,764	9,094	1,330	17%	16,853	4	4	36,000	0.41	0.47	0.06	No
Metro	1st Street	Secondary Highway	E/W	Mednik Avenue	Bleakwood Avenue	1,698	2,010	312	18%	1,820	1,990	170	9%	4,000	2	4	36,000	0.10	0.11	0.01	No

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.16-5 Future 2035 vs. 2035 Plus Project

Planning Area	Street Name	Classification	Direction	Street Limits		Northbound/Westbound				Southbound/Eastbound				2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
				From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth								
Metro	3rd Street	Major Highway	E/W	Indiana Street	Rowan Avenue	10,370	10,291	-79	-1%	12,255	12,093	-162	-1%	22,384	4	6-8	54,000	0.42	0.41	0.00	No
Metro	3rd Street	Major Highway	E/W	Rowan Avenue	Gage Avenue	8,614	8,362	-252	-3%	10,806	10,820	14	0%	19,182	4	6-8	54,000	0.36	0.36	0.00	No
Metro	3rd Street	Major Highway	E/W	Gage Avenue	Sunol Drive	12,552	13,931	1,379	11%	9,041	9,831	790	9%	23,762	4	6-8	54,000	0.40	0.44	0.04	No
Metro	3rd Street	Major Highway	E/W	Sunol Drive	Eastern Avenue	7,985	9,514	1,529	19%	9,733	10,992	1,259	13%	20,506	4	6-8	54,000	0.33	0.38	0.05	No
Metro	3rd Street	Major Highway	E/W	Eastern Avenue	Humphreys Avenue	5,116	5,746	630	12%	6,478	7,500	1,022	16%	13,246	4	6-8	54,000	0.21	0.25	0.03	No
Metro	3rd Street	Major Highway	E/W	Ford Boulevard	Mednik Avenue	5,056	5,207	151	3%	6,141	6,283	142	2%	11,490	2	6-8	54,000	0.21	0.21	0.01	No
Metro	3rd Street	Major Highway	E/W	Mednik Avenue	Beverly Boulevard	17,929	19,270	1,341	7%	20,431	21,447	1,016	5%	40,717	6	6-8	54,000	0.71	0.75	0.04	No
Metro	3rd Street	Major Highway	E/W	Beverly Boulevard	Atlantic Boulevard	6,115	6,635	520	9%	8,436	8,723	287	3%	15,358	6	6-8	54,000	0.27	0.28	0.01	No
Metro	3rd Street	Major Highway	E/W	Atlantic Boulevard	Hillview Avenue	11,106	11,730	624	6%	7,054	7,532	478	7%	19,262	4	6-8	54,000	0.34	0.36	0.02	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Indiana Street	Ditman Avenue	13,921	15,009	1,088	8%	9,355	10,415	1,060	11%	25,424	4	4	36,000	0.65	0.71	0.06	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Ditman Avenue	Rowan Avenue	3,539	4,085	546	15%	6,839	7,018	179	3%	11,103	4	4	36,000	0.29	0.31	0.02	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Rowan Avenue	Sunol Drive	5,034	5,530	496	10%	7,902	7,786	-116	-1%	13,316	4	4	36,000	0.36	0.37	0.01	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Sunol Drive	Eastern Avenue	7,799	9,982	2,183	28%	10,400	12,328	1,928	19%	22,310	4	4	36,000	0.51	0.62	0.11	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Ford Boulevard	Arizona Avenue	10,277	11,980	1,703	17%	10,332	11,751	1,419	14%	23,731	4	4	36,000	0.57	0.66	0.09	No
Metro	Whittier Boulevard	Secondary Highway	E/W	Arizona Avenue	Atlantic Boulevard	6,998	7,948	950	14%	7,069	7,922	853	12%	15,870	4	4	36,000	0.39	0.44	0.05	No
Metro	Whittier Boulevard	Major Highway	E/W	Atlantic Boulevard	Belden Avenue	6,229	7,516	1,287	21%	6,529	7,687	1,158	18%	15,203	4	6-8	54,000	0.24	0.28	0.05	No
Metro	Whittier Boulevard	Major Highway	E/W	Belden Avenue	Gethart Avenue	6,162	7,799	1,637	27%	6,567	8,021	1,454	22%	15,820	4	6-8	54,000	0.24	0.29	0.06	No
Metro	Whittier Boulevard	Major Highway	E/W	Gethart Avenue	Hendricks Avenue	5,826	7,382	1,556	27%	6,328	7,777	1,449	23%	15,159	4	6-8	54,000	0.23	0.28	0.06	No
Metro	Whittier Boulevard	Major Highway	E/W	Hendrick Avenue	Garfield Avenue	6,008	6,647	639	11%	6,719	7,245	526	8%	13,892	4	6-8	54,000	0.24	0.26	0.02	No
Metro	Olympic Boulevard	Major Highway	E/W	Indiana Street	Rowan Avenue	13,854	13,975	121	1%	17,198	16,986	-212	-1%	30,961	4	6-8	54,000	0.58	0.57	0.00	No
Metro	Olympic Boulevard	Major Highway	E/W	Rowan Avenue	Sunol Drive	9,159	10,108	949	10%	7,806	8,596	790	10%	18,704	4	6-8	54,000	0.31	0.35	0.03	No
Metro	Olympic Boulevard	Major Highway	E/W	Sunol Drive	Eastern Avenue	11,421	11,904	483	4%	9,224	9,810	586	6%	21,714	4	6-8	54,000	0.38	0.40	0.02	No
Metro	Olympic Boulevard	Major Highway	E/W	Ford Boulevard	Arizona Avenue	11,063	12,760	1,697	15%	13,175	14,905	1,730	13%	27,665	4	6-8	54,000	0.45	0.51	0.06	No
Metro	Olympic Boulevard	Major Highway	E/W	Arizona Avenue	Atlantic Boulevard	7,470	8,891	1,421	19%	9,226	10,679	1,453	16%	19,570	4	6-8	54,000	0.31	0.36	0.05	No

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Metro	Olympic Boulevard	Major Highway	E/W	Atlantic Boulevard	Goodrich Boulevard	7,054	7,586	532	8%	8,157	8,600	443	5%	16,186	4	6-8	54,000	0.28	0.30	0.02	No
Metro	Olympic Boulevard	Major Highway	E/W	Goodrich Boulevard	Gethart Avenue	7,256	8,410	1,154	16%	7,552	8,603	1,051	14%	17,013	4	6-8	54,000	0.27	0.32	0.04	No
Metro	Olympic Boulevard	Major Highway	E/W	Gethart Avenue	Hendricks Avenue	7,256	8,410	1,154	16%	7,552	8,603	1,051	14%	17,013	4	6-8	54,000	0.27	0.32	0.04	No
Metro	Olympic Boulevard	Major Highway	E/W	Hendrick Avenue	Garfield Avenue	7,303	8,454	1,151	16%	7,499	8,594	1,095	15%	17,048	4	6-8	54,000	0.27	0.32	0.04	No
Santa Monica Mountains	Kanan Dume Road	Major Highway	N/S	Latigo Canyon Road	Pacific Coast Highway	3,987	4,896	909	23%	4,048	4,725	677	17%	9,621	2	6-8	54,000	0.15	0.18	0.03	No
Santa Monica Mountains	Kanan Dume Road	Major Highway	N/S	Mulholland Highway	Latigo Canyon Road	3,987	4,896	909	23%	4,048	4,725	677	17%	9,621	2	6-8	54,000	0.15	0.18	0.03	No
Santa Monica Mountains	Kanan Dume Road	Major Highway	N/S	Triunfo Canyon Road	Mullholland Highway	3,470	4,960	1,490	43%	3,764	5,044	1,280	34%	10,004	2	6-8	54,000	0.13	0.19	0.05	No
Santa Monica Mountains	Kanan Dume Road	Major Highway	N/S	Sierra Creek Road	Triunfo Canyon Road	9,158	10,320	1,162	13%	10,382	10,823	441	4%	21,143	2	6-8	54,000	0.36	0.39	0.03	No
Santa Monica Mountains	Kanan Dume Road	Major Highway	N/S	Troutdale Drive	Sierra Creek Road	9,134	10,224	1,090	12%	10,210	10,616	406	4%	20,840	2	6-8	54,000	0.36	0.39	0.03	No
Santa Monica Mountains	Kanan Dume Road	Major Highway	N/S	Cornell Road	Troutdale Drive	5,378	6,663	1,285	24%	6,788	7,238	450	7%	13,901	2	6-8	54,000	0.23	0.26	0.03	No
Santa Monica Mountains	Malibu Canyon Road	Major Highway	N/S	Adamson Flat/Palm Canyon Lane	Piuma Road	8,366	9,996	1,630	19%	8,269	9,591	1,322	16%	19,587	2	6-8	54,000	0.31	0.36	0.05	No
Santa Monica Mountains	Malibu Canyon Road	Major Highway	N/S	Piuma Road	Mullholland Highway	7,421	8,088	667	9%	7,759	8,541	782	10%	16,629	2	6-8	54,000	0.28	0.31	0.03	No
Santa Monica Mountains	Malibu Canyon Road	Major Highway	N/S	Mullholland Highway	Lost Hills Road	8,759	9,778	1,019	12%	8,930	9,745	815	9%	19,523	2	6-8	54,000	0.33	0.36	0.03	No
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Secondary Highway	N/S	Pacific Coast Highway	Fernwood Pacific Drive	10,500	10,608	108	1%	11,045	11,386	341	3%	21,994	2	4	36,000	0.60	0.61	0.01	No
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Secondary Highway	N/S	Fernwood Pacific Drive	Old Topanga Canyon Road	11,346	11,976	630	6%	12,449	12,884	435	3%	24,860	2	4	36,000	0.66	0.69	0.03	No
Santa Monica Mountains	Topanga Canyon Boulevard (SR-27)	Secondary Highway	N/S	Old Tapanga Canyon Road	Keller Road	5,100	6,245	1,145	22%	5,947	6,317	370	6%	12,562	2	4	36,000	0.31	0.35	0.04	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Lechusa Road	Kanan Road	4,108	6,032	1,924	47%	3,684	5,657	1,973	54%	11,689	2	4-8	44,000	0.18	0.27	0.09	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Kanan Road	Sierra Creek Road	686	1,059	373	54%	494	939	445	90%	1,998	2	4-8	44,000	0.03	0.05	0.02	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Sierra Creek Road	Troutdale Drive	857	1,266	409	48%	519	1,036	517	100%	2,302	2	4-8	44,000	0.03	0.05	0.02	No

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

Table 5.16-5 Future 2035 vs. 2035 Plus Project

				Street Limits		Northbound/Westbound				Southbound/Eastbound										
Planning Area	Street Name	Classification	Direction	From	To	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2035 No Project Model ADT	2035 With Project Model ADT	Difference	Percent Growth	2-Way Future 2035 Plus Project Model ADT	Lanes (2035 Model)	County General Plan Designated Buildout Lanes	LA County Maximum Capacity at LOS E	Future No Project Model V/C	Future 2035 Plus Project Model V/C	Difference in Model V/C	Exceeds Capacity Thresholds AND Δ ≥ 0.02 (Yes/No)
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Troutdale Drive	Lake Vista Drive	4,280	4,644	364	9%	4,275	4,597	322	8%	9,241	2	4-8	44,000	0.19	0.21	0.02	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Lake Vista Drive	Cornell Road	1,063	1,213	150	14%	1,170	1,239	69	6%	2,452	2	4-8	44,000	0.05	0.06	0.00	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Cornell Road	Udell Road	5,423	5,632	209	4%	5,683	6,211	528	9%	11,843	2	4-8	44,000	0.25	0.27	0.02	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Udell Road	Las Virgenes Road	5,423	5,632	209	4%	5,683	6,211	528	9%	11,843	2	4-8	44,000	0.25	0.27	0.02	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Las Virgenes Road	Cold Canyon Road	3,297	3,707	410	12%	3,390	3,800	410	12%	7,507	2	4-8	44,000	0.15	0.17	0.02	No
Santa Monica Mountains	Mulholland Highway	Expressway	E/W	Cold Canyon Road	Stunt Road	2,430	2,886	456	19%	2,894	4,009	1,115	39%	6,895	2	4-8	44,000	0.12	0.16	0.04	No

Impact 5.16-1: Buildout in accordance with the Proposed Project would impact levels of service on the existing roadway system. [Threshold T-1, T-2]

Impact Analysis:

Intersection Levels of Service (LOS)

Implementation of the Proposed Project is expected to result in exceeding the County CMP standard level of service (LOS E), to LOS F, along with a significant increase in V/C due to the Project, at the following locations:

Existing Plus Project

- Sepulveda Boulevard from Vermont Avenue to I-110 South off ramp (South Bay Planning Area)
- 200th Street East from Avenue G to Avenue J (Antelope Valley Planning Area)
- Pearblossom Highway (SR-138) from 131st Street E to170th Street E (Antelope Valley Planning Area)
- Henry Mayo Drive (SR-126) from Commerce Center Drive to I-5 South off ramps (Santa Clarita Valley Planning Area)
- Henry Mayo Drive (SR-126) from San Martinez Grande Canyon to Del Valle Road (Santa Clarita Valley Planning Area)
- Hacienda Boulevard from the SR-60 Freeway Eastbound ramp to Halliburton Road (East San Gabriel Valley Planning Area)
- La Cienega Boulevard from Stocker Street to Slauson Avenue (Westside Planning Area)
- Slauson Avenue from Corning Avenue to La Cienega Boulevard (Westside Planning Area)

2035 Plus Project

- Sepulveda Boulevard from Vermont Avenue to I-110 South off ramp (South Bay Planning Area)
- 200th Street East from Avenue G to Avenue J (Antelope Valley Planning Area)
- Pearblossom Highway (SR-138) from 70th Street E to Avenue T8 (Antelope Valley Planning Area)
- Pearblossom Highway (SR-138) from 131st Street E to170th Street E (Antelope Valley Planning Area)
- Pico Canyon Road from Constitution Drive to The Old Road (Santa Clarita Valley Planning Area)

- Pico Canyon Road from Stevenson Ranch Parkway to Constitution Drive (Santa Clarita Valley Planning Area)
- Henry Mayo Drive (SR-126) from Commerce Center Drive to I-5 South off ramps (Santa Clarita Valley Planning Area)
- Henry Mayo Drive (SR-126) from San Martinez Grande Canyon to Del Valle Road (Santa Clarita Valley Planning Area)
- Hacienda Boulevard from SR-60 Freeway Westbound ramp to SR-60 Freeway Eastbound ramp (East San Gabriel Valley Planning Area)
- Hacienda Boulevard from SR-60 Freeway Eastbound ramp to Halliburton Road (East San Gabriel Valley Planning Area)
- Colima Road from La Mirada Boulevard to Lambert Road (Gateway Planning Area)
- La Cienega Boulevard from Stocker Street to Slauson Avenue (Westside Planning Area)
- La Cienega Boulevard from Overhill to Slauson Avenue (Westside Planning Area)
- Slauson Avenue from Corning Avenue to La Cienega Boulevard (Westside Planning Area)
- Slauson Avenue from La Cienega Boulevard to Fairfax (Westside Planning Area)
- Slauson Avenue from Fairfax Avenue to La Brea Avenue (Westside Planning Area)
- Rosemead Boulevard from Rush Street to Town Center Drive (West San Gabriel Valley Planning Area)
- Nadeau Street from Alameda Street to Santa Fe Avenue (Metro Planning Area)

Roadway Segment Analysis

Based on the established significant impact criteria, the Proposed Project will have a significant impact if it causes a roadway segment at LOS E or F to experience a change in V/C of 0.02 or greater. Based on the results of the modeling and impact analysis, the following locations are forecast to be significantly impacted:

Roadway Segment Impacts due to Planned Growth – Existing Plus Project

- **Sepulveda Boulevard from Vermont Avenue to I-110 South off ramp (South Bay Planning Area) –** Exceeds planned by approximately 8,000 vehicles, 0.04 change in V/C (Existing plus Project V/C = 1.16) due to the Proposed Project growth.

- **200th Street East from Avenue G to Avenue J (Antelope Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 1,800 daily vehicles, 0.99 change in V/C (Existing plus Project V/C = 1.05) due to the Proposed Project growth.

- **Pearblossom Highway (SR-138) from 131st Street E to170th Street E (Antelope Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 6,600 daily vehicles, 0.67 change in V/C (Existing plus Project V/C = 1.12) due to the Proposed Project growth.

- **Henry Mayo Drive (SR-126) from Commerce Center Drive to I-5 South off ramps (Santa Clarita Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 17,000 daily vehicles, 0.60 change in V/C (Existing plus Project V/C = 1.27) due to the Proposed Project growth.

- **Henry Mayo Drive (SR-126) from San Martinez Grande Canyon to Del Valle Road (Santa Clarita Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 16,000 daily vehicles, 0.61 change in V/C (Existing plus Project V/C = 1.36) due to the Proposed Project growth.

- **Hacienda Boulevard from SR-60 Freeway Eastbound ramp to Halliburton Road (East San Gabriel Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 2,000 daily vehicles, 0.23 change in V/C (Existing plus Project V/C = 1.03) due to the Proposed Project growth.

- **La Cienega Boulevard from Stocker Street to Slauson Avenue (Westside Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 10,000 daily vehicles, 0.02 change in V/C (Existing plus Project V/C = 1.18) due to the Project growth.

- **Slauson Avenue from Corning Avenue to La Cienega Boulevard (Westside Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 7,000 daily vehicles, 0.03 change in V/C (Existing plus Project V/C = 1.13) due to the Proposed Project growth.

2035 Plus Project Impacts

- **Sepulveda Boulevard from Vermont Avenue to I-110 South off ramp (South Bay Planning Area) –** Exceeds planned by approximately 12,000 vehicles, 0.02 change in V/C (2035 plus Project V/C = 1.23) due to Proposed Project growth.

- **200th Street East from Avenue G to Avenue J (Antelope Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 3,000 daily vehicles, 0.78 change in V/C (2035 plus Project V/C = 1.00) due to the Proposed Project growth.

- **Pearblossom Highway (SR-138) from 70th Street E to Avenue T8 (Antelope Valley Planning Area) –** Exceeds planned roadway LOS E capacity by 140 daily vehicles, 0.29 change in V/C (2035 plus Project V/C = 1.00) due to the Proposed Project growth.

- **Pearblossom Highway (SR-138) from 131st Street E to170th Street E (Antelope Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 20,000 daily vehicles, 0.31 change in V/C (2035 plus Project V/C = 1.36) due to the Proposed Project growth.

- **Pico Canyon Road from Constitution Drive to The Old Road (Santa Clarita Valley Planning Area) –** Exceeds planned roadway LOS E capacity by 670 daily vehicles, 0.13 change in V/C (2035 plus Project V/C = 1.01) due to the Proposed Project growth.

- **Pico Canyon Road from Stevenson Ranch Parkway to Constitution Drive (Santa Clarita Valley Planning Area) –** Exceeds planned roadway LOS E capacity by 670 daily vehicles, 0.13 change in V/C (2035 plus Project V/C = 1.01) due to the Proposed Project growth.

- **Henry Mayo Drive (SR-126) from Commerce Center Drive to I-5 South off ramps (Santa Clarity Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 30,000 daily vehicles, 0.23 change in V/C (2035 plus Project V/C = 1.45) due to the Proposed Project growth.

- **Henry Mayo Drive (SR-126) from San Martinez Grande Canyon to Del Valle Road (Santa Clarita Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 35,000 daily vehicles, 0.21 change in V/C (2035 plus Project V/C = 1.80) due to the Proposed Project growth.

- **Hacienda Boulevard from SR-60 Freeway Westbound ramp to SR-60 Freeway Eastbound ramp (East San Gabriel Valley Planning Area) –** Exceeds planned roadway LOS E capacity by 800 daily vehicles, 0.06 change in V/C (2035 plus Project V/C = 1.02) due to the Proposed Project growth.

- **Hacienda Boulevard from SR-60 Freeway Eastbound ramp to Halliburton Road (East San Gabriel Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 4,000 daily vehicles, 0.06 change in V/C (2035 plus Project V/C = 1.07) due to the Proposed Project growth.

- **Colima Road from La Mirada Boulevard to Lambert Road (Gateway Planning Area) –** Exceeds planned roadway LOS E capacity by 40 daily vehicles, 0.03 change in V/C (2035 plus Project V/C = 1.00) due to the Proposed Project growth.

- **La Cienega Boulevard from Stocker Street to Slauson Avenue (Westside Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 14,000 daily vehicles, 0.01 change in V/C (2035 plus Project V/C = 1.26) due to the Proposed Project growth.

- **La Cienega Boulevard from Overhill Drive to Slauson Avenue (Westside Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 2,000 daily vehicles, 0.01 change in V/C (2035 plus Project V/C = 1.04) due to the Proposed Project growth.

- **Slauson Avenue from Corning Avenue to La Cienega Boulevard (Westside Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 7,000 daily vehicles, 0.03 change in V/C (2035 plus Project V/C = 1.13) due to the Proposed Project growth.

- **Slauson Avenue from La Cienega Boulevard to Fairfax (Westside Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 14,000 daily vehicles, 0.01 change in V/C (2035 plus Project V/C = 1.26) due to the Proposed Project growth.

- **Slauson Avenue from Fairfax La Brea (Westside Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 25,000 daily vehicles, 0.01 change in V/C (2035 plus Project V/C = 1.46) due to the Proposed Project growth.

- **Rosemead Boulevard from Rush Street to Town Center Drive (West San Gabriel Valley Planning Area) –** Exceeds planned roadway LOS E capacity by approximately 2,000 daily vehicles, 0.03 change in V/C (2035 plus Project V/C = 1.03) due to the Proposed Project growth.

- **Nadeau Street from Alameda Street to Santa Fe Avenue (Metro Planning Area) –** Exceeds planned roadway LOS E capacity by 400 daily vehicles, 0.05 change in V/C (2035 plus Project V/C = 1.01) due to the Proposed Project growth.

Roadway Segment Impacts Due to Proposed Highway Plan Amendments

- **110th Street West between Johnson Road and Avenue M (Antelope Valley Planning Area) –** Per the Highway Plan in the Proposed General Plan Update, 110th Street West between Johnson Road and Avenue M will be downgraded from a proposed Major Highway to a local/collector street. This roadway segment is projected to carry approximately 28,900 daily vehicles by 2035 according to the results of the model. If this segment is downgraded to a local/collector street, the projected 2035 daily volume could exceed the roadway's LOS E operating capacity (15,000 daily vehicles) by approximately 14,000 daily vehicles. Further analysis may support the classification as the model network detail in this area may be insufficient to properly assess this segment.

- **Fullerton Road between La Habra Heights City Line and Harbor Boulevard (East San Gabriel Valley Planning Area) –** Per the Highway Plan in the Proposed General Plan Update, Fullerton Road between the La Habra Heights City Line and Harbor Boulevard will be downgraded from a proposed Secondary Highway to a local/collector street. This roadway segment is projected to carry between 47,700 and 54,300 daily vehicles by 2035 according to the results of the model. If this segment is downgraded to a local/collector street, the projected 2035 daily volume could exceed the roadway's LOS E operating capacity (15,000 daily vehicles) by up to 39,000 daily vehicles. Further analysis may support the classification as the model network detail in this area may be insufficient to properly assess this segment.

- **Fullerton Road between Harbor Boulevard and Colima Road (East San Gabriel Valley Planning Area) –** Per the Highway Plan in the Proposed General Plan Update, Fullerton Road between Harbor

Boulevard and Colima Road will be downgraded from an existing and proposed Major Highway to a local/collector street. This roadway segment is projected to carry between 34,000 and 40,800 daily vehicles by 2035 according to the results of the model. If this segment is downgraded to a local/collector street, the projected 2035 daily volume could exceed the roadway's LOS E operating capacity (15,000 daily vehicles) by up to 25,800 daily vehicles. Further analysis may support the classification as the model network detail in this area may be insufficient to properly assess this segment.

- **Whites Canyon Road between Vasquez Canyon Road and Plum Canyon Road (Santa Clarita Valley Planning Area) –** Per the Highway Plan in the Proposed General Plan Update, Whites Canyon Road between Vasquez Canyon Road and Plum Canyon Road will be downgraded from a proposed Secondary Highway to a local/collector street. This roadway segment is projected to carry approximately 19,700 daily vehicles by 2035 according to the results of the model. If this segment is downgraded to a local/collector street, the projected 2035 daily volume could exceed the roadway's LOS E operating capacity (15,000 daily vehicles) by approximately 4,700 daily vehicles. Further analysis may support the classification as the model network detail in this area may be insufficient to properly assess this segment.

- **Lincoln Boulevard between Washington Boulevard and the Los Angeles City Line (Westside Planning Area) –** Per the Highway Plan in the Proposed General Plan Update, Lincoln Boulevard between Washington Boulevard and the Los Angeles City Line will be classified as six-lane Major Highway. This roadway segment is projected to carry between 45,800 and 67,200 daily vehicles by 2035 according to the results of the model. If this segment classified as a six-lane Major Highway, the projected 2035 daily volume could exceed the roadway's LOS E operating capacity (54,000 daily vehicles) by up to 13,200 daily vehicles. Further analysis may support the classification as the model network detail in this area may be insufficient to properly assess this segment.

IMPACT 5.16-2: Implementation of the Proposed Project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. [Threshold T-3]

Impact Analysis: The Proposed Project will result in a significant impact to air traffic patterns if it causes an increase in air traffic levels or introduce incompatible land uses. The Proposed Project will not result in the development of a new airport within Los Angeles County nor will it introduce new land uses that could prevent safety hazards to air traffic. The Proposed Project has policies aimed at improving the compatibility between aviation facilities and their surroundings, encouraging greater multi-modal access to airports and encouraging the development of a decentralized system of major airports.

IMPACT 5.16-3: Implementation of the Proposed Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). [Threshold T-4]

Impact Analysis: The Proposed Project promotes highways to be built to specific standards that have been set by the County. These include increasing the number of lanes on major highways and other improvements under the Highway Plan. Hazards due to roadway design features will be evaluated on a project-by-project

basis as the buildout of the Proposed Project occurs. All new highways and upgrades will be planned, designed and built to County standards.

The County periodically monitors levels of service, traffic accident patterns, and physical conditions of the existing street system, and upgrade roadways as needed. Additionally, the County applies consistent standards throughout the Highway Plan for street design to promote travel safety. It will accomplish this by designating roadways based on their functional classification, adopting consistent standard street cross sections, coordinating circulation plans of new development project with each other, and adopting common standards for pavement width. Within residential neighborhoods, complete streets will be promoted through traffic-calming devices, shorter block length, and other considerations. Where possible, local street patterns would be designed to create logical and understandable travel paths for users and discourage cut-through traffic.

IMPACT 5.16-4: Implementation of the Proposed Project would not result in inadequate emergency access. [Threshold T-5]

Impact Analysis: Emergency access will be evaluated on a project-by-project basis as the buildout of the Proposed Project occurs. Buildout of the Proposed Project will enhance the capacity of the roadway system by upgrading roadways and intersections when necessary, ensure that the future dedication and acquisitions of roadways are based on projected demand, and implement the construction of paved crossover points through medians for emergency vehicles. Additionally, the Proposed Project will facilitate the consideration of the needs for emergency access in transportation planning. The County will maintain a current evacuation plan, ensure that new development is provided with adequate emergency and/or secondary access, including two points of ingress and egress for most subdivisions, require visible street name signage, and provide directional signage to freeways at key intersections to assist in emergency evacuation operations.

IMPACT 5.16-5: Implementation of the Proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). [Threshold T-6]

Impact Analysis: The 2012 Bicycle Master Plan (Bicycle Master Plan) was adopted by the County Board of Supervisors on March 13, 2012. The Bicycle Master Plan, which replaces the 1975 Plan of Bikeways, is a sub-element of the Mobility Element of the Proposed General Plan Update. The Bicycle Master Plan proposes approximately 831 miles of new bikeways throughout Los Angeles County. Along with the proposed bikeways, the Bicycle Plan recommends various bicycle-friendly policies and programs to promote bicycle ridership among users of all ages and skill sets within Los Angeles County. A Final Program EIR (State Clearinghouse No. 2011041004) for the Bicycle Master Plan was completed. The Bicycle Master Plan also contains elements that support alternative transportation programs, including increased ridership on public transit, developing mass transit as an alternative to automobile travel, the development of rail transit or exclusive bus lanes in high demand corridors, as well as research for and development of new transportation technologies.

The Proposed Project supports alternative modes of transportation, including walking and bicycling, to reduce total VMT. Additionally, the Proposed Project establishes several policies to ensure the safety and mobility of pedestrians and bicyclists. The County will provide safe and convenient access to safe transit, bikeways, and walkways, consider the safety and convenience of pedestrians and cyclists in the design and development of transportation systems, provide safe pedestrian connections across barriers, such as major traffic corridors, drainage and flood control facilities, and grade separations, adopt consistent standards for implementation of Americans with Disabilities Act requirements and in the development review process prioritize direct pedestrian access between building entrances, sidewalks and transit stops. The Bicycle Master Plan also contains many programs and policies that would mitigate potential hazards or barriers for bicyclists.

5.16.5 Cumulative Impacts

The geographic scope for traffic includes cumulative growth projections for Los Angeles County that are reflected in the SCAG RTP/SCS, as described in Section 4.4, *Cumulative Impact Assumptions*, of this DEIR. Past projects in Los Angeles County (cities and unincorporated areas) have converted undeveloped and agricultural land to urban uses resulting in residential and employment population increases and associated demand for expansions of roadway systems. The contribution of these past projects to area growth is also reflected in the SCAG RTP/SCS. The 2012–2035 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play, and how they will move around. Safe, secure, and efficient transportation systems will provide improved access to opportunities, such as jobs, education, and healthcare. SCAG utilizes an integrated analytical framework to develop growth projections, travel forecasts, and emissions estimates to support the region's various planning programs. In addition, SCAG also maintains a robust subregional modeling and data service program that is essential to the analysis of many of the region's projects and programs.

The primary functions of the Modeling and Forecasting Department include: a) working collaboratively with local jurisdictions to develop socioeconomic growth forecasts as required for regional and local planning; b) providing modeling services for the development and implementation of SCAG's plans, programs, and projects; c) developing and maintaining SCAG's various analytical tools and data to more effectively forecast travel demand and estimate resulting air quality; d) providing member services through a robust subregional modeling and data distribution program; e) promoting state of the art modeling practices; and, f) coordinating modeling activities within the SCAG Region.

To assess the effects of potential land use changes on the transportation system, the regional travel demand model of the SCAG has been applied. The SCAG model covers the six county areas (Los Angeles plus Orange, Ventura, Riverside, San Bernardino and Imperial counties). Within Los Angeles County, the model includes both city land area and unincorporated areas. Thus, the model is the appropriate tool to test changes in land uses in the unincorporated areas, and to also take into account changes and growth in the surrounding city areas. The SCAG model includes a 2008 base year and a 2035 future horizon year. Both models were used for this analysis. The 2008 model is used for the "Existing plus Project" analysis for purposes of CEQA review, and the future 2035 model was also reviewed to understand future build out land uses at 2035.

Because the modeling used for the traffic analyses contained in this Section 5.16, *Transportation and Traffic*, incorporates SCAG's regional growth projections, the analyses assess the traffic impacts of all cumulative development reasonably anticipated by Year 2035, and Post-2035 General Plan Buildout. As discussed above, most intersections and roadway/freeway/tollway/ramp segments will operate at acceptable levels of service with the existing or planned improvements, although some may require additional improvements, as described in Section 5.16.8, *Mitigation Measures*. It should be noted, however, that it has been anticipated in the traffic analysis that the cumulative impact of the Proposed Project traffic along with other regional growth at the identified ramp and freeway locations will be largely mitigated through a combination of regional programs that are the responsibility of other agencies such as cities and Caltrans. Future developers/project applicants will contribute their fair share to these regional programs, as applicable. However, if these programs are not implemented by the agencies with the responsibility to do so, the cumulative transportation and traffic impacts would remain significant and unavoidable. Under these circumstances, the Proposed Project could result in a cumulatively significant traffic impact that may remain significant and unavoidable.

5.16.6 Existing Regulations and Standard Conditions

There are no existing regulations or standard conditions that apply to transportation and traffic.

5.16.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.16-2, 5.16-3, 5.16-4 and 5.16-5.

Without mitigation, the following impacts would be **potentially significant**:

- Impact 5.16-1 Buildout in accordance with the Proposed Project would impact levels of service on the existing roadway system.

5.16.8 Mitigation Measures

Impact 5.16-1

T-1 The County shall continue to monitor potential impacts on roadway segments and intersections on a project-by-project basis as buildout occurs by requiring traffic studies for all projects that could significantly impact traffic and circulation patterns. Future projects shall be evaluated and traffic improvements shall be identified to maintain minimum levels of service in accordance with the County's Traffic Impact Analysis Guidelines, where feasible mitigation is available.

T-2 The County shall implement over time objectives and policies contained within the General Plan Mobility Element. Implementation of those policies will help mitigate any potential impacts of Project growth and/or highway amendments on the transportation system.

T-3 The County shall participate with Metro, the Congestion Management Program (CMP) Agency in Los Angeles County, on a potential Congestion Mitigation Fee program that would replace the current CMP Debit/Credit approach. Under a countywide fee program, each jurisdiction, including the County, will select and build capital transportation projects, adopt a fee ordinance, collect fees and control revenues. A fee program will require a nexus analysis, apply only to net new construction on commercial and industrial space and additional residential units and needs to be approved by Metro and the local jurisdictions. A countywide fee, if adopted, will allow the County to mitigate the impacts of development via the payment of the transportation impact fee in lieu of asking each development project for individual mitigation measures, or asking for fair share payments of mitigation. The fee program would itself constitute a "fair-share" program that would apply to all development (of a certain size) within the unincorporated areas.

T-4 The County shall work with Caltrans as they prepare plans to add additional lanes or complete other improvements to various freeways within and adjacent unincorporated areas. This includes adding or extending mixed flow general purpose lanes, adding or extending existing HOV lanes, adding Express Lanes (high occupancy toll lanes), incorporating truck climbing lanes, improving interchanges and other freeway related improvements.

T-5 The County shall require traffic engineering firms retained to prepare traffic impact studies for future development projects to consult with Caltrans, when a development proposal meets the requirements of statewide, regional, or areawide significance per CEQA Guidelines §15206(b). Proposed developments meeting the criteria of statewide, regional or areawide include:

- Proposed residential developments of more than 500 dwelling units
- Proposed shopping centers or business establishments employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space.
- Proposed commercial office buildings employing more than 1,000 persons or encompassing more than 250,000 square feet of floor space
- Proposed hotel/motel developments of more than 500 rooms

When the CEQA criteria of regional significance are not met, Caltrans recommends transportation engineers and/or city representatives consult with Caltrans when a proposed development includes the following characteristics:

- All proposed developments that have the potential to cause a significant impact to state facilities (right-of-way, intersections, interchanges, etc.) and when required mitigation improvements are proposed in the initial study. Mitigation concurrence should be obtained from Caltrans as early as possible.

- Any development that assigns 50 or more trips during peak hours to a state highway (freeways).
- Any development located adjacent to or within 100 feet of a state highway facility and may require a Caltrans Encroachment Permit. (Exceptions: additions to single family homes or 10 residential units of less).
- When it cannot be determined whether or not Caltrans will expect a traffic impact analysis pursuant to CEQA.

5.16.9 Level of Significance After Mitigation

Impact 5.16-1

The impacted locations are still considered to be significantly impacted with mitigation. Because this is a program-level analysis, additional case-by-case mitigation analysis of impacts and mitigation will occur at the project-level to determine more specific physical, program and policy-level mitigation measures to reduce the level of impact below a significant level.

Furthermore, inasmuch as the primary responsibility for approving and/or completing certain improvements located within cities lies with agencies other than the County (i.e., cities and Caltrans), there is the potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the County's control (e.g., the County cannot undertake or require improvements outside of the County's jurisdiction or the County cannot construct improvements in the Caltrans right-of-way without Caltrans' approval). Therefore, Impact 5.16-1 would remain significant and unavoidable.

5.16.10 References

Southern California Association of Governments (SCAG). 2012, April 4. Regional Transportation Plan/ Sustainable Communities Strategy 2012-2035. http://rtpscs.scag.ca.gov/Pages/default.aspx

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5.17 UTILITIES AND SERVICE SYSTEMS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Proposed General Plan Update (Proposed Project) to impact utilities and service systems.

5.17.1 Wastewater Treatment and Collection

5.17.1.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

Wastewater treatment before effluent is discharged to Waters of the United States is required by the federal Clean Water Act (CWA), United States Code, Title 33, Sections 1251 et seq. The federal Clean Water Act is described in further detail in Section 5.9, *Hydrology and Water Quality*, of this DEIR.

State

In California, State Water Resources Control Board (SWRCB) is responsible for ensuring the highest reasonable quality of waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The SWRCB's current challenge is exacerbated by California's rapid population growth, and the continuing struggle over precious water flows. It faces tough new demands which include fixing ailing sewer systems; building new wastewater treatment plants; and tackling the cleanup of underground water sources impacted by the very technology and industry that has catapulted California into global prominence. Additionally, the SWRCB will continue to focus on its most vexing problem of nonpoint source pollution, or polluted runoff, which is difficult to categorize, isolate and resolve.

The 1969 Porter-Cologne Water Quality Control Act, codified in the California Water Code, authorizes the SWRCB to implement programs to control polluted discharges into State waters. This law essentially implements the requirements of the CWA. Pursuant to this law, the local Regional Water Quality Control Board (RWQCB) is required to establish the wastewater concentrations of a number of specific hazardous substances in treated wastewater discharge.

Regional

Capital improvements to Los Angeles County Sanitation Districts (LACSD) water reclamation plants are funded from connection fees charged to new developments, redevelopments, and expansions of existing land uses. The connection fee is a capital facilities fee used to provide additional conveyance, treatment, and disposal facilities (capital facilities) required by new users connecting to the LACSD sewerage system or by existing users that significantly increase the quantity or strength of their wastewater discharge. The Connection Fee Program ensures that all users pay their fair share for any necessary expansion of the system (Raza 2013). Estimated wastewater generation factors used in determining connection fees in the LACSD's 22 member Districts are set forth in the Connection Fee Ordinance for each respective District available on LACSD's website.

Existing Conditions

Wastewater Treatment Process

Sanitary wastewater is treated in the following three phases:

- **Primary Treatment:** removal of solids using settling tanks;
- **Secondary Treatment:** reduction of organic matter using bacteria and oxygen; followed by further removal of solids; and
- **Tertiary Treatment:** filtration of wastewater to remove any solids remaining after the first two phases of treatment.

Most wastewater that undergoes tertiary treatment is disinfected after tertiary treatment. Disinfection methods include chlorine bleach and ultraviolet light. Tertiary-treated wastewater is often reused (i.e. recycled) for landscape and agricultural irrigation, groundwater recharge, and industrial uses.

Wastewater Treatment Providers for Unincorporated Areas of Los Angeles County

LACSD provides wastewater treatment to many areas of unincorporated Los Angeles County (unincorporated areas) as well as to 78 cities in Los Angeles County.

The City of Los Angeles Bureau of Sanitation (LABS) provides wastewater treatment to several unincorporated areas in and next to the City of Los Angeles, including unincorporated areas west of the City of Los Angeles in the Santa Susana Mountains, Simi Hills, and Santa Monica Mountains; Marina del Rey; and La Crescenta-Montrose.

The Las Virgenes Municipal Water District operates the Tapia Water Reclamation Facility in the unincorporated areas within the Santa Monica Mountains Planning Area.

The Los Angeles County Department of Public Works (DPW) operates three wastewater treatment plants in the City of Malibu that also serve nearby unincorporated areas.

Wastewater Treatment Facilities

Each of the wastewater treatment facilities described below provides primary, secondary, and tertiary treatment, except where otherwise noted. The facilities are mapped on Figure 5.17-1, *Wastewater Treatment Facilities*.

Antelope Valley Planning Area

- LACSD Lancaster Water Reclamation Plant (WRP), near the intersection of Sierra Highway and Avenue D in the City of Lancaster, has a capacity of 17 million gallons per day (mgd) and had treated average flows of 14 mgd in 2013 (LACSD 2014).

FIGURE 5.17-1

WASTEWATER TREATMENT FACILITIES

Source: LACSD 2014, LABS 2014, LVMWD 2014

- Wastewater Treatment Facilities

NOTE:
LACSD: Los Angeles County Sanitation Districts
LABS: City of Los Angeles Bureau of Sanitation
LVMWD: Las Virgines Municipal Water District

WRP: Water Reclamation Plant
WRF: Water Reclamation Facility
TP: Treatment Plant

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PLACEWORKS

5. Environmental Analysis
UTILITIES AND SERVICE SYSTEMS

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- LACSD Palmdale WRP, near the intersection of 30th Street East and Avenue P in the City of Palmdale, has a 12 mgd capacity and had treated average flows of 8.7 mgd in 2013 (LACSD 2014).

Santa Clarita Valley Planning Area

The Santa Clarita Valley Sanitation District, part of LACSD, provides wastewater treatment for much of the Santa Clarita Valley at two facilities.

- Valencia WRP, on The Old Road north of Magic Mountain Parkway in the unincorporated areas, has a 21.6 mgd capacity and had treated average flows of 14.5 mgd in 2013 (LACSD 2014).

- Saugus WRP, north of the intersection of San Fernando Road and Magic Mountain Parkway in the City of Santa Clarita, has a 6.2 mgd capacity and had treated average flows of 5.2 mgd in 2013 (LACSD 2014).

San Fernando Valley Planning Area

- LABS Tillman WRP southwest of the intersection of the I-405 with Victory Boulevard in the City of Los Angeles serves the unincorporated areas west of the City of Los Angeles. The plant has an 80 mgd capacity and treats average daily flows of 67 mgd (City of Los Angeles 2013a).

- LABS Los Angeles-Glendale WRP next to the east side of the Los Angeles River, and south of Colorado Street, in the City of Los Angeles, serves La Crescenta-Montrose. Wastewater flows through the plant at its 20 mgd capacity (City of Los Angeles 2013b).

Santa Monica Mountains Planning Area

- Tapia Water Reclamation Facility, operated by the Las Virgenes Municipal Water District, along Malibu Canyon Road in the unincorporated areas, has a 16 mgd capacity and treats average daily flows of 9.5 mgd (LVMWD 2013).

West San Gabriel Valley Planning Area

- LACSD San Jose Creek WRP, next to the north side of the junction of the I-605 and SR-60 freeways in the unincorporated areas, serves a population of one million in the San Gabriel Valley. The facility has a 100 mgd capacity and treated average flows of 63 mgd in 2013 (LACSD 2014).

- LACSD Whittier Narrows WRP, on Rosemead Boulevard in the City of El Monte, has a 15 mgd capacity and treated average flows of 8.6 mgd in 2013 (LACSD 2014).

East San Gabriel Valley Planning Area

- LACSD's Pomona WRP, near the northwest corner of Mission Boulevard and Humane Way in the City of Pomona, has a 15 mgd capacity and treated average flows of 8.3 mgd in 2013 (LACSD 2014).

- San Jose Creek WRP also provides wastewater treatment for part of the East San Gabriel Valley Planning Area.

Metro Planning Area and South Bay Planning Area

- Most of the unincorporated areas in the Metro and South Bay Planning Areas are in the service area of the Joint Water Pollution Control Plant (JWPCP) near the intersection of the I-110 freeway and Lomita Boulevard in the City of Carson. The plant has a 400 mgd capacity for primary and secondary treatment and treated average flows of 264 mgd in 2013 (LACSD 2014).

Westside Planning Area

- Marina del Rey is in the service area of BoS Hyperion Treatment Plant on Vista Del Mar in the Community of Playa Del Rey in the City of Los Angeles. The plant has a 450 mgd capacity and treats average wastewater flows of 362 mgd (City of Los Angeles 2013c).

Gateway Planning Area

- LACSD Long Beach WRP, on Willow Street west of the I-605 freeway in the City of Long Beach, has a 25 mgd capacity and treated average flows of 17 mgd in 2013 (LACSD 2014).

- LACSD Los Coyotes WRP, near the junction of the I-605 and SR-91 freeways in the City of Cerritos, has a 37.5 mgd capacity and treated average flows of 21 mgd in 2013 (LACSD 2014).

Coastal Islands Planning Area

- City of Avalon Waste Water Treatment Plant on Santa Catalina Island has a 1.2 mgd capacity and treats average daily flows of 0.44 mgd (Clary 2014).

Estimated Wastewater Generation, Existing Conditions

Estimated existing wastewater generation in the unincorporated areas is shown below in Table 5.17-1, *Estimated Wastewater Generation, Existing Conditions*. Wastewater generation is estimated as 60 percent of total water demand for unincorporated areas of about 177,024,890 gallons per day (gpd), which is 106,214,934 gpd. Wastewater generation by Planning Area is estimated by prorating total wastewater generation in the unincorporated areas by the population of a given Planning Area as a proportion of the total population of the unincorporated areas.

Table 5.17-1 Estimated Wastewater Generation, Existing Conditions

Planning Area	Population Unincorporated Areas	Population, Unincorporated Areas, by Planning Area as percentage of total	Wastewater Generation (gallons per day)
Antelope Valley	93,490	8.8%	9,311,613
Coastal Islands	158	0.0%	15,737
East San Gabriel Valley	239,218	22.4%	23,826,135
Gateway	104,061	9.8%	10,364,485
Metro	235,990	22.1%	23,504,626
San Fernando Valley	32,488	3.0%	3,235,808
Santa Clarita Valley	104,116	9.8%	10,369,963
Santa Monica Mountains	21,757	2.0%	2,166,999
South Bay	69,474	6.5%	6,919,617
West San Gabriel Valley	125,736	11.8%	12,523,317
Westside	39,926	3.7%	3,976,633
Total	**1,066,414**	**100%**	**106,214,934**

Wastewater Collection

The Consolidated Sewer Maintenance District of Los Angeles County, administered by DPW, operates and maintains more than 4,600 miles of sanitary sewers serving the unincorporated areas (except for Marina del Rey) and 40 cities. The Marina del Rey Sewer Maintenance District serves Marina del Rey.

The LACSD owns, operates, and maintains about 1,400 miles of sewers ranging from 8 to 144 inches in diameter that convey 500 mgd to 11 wastewater treatment plants (LACSD 2014b).

The City of Los Angeles Bureau of Sanitation (LABS) operates and maintains more than 6,700 miles of sewers.

5.17.1.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-1 Would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

U-2 Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

U-5 Would result in a determination by the wastewater treatment provider which serves or may serve the project that is has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Relevant General Plan Goals and Policies

Public Services and Facilities Element

- **Policy PS/F 3.1:** Increase the supply of water though the development of new sources, such as recycled water, gray water, and rainwater harvesting.

- **Policy PS/F 3.2:** Support the increased production, distribution and use of recycled water, gray water, and rainwater harvesting to provide for groundwater recharge, seawater intrusion barrier injection, irrigation, industrial processes and other beneficial uses.

- **Policy PS/F 4.1:** Encourage the planning and continued development of efficient countywide sewer conveyance treatment systems.

- **Policy PS/F 4.2:** Support capital improvement plans to improve aging and deficient wastewater systems, particularly in areas where the General Plan encourages development, such as TODs.

- **Policy PS/F 4.3:** Ensure the proper design of sewage treatment and disposal facilities, especially in landslide, hillside, and other hazard areas.

- **Policy PS/F 4.4:** Evaluate the potential for treating stormwater runoff in wastewater management systems or through other similar systems and methods.

General Plan Implementation Programs

PS/F-1 Planning Area Capital Improvement Plans: DRP and DPW to jointly secure sources of funding and set priorities for preparing studies to assess infrastructure needs for the 11 Planning Areas. Once funding has been secured and priorities have been set, prepare a Capital Improvement Plan for each of the 11 Planning Areas (see also Planning Areas Framework Program). Each Capital Improvement Plan shall include the following, as needed:

- Sewer Capacity Study;
- Transportation System Capacity Study;
- Waste Management Study;
- Stormwater System Study;
- Public Water System Study;
- list of necessary infrastructure improvements;
- Implementation Program; and
- Financing Plan.

As applicable, studies related to water, sewer, traffic, and stormwater management should specifically address the needs of the unincorporated legacy communities identified in the Land Use Element.

5.17.1.3 ENVIRONMENTAL IMPACTS

The following impact analysis addresses CEQA Guidelines Appendix G thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.17-1: Wastewater generated by buildout of the Proposed Project would not exceed wastewater treatment requirements of any of the four Regional Water Quality Control Boards having jurisdiction in Los Angeles County. [Threshold U-1].

Impact Analysis:

Individual development projects built pursuant to the Proposed Project would be subject to the following construction and operational requirements:

Stormwater

Discharges from Construction Operations

Wastewater treatment requirements for discharges to stormwater are set forth in the Statewide General Construction Permit for discharges from construction sites of one acre or more in the Los Angeles, Santa Ana, and Central Valley RWQCB regions; such discharges within the portion of Los Angeles County in the Lahontan RWQCB region are regulated under Sections J110 and J111 of Title 26 of the Los Angeles County Code of Ordinances, and with Chapter 21 of the Los Angeles County Flood Control District Code.

Discharges from Operation of Land Uses

The County has prepared the 2014 Low Impact Development Standards Manual (LID Standards Manual) to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4-2012-0175) henceforth referred to in this document as the 2012 MS4 Permit. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges.

Sanitary Wastewater

Discharge limits for concentrations of hazardous materials discharged into sanitary sewers are set by wastewater treatment agencies. Wastewater treatment facilities can treat sanitary wastewater meeting discharge limits.

Wastewater Requiring Separate Treatment

Some industrial and agricultural operations require wastewater treatment separate from municipal wastewater treatment. For example, discharges to stormwater from operations of certain types of industrial facilities are

regulated under the Statewide Industrial General Permit, Order No. 97-03-DWQ issued by the State Water Resources Control Board in 1997.

Discharges from some agricultural operations are regulated by RWQCBs. For instance, discharges from dairies in the Central Valley RWQCB region are regulated under several orders issued by the Central Valley RWQCB. Industrial and agricultural operations approved pursuant to the Proposed Project would comply with applicable waste discharge requirements.

Implementation of the Proposed Project would direct the majority of the anticipated population growth within the unincorporated areas into the northern portions of Los Angeles County. Specifically, the majority of population growth would occur in the Antelope Valley Planning Area, followed by the Santa Clarita Planning Area. The demand for wastewater treatment capacity would increase as projects are built upon implementation of the Proposed Project. New residential, commercial, and industrial developments would require wastewater service. An increase in wastewater demand would require the need for new or expanded facilities to be constructed in order to meet the demand. In order to be permitted, new facilities would be required to meet the wastewater treatment requirements for the Los Angeles RWQCB and Central Valley RWQCB. However, if the demand for wastewater treatment services increased at a rate disproportionate to capabilities of wastewater treatment facilities, a violation in wastewater treatment standards would occur.

The existing service capacities and service areas for many wastewater districts are based on the Existing General Plan land use designations. Buildout of the Existing General Plan would result 2,199,477 people and 602,024 residential units, as shown in Table 3-2 in Chapter 3, *Project Description*, As shown in Table 3-6, buildout of Proposed Project would result in a 2,356,864 people and 659,409 residential units, which is an increase of 157,387 persons and 57,385 residential units or a 7.2 percent increase compared to Existing General Plan buildout assumptions. No changes are proposed to land use designations in the existing Antelope Valley Area Plan and the existing Santa Clarita Area Plan. Compared to existing conditions, as shown in Table 5.5-15, Chapter 5.15, *Recreation*, the Planning Areas most likely to experience substantial population growth under the Proposed Project include the Antelope Valley, Santa Clarita Valley, and Metro Planning Areas with increases on 76 percent, 10 percent, and 5 percent, respectively. The eight remaining Planning Areas will experience population growth of 2.4 percent of less over existing conditions. Therefore, implementation of the Proposed Project would not increase the population or land use densities within wastewater district service areas in a manner that is not currently planned for in the northern portion of the unincorporated areas where the majority of population would be distributed under implementation of the Proposed Project.

As described in Chapter 3, *Project Description*, of this DEIR, most major land use and zoning changes planned for the unincorporated areas are concentrated in Transit Oriented Districts (TODs), which contain established wastewater treatment infrastructure. Targeted increases in development capacity in TODs occur in the Gateway, Metro and South Bay Planning Areas and are intended primarily to allow intensified development or a more flexible mix of land uses. As shown in Table 5.5-15, Chapter 5.15, *Recreation*, residential units in the Gateway, Metro and South Bay Planning Areas would increase about 1.6 percent, 5 percent and 1.6 percent, respectively. Although land use densities are increased, the changes do not introduce radically different land uses into neighborhoods.

Development of the land uses proposed under the Proposed Project would exceed wastewater district capacities if proper planning does not occur for the updated land use plan in a timely manner. Proposed General Plan Implementation Program PS/F1, *Planning Area Capital Improvement Plans*, requires Department of Regional Planning (DRP) and the Department of Public Works (DPW) to jointly secure sources of funding and to set priorities for preparing studies to assess infrastructure needs for the 11 Planning Areas. Once funding has been secured and priorities have been set, the County will prepare a Capital Improvement Plan for each of the 11 Planning Areas (see also Planning Areas Framework Program). Each Capital Improvement Plan shall include a Waste Management Study and Stormwater System Study. Proposed General Plan Update Policy PS/F 4.2 requires the County to support capital improvement plans to improve aging and deficient wastewater systems, particularly in areas where the Proposed General Plan Update encourages development, such as TODs. Policy PS/F 4.4 requires the County to evaluate the potential for treating stormwater runoff in wastewater management systems or through other similar systems and methods. Therefore, implementation of the Proposed Project policies and required regulations would mitigate this impact and impacts would be less than significant.

Impact 5.17-2: Sanitary wastewater generated by buildout of the Proposed Project could be adequately treated by the wastewater treatment providers serving the unincorporated areas. [Thresholds U-1, U-2 (part), and U-5]

Impact Analysis:

Wastewater Generation

The net increase in wastewater generation by the Proposed Project is estimated at about 98 million gallons per day (mgd), as shown below in Table 5.17-2. All wastewater generation – from residential and nonresidential land uses – is estimated as 76 gallons per capita per day (gpcd). The percentage of total water use indoors is lower in warmer, drier regions, as a larger proportion of water use is outdoor use in such areas. Thus, the estimate below overstates wastewater generation in warmer, drier parts of Los Angeles County such as the Antelope Valley and Santa Clarita Valley.

Table 5.17-2 Estimated Net Increase in Wastewater Generation due to Proposed Project Buildout

Planning Area	Estimated Wastewater Generation	Net Increase in Population, Unincorporated Areas	Forecasted Net Increase, Wastewater Generation (gallons per day)
Antelope Valley	76 gallons per capita per day (gpcd)[1]	977,081	74,258,156
Coastal Islands		-158	-12,008
East San Gabriel Valley		16,734	1,271,784
Gateway		16,297	1,238,572
Metro		65,083	4,946,308
San Fernando Valley		14,572	1,107,472
Santa Clarita Valley		133,522	10,147,672
Santa Monica Mountains		4,371	332,196
South Bay		16,918	1,285,768
West San Gabriel Valley		30,949	2,352,124
Westside		15,107	1,148,132
Total		**1,290,476**	**98,076,176**

[1] Wastewater generation factor includes wastewater generation from all land uses, residential and nonresidential. Source: LACDPW 2014a.

Wastewater Generation Compared to Residual Wastewater Treatment Capacity

Residual wastewater treatment capacity is capacity that is currently unused and is available to accommodate future growth. The residual capacities reported in Table 5.17-3 below are calculated from capacities and average flows reported above in Section 5.17.1.1, *Environmental Setting*. Note that residual capacities were not available for some of the facilities described.

Table 5.17-3 Estimated Wastewater Generation due to Proposed Project Buildout Compared to Residual Wastewater Treatment Capacity

Planning Area	Net Increase in Wastewater Generation due to General Plan Buildout	Wastewater Treatment Provider[1]	Facility	Existing Capacity, million gallons per day (mgd)[2]	Average wastewater flows, 2013, mgd[2]	Residual Treatment Capacity, mgd[2]	Residual Capacity Adequate for Net Increase in Wastewater Generation?
Antelope Valley	74,258,156	LACSD	Lancaster WRP	17	14	3	**No**
			Palmdale WRP	12	8.7	3.3	
			Subtotal	*29*	*22.7*	*6.3*	
Coastal Islands	-12,008	City of Avalon	Avalon WRP	1.2	0.44	0.76	Yes
East San Gabriel Valley	1,271,784	LACSD	San Jose Creek WRP	100	63	37	Yes
			Pomona WRP	15	8.3	6.7	
			Subtotal	*115*	*71.3*	*43.7*	
Gateway	1,238,572	LACSD	Long Beach WRP	25	17	8	Yes
			Los Coyotes WRP	37.5	21	16.5	
			Subtotal	*62.5*	*38*	*24.5*	
Metro	4,946,308	LACSD	Joint Water Pollution Control Plant	400	264	136	Yes
San Fernando Valley	1,107,472	LABS	Tillman WRP	80	67	13	Yes
			Los Angeles-Glendale WRP	20	20	0	
			Subtotal	*100*	*87*	*13*	
Santa Clarita Valley	10,147,672	LACSD	Valencia WRP	21.6	14.5	7.1	**No**
			Saugus WRP	6.2	5.2	1.0	
			Subtotal	*27.8*	*19.7*	*8.1*	
Santa Monica Mountains	332,196	LVMWD	Tapia WRF	16	9.5	6.5	Yes
South Bay	1,285,768	LACSD	Joint Water Pollution Control Plant	400	264	136	Yes
West San Gabriel Valley	2,352,124	LACSD	San Jose Creek WRP	100	63	37	Yes
			Whittier Narrows WRP	15	8.6	6.4	
			Subtotal	*115*	*71.6*	*43.4*	
Westside	1,148,132	LABS	Hyperion	450	362	88	Yes
Total	**94,900,889**	Not applicable	Not applicable	**1,216.5**	**883.24**	**466**	Not applicable

Sources: LACSD 2014; LABS 2013a; LABS 2013b; LABS 2013c; LVMWD 2013.

[1] LACSD: Los Angeles County Sanitation Districts
LABS: City of Los Angeles Bureau of Sanitation
LVMWD: Las Virgenes Municipal Water District

[2] Two facilities listed above–the San Jose Creek WRP and the Joint Water Pollution Control Plant–each serve two planning areas and are each listed twice in the Table. The capacities, wastewater flows, and residual capacities of these two facilities are each counted once in the totals in the bottom row.

As shown in Table 5.17-3, currently there is not adequate residual wastewater treatment capacity in the Antelope Valley and Santa Clarita Valley Planning Areas to accommodate the projected net increase in wastewater generation due to Proposed Project buildout.

Pursuant to Implementation Program PS/F 1, *Planning Area Capital Improvement Plans*, in the Proposed General Plan Update, the DRP and DPW are directed to jointly secure sources of funding and set priorities for preparing studies to assess infrastructure needs for the 11 Planning Areas. Once funding has been secured and priorities have been set, the County will prepare a Capital Improvement Plan for each of the 11 Planning Areas (see also LU-1, *Planning Areas Framework Program*). Each Capital Improvement Plan shall include the following, as needed:

- Sewer Capacity Study;
- Transportation System Capacity Study;
- Waste Management Study;
- Stormwater System Study;
- Public Water System Study;
- list of necessary infrastructure improvements;
- Implementation Program; and
- Financing Plan.

As applicable, studies related to water, sewer, traffic, and stormwater management would specifically address the needs of the unincorporated legacy communities such as Antelope Valley. Implementation Program PS/F 1 would be incorporated into the upcoming update to the Antelope Valley Area Plan. Implementation Program PS/F 1 would ensure adequate treatment capacity is available in the Antelope Valley Planning Area to service future development and that impacts of buildout of the Antelope Valley Area Plan on wastewater treatment capacity would be less than significant.

The Proposed Project does not include any changes to land uses in the adopted Santa Clarita Valley Area Plan and the boundary Santa Clarity Valley Planning Area remains unchanged. The impacts of the buildout of the Santa Clarita Valley Area Plan on wastewater treatment capacity were thoroughly analyzed in the certified Program EIR for the Santa Clarita Valley Area Plan. Impacts were identified as less than significant in the certified Santa Clarita Valley Area Plan Program EIR. The analysis and less than significant impact conclusion is incorporated by reference in this DEIR.

Santa Clarita Valley Area Plan

The following policies pertaining to wastewater treatment are set forth in the Santa Clarita Valley Area Plan and are incorporated by reference:

Land Use Element

Policy LU 9.1.1: Ensure construction of adequate infrastructure to meet the needs of new development prior to occupancy.

Conservation and Open Space Element

- **Policy CO 1.1.1:** In making land use decisions, consider the complex, dynamic, and interrelated ways that natural and human systems interact, such as the interactions between energy demand, water demand, air and water quality, and waste management.

- **Policy CO 1.2.1:** Improve the community's understanding of renewable resource systems that occur naturally in the Santa Clarita Valley, including systems related to hydrology, energy, ecosystems, and habitats, and the interrelationships between these systems, through the following measures:

  a.) Through the environmental and development review processes, consider development proposals within the context of renewable resource systems and evaluate potential impacts on a system-wide basis (rather than a project-specific basis), to the extent feasible;

  b.) In planning for new regional infrastructure projects, consider impacts on renewable resources within the context of interrelationships between these systems;

  c.) Provide information to decision-makers about the interrelationship between traffic and air quality, ecosystems and water quality, land use patterns and public health, and other similar interrelationships between renewable resource systems in order to ensure that decisions are based on an understanding of these concepts.

Policy CO 4.2.1: In cooperation with the Sanitation District and other affected agencies, expand opportunities for use of recycled water for the purposes of landscape maintenance, construction, water recharge, and other uses as appropriate.

Policy CO 4.2.2: Require new development to provide the infrastructure needed for delivery of recycled water to the property for use in irrigation, even if the recycled water main delivery lines have not yet reached the site, where deemed appropriate by the reviewing authority.

Policy CO 4.4.4: Promote the extension of sanitary sewers for all urban uses and densities, to protect groundwater quality, where feasible.

Funding for Capital Improvements to LACSD Water Reclamation Plants

Capital improvements to LACSD water reclamation plants are funded from connection fees charged to new developments, redevelopments, and expansions of existing land uses. The connection fee is a capital facilities fee used to provide additional conveyance, treatment, and disposal facilities (capital facilities) required by new users connecting to the LACSD's sewerage system or by existing users who significantly increase the quantity or strength of their wastewater discharge. The Connection Fee Program ensures that all users pay their fair share for any necessary expansion of the system (Raza 2013). Estimated wastewater generation factors used in determining connection fees in the LACSD's 22 member Districts are set forth in the Connection Fee Ordinance for each respective District available on LACSD's website.

Projects developed pursuant to the Proposed Project would pay connection fees to the LACSD, or corresponding types of fees to the City of Los Angeles Bureau of Sanitation, as applicable. Payments of such fees would reduce adverse impacts to wastewater generation capacity in the Antelope Valley and Santa Clarita Valley Planning Areas. As shown in Table 5.17 3, there is sufficient wastewater treatment capacity in the remaining Planning Areas and impacts would be less than significant.

5.17.1.4 CUMULATIVE IMPACTS

Cumulative projects are those that would be developed in cities in Los Angeles County. The timeframe for the buildout of the Proposed General Plan Update is post–2035 and unknown. The latest year of available population estimates for cities and the unincorporated areas is 2035 (see Chapter 4, *Environmental Setting*, Table 4.3). Thus, the latest year for which Proposed Project impacts can be compared with forecasted impacts for cities in Los Angeles County is 2035.

Cumulative projects in Los Angeles County could cause significant impacts if they either exceeded wastewater treatment requirements of RWQCBs with jurisdiction in Los Angeles County, or generated wastewater in exceeding the combined capacities of wastewater treatment plants in Los Angeles County.

Projects developed in cities are also required to comply with the existing wastewater treatment regulations discussed above under Impact 5.17-1.

The total net increase in wastewater generation by all projects in Los Angeles County between 2013 and 2035 is estimated at about 106 mgd. The total net increase in wastewater generation due to buildout of the Proposed Project is estimated at about 98 mgd (see Table 5.17-4). The total residual capacity of all wastewater treatment systems in Los Angeles County, totaled from Table 5.17-3, is about 466 million gallons per day.[1] Thus, wastewater from cumulative projects could be treated at existing wastewater treatment plants, and no significant cumulative impact to wastewater treatment capacity would occur.

Table 5.17-4 Cumulative Wastewater Generation

Area	Estimated Wastewater Generation			Significant Impact Compared to Countywide Residual Wastewater Treatment Capacity?
	Existing (2013)	2035 or Proposed General Plan Buildout	Forecast Net Increase	
2035 Scenario (Based on SCAG Projections)				
Unincorporated Areas	81,047,540	106,362,000	25,314,460	No
Cities	677,745,276	756,466,000	78,720,724	No
Entire Los Angeles County	756,814,916	862,828,000	106,013,084	No
General Plan Update Buildout, Post-2035				
Unincorporated Areas	81,047,540	179,123,640	98,076,100	No

[1] There is a forecasted net decrease in wastewater generation for cities and Los Angeles County between 2013 and 2035 due to projected decreases in per capita water use from 166 gallons per day in 2013 to 142 gpd in 2035 pursuant to the Water Conservation Act of 2009.
[2] Population and wastewater generation forecasts for cities and Los Angeles County at post-2035 buildout of the Proposed Project are not available.

[1] San Jose Creek WRP and the Joint Water Pollution Control Plant are each counted twice in Table 5.17-3, as each of these facilities serves two planning areas; these facilities are each counted once in the total stated above. The three facilities in the Santa Monica Mountains Planning Area are not counted in the total of residual capacity, as the capacities for these facilities in Table 5.17-3 are total capacities and not residual capacities.

5.17.1.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

Federal

- Clean Water Act

5.17.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: Impact 5.17-1 and 5.17-2.

5.17.1.7 MITIGATION MEASURES

No mitigation measures are required.

5.17.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant. .

5.17.2 Water Supply and Distribution Systems

5.17.2.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

Safe Drinking Water Act

Passed in 1974 and amended in 1986 and 1996, the Safe Drinking Water Act (SDWA) gives the U.S. Environmental Protection Agency (USEPA) the authority to set drinking water standards. Drinking water standards apply to public water systems, which provide water for human consumption through at least 15 service connections, or regularly serve at least 25 individuals. There are two categories of drinking water standards, the National Primary Drinking Water Regulations (NPDWR) and the National Secondary Drinking Water Regulations (NSDWR). The NPDWR are legally enforceable standards that apply to public water systems. NPDWR standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water.

Federal Water Pollution Control Act, 1972

In 1972, the Federal Water Pollution Control Act Amendments were enacted to address water pollution problems. After an additional amendment in 1977, this law was dubbed the CWA. Thereafter, it allowed for the regulation of discharges of pollutants into the waters of the U.S. by the USEPA. Under the CWA, the USEPA can implement pollution control programs and set water quality standards. Additionally, the CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions.

State

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires preparation of a plan that:

- Plans for water supply and assesses reliability of each source of water, over a 20-year period, in 5-year increments.
- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years.
- Implements conservation and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (Senate Bill 7 of Special Extended Session 7 (SBX7-7)), which amends the act and adds new water conservation provisions to the Water Code.

20x2020 Water Conservation Plan

The 20x2020 Water Conservation Plan, issued by the Department of Water Resources (DWR) in 2010 pursuant to SBX7-7, established a water conservation target of 20 percent reduction in water use by 2020 compared to 2005 baseline use.

Senate Bills 610 and 221

To assist water suppliers, cities, and counties in integrating water and land use planning, the State passed Senate Bill (SB) 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001), effective January 1, 2002. SB 610 and SB 221 improve the link between information of water-supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures that promote more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to city and county decision makers prior to approval of specified large development projects. This detailed information must be included in the administrative record as the evidentiary basis for an approval action by the city or county on such projects. The statutes recognize local control and decision making regarding the availability of water for projects and the approval of projects. Under SB 610, water supply assessments (WSA) must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA, as defined in Water Code Section 10912[a]. Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative verification of sufficient water supply. SB 221 is intended as a fail-safe to ensure collaboration on finding the needed water supplies to serve a new large subdivision before construction begins.

The Urban Water Management Planning Act states that every urban water supplier that provides water to 3,000 or more customers or provides over 3,000 acre-feet (af) of water annually should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of

customers during normal, dry, and multiple dry years. Both SB 610 and SB 221 identify the urban water management plan (UWMP) as a planning document that can be used by a water supplier to meet the standards in both statutes. Thorough and complete UWMPs are foundations for water suppliers to fulfill the specific requirements of these two statutes, and they are important source documents for cities and counties as they update their general plans. Conversely, general plans are source documents as water suppliers update the UWMPs. These planning documents are linked, and their accuracy and usefulness are interdependent (DWR 2008).

Governor's Drought Declaration

California Governor Edmund Brown Jr. declared a drought state of emergency on January 17, 2014, asking Californians to reduce water use by 20 percent. The U.S. Department of Agriculture designated 27 California counties, including Los Angeles County, as primary natural disaster areas on January 15, 2014, due to the drought (USDA 2014). Average annual rainfall at the Los Angeles Civic Center is 14.41 inches, but the Civic Center received 5.93 inches of rainfall between October 2012 and September 2013, which is 41 percent of the average during the 2012–2013 water year. Rainfall at the Civic Center between October 2013 and January 2014 was 0.88 inches, only 12 percent of the average (DWR 2014a). The DWR announced on January 31, 2014, that if current dry conditions persist, customers would receive no deliveries from the State Water Project in 2014, except for small carryover amounts from 2013. Deliveries to agricultural districts with long-standing water rights in the Sacramento Valley may be cut 50 percent—the maximum permitted by contract—depending on future snow survey results. Almost all areas served by the SWP also have other sources of water, such as groundwater and local reservoirs (DWR 2014b).

Local

Green Building Program

In 2008, Los Angeles County adopted the Green Building Program, which included the Drought-Tolerant Landscaping, Green Building, and Low Impact Development Ordinances (the Ordinances), and created an Implementation Task Force and Technical Manual. In November 2013, in response to the mandates set forth in CALGreen (2010 California Green Building Standards Code), the Board of Supervisors adopted the Los Angeles County Green Building Standards Code (Title 31).

Existing Conditions

Integrated Regional Water Management

Integrated Regional Water Management (IRWM) is a collaborative effort to manage all aspects of water resources in a region. IRWM differs from traditional approaches to water resource management by integrating all facets of water supply, water quality, wastewater treatment, and flood- and storm- water management. IRWM crosses jurisdictional, water-shed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions.

IRWM is an example of integrated resource planning, which began in the late 1980s in the electric power industry as a comprehensive approach to resource management and planning. When applied to water management, integrated resource planning is a systems approach that explores the cause-and-effect relationships between different aspects of water resource management, with an understanding that changes in the management of one aspect of water resources are often not confined to the boundaries of a single, water-management agency. A consensus-based, cross-jurisdictional, regional approach provides an opportunity to formulate comprehensive solutions to water resource issues within a region.

The methods used in the IRWM include a range of water-resource management strategies, which relate to water supply, water quality, water-use efficiency, operational flexibility, and stewardship of land and natural resources.

IRWM Regions Covering Los Angeles County

Los Angeles County is within three IRWM regions mapped on Figure 5.17-2, *Integrated Water Supply Management*.

The **Antelope Valley IRWM Region** spans 2,400 square miles in northern Los Angeles County and southeastern Kern County.

The proportion of the urban water demand in the Antelope Valley IRWM Region within Los Angeles County is forecasted to remain stable at about 92 percent through the 2015-2035 planning period. Agricultural water demand, about half of the total water demand in the Region, is forecasted for the region only and not for the two counties separately.

The **Upper Santa Clara River IRWM Region** consists of the portion of the Santa Clara River Watershed in Los Angeles County, which is a 654-square-mile area.

The **Greater Los Angeles County (GLAC) IRWM Region** spans the remainder of Los Angeles County including the Los Angeles River, San Gabriel River, Santa Monica Bay, and Dominguez watersheds. The GLAC Region encompasses about 2,058 square miles, and includes parts of southeastern Ventura County, northwest Orange County, and a small part of southwest San Bernardino County.

The GLAC Region is divided into five subregions:

- **North Santa Monica Bay:** similar to the Santa Monica Mountains Planning Area, plus includes parts of southeastern Ventura County. It totals 203 square miles.

- **Upper Los Angeles River:** consists of most of the part of the Los Angeles River Watershed north of the I-10 freeway in central Los Angeles. Contains the San Fernando Valley Planning Area, part of the southwestern Antelope Valley Planning Area, much of the northern Metro Planning Area, the north-westernmost part of the West San Gabriel Planning Area, and a small part of the southeastern Santa Clarita Valley Planning Area.

Note: Integrated water supply management (IRWM) regions are regional planning areas respecting water supplies. IRWM regions are based on watersheds; some IRWM regions consist of portion of a watershed (e.g. Upper Santa Clara River, part of the Santa Clara River watershed); while other IRWM regions are combinations of two or more watersheds, or parts of two or more watersheds (e.g. South Bay IRWM region consisting of Dominguez Channel watershed and part of the Santa Monica Bay watershed).

0 10
Scale (Miles)

Source: LACDPW 2013; AVEK 2013; CLWA 2014

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- **Upper San Gabriel and Rio Hondo Subregion:** consists of the San Gabriel River Watershed north of Whittier Narrows Flood Control Basin, and part of the eastern Los Angeles River Watershed. This subregion consists of the East San Gabriel Valley Planning Area, almost all of the West San Gabriel Planning Area, and part of the southeastern Antelope Valley Planning Area.

- **South Bay Subregion:** consists of the southeast part of the Santa Monica Bay Watershed and the Dominguez Watershed. This subregion spans the Westside and South Bay Planning Areas; the southwest corner of the Gateway Planning Area; and part of the western Metro Planning Area.

- **Lower San Gabriel and Los Angeles Rivers Subregion:** consists of the part of the Los Angeles River Watershed south of I-10 in central Los Angeles, plus the part of the San Gabriel River Watershed south of Whittier Narrows Flood Control Basin. This region includes the almost all of the Gateway Planning Area, plus the southern part of the Metro Planning Area and the southeastern rim of the East San Gabriel Planning Valley Area. The region includes part of northwest Orange County and a small part of southwest Ventura County (DPW 2014b).

Water Supply Fundamentals

Los Angeles County has seven types of water supply sources:

- **From Northern California via the State Water Project:** The delivery capacity of the State Water Project is currently 2.4 million acre-feet annually. The State Water Project has delivered water to 29 water agencies along the route, including the Antelope Valley-East Kern Water Agency, Castaic Lake Water Agency, Metropolitan Water District, and the San Gabriel Valley Municipal Water District. The Metropolitan Water District of Southern California (MWD) wholesales most of the water imported into Southern California by the State Water Project to the MWD's 26 member agencies.

- **From the Colorado River via the Colorado River Aqueduct:** The 242-mile long Colorado River Aqueduct carries a billion gallons (2,778 acre-feet) of water daily to Southern California. Los Angeles County relies on the Colorado River Aqueduct for some of its water supply. California, along with a number of other states, shares water that is diverted from the Colorado River. Over the past few decades, California has been utilizing more than its allocation of 4.4 million acre-feet of water annually from the Colorado River. Water agencies throughout California, including the Metropolitan Water District, are implementing programs to reduce water drawn from this source to the initial allocation agreement, through water banking, conservation, and recycling. The water is sold by the MWD to its member agencies.

- **Groundwater:** From local groundwater basins. Groundwater basins are recharged naturally through stormwater and rainfall, and artificially recharged in recharging basins with imported water, stormwater, and recycled water.

- **Water Banking:** Some water agencies store water in groundwater basins outside the region, mainly in the San Joaquin Valley

- **Surface Water:** From local streams.
- **Recycled Water:** Treated and disinfected municipal wastewater. Uses include landscape and agricultural irrigation, groundwater recharge, and industrial uses.
- **Desalination:** Of ocean water.
- **Stormwater Capture and Direct Use:** The supply made available through the capture of local stormwater and runoff flows for local non-potable use prior to reaching rivers or other water bodies.

Water Agencies Overview

Up to four levels of water agencies participate in delivering water from its source to households and other retail customers.

- The California Department of Water Resources (DWR) operates and maintains the State Water Project (SWP).
- Water Wholesalers: Two levels of water wholesalers serve many Los Angeles County residents**:**
    - The MWD buys imported SWP water; imports water from the Colorado River; and wholesales water to its member agencies.
    - Other water wholesalers in Los Angeles County include the Central Basin Municipal Water District, West Basin Municipal Water District, Upper San Gabriel Valley Municipal Water District, Castaic Lake Water Agency, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, and Antelope Valley-East Kern Water Agency. The Central Basin Municipal Water District, West Basin Municipal Water District, Upper San Gabriel Valley Municipal Water District, and the Three Valleys Municipal Water District are member agencies of the MWD. Some water wholesalers also operate groundwater wells.
- Water purveyors provide water to retail customers; some are agencies of cities or counties, some private companies, and some are special districts.

Water Agencies: Descriptions

Several water agencies serving the unincorporated areas are further described below:

Metropolitan Water District of Southern California

The Metropolitan Water District (MWD) serves a vast area of California's southern coast region, from the Oxnard to Mexico's border, and supplies water to most of the southern portion of Los Angeles County. MWD wholesales water to its member agencies, who in turn distribute the water to end users. Twenty-seven member agencies contract with MWD and together serve approximately 300 cities and unincorporated areas in Southern California.

The MWD is responsible for purchasing much of Southern California's water from the Colorado River and State Water Project to meet the region's growing demand. The MWD is Southern California's primary water wholesaler, supplying member cities and water districts with approximately two million acre-feet, or 650 billion gallons of water, annually. MWD also owns and operates several reservoirs and a transmission pipeline network.

Antelope Valley-East Kern Water Agency

The Antelope Valley-East Kern Water Agency (AVEK) holds the third largest entitlement to water from the State Water Project; only the Metropolitan Water District and Kern Water Company have higher entitlements. AVEK's district boundaries extend 2,400 square miles from the Antelope Valley in Los Angeles County and Kern County. Since 1953, AVEK has brought water to major consumers, including farmers and Edwards Air Force Base. AVEK imports 75,000 acre-feet of water into its district annually. However, demand for water in the Antelope Valley is higher than current imported water delivery capacities. Other water sources, including groundwater, surface water, and recycled water, comprise more than half of the water supplies within AVEK's service area.

Castaic Lake Water Agency

The Castaic Lake Water Agency (CLWA) monitors groundwater and provides imported water from the State Water Project to four retail water purveyors for distribution in the Santa Clarita Valley: Los Angeles County Waterworks District 36, Newhall County Water District, Santa Clarita Water Company, and Valencia Water Company. These agencies collect and maintain data on precipitation, groundwater quality, consumption rates, and surface water delivery throughout the Santa Clarita Valley. The data serves as an indicator of overall water conditions, and is used to project available water supplies and prevent over-drafting of valley groundwater basins.

The Santa Clarita Valley extracts approximately 40 percent of its water supply from groundwater basins. Historically, water use in the Santa Clara Valley was predominantly agricultural. Today, urban development is the primary user, and irrigation demands are expected to continue to decline.

Littlerock Creek Irrigation District

The Littlerock Creek Irrigation District (LCID) is a public entity that was created in the late 1880s. LCID was instrumental, along with the Palmdale Water District, in constructing the Littlerock Dam. The completion of Littlerock Dam in 1924 made it possible to store water runoff from the Angeles National Forest.

Palmdale Water District

The Palmdale Water District is one of the oldest water districts in the Antelope Valley. It began in the late 1800s as a water provider for agricultural irrigation. What started as a wooden trestle carrying creek water for farms is now an underground canal feeding Palmdale Lake with water from the Littlerock Dam. Much of this water supplies the expanding urban population in the Antelope Valley. In 1963, the Palmdale Water District began purchasing water from the State Water Project to supplement groundwater and water from Littlerock Dam.

Water Supply and Demand Projections in Integrated Regional Water Management Plans

Water supply and demand projections in Water Supply and Demand Projections in Integrated Regional Water Management Plans (IRWMPs) were compiled from Urban Water Management Plans (UWMPs) for water

wholesalers and water purveyors within each respective IRWM region and subregion. UWMPs of water wholesalers incorporate water supply and demand projections from each water purveyor purchasing water from a wholesaler. All of the UWMPs used in the IRWMPs cited in this Section are 2010 UWMPs.

UWMPs cited in water supply and demand projections in the IRWMPs referenced in this Section are listed below in Table 5.17-5.

Table 5.17-5 Urban Water Management Plans Cited in IRWMPs Referenced in this Section

IRWM Region/Subregion	UWMP	
	Water Wholesaler	Water Purveyor
Antelope Valley	Antelope Valley – East Kern Water Agency	---
Upper Santa Clara River	Castaic Lake Water Agency	---
Greater Los Angeles County		
North Santa Monica Bay	Calleguas Municipal Water District	Las Virgenes Municipal Water District
		Los Angeles County Waterworks District No. 29
		California Water Services Co. Westlake District
		Triunfo Sanitation District
Upper Los Angeles River	Foothill Municipal Water District	City of Los Angeles Department of Water & Power
		City of Glendale
		City of Burbank
		City of Pasadena
		Las Virgenes Municipal Water District
Upper San Gabriel and Rio Hondo	Foothill Municipal Water District	City of Pasadena
	Three Valleys Municipal Water District	City of South Pasadena
		City of Alhambra
		California American Water Co.
		San Gabriel County Water District
		San Gabriel Valley Water Co.
		City of Arcadia
		City of Azusa Light and Water
		Suburban Water Systems
		City of Sierra Madre
		City of Monrovia
		Valley County Water District
South Bay	West Basin Municipal Water District	City of Torrance
		City of Beverly Hills
		City of Santa Monica
		City of Los Angeles Department of Water & Power
		California Water Systems Co. (CWSC) Dominguez District
		CWSC Hawthorne District
		CWSC Hermosa-Redondo District
		CWSC Palos Verdes District
Lower San Gabriel and Los Angeles Rivers	Central Basin Municipal Water District	City of Los Angeles Department of Water & Power
		City of Long Beach
		City of Fullerton (Orange County)

Source: LACDPW 2014b

Water Supplies by IRWM Region

Antelope Valley

Projected water supplies by source in the Antelope Valley IRWM Region are shown below in Table 5.17-6. The Antelope Valley IRWMP forecasts that the population within that IRWM Region will increase to 547,000 in 2035 from a 2010 US Census count of about 346,000, which is a net increase of 201,000 (AVRWMG 2013).

Table 5.17-6 Projected Water Supplies, Antelope Valley IRWM Region, Acre-Feet per Year

	2015	2020	2025	2030	2035
Supplies					
Local Groundwater	110,000	110,000	110,000	110,000	110,000
Imported Water (State Water Project)	95,900	95,900	95,900	95,900	95,900
Surface Water	4,000	4,000	4,000	4,000	4,000
Recycle/Reuse	82	82	82	82	82
Total Supplies	**210,600**	**210,600**	**210,600**	**210,600**	**210,600**
Demands					
Urban Demands	95,000	103,000	108,000	113,000	118,000
Agricultural Demands	92,000	92,000	92,000	92,000	92,000
Total Demands	**187,000**	**195,000**	**200,000**	**205,000**	**210,000**
Surplus	**23,600**	**15,600**	**10,600**	**5,600**	**600**

Source: AVRWMG 2013.

Los Angeles County Waterworks District 40

Much of the Antelope Valley Planning Area lacks municipal water service and relies on private groundwater wells for water. Much of the unincorporated area within the Antelope Valley Planning Area that does have municipal water service is served by Los Angeles County Waterworks District 40 (WWD40), which also serves parts of the City of Lancaster and City of Palmdale. WWD40's 2010 Urban Water Management Plan also covers the Quartz Hill Water District (QHWD), which serves part of the City of Lancaster as well as unincorporated areas (see Figure 5.17-3, *Antelope Valley Water Agencies Service Areas*). The population within these two water providers' service areas is forecasted to increase from 279,300 in 2010 to 526,900 in 2035, which is a net increase of 247,600. These two water providers forecast that (including planned water supplies consisting of groundwater banking and expanded imported water financed by developer fees) they will have adequate water supplies to meet water demands in their service areas in normal-year, single-dry-year, and multiple-dry-year conditions through 2035. Water supply and demand forecasts for normal water year conditions, including existing and planned water supplies, are shown below in Table 5.17-7. WWD40's Urban Water Management Plan further forecasts that the population of the Antelope Valley IRWM Region will increase from 440,800 in 2010 to 1,025,100 in 2035, which is a net increase of 584,300. That increase includes increases in cities such as Lancaster and Palmdale as well as unincorporated areas in Los Angeles and Kern counties. The water supply and demand forecasts below in Table 5.17-7 cover only the service areas of WWD40 and the QHWD.

Table 5.17-7 Los Angeles County Waterworks District 40 and Quartz Hill Water District Combined Forecast Water Supplies and Demands

		2015	2020	2025	2030	2035
Supplies						
Existing Supplies	Groundwater	25,700	25,700	25,700	25,700	25,700
	Imported Water	67,800	67,800	67,800	67,800	67,800
	Total	93,500	93,500	93,500	93,500	93,500
Planned Supplies	Groundwater Banking	-	-	-	-	-
	Imported Water (Developer Fee)	2,300	4,100	12,900	21,600	31,200
	Recycled Water	5,400	8,200	10,900	13,600	16,300
	Total	7,700	12,300	23,800	35,200	47,500
Total Supplies		**101,200**	**105,800**	**117,300**	**128,700**	**141,000**
Demands						
Demands		98,400	103,900	116,300	128,700	141,000
Surplus		2,800	1,900	1,000	0	0

Source: LACWWD40 2011

Population Projections, Antelope Valley IRWM Region

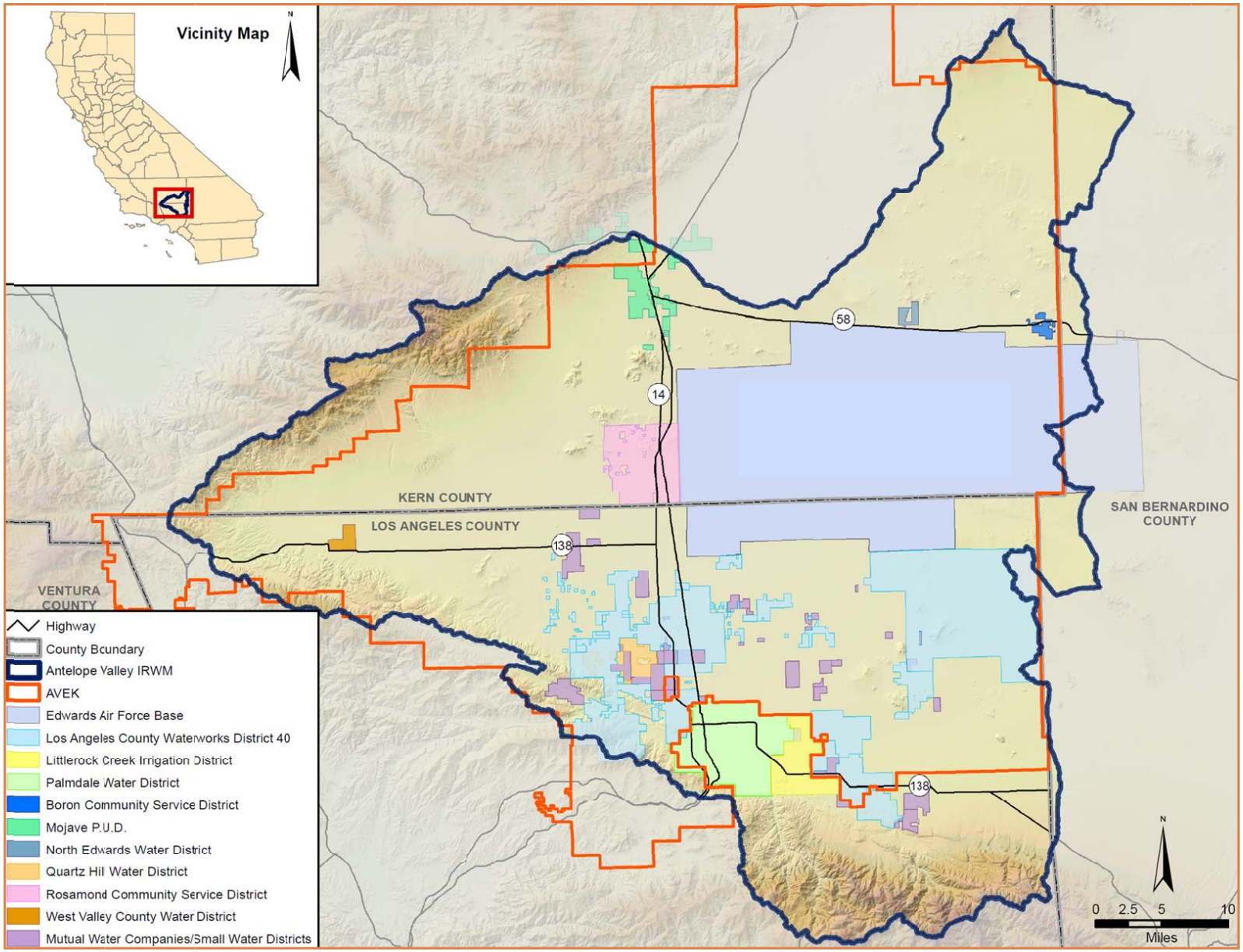
Population projections for the Antelope Valley IRWM Region used in the Antelope Valley IRWMP and the WWD40 2010 UWMP are shown below in Table 5.17-8. Population projections in the WWD40 UWMP are by water agency, not for cities and unincorporated areas.

Table 5.17-8 Population Projections, Antelope Valley IRWM Region

				2010	2035
Antelope Valley IRWMP	Los Angeles County		Incorporated (Palmdale and Lancaster)	296,000	407,000
			Unincorporated	63,000	99,000
			Subtotal	359,000	506,000
	Kern County (all)			31,000	41,000
	Total			**390,000**	**547,000**
WWD40 2010 UWMP (Population by water provider)	Los Angeles County	WWD40 and QHWD	Palmdale and Lancaster	238,000	456,100
			Unincorporated	41,300	70,800
			Subtotal	279,300	526,900
		Total	Palmdale and Lancaster	334,300	638,000
			Unincorporated	106,500	173,300
			Subtotal	440,800	851,800
	Kern County (all)			0	213,800
	Total			**440,800**	**1,025,100**

ANTELOPE VALLEY WATER AGENCIES SERVICE AREAS

FIGURE 5.17-3



Source: AVRWMG 2013

5. Environmental Analysis
UTILITIES AND SERVICE SYSTEMS

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Planned Water Supplies

Water agencies in the Antelope Valley IRWM Region are pursuing several options for increasing water supplies; no specific projects have yet been selected.

- **Imported Water (Development Fee):** AVEK and water retailers within its service area, including WWD40, QHWD, are working to develop a New Water Supply development fee to fund acquisition of additional imported water supplies. Such increase in imported water is forecast to grow from 2,300 afy in 2015 to 31,200 afy in 2035.

- **Recycled Water:** Tertiary-treated water from the LWRP and PWRP available for reuse is forecast to increase from 1,200 afy in 2010 to 31,700 afy by 2035. However, demand for recycled water would be limited by distribution infrastructure. A planned Antelope Valley Backbone recycled water distribution system would convey recycled water within the City of Palmdale and City of Lancaster and some unincorporated areas. Projected future uses of recycled water, mostly for forecast municipal irrigation and industrial uses, increase from 5,400 afy in 2015 to 16,300 afy in 2035 (WWD40 2011).

- **Groundwater Banking:** Water banking involves storing water available in wet years for recovery during droughts and/or periods of high demand. Groundwater banking is not accounted for in planned supplies listed in Table 5.17-7 above, as it stores water rather than increases overall supplies.

    - A proposed Antelope Valley Water Bank in eastern Kern County next to the Los Angeles County boundary would be capable of 100,000 afy each of recharge and recovery, and would have 500,000 af of total storage capacity.

    - The Semitropic Water Storage Bank in the San Joaquin Valley in Kern County has existing capacity of 1 million af; recharge capacity of 90,500 afy; and extraction capacity of 90,000 afy. A second phase of this groundwater banking program, the Stored Water Recovery Unit, will increase storage capacity to 1.65 million af and extraction capacity to 290,000 afy (WWD40 2011).

Upper Santa Clara River

Projected water supplies by source in the Upper Santa Clara River IRWM Region are shown below in Table 5.17-9. The Environmental Impact Report for the Santa Clarita Valley Area Plan concluded that water supplies would be adequate for buildout of the Santa Clarita Valley Area Plan for the portions of the Santa Clarita Valley Planning Area within the service area of the Castaic Lake Water Agency and/or within the East Subbasin of the Santa Clara River Valley Groundwater Basin after implementation of mitigation measures (see Figure 5.17-4, *Castaic Lake Water Agency Service Area and East Groundwater Subbasin*). However, impacts were identified as significant and unavoidable outside of those two areas.

Table 5.17-9 Projected Water Supplies, Upper Santa Clara River IRWM Region, Acre-Feet per Year

	2015	2020	2025	2030	2035
Existing Supplies					
Local Groundwater	67,225	68,225	68,225	68,225	68,225
Imported Water	79,397	77,817	77,517	77,317	77,232
Water Banking	39,950	39,950	24,950	24,950	24,950
Subtotal	*186,572*	*185,992*	*170,692*	*170,492*	*170,407*
Planned Supplies					
Groundwater	1,375	1,375	1,375	1,375	1,375
Recycled Water	975	2,725	5,225	7,775	10,275
Water Banking	0	0	10,000	10,000	20,000
Subtotal	*2,350*	*4,100*	*16,600*	*19,150*	*31,650*
Total	**188,922**	**190,092**	**187,292**	**189,642**	**202,057**

Source: CLWA 2014.

North Santa Monica Bay Subregion

Projected water supplies by source in the North Santa Monica Bay IRWM Subregion are shown below in Table 5.17-10.

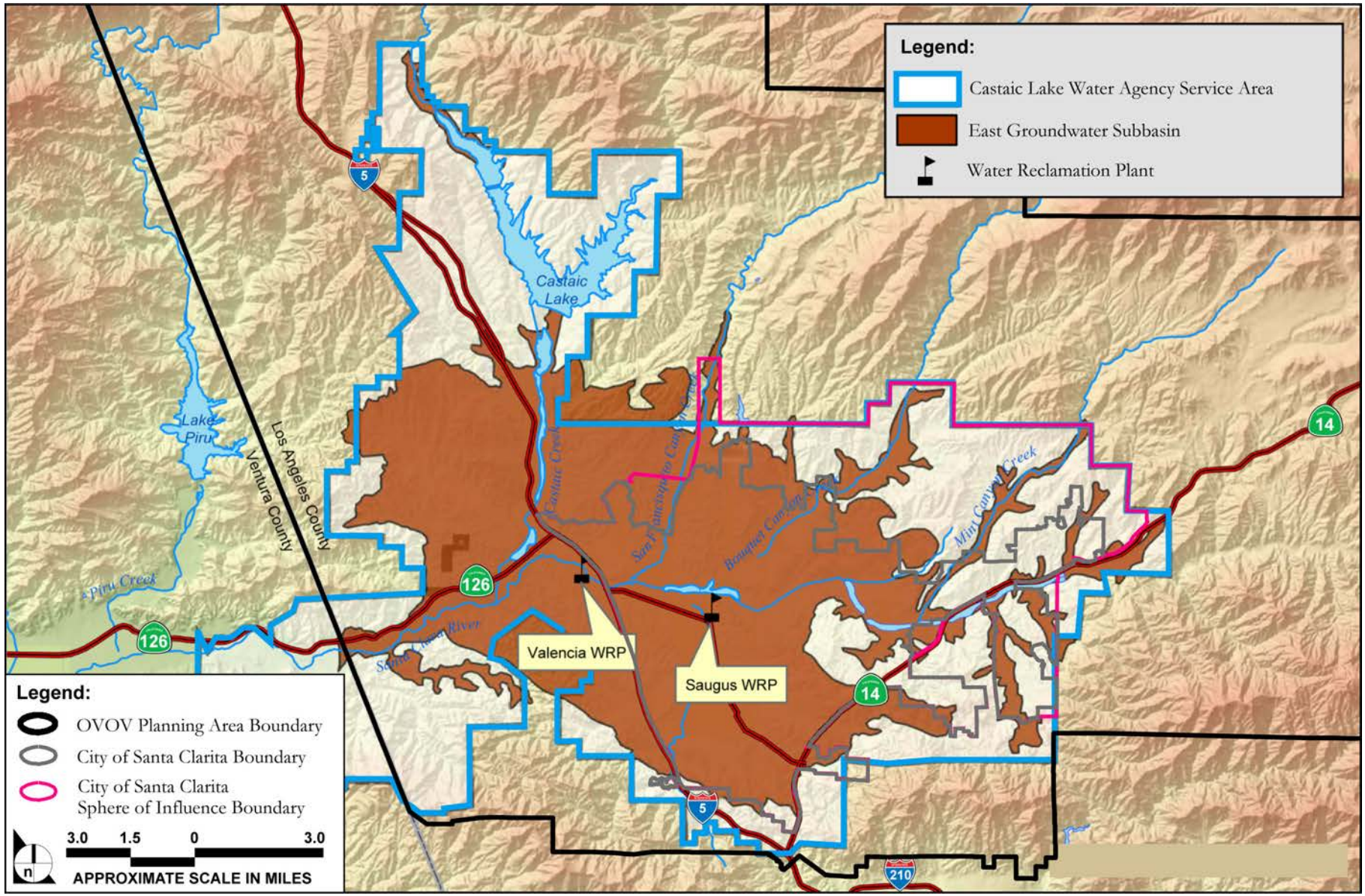
Table 5.17-10 Projected Water Supplies, North Santa Monica Bay IRWM Subregion, Acre-Feet per Year

	2015	2020	2025	2030	2035
Groundwater	188	188	188	188	188
Imported Water	43,233	43,184	44,410	48,214	46,716
Recycled Water	5,545	6,690	7,836	8,981	9,211
Total	**48,965**	**50,062**	**52,434**	**57,383**	**56,115**

Source: LACDPW 2014b

CASTAIC LAKE WATER AGENCY SERVICE AREA AND EAST GROUNDWATER SUBBASIN

FIGURE 5.17-4



Source: Impact Sciences, 2010

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Upper Los Angeles River Subregion

Projected water supplies by source in the Upper Los Angeles River IRWM Subregion are shown below in Table 5.17-11.

Table 5.17-11 Projected Water Supplies, Upper Los Angeles River IRWM Subregion, Acre-Feet per Year

	2015	2020	2025	2030	2035
Groundwater	52,306	108,106	123,306	119,206	122,211
Imported Water	336,385	289,948	278,272	285,974	276,774
Recycled Water	17,719	21,009	22,432	23,854	25,140
Local Surface Water	952	952	952	952	952
Conservation	9,224	17,811	25,789	33,583	40,081
Stormwater Capture and Direct Use	1,160	3,480	5,800	9,280	14,500
Water Transfers	23,200	23,451	23,451	23,451	23,451
Total	**440,946**	**464,757**	**480,001**	**496,299**	**503,109**

Source: LACDPW 2014b

Upper San Gabriel and Rio Hondo Subregion

Projected water supplies by source in the Upper San Gabriel and Rio Hondo IRWM Subregion are shown below in Table 5.17-12.

Table 5.17-12 Projected Water Supplies, Upper San Gabriel River and Rio Hondo IRWM Subregion, Acre-Feet per Year

	2015	2020	2025	2030	2035
Groundwater	207,696	217,764	218,766	221,376	222,609
Imported Water	120,442	118,371	121,568	125,114	126,887
Recycled Water	12,356	15,621	17,217	18,903	20,572
Local Surface Water	18,380	18,341	18,341	18,341	18,341
Conservation	22,691	24,718	27,563	30,016	32,258
Stormwater Capture and Direct Use	1,428	0	0	0	0
Water Transfers	(34)	0	0	0	0
Total	**382,993**	**394,816**	**403,456**	**413,751**	**420,668**

Source: LACDPW 2014b

South Bay Subregion

Projected water supplies by source in the South Bay IRWM Subregion are shown below in Table 5.17-13.

Table 5.17-13 Projected Water Supplies, South Bay IRWM Subregion, Acre-Feet per Year

	2015	2020	2025	2030	2035
Groundwater	84,858	89,589	89,589	89,589	89,589
Imported Water	431,704	393,368	396,054	392,892	387,520
Recycled Water	28,843	47,714	49,769	54,732	56,254
Conservation	20,471	31,327	36,864	43,131	47,924
Storm Water Capture and Direct Use	755	2,264	3,774	6,038	9,435
Water Transfers	15,096	15,096	15,096	15,096	15,096
Desalination	500	21,000	21,000	21,000	21,000
Total	**582,227**	**600,358**	**612,147**	**622,479**	**626,818**

Source: LACDPW 2014b

Lower San Gabriel and Los Angeles Rivers Subregion

Projected water supplies by source in the Lower San Gabriel and Los Angeles Rivers IRWM Subregion are shown below in Table 5.17-14.

Table 5.17-14 Projected Water Supplies, Lower San Gabriel and Los Angeles Rivers IRWM Subregion, Acre-Feet per Year

	2015	2020	2025	2030	2035
Groundwater	273,989	274,846	275,208	275,673	276,291
Imported Water	106,931	106,656	100,511	98,852	92,137
Recycled Water	42,670	44,695	47,620	48,745	49,870
Conservation	567	1,090	1,614	2,137	2,575
Storm Water Capture and Direct Use	80	240	400	640	1,000
Water Transfers	1,600	1,600	1,600	1,600	1,600
Desalination	0	0	5,000	5,000	10,000
Total	**425,837**	**429,127**	**431,953**	**432,647**	**433,473**

Source: LACDPW 2014b

Summary of Water Supplies by Source

Total water supplies for Los Angeles County are listed by source below in Table 5.17-15. Groundwater is projected to comprise of 35 to 36 percent of water supplies for Los Angeles County in both 2015 and 2035. Imported water is forecasted to decline as a percentage of total water supplies from 53 percent in 2015 to 45 percent in 2035. Increases in other sources replacing the reduction in imported water would be recycled water, conservation, stormwater capture and direct reuse, and desalination.

Table 5.17-15 Water Supplies by Source for Los Angeles County in Acre-Feet per Year

	2015	2020	2025	2030	2035
Groundwater	797,637	870,093	817,057	885,632	890,488
Imported Water	1,213,992	1,125,244	1,036,715	1,124,463	1,103,251
Surface Water	23,332	23,293	23,293	23,293	23,293
Recycled Water	108,190	138,536	144,956	160,522	168,904
Water Banking	39,950	39,950	34,950	34,950	34,950
Conservation	52,953	74,946	91,830	108,867	122,838
Stormwater Capture and Direct Use	3,423	5,984	9,974	15,958	24,935
Water Transfers	39,862	40,147	40,147	40,147	40,147
Desalination	500	21000	26000	26000	31000
Total	**2,279,839**	**2,339,193**	**2,224,922**	**2,419,832**	**2,439,806**

Source: LACDPW 2014b

Existing Water Demands

Existing water demands are shown below in Table 5.17-16.

Table 5.17-16 Existing Water Demands by IRWM Region/Subregion in Acre-Feet per Year

IRWM Region/Subregion	2015	2020	2025	2030	2035
Antelope Valley	187,000	195,000	200,000	205,000	210,000
Upper Santa Clara River	94,553	94,218	102,647	109,674	118,203
North Santa Monica Bay	42,218	39,701	40,771	44,427	42,782
Upper Los Angeles River	439,111	462,331	477,376	493,481	500,228
Upper San Gabriel and Rio Hondo	325,122	341,951	349,647	357,392	363,856
South Bay	477,051	498,009	507,296	517,697	521,946
Lower San Gabriel and Los Angeles Rivers	378,941	387,490	396,401	398,703	400,916
Total	**1,943,996**	**2,018,700**	**2,074,138**	**2,126,374**	**2,157,931**
Total Supplies (from Table 5.17-13)	**2,279,839**	**2,339,193**	**2,224,922**	**2,419,832**	**2,439,806**
Residual Supplies	**335,843**	**320,493**	**150,784**	**293,458**	**281,875**

Sources: AVRWMG 2013, CLWA 2014, LACDPW 2014b

Water Treatment Facilities

Water treatment facilities filter and/or disinfect water before it is delivered to customers.

MWD

The MWD operates five water treatment plants. Two of the plants are in Los Angeles County: the Joseph Jensen Treatment Plant in the neighborhood of Granada Hills in the City of Los Angeles, with capacity of 750 mgd; and the F. E. Weymouth Treatment Plant in the City of La Verne, with capacity of 520 mgd. The Robert Diemer Treatment Plant in the City of Yorba Linda in Orange County has 520 mgd capacity. The Henry Mills Treatment Plant in the City of Riverside in Riverside County has 326 mgd capacity, and the Robert Skinner Treatment Plant east of the City of Murietta in Riverside County has 520 mgd capacity. The five facilities' total capacity is approximately 2.64 billion gallons per day.

Central Basin Municipal Water District

The Central Basin Municipal Water District is a groundwater treatment facility, the Water Quality Protection Project, treats groundwater for volatile organic compound (VOC) contamination in the City of Pico Rivera in the Central subbasin; the contamination is a plume originating from the San Gabriel Valley to the north. The facility uses granular-activated carbon and has capacity of 2,000 gallons per minute (CBMWD 2011).

West Basin Municipal Water District

The West Basin Municipal Water District is a 2,400 acre foot per year (afy; or 2.1 mgd) capacity desalination facility in the City of Torrance operated by the West Basin Municipal Water District removes chloride from groundwater impacted by seawater.

Three Valleys Municipal Water District

The Three Valleys Municipal Water District (TVMWD) operates the Miramar Water Treatment Plant in the City of Claremont, with a 25 mgd capacity.

The above-described water treatment facilities are mapped on Figure 5.17-5, *Water Treatment Facilities*.

Principles Governing CEQA Analysis of Water Supply

In *Vineyard Area Citizens for Responsible Growth, Inc., v. City of Rancho Cordova* (53 Cal. Rptr. 3rd. 821; February 1, 2007), the California Supreme Court articulated the following principles for analysis of future water supplies for projects subject to CEQA:

To meet CEQA's informational purposes, the EIR must present sufficient facts to decision makers to evaluate the pros and cons of supplying the necessary amount of water to the project.

CEQA analysis for large, multiphase projects must assume that all phases of the project will eventually be built and the EIR must analyze, to the extent reasonably possible, the impacts of providing water to the entire project. Tiering cannot be used to defer water supply analysis until future phases of the project are built.

CEQA analysis cannot rely on "paper water." The EIR must discuss why the identified water should reasonably be expected to be available. Future water supplies must be likely, rather than speculative.

FIGURE 5.17-5

WATER TREATMENT FACILITIES

- Water Treatment Facilities

Angeles National Forest
Santa Clarita Valley Planning Area
Antelope Valley Planning Area
Jensen TP MWD
Ventura County
San Fernando Valley Planning Area
Angeles National Forest
Miramar TP TVMWD
San Bernardino County
Santa Monica Mountains Planning Area
West San Gabriel Valley Planning Area
Metro Planning Area
East San Gabriel Valley Planning Area
Weymouth TP MWD
Gateway Planning Area
Mills TP MWD
Westside Planning Area
Diemer TP MWD
Riverside County
Orange County
Skinner TP MWD
South Bay Planning Area

14, 5, 118, 170, 101, 2, 134, 405, 210, 57, 10, 60, 605, 110, 105, 91, 103, 47, 22

Planning Areas
Unincorporated Area
Interstate
State Highway
US Highway
Metrolink
Metro Rail

Source: LACSD 2014, LABS 2014, LVMWD 2014

LOS ANGELES COUNTY
GENERAL PLAN UPDATE
EIR

COLA-03.0E 6/17/2014 2:15:11 PM
0 5 10 Miles

PLACEWORKS

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When there is some uncertainty regarding availability of future water supply, an EIR should acknowledge the degree of uncertainty, include a discussion of possible alternative sources, and identify the environmental impacts of such alternative sources. Where a full discussion still leaves some uncertainly about the long-term water supply's availability, mitigation measures for curtailing future development in the event that intended sources become unavailable may become a part of the EIR's approach.

The EIR does not need to show that water supplies are definitely assured because such a degree of certainty would be "unworkable, as it would require water planning to far outpace land use planning." The requisite degree of certainty of a project's water supply varies with the stage of project approval. CEQA does not require large projects, at the early planning phase, to provide high degree of assurances of certainty regarding long-term future water supplies.

The EIR analysis may rely on existing, urban water management plans, so long as the project's new demand was included in the water management plan's future demand accounting.

The ultimate question under CEQA is not whether an EIR establishes a likely source of water, but whether it adequately addresses the reasonably foreseeable impacts of supplying water to the project.

Water Supply Reliability: Imported Water

The Southern California region faces a challenge satisfying its water requirements and securing firm water supplies. Increased environmental regulations and competition for water from outside the region have resulted in reduced supplies of imported water. Continued population and economic growth correspond to increase water demands in the region, putting an even larger burden on local supplies. A number of important factors affecting delivery reliability are discussed below. Major sources of uncertainty include Sacramento Delta pumping restrictions, organism decline, climate change and sea level rise, and levee vulnerability to floods and earthquakes.

MWD's 2010 Regional Urban Water Management Plan. MWD's 2010 Regional Urban Water Management Plan (UWMP) reports on its water reliability and identifies projected supplies to meet the long-term demand within its service area. It presents MWD's supply capacities from 2015 through 2035: single dry year, multiple dry years, and average year.

Colorado River Supplies. The Colorado River Aqueduct (CRA) supplies include water from existing and committed programs and from implementation of agreements to transfer water from agricultural agencies to urban uses. The Colorado River has the potential to supply additional water up to the CRA capacity of 1.25 million af on an as-needed basis.

State Water Project Supplies. MWD's State Water Project (SWP) supplies have been impacted in recent years by restrictions on SWP operations in accordance with the biological opinions of the US Fish and Wildlife Service and National Marine Fishery Service issued on December 15, 2008, and June 4, 2009, respectively. In dry, below-normal conditions, MWD has increased the supplies received from the California Aqueduct by developing flexible Central Valley/SWP storage and transfer programs. The goal of the storage/ transfer programs is to develop additional dry-year supplies that can be conveyed through the available

pumping capacity to maximize deliveries through the California Aqueduct during dry, hydrologic conditions and regulatory restrictions.

In June 2007, MWD's Board approved a Delta Action Plan, which provides a framework for staff to pursue actions with other agencies and stakeholders to build a sustainable Delta and reduce conflicts between water supply conveyance and the environment. The Delta Action Plan aims to prioritize immediate short-term actions to stabilize the Sacramento River Delta while an ultimate solution is selected and midterm steps to maintain the Bay-Delta while the long-term solution is implemented.

State and federal resource agencies and various environmental and water user entities are currently engaged in the development of the Bay Delta Conservation Plan, which is aimed at addressing Delta ecosystem restoration, water supply conveyance, flood control protection, and storage development. In evaluating the supply capabilities for the 2010 Regional UWMP, MWD assumed a new Delta conveyance is fully operational by 2022 that would return supply reliability similar to 2005 conditions, prior to supply restrictions.

Storage. Storage is a major component of MWD's dry year resource management strategy. The likelihood of having MWD adequate supply capability to meet projected demands without implementing its water supply allocation plan (WSAP) is dependent on its storage resources. In developing the supply capabilities for the 2010 Regional UWMP, MWD assumed a simulated median storage level going into each of five-year increments based on the balances of supplies and demands.

Supply Reliability. MWD evaluated supply reliability by projecting supply and demand conditions for the single- and multiyear drought cases based on conditions affecting the SWP (MWD's largest and most variable supply). For this supply source, the single driest year was 1977 and the driest three-year period was 1990 to 1992. The region can provide reliable water supplies not only under normal conditions but also under the single driest year and the multiple dry year conditions.

Water Supply Allocation Plan. Due to drought conditions and the uncertainty regarding future pumping operations from the SWP, MWD adopted a WSAP in 2008 that allocates water to members, and indirectly to the City, based on the regional shortage level in MWD's service area.

For future years in which MWD's supplies are insufficient to meet firm demands, imported supplies to MWDOC will be managed in accordance with the WSAP.

Water Supply Reliability: Groundwater

Groundwater basins are managed so that groundwater pumping does not exceed the total of natural and intentional recharge into a basin; such sustainable rate of groundwater pumping is the *safe operating yield*.

Agencies managing groundwater pumping and intentional groundwater recharge for many of the major groundwater basins underlying Los Angeles County are listed below in Table 5.17-17. Most of the basins listed are managed pursuant to court judgments ("adjudications"); for each basin, the court judgment specifies an agency (Watermaster) responsible for implementing the judgment.

Table 5.17-17 Groundwater Basins and Managing Agencies

Groundwater Basin	Adjudication Status	Watermaster	Safe Operating Yield, afy
Coastal Plain of Los Angeles Basin, West Coast Subbasin	Adjudicated	Department of Water Resources (DWR)	64,468 pumping rights[1]
Coastal Plain of Los Angeles Basin, Central Subbasin	Adjudicated	DWR	217,367 adjudicated water rights[2]
San Fernando Valley Basin	Adjudicated	Upper Los Angeles River Area Watermaster	87,000 consisting of 43,660 natural recharge plus 43,000 intentional recharge with imported water[3]
Main San Gabriel Valley Basin	Adjudicated	Main San Gabriel Valley Basin Watermaster	200,000 in fiscal year 2012-13; long-term average 195,000[4]
Raymond Basin	Adjudicated	Raymond Basin Management Board	30,662 adjudicated right[5]
Upper Santa Ana River Valley Basin Chino Subbasin	Adjudicated	Chino Basin Watermaster	54,834[6]
Antelope Valley Groundwater Basin	Adjudication Pending		110,000[7]
Santa Clara River Valley East Groundwater Basin	Not adjudicated	Managed under Groundwater Management Plan issued by Castaic Lake Water Agency	37,500 to 55,000 in normal water year conditions[8]

Sources: DWR 2004; [1] RMC 2011; [2] CBMWD 2012; [3] LADWP 2011; [4] MSGBW 2013; [5] RBMB 2013; [6] CBW 2012; [7] AVRWMG 2013; [8] CLWA 2011.

5.17.2.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-2 Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

U-4 Would not have sufficient water supplies available to serve the project from existing entitlements and resources, and new and/or expanded entitlements would be needed.

Relevant General Plan Goals and Policies Public Services and Facilities Element

Goal PS/F 1: A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.

- **Policy PS/F 1.1:** Discourage development in areas without adequate public services and facilities.
- **Policy PS/F 1.2:** Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.
- **Policy PS/F 1.3:** Ensure coordinated service provision through collaboration between County departments and service providers.

- **Policy PS/F 1.4:** Ensure the adequate maintenance of infrastructure.
- **Policy PS/F 1.5:** Focus infrastructure investment, maintenance and expansion efforts where the General Plan encourages development.
- **Policy PS/F 1.6:** Support multi-faceted public facility expansion efforts, such as substations, mobile units, and satellite offices.
- **Policy PS/F 1.7:** Consider resource preservation in the planning of public facilities.

Goal PS/F 2: Increased water conservation efforts.

- **Policy PS/F 2.1:** Support water conservation measures
- **Policy PS/F 2.2:** Support educational outreach efforts that discourage wasteful water consumption.

Goal PS/F 3: Increased local water supplies through the use of new technologies.

- **Policy PS/F 3.1:** Increase the supply of water though the development of new sources, such as recycled water, gray water, and rainwater harvesting.
- **Policy PS/F 3.2:** Support the increased production, distribution and use of recycled water, gray water, and rainwater harvesting to provide for groundwater recharge, seawater intrusion barrier injection, irrigation, industrial processes and other beneficial uses.

General Plan Implementation Programs

PS/F-1 Planning Area Capital Improvement Plans: DRP and DPW to jointly secure sources of funding and set priorities for preparing studies to assess infrastructure needs for the 11 Planning Areas. Once funding has been secured and priorities have been set, prepare a Capital Improvement Plan for each of the 11 Planning Areas (see also Planning Areas Framework Program). Each Capital Improvement Plan shall include the following, as needed:

- Sewer Capacity Study;
- Transportation System Capacity Study;
- Waste Management Study;
- Stormwater System Study;
- Public Water System Study;
- list of necessary infrastructure improvements;
- Implementation Program; and
- Financing Plan.

As applicable, studies related to water, sewer, traffic, and stormwater management should specifically address the needs of the unincorporated legacy communities identified in the Land Use Element.

5.17.2.3 ENVIRONMENTAL IMPACTS

The following impact analysis addresses CEQA Guidelines Appendix G thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.17-3: Water supply and delivery systems are not adequate to meet Proposed Project's requirements in the Antelope Valley and Santa Clarita Valley Planning Areas beyond 2035. [Thresholds U-2 (part) and U-4]

Impact Analysis:

Water Demands

The projected net increase in water demands due to Proposed Project buildout is approximately 158 million gallons per day, as shown below in Table 5.17-18.

Table 5.17-18 Estimated Water Demand due to Proposed Project Buildout

	Existing (2013)		General Plan Buildout		
Planning Area	Population	Water Demands (estimated as 166 gallons per capita per day)[1]	Population	Water Demands (estimated as 142 gallons per person per day)[1]	Net Increase, Water Demands
Antelope Valley	93,490	15,519,340	1,070,571	152,021,082	136,501,742
Coastal Islands	158	26,228	0	0	-26,228
East San Gabriel Valley	239,218	39,710,188	255,952	36,345,184	-3,365,004
Gateway	104,061	17,274,126	120,358	17,090,836	-183,290
Metro	235,990	39,174,340	301,073	42,752,366	3,578,026
San Fernando Valley	32,488	5,393,008	47,060	6,682,520	1,289,512
Santa Clarita Valley	104,116	17,283,256	237,638	33,744,596	16,461,340
Santa Monica Mountains	21,757	3,611,662	26,128	3,710,176	98,514
South Bay	69,474	11,532,684	86,392	12,267,664	734,980
West San Gabriel Valley	125,736	20,872,176	156,685	22,249,270	1,377,094
Westside	39,926	6,627,716	55,033	7,814,686	1,186,970
Total	**1,066,414**	**177,024,724**	**2,356,890**	**334,678,380**	**157,653,656**

Estimated water demands include demands by all land uses, residential and nonresidential; and including potable water and nonpotable water.
[1] Source: LACDPW 2014a

Impacts on Water Supplies

Antelope Valley Planning Area

Total water demands at Proposed Project buildout in the unincorporated areas of the Antelope Valley Planning Area are estimated to be 152 million gallons per day (170,400 afy), as shown above in Table 5.17-18. As shown in Table 5.17-6 above, total water supplies in the Antelope Valley IRWM Region in 2035 are forecast to be approximately 210,600 afy, which is adequate for the projected 2035 population of 547,000 people for the whole Antelope Valley IRWM Region including the incorporated cities of Palmdale and Lancaster, unincorporated areas, and part of Kern County. No estimate of supply beyond 2035 is available for the Antelope Valley IRWM Region. Therefore, even with planned future water supplies under consideration by Antelope Valley water agencies, water supplies in the Antelope Valley Planning Area would not be adequate to serve the buildout of the Proposed Project. New and/or expanded water supplies would be required to meet such demands. This impact would be significant.

Santa Clarita Valley Planning Area

The impact conclusions in the Santa Clarita Valley Area Plan EIR are hereby incorporated by reference. As discussed in Section 3.13, *Water Service*, of the Santa Clarita Valley Area Plan certified EIR, impacts would be less than significant after implementation of mitigation within the service area of the Castaic Lake Water Agency and/or within the East Subbasin of the Santa Clara River Valley Groundwater Basin; and significant and unavoidable outside of those two areas. Since the Proposed Project does not change any of the land uses within the Santa Clarita Valley Planning Area, no additional impacts beyond those disclosed in the OVOV Certified EIR would occur as a result of the Proposed Project.

Remaining Nine Planning Areas

Total water supplies in the five IRWM regions in Los Angeles County mainly consisting of the remaining nine Planning Areas in 2035 is estimated to be 2.03 million afy, or about 1,808 mgd (see tables 5.17-10 through 5.17-14 above).[2] Total water demands in the remaining nine planning areas at Proposed Project buildout are estimated to be 1.83 million afy, or 1,632 mgd (see Table 5.17-16 above). Residual water supplies in these nine planning areas are thus approximately 200,000 afy or 176 mgd. The total net increase in water demands due to Proposed Project buildout in these nine planning areas is approximately 4.69 mgd or 5,258 afy. There is adequate forecasted residual water supply at buildout to serve the Proposed Project in the remaining nine planning areas, and impacts on water supplies would be less than significant.

Impacts on Water Treatment Capacity

The total water treatment capacity in the region described above in Section 5.17.2.1, *Environmental Setting*, is about 2.67 billion gallons per day. There is adequate water treatment capacity in the region for the net increase in water demands resulting from Proposed Project buildout, and impacts would be less than significant.

[2] The five IRWM Regions are North Santa Monica Bay, Upper Los Angeles River, Upper San Gabriel and Rio Hondo, South Bay, and Lower San Gabriel and Los Angeles Rivers.

5.17.2.4 CUMULATIVE IMPACTS

Cumulative Water Demands

Cumulative forecasted water demands in Los Angeles County are shown below in Table 5.17-16. As shown in the Table, the cumulative net change in water demands in 2035 Proposed Project buildout conditions, and water demands due to post-2035 Proposed Project buildout, would not result in significant impacts to water supplies when compared with countywide residual water supply, shown in Table 5.17-19.

Table 5.17-19 Cumulative Water Demands

Area	Existing (2013) Water Demands	Forecasted Water Demands	Forecasted Net Increase, Water Demands[1]	Significant Impact Compared to Countywide Residual Water Supply
2035 Scenario (Based on SCAG Projections)				
Unincorporated Areas	177,024,890	198,729,000	21,704,110	No
Cities	1,480,338,366	1,413,397,000	(66,941,366)	No
Entire Los Angeles County	1,653,043,106	1,612,126,000	(40,917,106)	No
General Plan Update Buildout, Post-2035[2]				
Unincorporated Areas	177,024,890	334,678,380	157,653,490	No

[1] There is a forecast net decrease in water demand for cities and Los Angeles County between 2013 and 2035 due to the projected decrease in per capita water use from 166 gallons per day in 2013 to 142 gpd in 2035 pursuant to the Water Conservation Act of 2009.
[2] Population and water demand forecasts for cities within Los Angeles County beyond 2035 (e.g., Proposed Project buildout) are not available.

Cumulative Impacts to Water Treatment Facilities

As cumulative water demands for Los Angeles County are forecasted to decline between 2013 and 2035, no significant impact on water treatment capacity would occur.

5.17.2.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

State

- **California Water Code Sections 10610 et seq.:** Urban Water Management Planning Act
- **SBX7-7 (2009):** Water Conservation Act of 2009
- **Senate Bill (SB) 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001):** Water Supply Assessments

Local

- **Los Angeles County Green Building Standards Code** (Title 31).

5.17.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Water supply and delivery systems are not adequate to meet the Proposed Project's water demands in the Antelope Valley and Santa Clarita Valley Planning Areas beyond 2035.

5.17.2.7 MITIGATION MEASURES

Impact 5.17-3

Antelope Valley and Santa Clarita Valley Planning Areas

Development Site Plans, Building Plans, and Landscaping Plans

USS-1 Require the use of drought tolerant landscaping, native California plant materials, and evapotranspiration (smart) irrigation systems.

USS-2 Require the use of low-flow fixtures in all non-residential development and residential development with five or more dwelling units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate.

USS-3 Require low water use landscaping in new residential subdivisions and other private development projects, including a reduction in the amount of turf-grass.

USS-4 Promote the use of low-flow and/or waterless plumbing fixtures and appliances in all new non-residential development and residential development of five or more dwelling units.

USS-5 Support amendments to the County Building Code that would promote upgrades to water and energy efficiency when issuing permits for renovations or additions to existing buildings.

USS-6 Apply water conservation policies to all pending development projects, including approved tentative subdivision maps to the extent permitted by law. Where precluded from adding requirements by vested entitlements, encourage water conservation in construction and landscape design.

USS-7 Require new development to provide the infrastructure needed for delivery of recycled water to the property for use in irrigation, even if the recycled water main delivery lines have not yet reached the site, where deemed appropriate by the reviewing authority.

USS-8 Promote the installation of rainwater capture and gray water systems in new development for irrigation, where feasible and practicable.

USS-9 Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.

USS-10 Promote the use of permeable paving materials to allow infiltration of surface water into the water table.

USS-11 Maintain stormwater runoff on site by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas, and use of drainage areas as design elements, where feasible and reasonable.

USS-12 Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means, as appropriate.

USS-13 On previously developed sites proposed for major alteration, provide stormwater management improvements to restore natural infiltration, as required by the reviewing authority.

USS-14 Encourage and promote the use of new materials and technology for improved stormwater management, such as pervious paving, green roofs, rain gardens, and vegetated swales.

USS-15 Where detention and retention basins or ponds are required, seek methods to integrate these areas into the landscaping design of the site as amenity areas, such as a network of small ephemeral swales treated with attractive planting.

USS-16 Evaluate development proposals for consistency with the County Green Building Standards Code.

USS-17 Promote Low Impact Development standards on development sites, including but not limited to minimizing impervious surface area and promoting infiltration, in order to reduce the flow and velocity of stormwater runoff throughout the watershed.

Water Supply Planning and Water Conservation

USS-18 Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.

USS-19 Monitor growth, and coordinate with water districts as needed to ensure that long-range needs for potable and reclaimed water will be met.

USS-20 If water supplies are reduced from projected levels due to drought, emergency, or other unanticipated events, take appropriate steps to limit, reduce, or otherwise modify growth permitted by the General Plan in consultation with water districts to ensure adequate long-term supply for existing businesses and residents.

USS-21 Upon the availability of non-potable water, discourage and consider restrictions on the use of potable water for washing outdoor surfaces.

USS-22 In cooperation with the Sanitation Districts and other affected agencies, expand opportunities for use of recycled water for the purposes of landscape maintenance, construction, water recharge, and other uses as appropriate.

USS-23 In coordination with applicable water suppliers, adopt and implement a water conservation strategy for public and private development.

5.17.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Adequate water supplies have been identified in the UWMP's for the Project Area for demand as projected through the year 2035. However, additional water supplies necessary to serve buildout of the Proposed Project, which is expected to occur beyond the year 2035, have not been identified for the Antelope Valley and Santa Clarita Valley Planning Areas. Considering current water supply constraints—including the record 2013–2014 California drought—it is uncertain whether the water districts serving the Antelope Valley and Santa Clarita Valley Planning Areas would be able to secure water supplies greater than those currently forecasted for 2035. Therefore, impacts of the Proposed Project buildout on water supplies are significant and unavoidable.

5.17.3 Storm Drainage Systems

Storm drainage systems, and impacts of Proposed Project buildout on such systems, are described in Section 5.9, *Hydrology and Water Quality*.

5.17.4 Solid Waste

5.17.4.1 ENVIRONMENTAL SETTING

Regulatory Background

State

Assembly Bill 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

Assembly Bill 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multifamily residential land uses as well as schools and school districts.

Section 5.408 of the 2013 California Green Building Standards Code (Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

Local

Construction and Demolition Debris Recycling and Reuse Ordinance

The County of Los Angeles Board (County) of Supervisors adopted the Construction and Demolition Debris Recycling and Reuse Ordinance on January 4, 2005. The Ordinance added Chapter 20.87 to the Los Angeles County Code, which requires projects in the unincorporated areas to recycle or reuse 50 percent of the debris generated. Its purpose is to increase the diversion of construction and demolition debris from disposal facilities and will assist the County in meeting the State of California's 50 percent waste reduction mandate.

Los Angeles Countywide Siting Element

In 1997, the County prepared the Los Angeles Countywide Siting Element (Siting Element) that estimates the amount of solid wastes generated in Los Angeles County and proposes various diversion and alternate disposal options. The Siting Elements is a long-term planning document that describes how the County and the cities within the County plan to manage the disposal of their solid waste for a 15-year planning period. The Siting Element identifies DPW as the responsible agency to develop plans and strategies to manage and coordinate the solid waste generated in the unincorporated areas and to address the disposal needs of Los Angeles County. In addition, the Siting Element contains goals and policies on a variety of solid waste management issues. The County will continue to meet its disposal capacity needs by implementing enhanced waste reduction and diversion programs and greater resource recovery efforts. Existing Conditions

Solid Waste Collection

For many years, two-thirds of the unincorporated areas (primarily in the San Gabriel Valley and Antelope Valley Planning Areas), residential and commercial solid waste collection services were provided through an open-market system, whereby each resident/business directly arranged for trash collection services with no County involvement. Due to changes in federal and state laws regarding waste reduction, and changing public attitudes toward protecting the environment and increasing consumer demands for better service, the open-market system was unable to fully adapt to these conditions. In response, beginning in 2007, DPW gradually implemented the following solid waste collection systems to replace the open-market system:

Garbage Disposal Districts (GDDs)

Garbage Disposal Districts (GDDs) are designated areas within the unincorporated areas where trash collection and disposal services are provided to both residents and businesses by a private waste hauler that contracts with DPW. Operational expenses are paid from revenues generated through special property tax assessments. To date, the County has established seven GDDs in the unincorporated areas in South Los Angeles and Malibu communities.

Residential Franchise System

In a residential franchise system, an agreement is awarded to an exclusive waste hauler to provide trash collection and recycling services to all single-family residences and duplexes within specific unincorporated communities. The franchise system provides benefits to establish quality service and promote cleaner

neighborhoods through recycling services, environmental workshops, bulky item pick-ups, and annual clean-up events. The franchise system is designed to provide uniform service standards for haulers operating in each franchise area. The system provides each community with the flexibility needed to create services that will benefit area residents. These features are modified to reflect feedback received through survey cards, community meetings, and telephone calls. This interactive process allows the County to tailor each agreement to meet the needs voiced by each community. The franchise system also benefits the community by limiting the wear and tear on County streets, assists the County in meeting the State's waste reduction mandate, and reduces the need for new landfills. Currently, there are 21 residential franchise areas. DPW is considering replacing the remaining residential open-market system areas, including the Antelope Valley.

Commercial Franchise System

Effective July 1, 2012, all unincorporated area residents, businesses, and multifamily residents that utilize dumpster and/or roll-off trash collection service are served by a non-exclusive franchise system. In the non-exclusive franchise system, the County allows solid waste collection services to be provided by private waste haulers, but requires haulers to enter into a non-exclusive commercial waste collection franchise agreement with the County. The franchise agreement establishes minimum performance and customer service standards. Under this non-exclusive franchise system, customers enjoy free recycling services and on-site consultations, free bulky item and electronic waste collection, free holiday tree collection, graffiti removal, clean fuel collection trucks to reduce air pollution and noise, and customer dispute resolution. Along with these new benefits, customers will continue to have a choice of more than one waste hauler because the system is open to competition to all haulers that enter into the franchise agreement. The waste haulers deal directly with the public and businesses in competing for customers.

Landfills

In 2012, about 789,000 tons of solid waste from the unincorporated areas was disposed at 10 landfills. Nine of the landfills are described Table 5.17-20 below and mapped on Figure 5.17-6, *Landfills Serving Unincorporated Los Angeles County*. The remaining landfill, Puente Hills Landfill, closed in October 2013. Total disposal of solid waste from Los Angeles County in 2013 is estimated at about 44.8 million pounds per day based on 4.5 pounds of solid waste disposal per resident.

Table 5.17-20 Landfills Serving Unincorporated Areas

Landfill and Location	Current Remaining Capacity, Cubic Yards	Estimated Close Date (based on current SWFP)	Maximum Daily Load (tons)	Average Daily Disposal, 2012 (tons)	Residual Daily Disposal Capacity (tons)
Antelope Valley Public Landfill City of Palmdale	19,952,000	2042	1,800	832	968
Calabasas Sanitary Landfill Community of Agoura, unincorporated Los Angeles County	12,338,000	2028	3,500	604	2,896
Chiquita Canyon Sanitary Landfill Community of Castaic, unincorporated Los Angeles County	6,020,000	2019	6,000	2,970	3,030
El Sobrante Landfill City of Corona, Riverside County	145,530,000	2045	16,054	6,179	9,875
Lancaster Landfill and Recycling Center, City of Lancaster	14,491,000	2044	3,000	690	2,310
Olinda Alpha Sanitary Landfill City of Brea, Orange County	38,578,383	2021	8,000	7,633	367
Scholl Canyon Landfill City of Glendale	7,011,000	2030	3,400	675	2,725
Simi Valley Landfill & Recycling Center City of Simi Valley, Ventura County	119,600,000	2052	6,000	2,124	3,876
Sunshine Canyon City/County Landfill Community of Sylmar, City of Los Angeles	96,393,000	2037	12,100	7,221	4,879
Total[1]	**419,913,383**	n/a	**59,854**	**28,928**	**30,926**

Sources: CalRecycle 2014a; CalRecyle 2014b; CalRecycle 2014c; CalRecycle 2014d; CalRecycle 2014e; CalRecycle 2014f; CalRecycle 2014g; CalRecycle 2014h; CalRecycle 2014i; Los Angeles County Department of Public Works.
Each of the nine landfills is open six days per week, Monday through Saturday, except for certain holidays.
[1] Some of the landfills described above have statutory limits as to what areas they can accept waste from. Therefore, the totals are for comparison/information only and do not indicate disposal capacity for any specific region.

Solid Waste Disposal in Lieu of Puente Hills Landfill

In 2012 about 308,000 tons of solid waste from the unincorporated areas, which was 38 percent of the solid waste landfilled from the unincorporated areas that year, was landfilled at the Puente Hills Landfill. After the closure of Puente Hills Landfill in October 2013, solid waste that was formerly landfilled there is now disposed of at the following facilities:

- Calabasas Sanitary Landfill
- Scholl Canyon Landfill
- Puente Hills Material Recovery Facility in the City of Industry; maximum permitted throughput is 4,400 tons per day (CalRecycle 2014b).

- Southeast Resource Recovery Facility, a recycling and waste-to-energy facility on Terminal Island in the City of Long Beach; maximum permitted throughput is 2,240 tons per day (CalRecycle 2014c).
- Commerce Refuse-to-Energy Facility: maximum permitted throughput is 1,000 tons per day (CalRecycle 2014d).
- Olinda Alpha Sanitary Landfill
- Frank Bowerman Landfill, City of Irvine, Orange County. The Frank Bowerman Landfill has remaining capacity of 205,000,000 cubic yards, an estimated closure date of 2053, maximum permitted throughput of 11,500 tons per day, and average daily disposal in 2012 of about 4,827 tons per day (CalRecycle 2014e) (Cox 2014).

Recycling and Solid Waste Diversion

There are 50 solid waste diversion programs serving unincorporated areas, including composting, material-recovery facilities, household hazardous-waste collection, public education, recycling, source reduction, special-waste materials (e.g. tires and concrete/asphalt/rubble), and waste-to-energy programs (CalRecycle 2014).

Transfer Stations.

Waste transfer stations are facilities where municipal solid waste is unloaded from collection vehicles and briefly held while it is reloaded onto larger, long-distance transport vehicles for shipment to landfills or other treatment or disposal facilities.

Refuse-to-Energy Facilities

Two refuse-to-energy facilities in Los Angeles County are described above.

5.17.4.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-6 Would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

U-7 Would not comply with federal, state, and local statutes and regulations related to solid waste.

Relevant General Plan Goals and Policies

The following is a list of applicable goals and policies of the Proposed Project that are intended to reduce potentially significant adverse effects concerning waste management.

FIGURE 5.17-6

LANDFILLS SERVING UNINCORPORATED AREAS

Landfill

Source: CalRecycle, 2014

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PLACEWORKS

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Public Services and Facilities Element

Goal PS/F 5: Adequate disposal capacity and minimal waste and pollution.

- **Policy PS/F 5.1:** Maintain an efficient, safe and responsive waste management system that reduces waste while protecting the health and safety of the public.
- **Policy PS/F 5.2:** Ensure adequate disposal capacity by providing for environmentally sound and technically feasible development of solid waste management facilities, such as landfills and transfer/processing facilities.
- **Policy PS/F 5.3:** Discourage incompatible land uses near or adjacent to solid waste disposal facilities identified in the Countywide Integrated Waste Management Plan.
- **Policy PS/F 5.4:** Encourage solid waste management facilities that utilize conversion and other alternative technologies and waste to energy facilities.
- **Policy PS/F 5.5:** Reduce the County's waste stream by minimizing waste generation and enhancing diversion.
- **Policy PS/F 5.6:** Encourage the use and procurement of recyclable and biodegradable materials.
- **Policy PS/F 5.7:** Encourage the recycling of construction and demolition debris generated by public and private projects.
- **Policy PS/F 5.8:** Ensure adequate and regular waste and recycling collection services.
- **Policy PS/F 5.9:** Encourage the availability of trash and recyclables containers in new developments, public streets, and large venues.

5.17.4.3 ENVIRONMENTAL IMPACTS

The following impact analysis addresses CEQA Guidelines Appendix G thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.17-4: Existing and/or proposed facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations. [Thresholds U-6 and U-7]

Impact Analysis:

Generation of solid waste would increase as the population increases with buildout of the Proposed Project. Correspondingly, there would be a need for additional landfill capacity and related support facilities.

Forecasted Solid Waste Generation

Forecast solid waste generation by Proposed Project buildout is shown below in Table 5.17-21.

The Proposed Project buildout would allow for: 659,409 residential dwelling units; 92 million square feet (2,129 acres) of commercial use; 102 million square feet (5,210 acres) of industrial use; 503 million square feet (80,896 acres) of public/semi-public; and 714,704 acres of public/open space. Buildout of the Proposed General Plan would result in 358,930 additional residential dwelling units compared to existing land uses. Buildout of the Proposed Project would result in an 86 percent increase in commercial uses (64 million square feet) and a 40 percent increase in industrial uses (29 million square feet). The majority of new development is expected to occur in the Antelope Valley Planning Area, which would accommodate approximately 70.6 percent of new residential units and 76 percent of the population growth.

Table 5.17-21 Forecasted Net Increase in Solid Waste Generation due to Proposed Project Buildout

	Residents		Estimated Solid Waste Generation		
Planning Area	Net Increase	Total	Pounds per day per resident	Net Increase	Total
Antelope Valley	977,081	1,070,571	4.5[1]	4,396,865	4,817,570
Coastal Islands	-158	0		-711	0
East San Gabriel Valley	16,734	255,952		75,303	1,151,784
Gateway	16,297	120,358		73,337	541,611
Metro	65,083	301,073		292,874	1,354,829
San Fernando Valley	14,572	47,060		65,574	211,770
Santa Clarita Valley	133,522	237,638		600,849	1,069,371
Santa Monica Mountains	4,371	26,128		19,670	117,576
South Bay	16,918	86,392		76,131	388,764
West San Gabriel Valley	30,949	156,685		139,271	705,083
Westside	15,107	55,033		67,982	247,649
Total	**1,290,476**	**2,356,890**		**5,807,142**	**10,606,005**

[1] Source: LACDPW 2014a

Both the forecasted net increase in solid waste generation by Proposed Project buildout, about 5.81 million pounds per day (2,904 tons per day), and the forecast total solid waste generation in unincorporated County areas at Proposed Project buildout – about 10.6 million pounds per day (5,300 tons per day; see Table 5.17-19 above) are well within the total residual 30,926 tons per day daily disposal capacity of the nine landfills described in Table 5.17-18. By comparison, total solid waste generation from Los Angeles County in 2013 is estimated as about 44.8 million pounds – or 22,400 tons – per day. The County would maintain 15 years' identified disposal capacity in conformance with AB 939. Proposed Project buildout would not require construction of new or expanded landfills, and impacts would be less than significant.

5.17.4.4 CUMULATIVE IMPACTS

Cumulative projects are those that would be developed in cities in Los Angeles County, along with buildout of the Proposed Project. Projections of numbers of housing units and jobs in the unincorporated areas at 2035 and at buildout of the Proposed Project; and corresponding 2035 projections for cities and Los Angeles County as a whole, are shown in Section 4.4, *Assumptions Regarding Cumulative Impacts*. Cumulative projects in Los Angeles County could cause significant cumulative impacts if they generated solid waste exceeding the total capacity of landfills serving Los Angeles County, or if they violated regulations governing solid waste disposal.

Solid Waste Generation

Cumulative estimated solid waste generation for Proposed Project buildout to 2035 conditions, and at post-2035 buildout, are shown below in Table 5.17-22. As shown in the Table, cumulative solid waste generation in 2035 is estimated at about 6.3 million pounds per day, or 3,100 tons per day, which is well within the residual capacity of landfills serving Los Angeles County. No significant cumulative impact would occur.

Table 5.17-22 Cumulative Solid Waste Demands

Area	Estimated Solid Waste Generation, pounds per day			Significant Impact Compared to Countywide Residual Landfill Capacity
	Existing (2013)	2035 or Proposed Project Buildout	Net Increase	
2035 Scenario (Based on SCAG Projections)				
Unincorporated Areas	4,798,868	6,297,750	1,498,883	No
Cities	40,129,655	44,790,750	4,661,096	No
Los Angeles County	44,811,410	51,088,500	6,277,091	No
General Plan Update Buildout, Post-2035[1]				
Unincorporated Area	4,798,868	10,606,005	5,807,138	No

[1] Population and solid waste generation forecasts for cities and Los Angeles County at Proposed Project buildout are not available.

Regulatory Compliance

As with projects in the unincorporated areas, projects in cities would comply with AB 341 and Section 5.408 of the California Green Building Standards Code. AB 341 requires recycling by commercial and multifamily residential land uses and schools. California Green Building Standards Code Section 5.408 requires recycling or and/or reuse of at least 50 percent of nonhazardous construction and demolition waste from nonresidential construction operations. Cities, as well as Los Angeles County, would comply with requirements in AB 939 for solid waste diversion. Impacts would be less than significant.

5.17.4.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

State

- California Public Resources Code 40050 et seq.: Integrated Solid Waste Management Act of 1989

- Assembly Bill 341 (Chapter 476, Statutes of 2011)
- Title 24, California Code of Regulations, Part 11 (California Green Building Standards Code), Section 5.408

5.17.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.17-4 would be less than significant.

5.17.4.7 MITIGATION MEASURES

No mitigation measures are required.

5.17.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.17.5 Other Utilities

5.17.5.1 ENVIRONMENTAL SETTING

Regulatory Background

California Public Utilities Commission

California Public Utilities Commission (CPUC) General Order 112E, which is based upon the Federal Department of Transportation Guidelines contained in Part 192 of the Federal Code of Regulations, specifies a variety of design, construction, inspection and notification requirements. The CPUC conducts annual audits of pipeline operations to ensure compliance with these safety standards. In addition, the SCG has a safety program which has reduced the risk of gas distribution fires by improving welds on the larger diameter (24- to 30-inch) pipelines and by replacing old distribution pipes with flexible plastic pipes. According to SCG staff, high-pressure gas mains are common in developed areas throughout the country, and SCG lines are inspected regularly and must comply with CPUC mandated safety requirements.

California Energy Commission

The CEC was created as the State's principal energy planning organization in 1974, in order to meet the energy challenges facing the state in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing state energy policy:

- Forecasting statewide electricity needs;
- Licensing power plants to meet those needs;
- Promoting energy conservation and efficiency measures;
- Developing renewable energy resources and alternative energy technologies;

- Promoting research, development and demonstration; and
- Planning for and directing state response to energy emergencies.

Title 24, California Code of Regulations, Part 6: Energy Efficiency Standards for Buildings

Title 24, Part 6, of the California Code of Regulations contains the CEC's Energy Efficiency Standards for Residential and Nonresidential Buildings. Title 24 was first established in 1978, in response to a legislative mandate to reduce California's energy consumption. Since that time, Title 24 has been updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

Title 20, California Code of Regulations, Sections 1601 et seq: Appliance Efficiency Regulations

The 2012 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) took effect February 13, 2013. The regulations include standards for both federally regulated appliances and nonfederally regulated appliances.

Assembly Bill 1890 (1996)

The CPUC regulates investor-owned electric power and natural gas utility companies in the State of California. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities (e.g., Southern California Edison) was decoupled. All new construction in the State of California is subject to the energy conservation standards set forth in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings. The utilization of alternative energy applications in development projects (including the Proposed Project), while encouraged, is not required as a development condition. Such applications may include installation of photovoltaic solar panels, active solar water heating systems, or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy sources (i.e., electricity and natural gas). Incentives, primarily in the form of state and federal tax credits, as well as reduced energy bills, provide a favorable basis.

Existing Conditions

Electricity

Southern California Edison (SCE) provides electricity to Los Angeles County. Total electricity demands in SCE's service area were 82,069 gigawatt-hours (GWH) per year in 2012, and are forecast to increase to 96,516 GWH in 2024 (CEC 2013); one GWH is equivalent to one million kilowatt-hours.

Natural Gas

The Southern California Gas Company (SCGC) supplies natural gas to most of Los Angeles County except for a few cities, including the City of Vernon and City of Long Beach, which supply natural gas to their own residents and other customers.

Total natural gas supplies available to SCGC are forecasted to remain constant at 3,875 million cubic feet per day (MMCF/Day) from 2015 through 2030 (CGEU 2012).

Communication: Telephone, Mobile Phone, Cable and Internet Service

Cable

Cable operators serving Los Angeles County are: Time Warner Cable, Charter Communication, Cox Communications, AT&T U-verse, and Verizon

Federal laws provide oversight of the cable industry. While the County continues to serve as the local franchise authority, and will respond to every community inquiry that it receives, it is important for residents to understand the extent of the County's authority. Under current federal law, the County does not have any legal ability to dictate what cable companies charge for their services or how they set its channel lineup. As currently written, federal law allows all cable providers to operate in a deregulated manner when it comes to issues concerning pricing or channel lineup.

Relevant General Plan Goals and Policies

Public Services and Facilities Element

Goal PS/F 6: A County with adequate public utilities.

- **Policy PS/F 6.1:** Ensure efficient and cost-effective utilities that serve existing and future needs.
- **Policy PS/F 6.2:** Improve existing wired and wireless telecommunications infrastructure.
- **Policy PS/F 6.3:** Expand access to wireless technology networks, while minimizing visual impacts through co-location and design.
- **Policy PS/F 6.4:** Protect and enhance utility facilities to maintain the safety, reliability, integrity and security of utility services.
- **Policy PS/F 6.5:** Encourage the use of renewable energy sources in utility and telecommunications networks.
- **Policy PS/F 6.6:** Encourage the construction of utilities underground, where feasible.
- **Policy PS/F 6.7:** Discourage above-ground electrical distribution and transmission lines in hazard areas.
- **Policy PS/F 6.8:** Encourage projects that incorporate onsite renewable energy systems.
- **Policy PS/F 6.9:** Support the prohibition of public access within, and the limitation of access in areas adjacent to natural gas storage facilities and oil and gas production and processing facilities to minimize trespass and ensure security.

- **Policy PS/F 6.10:** Encourage utility siting to be localized and decentralized to reduce impacts; reduce transmission losses; promote local conservation by connecting users to their systems more directly; and reduce system malfunctions.

General Plan Implementation Programs

PS/F-1 Planning Area Capital Improvement Plans: DRP and DPW to jointly secure sources of funding and set priorities for preparing studies to assess infrastructure needs for the 11 Planning Areas. Once funding has been secured and priorities have been set, prepare a Capital Improvement Plan for each of the 11 Planning Areas (see also Planning Areas Framework Program). Each Capital Improvement Plan shall include the following, as needed:

- Sewer Capacity Study;
- Transportation
- System Capacity Study;
- Waste Management Study;
- Stormwater System Study;
- Public Water
- System Study;
- list of necessary infrastructure improvements; Implementation Program; and
- Financing Plan.

As applicable, studies related to water, sewer, traffic, and stormwater management should specifically address the needs of the unincorporated legacy communities identified in the Land Use Element.

5.17.5.2 THRESHOLDS OF SIGNIFICANCE

Although not specifically in Appendix G of the CEQA Guidelines, the following additional threshold is also addressed in the impact analysis: a project would normally have a significant effect on the environment if the project:

U-8 Would increase demand for other public services or utilities.

5.17.5.3 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance based on Appendix G of the CEQA Guidelines. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.17-5: Existing and/or proposed facilities would be able to accommodate project-generated utility demands. [Threshold U-8]

Impact Analysis

Electricity

Growth in the unincorporated areas would result in additional demand for electricity service. Presently and for the foreseeable future, the national and regional supply of electrical energy is not in jeopardy. The acceleration of the approval and licensing process of additional state power plants will ensure an adequate supply of electricity for state consumers. Past shortages of electricity were solved by the additional power plants being brought "online" in California. The matter of electrical generation capacity is not one of physical shortages due to power plant limitations; rather, it is a function of market forces and the wholesale cost of electricity.

Total electricity demands in SCE's service area were 82,069 gigawatt-hours (GWH) per year in 2012, and are forecast to increase to 96,516 GWH in 2024 (CEC 2013); one GWH is equivalent to one million kilowatt-hours. Implementation of the Proposed Project would result in increased demand in electricity service to the unincorporated areas. New development occurring from buildout of the Proposed Project would be subject to Title 24, Part 6 of the California Administrative code, the Energy Efficiency Standards for Residential and Nonresidential Buildings, which requires local jurisdiction to use energy efficient appliances, weatherization techniques and efficient cooling and heating systems to reduce energy demand stemming from new development.

SCE's sources of electricity generation in 2012 were 20 percent renewable, including 9 percent geothermal and 8 percent wind; 21 percent natural gas; 7 percent coal; 7 percent nuclear; 4 percent large hydroelectric; and 41 percent unspecified.

Forecast electricity demands by Proposed Project buildout are shown below in Table 5.17-23. The forecasted net increase in electricity demand due to Proposed Project buildout is about 9.9 billion kWh per year, or about 10,300 GWH per year, and is within SCE's demand forecast for its service area. Therefore, impacts of Proposed Project buildout on electricity supplies would be less than significant.

Table 5.17-23 Forecasted Net Increase in Electricity Demand by Proposed Project Buildout

Land Use	Net Increase	Annual Electricity Demand, kWh	
		Per Unit/Employee[1]	Total
Residences	358,931 units	7,055	2,532,258,205
Nonresidential	215,077 employees	34,249	7,366,172,173
Total	**Not applicable**	**Not applicable**	**9,898,430,378**

[1] Source: LACDPW 2014a.

Natural Gas

Estimated natural gas demands by Proposed Project buildout are shown below in Table 5.17-24. The estimated net increase in natural gas demand is about 192 million therms per year, that is, 51 million cubic feet of natural gas per day. Forecasted natural gas demands due to the Proposed Project buildout are within SCGC's estimated supplies; thus, impacts of the Proposed Project buildout on natural gas supplies would be less than significant.

Table 5.17-24 Forecasted Net Increase in Natural Gas Demand by Proposed Project Buildout

Land Use	Net Increase	Annual Natural Gas Demand, Therms	
		Per Unit/Employee[1]	Total
Residences	358,931 units	424.6	152,402,103
Nonresidential	215,077 employees	183.8	39,531,153
Total	**Not applicable**	**Not applicable**	**191,933,256**

[1] Source: LACDPW 2014a.

5.17.5.4 CUMULATIVE IMPACTS

Cumulative projects are those that would be developed in cities in Los Angeles County, in addition to projects that would be developed in unincorporated areas pursuant to the Proposed Project.

Electricity

Cumulative electricity demands are estimated below in Table 5.17-25. Estimated cumulative electricity demands in 2035 Proposed Project buildout conditions would be about 15.1 billion kWh per year, that is, 15,100 GWH per year, within SCE's demand forecast for its service area. Thus, cumulative impacts on electricity supplies would be less than significant.

Table 5.17-25 Cumulative Net Increase in Electricity Demands

Area	Net Increase		Electricity Demand, kWh per year				
			Residential Land Uses		Nonresidential Land Uses		
	Housing Units	Employees	Per Housing Unit[1]	Subtotal	Per Employee[1]	Subtotal	Total
2035 Scenario (Based on SCAG Projections)							
Unincorporated Areas	105,022	65,440	7,055	740,930,210	34,249	2,241,254,560	2,982,184,770
Cities	292,713	296,660	7,055	2,065,090,215	34,249	10,160,308,340	12,225,398,555
Los Angeles County Total	**388,618**	**362,100**	**7,055**	2,741,699,990	**34,249**	12,401,562,900	15,143,262,890
Post-2035 Proposed Project Buildout							
Unincorporated Areas	From Table 5.21:						**10,312,073,9,22**

[1] electricity demand factors: Source: LACDPW 2014a

Natural Gas

Cumulative natural gas demands are estimated below in Table 5.17-26. As shown, cumulative net increase in natural gas demands in 2035 conditions would be about 232 million therms per year, or 61.6 million cubic feet of natural gas per day, within SCGC's natural gas supply forecast. Thus, cumulative impacts on natural gas supplies would be less than significant.

Table 5.17-26 Cumulative Net Increase in Natural Gas Demands

Area	Net Increase		Annual Natural Gas Demand, Therms				
			Residential Land Uses		Nonresidential Land Uses		
	Housing Units	Employees	Per Housing Unit	Subtotal	Per Employee	Subtotal	Total
2035 (Based on SCAG Projections)							
Unincorporated Areas	105,022	65,440	424.6	44,592,341	183.8	12,027,872	56,620,213
Incorporated Cities	292,713	296,660	424.6	124,285,940	183.8	54,526,108	178,812,048
Los Angeles County Total	**388,618**	**362,100**	424.6	**165,007,203**	183.8	**66,553,980**	**231,561,183**
Full Post-2035 General Plan Update Buildout							
Unincorporated Areas	From Table 5.22:						**197,835,748**

[1] Based on an average of 10 pounds per single-family residential unit per day (median of six rates from CalRecycle 2009), divided by average household size in unincorporated Los Angeles County of 3.55 persons in 2013.
[2] Based on average of 0.013 pounds per square foot per day (median of three rates from CalRecycle 2009), multiplied by 500 square feet per employee.

5.17.5.5 EXISTING REGULATIONS AND STANDARD CONDITIONS

State

- California Code of Regulations Title 24, Part 6: Energy Efficiency Standards for Residential and Nonresidential Buildings.
- Assembly Bill 1890: Electric power deregulation

5.17.5.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.17-6 would be less than significant.

5.17.5.7 MITIGATION MEASURES

No mitigation measures are required.

5.17.5.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

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5. Environmental Analysis
UTILITIES AND SERVICE SYSTEMS

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6. Significant Unavoidable Adverse Impacts

Chapter 1, *Executive Summary*, contains Table 1-4, which summarizes the impacts, mitigation measures, and levels of significance before and after mitigation. While mitigation measures would reduce the level of impact, the following impacts would remain significant, unavoidable, and adverse after mitigation measures are applied:

Agricultural Resources

- **Impact 5.2-1:** Buildout of the Proposed Project would convert mapped important farmland in the Antelope Valley Planning Area to non-agricultural uses. No mitigation measures are available that would reduce the impacts of the conversion of mapped important farmland to less than significant. Efforts to preserve offsite farmland through agricultural or conservation easements, or mitigation banks, do not offset or decrease the reduction in total mapped important farmland due to the implementation of a project. This impact would remain significant and unavoidable.

- **Impact 5.2-5:** Buildout of the Proposed Project would indirectly result in the conversion of mapped important farmland to non-agricultural uses in the Antelope Valley and Santa Clarita Valley Planning Areas. Although goals and policies have been incorporated into the Proposed Project to protect farming operations from urbanization, these goals and policies cannot ensure that additional conversion of farmland will not occur. This impact would remain significant and unavoidable.

Air Quality

- **Impact 5.3-1:** Buildout of the Proposed Project would generate more population and employment growth and more VMT than the current general plan; therefore, the project would be inconsistent with SCAQMD's 2012 AQMP and AVAQMD's Ozone Attainment Plan. Mitigation measures incorporated into future development projects and adherence to the Proposed Project policies for operation and construction phases described in Impacts 5.3 2 and 5.3 3 above would reduce criteria air pollutant emissions associated with buildout of the Proposed Project. Goals and policies included in the Proposed Project would facilitate continued County of Los Angeles participation/cooperation with SCAQMD, AVAQMD, and SCAG to achieve regional air quality improvement goals, promote energy conservation design and development techniques, encourage alternative transportation modes, and implement transportation demand management strategies. However, no mitigation measures are available that would reduce impacts associated with inconsistency with the air quality management plans due to the magnitude of growth and associated emissions that would be generated by the buildout of unincorporated Los Angeles County in accordance with the Proposed Project. Impact 5.3 1 would remain Significant and Unavoidable.

- **Impact 5.3-2:** Construction activities associated with the buildout of the General Plan Update would generate criteria air pollutant emissions that would exceed SCAQMD's and AVAQMD's regional significance thresholds and would contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB. Goals and policies are included in the General Plan Update that would reduce air pollutant emissions. However, due to the magnitude of emissions generated by future construction activities associated with the buildout of the General Plan Update, no mitigation measures are available that would reduce impacts below SCAQMD's and AVAQMD's thresholds. Impact 5.3 2 would remain Significant and Unavoidable.

- **Impact 5.3-3:** Buildout of the proposed land use plan would generate additional vehicle trips and area sources of criteria air pollutant emissions that exceed SCAQMD's and AVAQMD's regional significance thresholds and would contribute to the nonattainment designations of the SoCAB and Antelope Valley portion of the MDAB. Goals and policies are included in the Proposed Project that would reduce air pollutant emissions. However, due to the magnitude of emissions generated by the buildout of the Proposed Project, no mitigation measures are available that would reduce impacts below SCAQMD's or AVAQMD's thresholds. Impact 5.3 3 would remain Significant and Unavoidable.

- **Impact 5.3-4:** Buildout of the Proposed Project could result in new sources of criteria air pollutant emissions and/or toxic air contaminants near existing or planned sensitive receptors. Goals and policies are included in the Proposed Project that would reduce concentrations of criteria air pollutant emissions and TACs generated by new development.

  Review of projects by SCAQMD or AVAQMD for permitted sources of air toxics (e.g., industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure health risks are minimized. Mitigation Measure 3 2 would ensure mobile sources of TACs not covered under SCAQMD or AVAQMD permits are considered during subsequent project-level environmental review. Development of individual projects would be required to achieve the incremental risk thresholds established by SCAQMD or AVAQMD, and TACs would be less than significant.

  However, localized emissions of criteria air pollutants could exceed the SCAQMD or AVAQMD regional significance thresholds because of the scale of development activity associated with theoretical buildout of the Proposed Project. For this broad-based General Plan project, it is not possible to determine whether the scale and phasing of individual projects would result in the exceedance of the localized emissions thresholds. Therefore, in accordance with the SCAQMD and AVAQMD methodology, Impact 5.3 4 would remain Significant and Unavoidable.

Biological Resources

- **Impact 5.4-1:** Development of the Proposed Project would impact, either directly or through habitat modifications, species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the CDFW or USFWS.

Although direct impacts to special-status species would be mitigated, there is no mitigation provided for the indirect impacts to special-status species through the loss of common (i.e., non-sensitive) habitats. Special-status species are dependent on a variety of habitat types (comprised of both common and sensitive habitats), and the conversion of common habitat types with the buildout of the Project would result in the overall reduction of habitat and resources to support special-status species. Thus, due to the loss of common habitats capable of supporting special-status species and diminished resource availability, impacts to special-status species remain significant and unavoidable at the general plan level.

- **Impact 5.4-4:** The Proposed Project would affect wildlife movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

  Implementation of the Proposed Project will have both direct and indirect beneficial effects for protecting regional wildlife linkages and facilitating wildlife movement by avoiding the most biologically sensitive areas and concentrating development in previously disturbed areas. However, buildout of the Project will impact regional wildlife linkages and may impact nursery sites. Thus, buildout of the Project will have a significant adverse effect on wildlife movement and nursery sites.

Cultural Resources

- **Impact 5.5-1:** Goals and policies have been incorporated into the Proposed Project to protect historic resources. However, the above policies afford only limited protection to historic structures and would not ultimately prevent the demolition of a historic structure if preservation is determined to be infeasible. The determination of feasibility will occur on a case by case basis as future development applications on sites containing historic structures are submitted. Additionally, some structures that are not currently considered for historic value (as they must generally be at least 50 years or older) could become worthy of consideration during the planning period for the Proposed Project. While policies would minimize the probability of historic structures being demolished, these policies cannot ensure that the demolition of a historic structure would not occur. This is considered a significant unavoidable adverse impact.

Greenhouse Gas Emissions

- **Impact 5.7-1:** The CCAP would ensure that GHG emissions from buildout of the Proposed Project would be minimized. However, additional statewide measures would be necessary to reduce GHG emissions under the Proposed Project to meet the long-term GHG reduction goals under Executive Order S 03 05, which identified a goal to reduce GHG emissions to 80 percent of 1990 levels by 2050. CARB is currently updating the Scoping Plan to identify additional measures to achieve the long-term GHG reduction targets. At this time, there is no plan past 2020 that achieves the long-term GHG reduction goal established under S 03 05. As identified by the California Council on Science and Technology, the state cannot meet the 2050 goal without major advancements in

technology (CCST 2012). Since no additional statewide measures are currently available, Impact 5.7 1 would remain significant and unavoidable.

- **Impact 5.7-2:** Implementation of the CCAP would be necessary to ensure that the local GHG reduction goals for the County under AB 32 would be met. Adoption and implementation of the CCAP in its entirety would reduce GHG emissions to less than significant levels. However, in the absence of an adopted CCAP, consistency with plans adopted for the purpose of reducing GHG emissions toward the short-term target of AB 32 could be significant. Impact 5.7-2 would remain significant and unavoidable.

Mineral Resources

- **Impact 5.11-1:** Buildout of the Proposed Project would cause a loss of availability of known mineral resources within the Antelope Valley Planning Area. No mitigation measures are available that would reduce this impact to less than significant. Mineral resources are limited and nonrenewable and cannot be increased elsewhere to compensate for the loss of availability of mineral resources due to the buildout of the Proposed Project. Compensatory mitigation outside of the region is also infeasible. Such mitigation would not reduce the loss of availability of mineral resources in Los Angeles County due to the very high cost of transporting aggregate. Impact 5.11-1 would be significant and unavoidable

- **Impact 5.11-2:** Implementation of the Proposed Project would cause a substantial loss of the availability of mineral resources in one mineral extraction area identified in the existing Los Angeles County General Plan: the Little Rock Wash area in the Antelope Valley Planning Area. No mitigation measures are available that would this impact to less than significant. Impact 5.11-2 impact would be significant and unavoidable.

- **Cumulative Impacts:** Cumulative projects in combination with the buildout of the Proposed Project would contribute to significant cumulative impacts in the Antelope Valley Planning Area. Urbanization and growth in the cities adjacent to the unincorporated areas would have the potential to result in land uses that are incompatible with mining and resource recovery and would result in a cumulative loss of available resources. Similar to portions of the unincorporated areas, the California Geological Survey has classified land within cities in Los Angeles County into MRZs. Adjacent cities have included protections in their general plans or other planning documents to protect these and other mineral resources. However, planned and projected growth in the region would result in a reasonably foreseeable loss of mineral resources due to the encroachment of incompatible uses that would limit future areas from being permitted for mining operations. No mitigation measures are available that would reduce this impact to less than significant; therefore, this impact would remain significant and unavoidable.

Noise

- **Impact 5.12-1:** Construction activities would result in temporary noise increases in the vicinity of the Proposed Project. Mitigation Measure 5.12-1 (construction-related noise) would reduce impacts associated with construction activities to the extent feasible. However, due to the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities, Impact 5.12-1 (construction noise) would be significant and unavoidable.

- **Impact 5.12-2:** Buildout of the Proposed Project would result in an increase in traffic on local roadways in Los Angeles County, which would substantially increase the existing ambient noise environment. No feasible mitigation measures are available to further reduce traffic noise impacts to existing noise sensitive receptors. Therefore, Impact 5.12-2 would remain significant and unavoidable.

- **Impact 5.12-3:** New noise-sensitive land uses associated with Proposed Project could be exposed to elevated noise levels from mobile sources along roadways. Implementation of the noise-related policies contained within the Proposed Project in addition to Mitigation Measure 5.12-2 would reduce exterior noise compatibility impacts. While interior noise levels are required to achieve the 45 dBA CNEL interior noise limit of Title 24 and Title 25, exterior noise levels may still exceed the County noise land use compatibility criteria, despite exterior noise attenuation (i.e., walls and/or berms). Therefore, impacts related to exterior noise compatibility would remain significant and unavoidable.

- **Impact 5.12-4:** The Proposed Project could create elevated levels of groundborne vibration and groundborne noise, both in the short term and the long term. Mitigation Measure 5.12-3 (train-related vibration) would reduce potential train-related vibration impacts to new uses below the thresholds. Mitigation Measure 5.12-4 (construction-related vibration) would reduce vibration impacts associated with construction activities to the extent feasible. Mitigation Measure 5.12-5 (industrial-related vibration) would reduce potential vibration impacts from industrial uses to less-than-significant levels. However, due to the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities, Impact 5.12–4 (vibration) would remain significant and unavoidable.

Transportation and Traffic

- **Impact 5.16-1:** The impacted locations are still considered to be significantly impacted with mitigation. Because this is a program-level analysis, additional case-by-case mitigation analysis of impacts and mitigation will occur at the project-level to determine more specific physical, program and policy-level mitigation measures to reduce the level of impact below a significant level.

  Furthermore, inasmuch as the primary responsibility for approving and/or completing certain improvements located within cities lies with agencies other than the County (i.e., cities and Caltrans), there is the potential that significant impacts may not be fully mitigated if such improvements are not

completed for reasons beyond the County's control (e.g., the County cannot undertake or require improvements outside of the County's jurisdiction or the County cannot construct improvements in the Caltrans right-of-way without Caltrans' approval). Therefore, Impact 5.16-1 would remain significant and unavoidable.

- **Cumulative Impacts:** Traffic analysis for the Proposed Project anticipates that the cumulative impact of the project traffic along with other regional growth at the identified ramp and freeway locations will be largely mitigated through a combination of regional programs that are the responsibility of other agencies such as cities and Caltrans. Future developers/project applicants will contribute its fair share to these regional programs, as applicable. However, if these programs are not implemented by the agencies with the responsibility to do so, the cumulative transportation and traffic impacts would remain significant and unavoidable. Under these circumstances, the Proposed Project could result in a cumulatively significant traffic impact that may remain significant and unavoidable.

Utilities and Service Systems

- **Impact 5.17-3:** Adequate water supplies have been identified in the UWMP's for the Project Area for demand as projected through the year 2035. However, additional water supplies necessary to serve buildout of the Proposed Project, which is expected to occur beyond the year 2035, have not been identified for the Antelope Valley and Santa Clarita Valley Planning Areas. Considering current water supply constraints—including the record 2013–2014 California drought—it is uncertain whether the water districts serving the Antelope Valley and Santa Clarita Valley Planning Areas would be able to secure water supplies greater than those currently forecasted for 2035. Therefore, impacts of the Proposed Project buildout on water supplies are significant and unavoidable.

7. Alternatives to the Proposed Project

7.1 INTRODUCTION

7.1.1 Purpose and Scope

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines Section 15126.6). This chapter identifies potential alternatives to the Proposed General Plan Update and associated actions (Proposed Project) and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines on alternatives (Section 15126.6[a] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- "The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (15126.6[b]).

- "The specific alternative of 'no project' shall also be evaluated along with its impact" (15126.6[e][1]).

- "The no project analysis shall discuss the existing conditions at the time the Notice of Preparation (NOP) is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" (15126.6[e][2]).

- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project" (15126.6[f]).

- "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)" (15126.6[f][1]).

- "For alternative locations, "only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (15126.6[f][2][A]).

- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (15126.6[f][3]).

For each development alternative, this analysis:

- Describes the alterative;
- Analyzes the impact of the alternative as compared to the Proposed Project;
- Identifies the impacts of the Project that would be avoided or lessened by the alternative;
- Assesses whether the alternative would meet most of the basic Project objectives; and
- Evaluates the comparative merits of the alternative and the Project.

Per the CEQA Guidelines Section 15126.6(d), additional significant effects of the alternatives are discussed in less detail than the significant effects of the Project.

7.1.2 Project Objectives

As described in Section 3.2, *Statement of Objectives*, the following objectives have been established for the Proposed Project and will aid decision-makers in their review of the Project, the Project alternatives, and associated environmental impacts:

- Provide a comprehensive update to the existing Los Angeles County General Plan (Existing General Plan) that establishes the goals and policies to create a built environment that fosters the enjoyment, financial stability, and well-being of the unincorporated areas of Los Angeles County (unincorporated areas) and Los Angeles County as a whole.

- Improve the job-housing balance and fiscal sustainability by planning for a diversified employment base, providing residential, commercial, industrial, and mixed-use land uses.

- Promote sustainability by locating new development near existing infrastructure, services, and jobs.

- Maintain environmentally sustainable communities and reduce greenhouse gas (GHG) emissions that contribute to climate change.

- Support a reasonable share of projected regional population growth.

- Reinforce the vitality, local economy, and individual character of existing communities while balancing housing, employment, and recreational opportunities.

- Promote environmental stewardship that protects the range of natural resources and habitats that uniquely define the character and ecological importance of the unincorporated areas.
- Provide policy guidance to protect and conserve natural resources and to improve the quality of air, water, and biological resources.
- Coordinate the equitable sharing of public and private costs associated with providing and/or upgrading community services and infrastructure, and in a context-sensitive manner that addresses community character.
- Ensure that development accounts for physical constraints and the natural hazards of the land.
- Recognize community and stakeholder interests, while striving for consensus.
- Protect and enhance recreational opportunities and public access to open space and natural resources.

7.1.3 Significant Unavoidable Adverse Impacts

As described in Chapter 6, *Significant Unavoidable Adverse Impacts*, the following impacts related to the Proposed Project have been determined to be significant and unavoidable after implementation of all feasible mitigation measures. The impacts that were found in the Draft EIR (DEIR) to be significant and unavoidable are:

- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Mineral Resources
- Noise
- Transportation/Traffic
- Utilities and Service Systems (Water Supply)

7.2 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this DEIR.

7.2.1 Project Planning Alternatives

During the course of the Proposed Project, numerous variations in mapping were considered. The variations were a result of an iterative process of receiving input from stakeholders and County of Los Angeles (County) staff, and refining the working maps that eventually became the Preferred Land Use Alternative. While some of these previous variations would have represented the opinions of a segment of stakeholders more strongly, or would have reduced environmental impacts further than the Proposed Project or other alternatives considered, they were not appropriate for analysis in the DEIR because they are no longer being pursued by the Lead Agency. They have since been refined or supplemented by the currently proposed General Plan Land Use Policy Map. Additionally, in 2010, an expert panel of biologists was convened to evaluate the Significant Ecological Areas (SEA) boundaries, and additional locations were identified as areas that warranted the SEA designation. The Proposed Project identifies 21 SEAs and 9 Coastal Resource Areas (CRAs) that represent the wide-ranging biodiversity of Los Angeles County and contain its most important biological resources. Therefore, the Proposed Project and the alternatives that are analyzed below were determined to provide the best scenarios to represent the different planning approaches that have been considered during the process.

7.2.2 Existing SEA Boundaries Alternative

Under this Alternative, the existing SEA boundaries would remain in effect. However, the Proposed SEA boundaries included as part of the Proposed Project are the result of a long process to update the SEA boundaries to reflect the most recent biological information available, as discussed below.

In 1999, the County began a comprehensive revision to the Existing General Plan. As part of this revision, an updated study of the SEAs was commissioned, which resulted in the 2000 Los Angeles County SEA Update Study. This updated study evaluated existing SEAs for changes in biotic conditions and considered additional areas for SEA status; proposed SEA boundaries based upon biotic evaluation; and proposed guidelines for managing and conserving biological resources within SEAs. After consideration of public and resource agency input, a draft SEA map was released for public review as part of the Comprehensive Update and Amendment to the Existing General Plan (Initial Study) in 2002.

In 2003, based on biological information and public input received, the County released a Draft General Plan policy and map document called *Shaping the Future 2025*, which included the draft SEA map that reflected changes to the proposed SEAs. The proposed SEAs were refined from 2003 through 2007, based on the SEA criteria, additional field work and literature review, and to address public comments. In 2008, the draft SEA map was released for public review as part of the draft General Plan. In 2010, an expert panel of biologists was convened to evaluate the SEA boundaries, and additional locations were identified as areas that warranted the SEA designation. Throughout the entirety of the SEA study and update process, modifications to the proposed boundaries have occurred based on biological information received through multiple public review periods. In 2011, the draft SEA map was released for public review as part of the Los Angeles County Draft 2035 General Plan.

The County is continuing to update and refine the SEA designations and policies, including changes to the policies, boundaries and technical descriptions of the SEAs. The Proposed Project identifies 21 SEAs and 9 Coastal Resource Areas (CRAs)[1,2] that represent the wide-ranging biodiversity of Los Angeles County and contain its most important biological resources. The 21 SEAs and 9 CRAs are recommended to replace the 61 SEAs designated in the Existing General Plan. Figure 5.4-3, *Existing and Proposed Significant Ecological Areas (SEAs)*, shows the locations of both the existing and proposed SEAs within Los Angeles County.

Since the updated SEA boundaries are based on the latest biological information and GIS mapping data, they are considered biologically superior to the 61 SEAs designated in the Existing General Plan. As a result, this alternative was considered, but rejected since it would result in greater biological impacts as compared to the Proposed Project.

7.2.3 No Growth/No Development Alternative

The No Growth/No Development Alternative would prohibit all new development, restricting urban growth to its current extent. No alterations to the unincorporated areas would occur (with the exception of previously approved or entitled development); all existing residential, commercial, office, industrial, public facilities, agriculture and open space, along with utilities and roadways would generally remain in their current condition. Implementation of this alternative would not provide adequate housing supply required to meet the County's obligations to provide its fair share of housing. By limiting development within Los Angeles County, implementation of this alternative would increase development pressure in surrounding counties, including Ventura, Kern, San Bernardino, Riverside, and Orange counties. It should also be noted that this alternative would not achieve any of the objectives established for the Project. As a result, this alternative has been rejected from further consideration.

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following three alternatives have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the Proposed Project, but that may avoid or substantially lessen any of the significant effects of the Proposed Project. These alternatives are analyzed in detail in the following sections:

- No Project/Existing General Plan Alternative
- Reduced Intensity Alternative
- Antelope Valley Reduced Intensity Alternative

[1] It should be noted that because portions of the Santa Monica Mountains SEA and the Palos Verdes Peninsula and Coastline SEA are within the California Coastal Zone, these portions of the SEAs are proposed as Coastal Resource Areas (CRAs). The SEA Ordinance does not apply to CRAs. Although CRAs have equivalent ecological significance to SEAs, the CRAs are within the California Coastal Zone, and the SEA Ordinance is superseded by the California Coastal Act. Both Santa Catalina Island and Marina del Rey have individual California Coastal Commission Local Coastal Programs, which regulate development within them. The coastal zone area within the Santa Monica Mountains is regulated by the Malibu Local Coastal Land Use Plan, and the County is currently undergoing the review process with the California Coastal Commission to update this plan and to establish the Santa Monica Mountains Local Coastal Program.

[2] Santa Catalina Island is designated as a CRA only and is not proposed for SEA expansion.

7. Alternatives to the Proposed Project

An EIR must identify an "environmentally superior" alternative, and where the no project alternative is identified as environmentally superior, the EIR is then required to identify an environmentally superior alternative from among the others evaluated. Each alternative's environmental impacts are compared to the Proposed Project and determined to be environmentally superior, neutral, or inferior. However, only those impacts found significant and unavoidable are used in making the final determination of whether an alternative is environmentally superior or inferior to the Proposed Project. Section 7.7 identifies the Environmentally Superior Alternative.

7.3.1 Alternatives Comparison

The Proposed Project is analyzed in detail in Chapter 5 of this DEIR. Table 7-1 provides a summary of each project alternative analyzed in this chapter.

Table 7-2 provides a summary of buildout projections and corresponding increases/changes for each of the three alternatives, and the Proposed Project. It is important to note that the buildout numbers shown are not growth projections. That is, they do not anticipate what is likely to occur by a certain time horizon, but rather, provide a buildout scenario that would only occur if all of the areas within the Project Area were to develop to the probable capacities yielded by the alternatives. The following tables were developed to better understand the difference between the alternatives analyzed in the DEIR:

Table 7-1 Summary of Development Alternatives

Alternative	Description	Basis for Selection and Summary of Analysis
Proposed Project		
General Plan Update and associated actions	• Includes a comprehensive update to the Existing General Plan. • Updates SEA boundaries based on latest biological information. • Projects a total of 668,910 dwelling units at buildout (additional 368,432 units from existing). • Projects a total population of 2,383,372 at buildout (additional 1,316,958 persons from existing). • Projects a total of 477,860 employees at buildout (additional 225,201 employees from existing).	n/a
Project Alternatives		
1) No Project/ Existing General Plan Alternative	• Existing General Plan originally adopted on November 25, 1980 would remain in effect. • Maintains existing SEA boundaries. • Projects a total of 602,024 dwelling units at buildout (additional 301,546 units from existing). • Projects a total population of 2,199,477 at buildout (additional 1,133,063 persons from existing). • Projects a total of 444,393 employees at buildout (additional 191,734 employees from existing).	• Required by CEQA. • Avoids need for general plan amendments and zone changes. • Reduces, but does not eliminate, significant impacts to air quality, GHG emissions, noise, and transportation/traffic. • Does not meet the project objectives.

Table 7-1 Summary of Development Alternatives

Alternative	Description	Basis for Selection and Summary of Analysis
2) Reduced Intensity Alternative	• Includes a comprehensive update to the Existing General Plan. • Updates SEA boundaries based on latest biological information. • Reduces allowable dwelling units, population, and employment growth by 30 percent. • Projects a total of 558,380 dwelling units at buildout (additional 257,902 units from existing). • Projects a total population of 1,988,285 at buildout (additional 921,871 persons from existing). • Projects a total of 410,300 employees at buildout (additional 157,641 employees from existing).	• Reduces, but does not eliminate, significant impacts to aesthetics, agriculture and forestry resources, air quality, GHG emissions, noise, and transportation/traffic. • Does not avoid significant environmental impacts. • Meets some of the project objectives but not to the degree of the Proposed Project.
3) Antelope Valley Reduced Intensity Alternative	• Includes a comprehensive update to the Existing General Plan. • Updates SEA boundaries based on latest biological information. • Reduces allowable dwelling units, population, and employment growth within the Antelope Valley Area Plan to 106,180 dwelling units, 405,410 residents, and 134,351 employees. • Projects a total of 106,180 dwelling units at buildout (additional 81,441 units from existing). • Projects a total population of 405,410 at buildout (additional 311,920 persons from existing). • Projects a total of 134,351 employees at buildout (additional 102,513 employees from existing).	• Reduces, but does not eliminate, significant impacts to aesthetics, agriculture and forestry resources, air quality, GHG emissions, noise, population and housing, and transportation/traffic. • Does not avoid significant environmental impacts. • Meets all of the project objectives.

7. Alternatives to the Proposed Project

Table 7-2 Project Alternatives - Buildout Projections by Planning Area

Planning Area		Proposed Project	No Project/Existing General Plan Alternative	Reduced Intensity Alternative	Antelope Valley Reduced Intensity Alternative
Antelope Valley	Dwelling Units	278,158	278,249	202,132	106,180
	Population	1,070,571	1,070,924	719,590	405,410
	Employment	51,219	51,319	43,997	134,351
	Jobs/Housing Ratio	0.18	0.18	0.22	1.27
Coastal Islands[1]	Dwelling Units	21	21	21	21
	Population	0	0	0	0
	Employment	570	570	570	570
	Jobs/Housing Ratio	27.14	27.14	27.14	27.14
East San Gabriel Valley	Dwelling Units	70,097	59,621	68,215	70,097
	Population	255,952	224,816	242,845	255,952
	Employment	53,231	48,749	45,725	53,231
	Jobs/Housing Ratio	0.76	0.82	0.67	0.76
Gateway	Dwelling Units	34,446	19,469	32,735	34,446
	Population	120,358	74,955	116,537	120,358
	Employment	36,820	32,696	31,628	36,820
	Jobs/Housing Ratio	1.07	1.68	0.97	1.07
Metro	Dwelling Units	94,854	85,210	88,318	94,854
	Population	308,594	285,413	314,412	308,594
	Employment	103,778	95,424	89,145	103,778
	Jobs/Housing Ratio	1.09	1.12	1.01	1.09
San Fernando Valley	Dwelling Units	13,464	14,032	12,137	13,464
	Population	47,060	53,286	43,208	47,060
	Employment	24,741	25,049	21,253	24,741
	Jobs/Housing Ratio	1.84	1.79	1.75	1.84
Santa Clarita Valley	Dwelling Units	77,155	77,155	62,559	77,155
	Population	237,638	237,638	222,710	237,638
	Employment	105,881	105,881	90,952	105,881
	Jobs/Housing Ratio	1.37	1.37	1.45	1.37
Santa Monica Mountains	Dwelling Units	6,788	6,788	6,463	6,788
	Population	26,128	26,128	23,008	26,128
	Employment	28,707	28,707	24,659	28,707
	Jobs/Housing Ratio	4.23	4.23	3.81	4.23
South Bay	Dwelling Units	30,240	14,136	27,154	30,240
	Population	98,421	53,897	96,668	98,421
	Employment	29,124	17,504	25,018	29,124
	Jobs/Housing Ratio	0.96	1.24	0.92	0.96
West San Gabriel Valley	Dwelling Units	46,371	33,634	42,889	46,371
	Population	163,617	127,953	152,685	163,617
	Employment	29,197	23,587	25,080	29,197
	Jobs/Housing Ratio	0.63	0.70	0.58	0.63

Table 7-2 Project Alternatives - Buildout Projections by Planning Area

Planning Area		Proposed Project	No Project/Existing General Plan Alternative	Reduced Intensity Alternative	Antelope Valley Reduced Intensity Alternative
Westside	Dwelling Units	17,316	13,709	15,751	17,316
	Population	55,033	44,466	56,074	55,033
	Employment	14,592	14,906	12,534	14,592
	Jobs/Housing Ratio	0.84	1.09	0.80	0.84
Totals	Dwelling Units	668,910	602,024	558,374	490,083
	Population	2,383,372	2,199,477	2,043,811	1,655,675
	Employment	477,860	444,393	410,561	536,409
	Jobs/Housing Ratio	0.71	0.74	0.74	1.09
Percent Change from Proposed Project	Dwelling Units		-10%	-17%	-27%
	Population		-8%	-14%	-31%
	Employment		-7%	-14%	+11%

Source: County of Los Angeles Department of Regional Planning, 2014.
Notes:
Very little growth is projected for the Coastal Islands Planning Area. As a result, none of the alternatives alter the buildout assumptions for the Coastal Islands Planning Area from what is assumed for the Proposed Project.

7.4 NO PROJECT/EXISTING GENERAL PLAN ALTERNATIVE

This alternative, which is required by CEQA, assumes that the Existing General Plan and implementing zoning would remain unchanged. The Existing General Plan originally adopted on November 25, 1980 would remain in effect, and no update to the Existing General Plan goals and policies would occur. This alternative would also maintain the existing SEA boundaries. Other key components of the Proposed Project, including the establishment of Transit Oriented Districts (TODs) in the General Plan, amendment to the MXD Mixed Use Zone, and adoption of the Community Climate Action Plan also would not occur under this alternative. Under the No Project/Existing General Plan Alternative, a total of 602,024 dwelling units (additional 301,546 units from existing), a total population of 2,199,477 (additional 1,133,063 persons from existing), and total of 444,393 employees (additional 191,734 employees from existing) would occur at buildout.

7.4.1 Aesthetics

The Existing General Plan designates approximately 548,888 acres out of 1,137,968 acres for development (approximately 48 percent) within the Antelope Valley Planning Area. The Proposed Project also allows development on approximately 48 percent of the Planning Area (548,777 acres out of 1,132,744 acres). The buildout projections for the Antelope Valley Planning Area under this alternative are also very similar to the Proposed Project. Under the No Project/Existing General Plan Alternative, a total of 278,249 dwelling units and 46.9 million square feet of non-residential development is projected for the Antelope Valley Planning Area. Under the Proposed Project, a total of 278,158 dwelling units and 46.9 million square feet of non-residential development is projected. As a result, impacts under the No Project/Existing General Plan Alternative would be similar to the Proposed Project.

7.4.2 Agriculture and Forestry Resources

As discussed in Section 5.2, *Agriculture and Forestry Resources*, conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to the buildout of the Project would be a significant impact in the Antelope Valley Planning Area, and a less than significant impact in the Santa Clarita Valley Planning Area and Santa Monica Mountains Planning Area. Project implementation could result in the conversion of up to 20,773 acres of land designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. This land could also be developed under the Existing General Plan, since no changes to the existing Antelope Valley Area Plan are being proposed as part of the Proposed Project. As a result, impacts under the No Project/Existing General Plan Alternative would be similar to the Proposed Project.

7.4.3 Air Quality

The No Project/Existing General Plan Alternative would generate slightly less emissions from area, energy, and mobile sources and short-term emissions from construction activities associated with new development. This alternative would have a ten percent decrease in dwelling units, eight percent decrease in population, and a seven percent decrease in employment in the Project Area, compared to buildout of the Proposed Project. Thus, mobile-source emissions would be slightly less than those associated with buildout of the Proposed Project. Furthermore, area and energy sources of emissions would also be slightly reduced. Short-term emissions related to project construction activities would be slightly less in this alternative due to the reduced amount of total permitted development. However, this alternative would not substantially reduce significant short- and long-term criteria pollutant contributions of volatile organic compounds (VOC), NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$; would not be consistent with the adopted air quality management plans, since criteria pollutant thresholds would be exceeded; and would cumulatively contribute to the SoCAB nonattainment designations for O_3, PM_{10}, and $PM_{2.5}$. In addition, under this alternative, no community climate action plan would be adopted, as further discussed below under Greenhouse Gas Emissions. Implementation of the Proposed Project was found to have significant and unavoidable impacts to short- and long-term air quality. Short- and long-term air quality impacts of this alternative would also be significant and unavoidable. However, since air quality emissions would be slightly reduced, this alternative is considered environmentally superior to the Proposed Project.

7.4.4 Biological Resources

Both the Proposed Project and the Existing General Plan contain policies that emphasize the conservation of SEAs and open space areas. However, neither provides a mechanism for compensation for unavoidable habitat loss or mitigation for direct impacts special-status species or sensitive plant communities. Thus, mitigation measures are proposed to reduce direct impacts to special-status species and sensitive habitat. Although development that is allowed in both the Existing General Plan and the Proposed Project would result in similar significant impacts to special-status species at the general plan level, the Proposed Project includes mitigation that would reduce direct impacts to special-status species and sensitive habitat. Therefore, impacts would be less under the Proposed Project, although they would remain significant.

The Existing General Plan specifically emphasizes the preservation and restoration of coastal and marine resources, and the Proposed Project specifically emphasizes the restoration of significant riparian resources and discouragement of development to preserve riparian habitats, including wetlands, in a natural state. Thus, both the Proposed Project and the Existing General Plan contain policies that emphasize protection of water sources and watershed to ensure the ecological functions of these systems are maintained. Mitigation measures BIO–1 and BIO–3 are proposed to reduce any impacts to wetlands, and in combination with the requirements for regulatory permitting, are considered less than significant. Impacts would be similar between the Existing General Plan and the Proposed Project, with the potential for a slightly higher level of protection for wetland resources under the Proposed Project as a result of the recommended mitigation measures.

Although both the Proposed Project and the Existing General Plan contain policies that emphasize the conservation of SEAs and open space areas, the Existing General Plan does not specifically provide for the protection of wildlife movement corridors. However, the Proposed Project emphasizes the preservation of wildlife corridors and linkages, and connectivity between habitats with the updated SEA boundaries. Regardless, neither provides a mechanism for compensation if avoidance of impacts to regional wildlife linkages is not feasible. Although the Proposed Project's policies emphasize the preservation of wildlife corridors and linkages and mitigation measure BIO–1 may provide some protection measures to avoid or minimize impacts to wildlife corridors and nursery sites, development allowed in both the Existing General Plan and the Proposed Project would result in similar significant impacts to regional wildlife linkages at the general plan level.

Since the updated SEA boundaries are based on the latest biological information and GIS mapping data, they are considered biologically superior to the 61 SEAs designated in the Existing General Plan. In addition, mitigation measures are incorporated into the Proposed Project to reduce direct impacts to special-status species and sensitive habitat. As a result, this alternative is not environmentally superior to the Proposed Project.

7.4.5 Cultural Resources

Under this alternative, development intensity would be reduced; however, the amount of undeveloped acreage available for development would remain substantially the same. As a result, impacts to cultural resources would be expected to be substantially similar to those of the Proposed Project. This alternative could possibly impact any historic resources similar to the Proposed Project. Ground-disturbing activities associated with the buildout of the Existing General Plan would continue to occur in order to accommodate new development. Consequently, the potential of encountering fossil-bearing soils and rock formations, destroying below-ground paleontological resources, and affecting archaeological sites and sites of cultural significance would still occur, similarly to the Proposed Project. However, cultural resources are governed on a site-by-site basis, and the probability of uncovering new resources or disturbing known resources is considered in project-level environmental review. Mitigation measures are created for projects that have the potential to disturb cultural resources, to lessen or negate impacts. Therefore, implementation of this alternative would result in impacts similar to the buildout of the Proposed Project, which are considered less than significant.

7.4.6 Geology and Soils

Earthquake hazards would be of similar magnitude under the No Project/Existing General Plan Alternative as under the Proposed Project, because future development would still occur throughout Los Angeles County. Other site-specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, landslides, and expansive soils would also be similar for this alternative relative to the Proposed Project. New development under both alternatives would be expected to conform to the most recent California Building Codes and County Grading Ordinance, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative would be similar to the Proposed Project, and would have a less than significant impact.

7.4.7 Greenhouse Gas Emissions

This alternative would have a ten percent decrease in dwelling units, eight percent decrease in population, and a seven percent decrease in employment in the Project Area, compared to the buildout of the Proposed Project. Thus, GHG emissions would be slightly less than those associated with the buildout of the Proposed Project. However, under this alternative, no community climate action plan would be adopted. As described in Section 5.7, *Greenhouse Gas Emissions,* the Community Climate Action Plan, which is part of the Proposed Project, would reduce GHG emissions by 380,833 equivalent metric tons of Carbon Dioxide ($MTCO_2e$) per year at buildout. This represents a five percent decrease in $MTCO_2e$ emissions from business as usual at buildout. Consequently, this alternative would be less efficient than the Proposed Project because GHG emissions on a per capita basis would be greater without the adoption of the Community Climate Action Plan. Since overall GHG emissions would be reduced by 7 to 10 percent, and the Community Climate Action Plan provides a five percent decrease, overall GHG emissions under this alternative are expected to be similar to the Proposed Project. Like the Proposed Project, impacts from this alternative would be significant and unavoidable, since additional statewide measures would be necessary to reduce GHG emissions to meet the long-term GHG reduction goals under Executive Order S-03-05, which identified a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050.

7.4.8 Hazards and Hazardous Materials

This impact would be similar to the Proposed Project, although slightly reduced, because the No Project/Existing General Plan Alternative reduces overall development intensity. Consequently, impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset conditions, would be slightly reduced, although they are already less than significant. In addition, development under the No Project/Existing General Plan Alternative could expose people to hazardous substances that may be present in soil or groundwater, and demolition activities could expose workers and the environment to asbestos-containing materials and/or lead-based paint and residues. However, development under both the Proposed Project and this alternative would be held to federal, state, and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous material policies in the Los Angeles County Code and implementation of the existing regulations related to hazardous materials would reduce this impact to a less-than-significant level. For future developments on hazardous materials sites, appropriate remediation activities would be required

before construction activities could be permitted. Similar to the Proposed Project, impacts would be less than significant. Overall, impacts related to hazards and hazardous materials would be slightly reduced under this alternative compared to the Proposed Project, and impacts would remain less than significant.

7.4.9 Hydrology and Water Quality

Implementation of the No Project/Existing General Plan Alternative would have similar hydrology and water quality impacts to the Proposed Project. Although both residential and non-residential intensity would be reduced under this alternative, similar alterations to drainage patterns and alterations to hydrological patterns would occur. Similar to the Proposed Project, runoff would be subject to NPDES permit standards and provisions stipulated in the drainage area management plan. If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. The adopted policies that offer protection from water quality impairment would be implemented to treat runoff to the maximum extent practicable. In terms of water quality, this alternative would have a less than significant impact, similar to the Proposed Project. Hydrology and water quality impacts overall would be similar for this alternative as for the Proposed Project, and impacts would remain less than significant.

7.4.10 Land Use and Planning

Under the No Project/Existing General Plan Alternative, the benefits of providing additional mixed-use and development intensity opportunities in specific focus areas would not occur. Therefore, although significant impacts would not result under this alternative, the Proposed Project provides for the establishment of TODs in the General Plan, the amendment to the MXD Mixed Use Zone, and the adoption of the Community Climate Action Plan in order to align with SCAG's regional policies for integrating land use and transportation. However, similarly to the Proposed Project, no conflicts with adopted plans and policies would occur. Therefore, land use impacts would be slightly greater than the Proposed Project under this alternative, although they would remain less than significant.

7.4.11 Mineral Resources

As discussed in Section 5.11, *Mineral Resources*, implementation of the Proposed Project is expected to have a significant unavoidable adverse impact to mineral resources due to development within the Antelope Valley Planning Area. The Existing General Plan designates approximately 548,888 acres out of 1,137,968 acres for development (approximately 48 percent) within the Antelope Valley Planning Area. The Proposed Project also allows development on approximately 48 percent of the Planning Area (548,777 acres out of 1,132,744 acres). The buildout projections for the Antelope Valley Planning Area under this alternative are also very similar to the Proposed Project. Under the No Project/Existing General Plan Alternative, a total of 278,249 dwelling units and 46.9 million square feet of non-residential development is projected for the Antelope Valley Planning Area. Under the Proposed Project, a total of 278,158 dwelling units and 46.9 million square feet of non-residential development is projected. As a result, impacts under the No Project/Existing General Plan Alternative would be similar to the Proposed Project with respect to mineral resources.

7.4.12 Noise

This alternative would have a ten percent decrease in dwelling units, eight percent decrease in population, and a seven percent decrease in employment in the Project Area, compared to the buildout of the Proposed Project. Under this alternative, there would be potentially less residential and non-residential development given the reduced capacity, thereby eliminating potential short-term noise impacts from construction of these projects. Additionally, the reduction of residential and non-residential development and construction activities would also reduce potential short-term vibration impacts to sensitive receptors. This alternative would also reduce potential long-term noise impacts from mobile and stationary sources. The reduction of planned buildout capacity would reduce the number of vehicle trips generated by new developments and would reduce the number of stationary sources of noise. Overall, this alternative would reduce short- and long-term noise impacts of the Proposed Project. However, buildout of the Existing General Plan would continue to expose sensitive receptors to elevated noise levels and strong vibration from construction and result in an increase in traffic on the local roadways, which would substantially increase noise levels. Consequently, this alternative would reduce but would not eliminate the significant construction-related and operational impacts of the Proposed Project.

7.4.13 Population and Housing

As discussed in Section 5.13, *Population and Housing*, and shown in Table 5.13-3, the Antelope Valley Planning Area goes from an existing jobs/housing ratio of 1.29 to 0.18 at buildout, which is considered housing rich. This would be considered a significant impact without mitigation. The buildout projections for the Antelope Valley Planning Area under this alternative are also very similar to the Proposed Project. Under the No Project/Existing General Plan Alternative, a total of 278,249 dwelling units and 46.9 million square feet of non-residential development is projected for the Antelope Valley Planning Area. Under the Proposed Project, a total of 278,158 dwelling units and 46.9 million square feet of non-residential development is projected. As a result, the jobs/housing balance for the Antelope Valley Planning Area remains the same under this alternative, as shown in Table 7-2. Therefore, impacts under the No Project Alternative/Existing General Plan Alternative would be similar to the Proposed Project, without mitigation.

7.4.14 Public Services

Under the No Project Alternative/Existing General Plan Alternative, development would occur throughout the Project Area as permitted by the Existing General Plan. This alternative would have a ten percent decrease in dwelling units, eight percent decrease in population, and a seven percent decrease in employment in the Project Area, compared to the buildout of the Proposed Project. Under this alternative, impacts associated with fire protection, sheriff protection, schools and library services would be less compared to the Proposed Project, since there would be less residential development at buildout. Fewer residential developments would result in a lower generation of new residents and therefore reduce demand for these services. Therefore, the No Project Alternative/Existing General Plan Alternative would have slightly reduced impacts compared to the Proposed Project, although, similarly to the Proposed Project, impacts would be less than significant.

7.4.15 Recreation

Under the No Project Alternative/Existing General Plan Alternative, the County would continue to function under the direction of the Existing General Plan. Due to the higher level of population estimated under buildout conditions of the Proposed Project, the demands on existing recreational facilities would be slightly reduced under this alternative. As a result, less parkland would be required to serve the projected population at buildout. Impacts would remain less than significant, and this alternative would slightly reduce impacts of the Proposed Project.

7.4.16 Transportation and Traffic

Under the No Project Alternative/Existing General Plan Alternative, development would occur throughout the Project Area as permitted by the Existing General Plan. This alternative would have a ten percent decrease in dwelling units, eight percent decrease in population, and a seven percent decrease in employment in the Project Area, compared to the buildout of the Proposed Project. This would result in corresponding decreases in traffic volumes on area roadways. However, this alternative would not provide for the establishment of TODs in the General Plan and amendment to the MXD Mixed Use Zone, which would promote alternative modes of transportation. The Proposed Project, through land use strategies, goals and policies, and implementation programs, includes broad range of approaches to developing alternative modes of transport, which includes creating more walkable communities, enhancements to the public transit system, and support of nonmotorized travel. This alternative would still contribute to an unacceptable LOS on several roadways in the Project Area, including Caltrans facilities, and therefore would still result in significant unavoidable transportation and traffic impacts. However, since traffic volumes at buildout would be reduced by 7 to 10 percent, this alternative is considered superior to the Proposed Project with regards to transportation and traffic.

7.4.17 Utilities and Service Systems

Under the No Project Alternative/Existing General Plan Alternative, development would occur throughout the Project Area as permitted by the Existing General Plan. This alternative would have a ten percent decrease in dwelling units, eight percent decrease in population, and a seven percent decrease in employment in the Project Area, compared to the buildout of the Proposed Project. Under the No Project/Existing General Plan Alternative, impacts to utilities and service systems would be reduced due to the reduction in residential units and non-residential square footage. However, similarly to the Proposed Project, impacts relating to water supply would remain significant and unavoidable.

7.4.18 Conclusion

Ability to Reduce Environmental Impacts

The No Project/Existing General Plan Alternative would have similar impacts for aesthetics, agriculture and forestry resources, cultural resources, geology and soils, GHG emissions, hydrology and water quality, mineral resources, and population and housing. Impacts would be slightly reduced for air quality, hazards and

hazardous materials, noise, public services, recreation, transportation and traffic, and utilities and service systems. However, impacts to biological resources and land use and planning would be greater under this alternative. In addition, while it would slightly reduce significant impacts with regard to agriculture and forestry resources, air quality, biological resources, cultural resources, greenhouse gas emissions, mineral resources, noise, transportation/traffic, utilities and service systems (water supply), these would remain significant and unavoidable.

Ability to Achieve Project Objectives

Implementation of the No Project/Existing General Plan Alternative would allow future growth that may not be compatible with the current goals and objectives of the County. This alternative would not update the existing SEA boundaries. Since the updated SEA boundaries are based on the latest biological information and GIS mapping data, they are considered biologically superior to the 61 SEAs designated in the Existing General Plan. In addition, such growth would not provide the mix of uses and housing that would be allowed under the Proposed Project. Other key components of the Proposed Project, including the establishment of TODs in the General Plan, amendment to the MXD Mixed Use Zone, and adoption of the Community Climate Action Plan would not occur under this alternative. Specifically, the No Project/Existing General Plan Alternative does not promote mixed-use development, does not locate mixed uses near regional employment and activity centers, does not promote multi-modal transportation, and therefore would be inconsistent with SCAG's RTP/SCS for the unincorporated areas.

7.5 REDUCED INTENSITY ALTERNATIVE

This alternative would reduce the overall additional development intensity by 30 percent within each Planning Area as compared to the Proposed Project. Under the Reduced Intensity Alternative, a comprehensive update to the Existing General Plan goals and policies would occur, similar to the Proposed Project. Updates to the existing SEA boundaries based on the latest biological information and GIS mapping data would also occur. Other key components of the Proposed Project, such as the establishment of TODs in the General Plan, amendment to the MXD Mixed Use Zone, and adoption of the Community Climate Action Plan would occur under this alternative. Under the Reduced Intensity Alternative, a total of 558,380 dwelling units (additional 257,902 units from existing), a total population of 1,988,285 (additional 921,871 persons from existing), and a total of 410,300 employees (additional 157,641 employees from existing) would occur at buildout.

7.5.1 Aesthetics

Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. This would reduce overall density within the Project Area at buildout. As a result, aesthetic impacts under the Reduced Intensity Alternative would be reduced, as compared to the Proposed Project.

7.5.2 Agriculture and Forestry Resources

As discussed in Section 5.2, *Agriculture and Forestry Resources*, conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to the buildout would be a significant impact in the Antelope Valley Planning Area, and a less than significant impact in the Santa Clarita Valley Planning Area and Santa Monica Mountains Planning Area. Project implementation could result in the conversion of up to 20,773 acres of land designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. This land could also be developed under the Reduced Intensity Alternative, although at lower densities. As a result, impacts under the Reduced Intensity Alternative would be similar to the Proposed Project.

7.5.3 Air Quality

The Reduced Intensity Alternative would generate fewer emissions from area, energy, and mobile sources and short-term emissions from construction activities associated with new development. Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. Thus, mobile-source emissions would be less than those associated with the buildout of the Proposed Project. Short-term emissions related to project construction activities would be slightly less in this alternative due to the reduced amount of total permitted development. However, this alternative would not substantially reduce significant short- and long-term criteria pollutant contributions of VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$; would not be consistent with the adopted air quality management plans, since criteria pollutant thresholds would be exceeded; and would cumulatively contribute to the SoCAB nonattainment designations for O_3, PM_{10}, and $PM_{2.5}$. Implementation of the Proposed Project was found to have significant and unavoidable impacts to short- and long-term air quality. Short- and long-term air quality impacts of this alternative would also be significant and unavoidable. However, since air quality emissions would be reduced, this alternative is considered environmentally superior to the Proposed Project.

7.5.4 Biological Resources

The Proposed Project contains policies that emphasize the conservation of SEAs and open space areas. Since the updated SEA boundaries are based on the latest biological information and GIS mapping data, they are considered biologically superior to the 61 SEAs designated in the Existing General Plan. The updated SEA designations would also occur under the Reduced Intensity Alternative. However, the updated SEA program does not provide a mechanism for compensation for unavoidable habitat loss or mitigation for direct impacts special-status species or sensitive plant communities. Since the Reduced Intensity Alternative does not reduce the amount of land designated for development, impacts to biological resources would be similar to the Proposed Project, and would remain significant.

7.5.5 Cultural Resources

Under this alternative, development intensity would be reduced; however, the amount of undeveloped acreage available for development would remain substantially the same. As a result, impacts to cultural

resources would be expected to be substantially similar to those of the Proposed Project. This alternative would not impact any historic resources. Ground-disturbing activities associated with the buildout of the Reduced Intensity Alternative would continue to occur in order to accommodate new development. Consequently, the potential of encountering fossil-bearing soils and rock formations, destroying below-ground paleontological resources, and affecting archaeological sites and sites of cultural significance would still occur, similar to the Proposed Project. However, cultural resources are governed on a site-by-site basis, and the probability of uncovering new resources or disturbing known resources is considered in project-level environmental review. Mitigation measures are created for projects that have the potential to disturb cultural resources, to lessen or negate impacts. Therefore, implementation of this alternative would result in impacts similar to the buildout of the Proposed Project, which are considered less than significant.

7.5.6 Geology and Soils

Earthquake hazards would be of similar magnitude under the Reduced Intensity Alternative as under the Proposed Project, because future development would still occur throughout Los Angeles County. Other site-specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, landslides, and expansive soils would also be similar for this alternative relative to the Proposed Project. New development under the Proposed Project or this alternative would be expected to conform to the most recent California Building Codes and County Grading Ordinance, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative, similarly to the Proposed Project, would have a less than significant impact.

7.5.7 Greenhouse Gas Emissions

Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. Thus, GHG emissions would be less than those associated with the buildout of the Proposed Project. Under this alternative, the Community Climate Action Plan is assumed to be adopted. As described in Section 5.7, *Greenhouse Gas Emissions,* the Community Climate Action Plan would reduce GHG emissions by 380,833 $MTCO_2e$ per year at buildout. This represents a seven percent decrease in $MTCO_2e$ emissions from business as usual at buildout. Since overall GHG emissions would be reduced by 14 to 17 percent, and the Community Climate Action Plan, which is part of the Proposed Project, provides a seven percent decrease, overall GHG emissions under this alternative are expected to be reduced by approximately 21 to 24 percent as compared to the Proposed Project. However, similarly to the Proposed Project, impacts from this alternative would be significant and unavoidable, since additional statewide measures would be necessary to reduce GHG emissions to meet the long-term GHG reduction goals under Executive Order S-03-05, which identified a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050.

7.5.8 Hazards and Hazardous Materials

This impact would be similar to the Proposed Project, although slightly reduced, because the Reduced Intensity Alternative reduces overall development intensity. Consequently, impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset

conditions, would be slightly reduced, although they are already less than significant. In addition, development under the Reduced Intensity Alternative could expose people to hazardous substances that may be present in soil or groundwater, and demolition activities could expose workers and the environment to asbestos-containing materials and/or lead-based paint and residues. However, development under both the Proposed Project and this alternative would be held to federal, state, and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous material policies in the Los Angeles County Code and implementation of the existing regulations related to hazardous materials would reduce this impact to a less-than-significant level. For future developments on hazardous materials sites, appropriate remediation activities would be required before construction activities could be permitted. Similar to the Proposed Project, impacts would be less than significant. Overall, impacts related to hazards and hazardous materials would be slightly reduced under this alternative compared to the Proposed Project, and impacts would remain less than significant.

7.5.9 Hydrology and Water Quality

Implementation of the Reduced Intensity Alternative would have similar hydrology and water quality impacts to the Proposed Project. Although both residential and non-residential intensity would be reduced under this alternative, similar alterations to drainage patterns and alterations to hydrological patterns would occur. Similar to the Proposed Project, runoff would be subject to NPDES permit standards and provisions stipulated in the drainage area management plan. If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. The adopted policies that offer protection from water quality impairment would be implemented to treat runoff to the maximum extent practicable. In terms of water quality, this alternative would have a less than significant impact, similar to the Proposed Project. Hydrology and water quality impacts overall would be similar for this alternative as for the Proposed Project, and impacts would remain less than significant.

7.5.10 Land Use and Planning

Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. Thus, potential land use impacts would be less than those associated with the buildout of the Proposed Project. However, under the Reduced Intensity Alternative, the benefits of providing additional mixed-use and development intensity opportunities in specific focus areas would occur, but not to the same extent due to the reduction in densities. Like the Proposed Project, no conflicts with adopted plans and policies would occur. Therefore, land use impacts would be slightly less than the Proposed Project under this alternative and would remain less than significant.

7.5.11 Mineral Resources

As discussed in Section 5.11, *Mineral Resources*, implementation of the Proposed Project is expected to have a significant unavoidable adverse impact to mineral resources due to development within the Antelope Valley Planning Area. The Proposed Project allows development on approximately 48 percent of the Planning Area (548,777 acres out of 1,132,744 acres). This land could also be developed under the Reduced Intensity

Alternative, although at lower densities. As a result, impacts under the Reduced Intensity Alternative would be similar to the Proposed Project with respect to mineral resources.

7.5.12 Noise

Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. Under this alternative, there would be potentially less residential and non-residential development given the reduced capacity, thereby eliminating potential short-term noise impacts from construction of these projects. Additionally, the reduction of residential and non-residential development and construction activities would also reduce potential short-term vibration impacts to sensitive receptors. This alternative would also reduce potential long-term noise impacts from mobile and stationary sources. The reduction of planned buildout capacity would reduce the number of vehicle trips generated by new developments and would reduce the number of stationary sources of noise. Overall, this alternative would reduce short- and long-term noise impacts of the Proposed Project. However, buildout of the Existing General Plan would continue to expose sensitive receptors to elevated noise levels and strong vibration from construction and result in an increase in traffic on the local roadways, which would substantially increase noise levels. Consequently, this alternative would reduce but would not eliminate the significant construction-related and operational impacts of the Proposed Project.

7.5.13 Population and Housing

As discussed in Section 5.13, *Population and Housing*, and shown in Table 5.13-3, the Antelope Valley Planning Area goes from an existing jobs/housing ratio of 1.29 to 0.18 at buildout under the Proposed Project, which is considered housing rich. This would be considered a significant impact without mitigation. Allowable development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 30 percent. Under the Reduced Intensity Alternative, a total of 202,132 dwelling units, a total population of 719,590, and a total employment of 43,997 would be projected for the Antelope Valley Planning Area. As shown in Table 7-2, this would result in a jobs/housing balance of 0.22 for the Antelope Valley Planning Area, which is slightly better than the Proposed Project, but still housing-rich. Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. Overall jobs/housing balance would slightly improve from 0.71 to 0.74 under this alternative. Therefore, impacts under the Reduced Intensity Alternative would be slightly reduced when compared to the Proposed Project.

7.5.14 Public Services

Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. Under this alternative, impacts associated with fire protection, sheriff protection, schools and library services would be less compared to the Proposed Project, since there would be less residential development at buildout. Fewer residential developments would result in a lower generation of new residents and therefore

less demand for these services. Therefore, the Reduced Intensity Alternative would have reduced impacts compared to the Proposed Project, although, similarly to the Proposed Project, impacts would be less than significant.

7.5.15 Recreation

Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. Due to the higher level of population estimated under buildout conditions of the Proposed Project, the demands on existing recreational facilities would be slightly reduced under this alternative. As a result, less parkland would be required to serve the projected population at buildout. Impacts would remain less than significant, and this alternative would slightly reduce impacts of the Proposed Project.

7.5.16 Transportation and Traffic

Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. This would result in corresponding decreases in traffic volumes on area roadways. This alternative would also provide for the establishment of TODs and the amendment to the MXD Mixed Use Zone, which would promote alternative modes of transportation, although at reduced densities. This alternative would still contribute to an unacceptable LOS on several roadways in the Project Area, including Caltrans facilities, and therefore would still result in significant unavoidable transportation and traffic impact. However, since traffic volumes at buildout would be reduced by 14 to 17 percent, this alternative is considered superior to the Proposed Project with regards to transportation and traffic.

7.5.17 Utilities and Service Systems

Throughout the Project Area, this alternative would have a 17 percent decrease in dwelling units, 14 percent decrease in population, and a 14 percent decrease in employment, compared to the buildout of the Proposed Project. Under the Reduced Intensity Alternative, impacts to utilities and service systems would be reduced due to the reduction in residential units and non-residential square footage. However, similarly to the Proposed Project, impacts would remain significant and unavoidable.

7.5.18 Conclusion

Ability to Reduce Environmental Impacts

The Reduced Intensity Alternative would have similar impacts for agriculture and forestry resources, biological resources, cultural resources, geology and soils, GHG emissions, hydrology and water quality, mineral resources, and population and housing. Impacts would be reduced for aesthetics, air quality, GHG emissions, hazards and hazardous materials, land use and planning, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. In addition, while it would slightly reduce significant impacts with regard to agriculture and forestry resources, air quality, biological

resources, cultural resources, greenhouse gas emissions, mineral resources, noise, transportation/traffic, utilities and service systems (water supply), these would remain significant and unavoidable.

Ability to Achieve Project Objectives

This alternative would meet all of the project objectives identified in Section 7.1.2, although not to the same extent. For instance, this alternative would involve the establishment of TODs in the General Plan and amendment to the MXD Mixed Use Zone, although allowable densities would be reduced as compared to the Proposed Project.

7.6 ANTELOPE VALLEY REDUCED INTENSITY ALTERNATIVE

This alternative would reduce the allowable development intensity within the Antelope Valley Planning Area. No other changes in any other Planning Area would occur. The alternative reduces allowable dwelling units, population, and employment growth within the Antelope Valley Planning Area to 81,441 dwelling units, 311,920 residents, and 102,513 employees. Under the Proposed Project, a total of 278,158 dwelling units, 1,070,571 residents, and 51,219 employees would be allowed in the Antelope Valley Planning Area at buildout. Under the Antelope Valley Reduced Intensity Alternative, a comprehensive update to the Existing General Plan goals and policies would occur, similar to the Proposed Project. Updates to the existing SEA boundaries based on the latest biological information and GIS mapping data would also occur. Other key components of the Proposed Project, such as the establishment of TODs in the General Plan, amendment to the MXD Mixed Use Zone, and adoption of the Community Climate Action Plan would occur under this alternative. Under the Antelope Valley Reduced Intensity Alternative, a total of 490,083 dwelling units (additional 189,605 units from existing), a total population of 1,655,675 (additional 589,261 persons from existing), and a total of 536,409 employees (additional 283,750 employees from existing) would occur in the Project Area at buildout.

7.6.1 Aesthetics

Under this Alternative, allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. Under the Antelope Valley Reduced Intensity Alternative, a total of 106,180 dwelling units, a total population of 405,410, and a total employment of 134,351 would be projected for the Antelope Valley Planning Area. Throughout the Project Area, this alternative would have a 27 percent decrease in dwelling units, 31 percent decrease in population, and a 11 percent increase in employment, compared to the buildout of the Proposed Project. As a result, aesthetic impacts under the Antelope Valley Reduced Intensity Alternative would be reduced for the Antelope Valley Area Plan, as compared to the Proposed Project. Aesthetic impacts within the balance of the Project Area would be the same as the Proposed Project, since no other changes are proposed under this Alternative.

7.6.2 Agriculture and Forestry Resources

As discussed in Section 5.2, *Agriculture and Forestry Resources*, conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to the buildout of the Proposed Project would be a significant impact in the Antelope Valley Planning Area, and a less than significant impact

in the Santa Clarita Valley Planning Area and Santa Monica Mountains Planning Area. Project implementation could result in the conversion of up to 20,773 acres of land designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. Allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. As a result, agriculture and forestry resources impacts under the Antelope Valley Reduced Intensity Alternative would be reduced as compared to the Proposed Project, although they would remain significant and unavoidable.

7.6.3 Air Quality

The Antelope Valley Reduced Intensity Alternative would generate fewer emissions from area, energy, and mobile sources and short-term emissions from construction activities associated with new development. Allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. Under the Antelope Valley Reduced Intensity Alternative, a total of 106,180 dwelling units, a total population of 405,410, and a total employment of 134,351 would be projected for the Antelope Valley Planning Area. This results in a jobs/housing ratio within the Antelope Valley Planning Area of 1.27, which is more balanced than under the Proposed Project (0.18). This results in reduced VMT within the Mojave Desert and South Coast Air Basins. Thus, mobile-source emissions would be less than those associated with the buildout of the Proposed Project. Short-term emissions related to project construction activities would be less in this alternative due to the reduced amount of total permitted development. However, this alternative would not substantially reduce significant short- and long-term criteria pollutant contributions of VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$; would not be consistent with the adopted air quality management plans, since criteria pollutant thresholds would be exceeded; and would cumulatively contribute to the SoCAB nonattainment designations for O_3, PM_{10}, and $PM_{2.5}$. Implementation of the Proposed Project was found to have significant and unavoidable impacts to short- and long-term air quality. Short- and long-term air quality impacts of this alternative would also be significant and unavoidable. However, since air quality emissions would be reduced, this alternative is considered environmentally superior to the Proposed Project.

7.6.4 Biological Resources

The Proposed Project contains policies that emphasize the conservation of SEAs and open space areas. Since the updated SEA boundaries are based on the latest biological information and GIS mapping data, they are considered biologically superior to the 61 SEAs designated in the Existing General Plan. The updated SEA designations would also occur under the Antelope Valley Reduced Intensity Alternative. However, the updated SEA program does not provide a mechanism for compensation for unavoidable habitat loss or mitigation for direct impacts special-status species or sensitive plant communities. Since the Antelope Valley Reduced Intensity Alternative reduces the residential development within the Antelope Valley Planning Area, impacts to biological resources would be reduced as compared to the Proposed Project, although they would remain significant.

7.6.5 Cultural Resources

Under this alternative, allowable residential development within the Antelope Valley Planning Area would be reduced by approximately 62 percent. As a result, impacts to cultural resources would be reduced in the Antelope Valley Planning Area as compared to the Proposed Project. Potential impacts in the balance of the Project Area would remain the same since no other land use changes are proposed in this alternative. Therefore, implementation of this alternative would result in fewer impacts to cultural resources as compared to the Proposed Project, which are considered less than significant.

7.6.6 Geology and Soils

Earthquake hazards would be of similar magnitude under the Antelope Valley Reduced Intensity Alternative as under the Proposed Project, because future development would still occur throughout Los Angeles County. Other site-specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, landslides, and expansive soils would also be similar for this alternative relative to the Proposed Project. New development under both alternatives would be expected to conform to the most recent California Building Codes and County Grading Ordinance, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative, similarly to the Proposed Project, would have a less than significant impact.

7.6.7 Greenhouse Gas Emissions

Allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. Under the Antelope Valley Reduced Intensity Alternative, a total of 106,180 dwelling units, a total population of 405,410, and a total employment of 134,351 would be projected for the Antelope Valley Planning Area. This results in a jobs/housing ratio within the Antelope Valley Planning Area of 1.27, which is more balanced than under the Proposed Project (0.18). This results in reduced VMT within the Mojave Desert and South Coast Air Basins. Throughout the Project Area, this alternative would have a 27 percent decrease in dwelling units, 31 percent decrease in population, and an 11 percent increase in employment, compared to the buildout of the Proposed Project. Thus, GHG emissions would be less than those associated with the buildout of the Proposed Project. Under this alternative, the Community Climate Action Plan is assumed to be adopted. As described in Section 5.7, *Greenhouse Gas Emissions,* the Community Climate Action Plan, which is part of the Proposed Project, would reduce GHG emissions by 380,833 $MTCO_2e$ per year at General Plan buildout. This represents a five percent decrease in $MTCO_2e$ emissions from business as usual at buildout. Since overall GHG emissions would be reduced, and the Community Climate Action Plan, which is part of the Proposed Project, provides a five percent decrease, overall GHG emissions under this alternative are expected to be reduced as compared to the Proposed Project. However, similarly to the Proposed Project, impacts from this alternative would be significant and unavoidable, since additional statewide measures would be necessary to reduce GHG emissions to meet the long-term GHG reduction goals under Executive Order S-03-05, which identified a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050.

7.6.8 Hazards and Hazardous Materials

This impact would be similar to the Proposed Project, although slightly reduced, because the Antelope Valley Reduced Intensity Alternative reduces overall development intensity within the Antelope Valley Planning Area. Consequently, impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset conditions, would be slightly reduced, although they are already less than significant. In addition, development under the Antelope Valley Reduced Intensity Alternative could expose people to hazardous substances that may be present in soil or groundwater, and demolition activities could expose workers and the environment to asbestos-containing materials and/or lead-based paint and residues. However, development under both the Proposed Project and this alternative would be held to federal, state, and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous material policies in the Los Angeles County Code and implementation of the existing regulations related to hazardous materials would reduce this impact to a less-than-significant level. For future developments on hazardous materials sites, appropriate remediation activities would be required before construction activities could be permitted. Similar to the Proposed Project, impacts would be less than significant. Overall, impacts related to hazards and hazardous materials would be slightly reduced under this alternative compared to the Proposed Project, and impacts would remain less than significant.

7.6.9 Hydrology and Water Quality

Allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. As a result, implementation of the Antelope Valley Reduced Intensity Alternative would reduce hydrology and water quality impacts in the Antelope Valley Planning Area due to decreased impervious surfaces. Potential impacts in the balance of the Project Area would remain the same. Similar to the Proposed Project, runoff would be subject to NPDES permit standards and provisions stipulated in the drainage area management plan. If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. The adopted policies that offer protection from water quality impairment would be implemented to treat runoff to the maximum extent practicable. In terms of water quality, this alternative would have a less than significant impact, similar to the Proposed Project. Hydrology and water quality impacts overall would be less for this alternative as for the Proposed Project, although they would remain less than significant.

7.6.10 Land Use and Relevant Planning

Allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. Under the Antelope Valley Reduced Intensity Alternative, a total of 106,180 dwelling units, a total population of 405,410, and a total employment of 134,351 would be projected for the Antelope Valley Planning Area. As a result, potential land use impacts within the Antelope Valley Planning Area would be reduced. Potential impacts in the balance of the Project Area would remain the same, as no other intensity changes are associated with this alternative. Therefore, land use impacts would be less than the Proposed Project under this alternative and would remain less than significant.

7.6.11 Mineral Resources

As discussed in Section 5.11, *Mineral Resources*, implementation of the Proposed Project is expected to have a significant unavoidable adverse impact to mineral resources due to development within the Antelope Valley Planning Area. The Proposed Project allows development on approximately 48 percent of the Planning Area (548,777 acres out of 1,132,744 acres). Allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. As a result, impacts under the Antelope Valley Reduced Intensity Alternative would be reduced as compared to the Proposed Project with respect to mineral resources, although they would remain significant and unavoidable.

7.6.12 Noise

Allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. Under this alternative, there would be less residential development given the reduced capacity, thereby eliminating potential short-term noise impacts from construction of these projects. Additionally, the reduction of residential development and construction activities would also reduce potential short-term vibration impacts to sensitive receptors. This alternative would also reduce potential long-term noise impacts from mobile and stationary sources within the Antelope Valley Planning Area. The reduction of planned buildout capacity would reduce the number of vehicle trips generated by new developments and would reduce the number of stationary sources of noise. Overall, this alternative would reduce short- and long-term noise impacts of the Proposed Project within the Antelope Valley Planning Area. Potential noise impacts in the balance of the Project Area would remain similar to the Proposed Project. Consequently, this alternative would reduce but would not eliminate the significant construction-related and operational impacts of the Proposed Project.

7.6.13 Population and Housing

As discussed in Section 5.13, *Population and Housing*, and shown in Table 5.13-3, the Antelope Valley Planning Area goes from an existing jobs/housing ratio of 1.29 to 0.18 at buildout, which is considered housing rich. This would be considered a significant impact without mitigation. Allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. Under the Antelope Valley Reduced Intensity Alternative, a total of 106,180 dwelling units, a total population of 405,410, and a total employment of 134,351 would be projected for the Antelope Valley Planning Area. This results in a jobs/housing ratio within the Antelope Valley Planning Area of 1.27, which is more balanced than under the Proposed Project (0.18). Therefore, impacts under the Antelope Valley Reduced Intensity Alternative would be slightly reduced when compared to the Proposed Project.

7.6.14 Public Services

Throughout the Project Area, this alternative would have a 27 percent decrease in dwelling units, 31 percent decrease in population, and an 11 percent increase in employment, compared to the buildout of the Proposed Project. Under this alternative, impacts associated with fire protection, sheriff protection, schools and library services would be less compared to the Proposed Project, since there would be less residential development at

buildout. Fewer residential developments would result in a lower generation of new residents and therefore less demand for these services. Therefore, the Antelope Valley Reduced Intensity Alternative would have reduced impacts compared to the Proposed Project, although similarly to the Proposed Project, impacts would be less than significant.

7.6.15 Recreation

Throughout the Project Area, this alternative would have a 27 percent decrease in dwelling units, 31 percent decrease in population, and an 11 percent increase in employment, compared to the buildout of the Proposed Project. Due to the higher level of population estimated under buildout conditions of the Proposed Project, the demands on existing recreational facilities would be slightly reduced under this alternative. As a result, less parkland would be required to serve the projected population at buildout. Impacts would remain less than significant, and this alternative would slightly reduce impacts of the Proposed Project.

7.6.16 Transportation and Traffic

Allowable residential development within the Antelope Valley Planning Area under this alternative would be reduced by approximately 62 percent. Under the Antelope Valley Reduced Intensity Alternative, a total of 106,180 dwelling units, a total population of 405,410, and a total employment of 134,351 would be projected for the Antelope Valley Planning Area. This results in a jobs/housing ratio within the Antelope Valley Planning Area of 1.27, which is more balanced than under the Proposed Project (0.18). This results in reduced VMT within the Mojave Desert and South Coast Air Basins. This would result in corresponding decreases in traffic volumes on area roadways within the Antelope Valley Planning Area. This alternative would also provide for the establishment of TODs in the General Plan and amendment to the MXD Mixed Use Zone, which would promote alternative modes of transportation. This alternative would still contribute to an unacceptable LOS on several roadways in the Project Area, including Caltrans facilities, and therefore would still result in significant unavoidable transportation and traffic impact. However, since traffic volumes at buildout would be reduced, this alternative is considered superior to the Proposed Project with regards to transportation and traffic.

7.6.17 Utilities and Service Systems

Throughout the Project Area, this alternative would have a 27 percent decrease in dwelling units, 31 percent decrease in population, and an 11 percent increase in employment, compared to the buildout of the Proposed Project. Under the Antelope Valley Reduced Intensity Alternative, impacts to utilities and service systems would be reduced due to the reduction in residential units and non-residential square footage. However, similarly to the Proposed Project, impacts would remain than significant and unavoidable.

7.6.18 Conclusion

Ability to Reduce Environmental Impacts

The Antelope Valley Reduced Intensity Alternative would have similar impacts for geology and soils. Impacts would be reduced for aesthetics, agriculture and forestry resources, air quality, biological resources, cultural

resources, GHG emissions, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. In addition, while it would slightly reduce significant impacts with regard to agriculture and forestry resources, air quality, biological resources, cultural resources, greenhouse gas emissions, mineral resources, noise, transportation/traffic, utilities and service systems (water supply), these would remain significant and unavoidable.

Ability to Achieve Project Objectives

This alternative would meet all of the project objectives identified in Section 7.1.2, although potential residential development within the Antelope Valley Planning Area would be significantly reduced.

7.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" and, in cases where the "No Project" Alternative is environmentally superior to the Proposed Project, the environmentally superior development alternative must be identified. An impact comparison is provided on Table 7-3 and a summary of the ability of each alternative to meet the project objectives is provided on Table 7-4. Two alternatives have been identified as "environmentally superior" to the Proposed Project:

- Reduced Intensity Alternative
- Antelope Valley Reduced Intensity Alternative

The Antelope Valley Reduced Intensity Alternative has been identified as the environmentally superior alternative because of its ability to reduce the significant impacts of the Proposed Project while still meeting the basic objectives of the project. This alternative would lessen impacts to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, GHG emissions, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. In addition, the Antelope Valley Reduced Intensity Alternative meets all of the basic objectives established for the Proposed Project.

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts." [Guidelines Sec. 15126.6(c)]

Table 7-3 Impact Comparison Proposed Project versus Project Alternatives

Environmental Impact	Proposed Project (without/ with mitigation)	No Project/Existing General Plan Alternative	Reduced Intensity Alternative	Antelope Valley Reduced Intensity Alternative
Aesthetics	LS/LS	=	-	-
Agricultural and Forestry Resources	**S/S**	=	=	-
Air Quality				
Short-Term	**S/S**	-	-	-
Long-Term	**S/S**	-	-	-
Biological Resources	**S/S**	+	=	-
Cultural Resources	**S/S**	=	=	-
Geology and Soils	LS/LS	=	=	=
Greenhouse Gas Emissions	**S/S**	=	=	-
Hazards and Hazardous Materials	LS/LS	-	-	-
Hydrology and Water Quality	S/LS	=	=	-
Land Use and Planning	LS/LS	+	-	-
Mineral Resources	**S/S**	=	=	-
Noise				
Short-Term	**S/S**	-	-	-
Long-Term	**S/S**	-	-	-
Population and Housing	LS/LS	=	-	-
Public Services	LS/LS	-	-	-
Recreation	LS/LS	-	-	-
Transportation/Traffic	**S/S**	-	-	-
Utilities and Service Systems	**S/S**	-	-	-

LS = Less than significant.
S = Significant
- = Reduces impacts compared to the Proposed Project.
+ = Increases impacts compared to the Proposed Project.
= Impacts would be similar.

7. Alternatives to the Proposed Project

Table 7-4 Ability of Each Alternative to Meet the Proposed Project Objectives

Proposed Project Objective	Proposed Project	No Project/Existing General Plan Alternative	Reduced Intensity Alternative	Antelope Valley Alternative Land Use Plan
Provide a comprehensive update to the existing Los Angeles County General Plan (Existing General Plan) that establishes the goals and policies to create a built environment that fosters the enjoyment, financial stability, and well-being of the unincorporated areas of Los Angeles County (unincorporated areas) and Los Angeles County as a whole.	Yes	No	Yes	Yes
Improve the job-housing balance and fiscal sustainability by planning for a diversified employment base, providing residential, commercial, industrial, and mixed-use land uses.	Yes	Yes, but not to the same extent	Yes	Yes
Promote sustainability by locating new development near existing infrastructure, services, and jobs.	Yes	Yes, but not to the same extent	Yes	Yes
Maintain environmentally sustainable communities and reduce greenhouse gas (GHG) emissions that contribute to climate change.	Yes	No	Yes	Yes
Support a reasonable share of projected regional population growth.	Yes	No	Yes	Yes
Reinforce the vitality, local economy, and individual character of existing communities while balancing housing, employment, and recreational opportunities.	Yes	Yes, but not to the same extent	Yes	Yes
Promote environmental stewardship that protects the range of natural resources and habitats that uniquely define the character and ecological importance of the unincorporated areas.	Yes	No	Yes	Yes
Provide policy guidance to protect and conserve natural resources and to improve the quality of air, water, and biological resources.	Yes	No	Yes	Yes
Coordinate the equitable sharing of public and private costs associated with providing and/or upgrading community services and infrastructure, and in a context-sensitive manner that addresses community character	Yes	Yes	Yes	Yes
Ensure that development accounts for physical constraints and the natural hazards of the land.	Yes	No	Yes	Yes
Recognize community and stakeholder interests while striving for consensus.	Yes	No	Yes	Yes
Protect and enhance recreational opportunities and public access to open space and natural resources	Yes	No	Yes	Yes

8. Impacts Found Not to Be Significant

California Public Resources Code Section 21003 (f) states: "…it is the policy of the state that… [a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." This policy is reflected in the State California Environmental Quality Act (CEQA) Guidelines (Guidelines) Section 15126.2(a), which states that "[a]n EIR [Environmental Impact Report] shall identify and focus on the significant environmental impacts of the Proposed Project" and Section 15143, which states that "[t]he EIR shall focus on the significant effects on the environment." The Guidelines allow use of an Initial Study to document project effects that are less than significant (Guidelines Section 15063[a]). Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant, and were therefore not discussed in detail in the Draft EIR.

As described in the Notice of Preparation (NOP) prepared for the Proposed Project, all impact categories were found to have at least one potentially significant impact; therefore, all categories have been evaluated in the EIR.

8. Impacts Found Not to Be Significant

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9. Significant Irreversible Changes Due to the Proposed Project

Section 15126.2(c) of the CEQA Guidelines requires that an Environmental Impact Report (EIR) describe any significant irreversible environmental changes that would be caused by the Proposed Project should it be implemented. Buildout of the Los Angeles County General Plan Update would occur over the next 20 years and beyond. Implementation of the Proposed Project would provide guidance for additional residential and commercial development consistent with the County's goals and policies. The significant irreversible changes due to the Proposed Project are:

- Future development would involve construction activities that entail the commitment of nonrenewable and/or slowly renewable energy resources, including gasoline, diesel fuel, electricity; human resources; and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, and water.

- An increased commitment of social services and public maintenance services (e.g., police, fire, and sewer and water services) would also be required. The energy and social service commitments would be long-term obligations in view of the fact of the low likelihood of returning the land to its original condition once it has been developed.

- Population growth related to project implementation would increase vehicle trips over the long term. Emissions associated with such vehicle trips would continue to contribute to the South Coast Air Basin's nonattainment designation for ozone and particulate matter (PM_{10} and $PM_{2.5}$).

- Future development of the Proposed Project is a long-term irreversible commitment of vacant parcels of land or redevelopment of existing developed land in unincorporated Los Angeles County.

9. Significant Irreversible Changes Due to the Proposed Project

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10. Growth–Inducing Impacts of the Proposed Project

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the Proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is an assessment of other projects that would foster other activities that could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

- Would this project result in the need to expand one or more public services to maintain desired levels of service?

- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which the Proposed Project could contribute to significant changes in the environment, beyond the direct consequences of developing the land use concept examined in the preceding sections of this EIR.

Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

As discussed in Section 5.17, *Utilities and Service Systems*, major new infrastructure facilities would be required to implement the Proposed Project in some areas of Los Angeles County. Some extensions of existing utility facilities from surrounding roadways, including water and sewer lines, would need to be upgraded to serve the amount of development anticipated by the Proposed Project. In particular, infrastructure in the Santa Clarita Valley Planning Area and Antelope Valley Planning Area would need to be upgraded—in a context-sensitive way—to serve the level of growth projected for those areas.

10. Growth-Inducing Impacts of the Proposed Project

The purpose of the Proposed Project is to guide growth and development in the unincorporated areas of Los Angeles County (Project Area). Los Angeles County, as well as the entire Southern California region, has experienced dramatic growth in the past two decades. Similar growth is expected to continue for the next two decades. As a response to this trend, the focus of the Proposed Project is to provide a framework in which growth can be managed and tailored to suit the needs of the community and the surrounding area. Adoption of the Proposed Project would allow future development in the Project Area consistent with the Land Use Policy Map, zoning maps, and related development standards. The Proposed Project does not approve the construction of specific development projects and would largely accommodate growth based on market conditions. However, in some locations, it would allow increased development intensity and/or a more inclusive mix of land uses compared to existing conditions. Therefore, the Proposed Project removes regulatory obstacles to growth, and is considered to be growth-inducing.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

As discussed in Section 5.14, *Public Services*, as the Project Area continues to develop, it would require further commitment of public services that could include fire protection, sheriff protection, public schools, public recreation, and other services as appropriate. An increase in development in the various Planning Areas would require an increased commitment to public services that would be considered a long-term commitment in order to maintain a desired level of service. This is considered a growth-inducing impact.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

Future development consistent with the Proposed Project would create a number of temporary construction jobs during development of individual projects. This would be a direct, growth-inducing effect of the Proposed Project.

As the population grows and occupies new dwelling units, these residents would seek shopping, entertainment, employment, home improvement, vehicle maintenance, and other economic opportunities in the surrounding area. This would facilitate the purchase of economic goods and services and could, therefore, encourage the creation of new businesses and/or the expansion of existing businesses. A key objective of the Proposed Project is to balance housing and employment within individual Planning Areas to reduce vehicle miles traveled. As a result, the Proposed Project would provide new employment opportunities in housing-rich areas within future office and commercial developments. Additionally, proposed increases in commercial uses are intended to serve the shopping needs of future residents and would generate additional employment opportunities. Therefore, the Proposed Project would have both direct and indirect growth-inducing effects.

Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Approval of the Proposed Project would not set a precedent that could encourage and facilitate other activities that could significantly affect the environment. Cities and counties in California periodically update their general plans pursuant to California Government Code Sections 65300 et seq.

As discussed in Chapter 3, *Project Description*, the Proposed Project consists of the preparation of the Los Angeles County General Plan Update, which includes a revision of the Existing General Plan Land Use Policy Map; revision of the elements required by the State of California; and optional elements. The Proposed General Plan consists of the following: Land Use Element, Mobility Element, Air Quality Element, Conservation and Natural Resources Element, Parks and Recreation Element, Noise Element, Safety Element, Public Services and Facilities Element, and Economic Development Element. The purpose of the Proposed General Plan Update is to provide a framework in which the growth can be managed and tailored to suit the needs of the community and the surrounding area. Pressures to develop in the surrounding cities may derive from regional economic conditions and market demands for housing, commercial, office and industrial land uses that may be directly or indirectly influenced by the Proposed Project.

Buildout projections for the Proposed Project are based on the theoretical buildout (dwelling units, population, nonresidential square footage, and employment) of each land use designation, which are calculated using the range of allowable densities. Buildout projections for the Proposed Project, broken down by Planning Area, are shown in Table 3-6, *Proposed Project Buildout Projections (by Planning Area)*. Buildout of the Proposed Project would allow for 659,409 total residential dwelling units and 7.2 million square feet of nonresidential land uses. The majority of new development is expected to occur in the Antelope Valley Planning Area and Santa Clarita Valley Planning Area. Although the remaining Planning Areas are predominantly built out, they would experience modest growth prior to buildout of the Proposed Project, primarily consisting of infill development, such as within the Transit Oriented Districts (see Chapter 3, *Project Description*).

Although the Proposed Project does not include approval of physical development, it creates additional development capacity in the Project Area compared to existing conditions. Much of this development capacity is either available under existing conditions or is limited to targeted areas. Furthermore, development projects would be induced more by market demands than by new development capacity created by land use changes included in the proposed Land Use Policy Map. However, because approval of the Proposed Project would ultimately result in subsequent projects that would have their own environmental impacts—including potentially significant impacts—the Proposed Project is a precedent-setting and growth-inducing action.

10. Growth-Inducing Impacts of the Proposed Project

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11. Organizations and Persons Consulted

COUNTY OF LOS ANGELES (LEAD AGENCY)

Department of Regional Planning

Richard J. Bruckner	Director
Mitch Glaser	Assistant Administrator
Connie Chung, AICP	Supervising Regional Planner
Patricia Hachiya	Supervising Regional Planner, Impact Analysis Section

Department of Public Works

Ruben Cruz, P.E.	Associate Civil Engineer
Matthew Dubiel, P.E.	Associate Civil Engineer
Amir Ibrahim, P.E.	Senior Civil Engineer
Toan Duong, P.E.	Civil Engineer

Los Angeles County Department Regional Planning
Patricia Hachiya

Department of Parks and Recreation

Joan Rupert	Departmental Facilities Planner
Lorrie Bradley	Park Planner
James Barber	Departmental Facilities Planner

Fire Department

Irma Jara
Tony Le

Wally Collins	Fire Prevention Engineering Assistant
Frank Vidales	Chief, Forestry Division
Juan Padilla	Fire Prevention Engineering Assistant
J Lopez	Assistance Chief, Forestry Division

Judith Leslie-Thomas

Department of Public Health

Michelle Tsiebos, REHS, MPA	Environmental Health Specialist
Evanor Masis	Industrial Hygienist
Robert Vasquez	Industrial Hygienist

11. Organizations and Persons Consulted

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