

Appendix I

Biological Resources Technical Report

SINGLE-FAMILY RESIDENTIAL HAULED WATER INITIATIVE
FOR NEW DEVELOPMENT

BIOLOGICAL RESOURCES TECHNICAL REPORT

PREPARED FOR:

LOS ANGELES COUNTY HAULED WATER TASK FORCE
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SECTION ES
EXECUTIVE SUMMARY

The proposed Single-Family Residential Hauled Water Initiative for New Development (proposed initiative) would allow up to 42,867 parcels, comprising 340,461 acres or approximately 532 square miles to use hauled water as a source of potable water during the building permit application process. The reasonable worst-case scenario assumes the annual average rate of issuance of building permits over the 20-year 2015 to 2035 planning horizon would be approximately 32 per year in the Santa Clarita Valley and approximately 152 per year in the Antelope Valley for a total of 184 permits per year for both areas. The total anticipated building permits over the 20-year 2015 to 2035 planning horizon would be approximately 3,680. The forecast for the 20-year 2015 to 2035 planning horizon predicted that the issuance of building permits within subareas would range from zero to 1,251 parcels over the 20-year period (Table ES-1, *20-Year 2015 to 2035 Forecasted Parcel Development*).

TABLE ES-1
20-YEAR 2015 TO 2035 FORECASTED PARCEL DEVELOPMENT

Castaic/ Santa Clarita Agua Dulce	Acton	Lake Hughes/ Gorman/ West of Lancaster	Lake Los Angeles/ Llano/ Valyermo/ Littlerock	Antelope Valley Northeast	Lancaster Northeast	East San Gabriel Mountains
Forecasted Development (Percentage of Parcels within Subarea)						
735 of 2,243 parcels (33%)	737 of 1,246 parcels (59%)	847 of 15,166 parcels (6%)	1,251 of 14,822 parcels (8%)	0 of 1,938 parcels (0%)	110 of 6,794 parcels (2%)	0 of 658 parcels (0%)

An analysis of a small subset of parcels in each subarea was performed in order to determine potential impacts from hauled water infrastructure including a storage tank, a septic leach field, and access for hauled water delivery vehicles. Based on the analysis it was determined that the average area of disturbance for each parcel was approximately 36 percent. The average size of lots analyzed was 4 acres.¹ Based on this analysis, potential impacts to biological resources were determined. The proposed initiative has the potential to result in significant impacts on biological resources related to five of the six thresholds articulated in Appendix G of the California Environmental Quality Act Guidelines (State CEQA Guidelines): federally or State-listed rare, threatened, and endangered species; State-designated sensitive plant communities and riparian habitats; federally protected wetlands; wildlife movement corridors; and potential conflicts with local policies and ordinances.

¹ Sapphos Environmental, Inc. 27 August 2014. Memorandum for the Record. Subject: "Analysis of Residential Development and Existing Disturbance for Parcels within or near the Proposed Hauled Water Initiative Study Area." Prepared for: Los Angeles County Hauled Water Task Force.

LISTED AND SENSITIVE PLANTS AND ANIMALS

There are 27 listed or candidate species, 75 sensitive or rare species, and 14 locally important species with the potential to be impacted by the proposed initiative. The number of listed species present within any given subarea ranges from six to 20. Critical habitat present within the proposed initiative subareas varies from 0 to 99 percent. Critical habitat may potentially be disturbed in two subareas: Castaic/Santa Clarita/Agua Dulce and Acton (Table ES-2, *Potential Impacts to Biological Resources*). The number of other sensitive plants and wildlife species present within any given subarea ranges from 12 to 49. The number of locally important species present within any given subarea ranges from three to 12. These numbers represent the maximum number of species and areas of critical habitat that could be impacted by the proposed initiative. The forecast can only predict how many parcels would be issued building permits, not which parcels would be developed; therefore, it is assumed that all impacts listed above have the potential to occur.

**TABLE ES-2
POTENTIAL IMPACTS TO BIOLOGICAL RESOURCES**

Subarea	Number of Parcels Forecasted for Development	Percentage of Area	Number of Affected Parcels	Acres of Potential Development	Acres of Potential Disturbance
<i>Critical Habitat</i>					
C	735	5%	37	147.0	53
A	737	0.1%	1	2.9	1
LH	847	0%	0	0	0
LL	1,251	0%	0	0	0
AV	0	99%	0	0	0
LN	110	0%	0	0	0
SG	0	2%	0	0	0
Total Study Area	3,680	5%	184	736.0	265.0
<i>State-sensitive Plant Communities</i>					
C	735	27%	198	794	286
A	737	9%	66	265	96
LH	847	44%	373	1,491	537
LL	1,251	51%	638	2,552	919
AV	0	97%	0	0	0
LN	110	22%	24	97	35
SG	0	68%	0	0	0
Total Study Area	3,680	43%	1,582	6,330	2,279
<i>Riparian Habitat</i>					
C	735	1%	7	29	11
A	737	6%	44	177	64
LH	847	8%	68	271	98
LL	1,251	14%	175	700	252
AV	0	5%	0	0	0
LN	110	62%	68	273	98
SG	0	13%	0	0	0
Total Study Area	3,680	15%	552	2,208.0	795

**TABLE ES-2
POTENTIAL IMPACTS TO BIOLOGICAL RESOURCES, *Continued***

Subarea	Number of Parcels Forecasted for Development	Percentage of Area	Number of Affected Parcels	Acres of Potential Development	Acres of Potential Disturbance
<i>State Jurisdictional Areas</i>					
C	735	2%	15	59	21
A	737	2%	15	59	21
LH	847	1%	8	34	12
LL	1,251	3%	38	150	54
AV	0	4%	0	0	0
LN	110	4%	4	18	6
SG	0	5%	0	0	0
Total Study Area	3,680	2%	74	294	106
<i>Federal Wetlands and Waterways</i>					
C	735	2%	15	59	21
A	737	1%	7	30	11
LH	847	0.2%	2	7	2
LL	1,251	0%	0	0	0
AV	0	0%	0	0	0
LN	110	0%	0	0	0
SG	0	4%	0	0	0
Total Study Area	3,680	0.4%	16	62	22
<i>Significant Ecological Areas</i>					
C	735	42%	309	1,235	445
A	737	20%	147	590	212
LH	847	35%	296	1,186	427
LL	1,251	46%	575	2,302	829
AV	0	0%	0	0	0
LN	110	66%	73	290	105
SG	0	12%	0	0	0
Total Study Area	3,680	43%	1,582	6,330	2,279

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains.

RIPARIAN COMMUNITIES AND STATE-DESIGNATED SENSITIVE HABITAT

There is potential for the presence of 59 State-designated plant communities that may be impacted by the proposed initiative. The number of State-designated plant communities that may be impacted within any given subarea ranges from 16 to 40 (covering 9 to 97 percent of total acreage per subarea) (Table ES-2). State-sensitive plant communities have the potential to be disturbed in five of the seven subareas and acres of disturbance ranges from 35 to 919 acres across subareas (Table ES-2). The number of riparian plant communities that may be impacted within any given subarea ranges from 13 to 30 (covering 1 to 62 percent of total acreage per subarea). Riparian habitat the potential to be disturbed in five of the seven subareas and acres of disturbance ranges from 11 to 252 acres across subareas (Table ES-2). The total acreage that may be classified as State Jurisdictional Areas that may be impacted within any given subarea ranges from 2 to 5 percent of total acreage per subarea. State Jurisdictional Areas have the potential to be disturbed in five of the seven subareas and acres of disturbance ranges from 6 to 54 acres across subareas (Table ES-2).

FEDERAL “WATERS OF THE UNITED STATES”

Federal “Waters of the United States” potentially subject to U.S. Army Corps of Engineers (USACOE) jurisdiction are present within the proposed initiative study area. The total acreage that may be classified as of federal wetlands and waterways that may be impacted within any given subarea ranges from 0 to 4 percent of subareas (Table ES-2). The linear miles of federal blue-line drainages that may be impacted within each subarea range from 0 to 125 miles. Federal wetlands and waterways have the potential to be disturbed in three of the seven subareas and acres of disturbance ranges from 2 to 21 acres across subareas (Table ES-2).

MIGRATORY CORRIDORS AND NURSERY SITES

Migratory corridors are potentially present within all proposed initiative subareas and may experience impacts from the proposed initiative. With the exception of the Antelope Valley Northeast, all subareas fall within existing Significant Ecological Areas (which often indicate wildlife corridors) to some degree (12–66 percent) (Table ES-2). SEAs have the potential to be disturbed in five of the seven subareas and acres of disturbance ranges from 105 to 829 acres across subareas (Table ES-2). Nesting birds protected by the Migratory Bird Treaty Act (MBTA) have the potential to be present on all parcels within the proposed initiative subareas.

GENERAL PLANS AND POLICIES

The proposed initiative would result in conflicts with local policies or ordinances protecting biological resources because of allowable development in currently undeveloped locations. Facilitating development throughout the study area has the potential to conflict with up to 14 local policies protecting biological resources that are relevant to the proposed initiative. The proposed initiative is not expected to conflict with the Los Angeles County Oak Tree Ordinance or the Hillside Management and Significant Ecological Areas Ordinance. The proposed initiative is not expected to conflict with the provisions of applicable Community Standards Districts.

HABITAT CONSERVATION PLANS AND NATURAL COMMUNITY CONSERVATION PLANS

The proposed initiative would not result in impacts to biological resources in relation to a conflict with an applicable HCP or NCCP. Approximately 50 percent of the Acton subarea, 100 percent of the Antelope Valley Northeast subarea, and approximately 80 percent of the Lake Hughes/Gorman/West of Lancaster subarea are within the Desert Renewable Energy Conservation Plan (DRECP). The DRECP is a proposed multispecies HCP intended to conserve threatened and endangered species and natural communities in the Mojave and Colorado Desert regions of Southern California. However, the DRECP only applies to the development of renewable energy projects. Similarly, the same areas of the proposed initiative parcels are located within the West Mojave Plan HCP. However, the West Mojave Plan HCP does not apply to the proposed initiative because potential hauled water parcels are not located on federal lands and the initiative would not trigger a federal nexus.^{2,3}

² California Department of Fish and Wildlife. Natural Community Conservation Planning (NCCP). Website accessed, November 24, 2014. Available online at <http://www.dfg.ca.gov/habcon/nccp/>.

³ Renewable Energy Action Team. Desert Renewable Energy Conservation Plan. Website accessed, November 24, 2014. Available online at: <http://www.drecp.org/>

SECTION 1.0 INTRODUCTION

This Biological Resources Technical Report (BRTR) has been prepared to provide information related to the consideration of the proposed initiative. This analysis was undertaken to determine if the proposed initiative would result in adverse significant impacts related to biological resources, requiring the consideration of mitigation measures or alternatives in accordance with Appendix G of the State CEQA Guidelines.¹ For the purpose of this analysis, a study area was established consisting of 42,867 parcels where development of a single-family home is an allowable use, subject to issuance of a building permit. The study area comprises approximately 535 square miles within the unincorporated territory of the Los Angeles County (County). An unknown portion of these parcels could be developed in the absence of the proposed initiative, if the property owner were able to demonstrate the ability to develop a groundwater well to provide potable water consistent with the County standards established pursuant to the building permit application. The proposed initiative would potentially allow development of parcels that could otherwise not be developed, through the allowed use of hauled water as the primary source of potable water. This report evaluates the potential impacts to biological resources associated with parcels that would potentially be eligible for development through the use of hauled water to support development of a single-family residence pursuant to the proposed initiative. The evaluation of impacts is based on information contained in published and unpublished literature, databases, review of current and historic maps and aerial photographs to characterize the existing conditions in relation to biological resources, and modeling of potential development to estimate the potential level of development. The evaluation also considered the policies, goals, and objectives of the adopted and proposed land use planning documents for the study area: the Land Use Element and Conservation and Natural Resources Element of the Los Angeles County General Plan 2035,² the 2015 Antelope Valley Areawide Plan – Town & Country,³ and the 2012 Santa Clarita Valley Area Plan.⁴

DEFINITIONS

Listed Species include those species listed as rare, threatened, or endangered pursuant to the federal and State Endangered Species Acts (ESAs).

Sensitive Species include (1) species of Special Concern (SSC) that have been designated by the California Department of Fish and Wildlife (CDFW), (2) rare plants, (3) special-status animals designated by the California Natural Diversity Database (CNDDDB), and (4) locally important species.

Species of Special Concern are species, subspecies, or distinct population of an animal (bird, mammal, fish, reptile, and amphibian) native to California that currently satisfies one or more of the following criteria: (a) is extirpated from the State or, in the case of birds, in its primary seasonal

¹ California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

² Los Angeles County Department of Regional Planning. Adopted 6 October 2015. Los Angeles County 2035 General Plan: Chapter 9: Conservation and Natural Resources Element Available online at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan-ch6.pdf

³ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available at: <http://planning.lacounty.gov/tnc>

⁴ Los Angeles County, Santa Clarita Valley Area Plan, 2012. PDF available online at: http://planning.lacounty.gov/assets/upl/data/pd_santa-clarita-area-plan-2012.pdf

or breeding role; (b) is listed as federally, but not State-, threatened or endangered; (c) meets the State definition of threatened or endangered but has not formally been listed; (d) is experiencing, or formerly experienced, serious (non-cyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State-threatened or endangered status; (e) has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State-threatened or endangered status.

Locally Important species include those not listed pursuant to the State or federal ESA or designated as SSC by CDFW, but otherwise identified as sensitive species that should be considered in assessing the potential effects of proposed projects. These include those plant species designated as rare by the California Native Plant Society (CNPS) (Rare Plant Rank 1A, 1B, 2A, 2B, 3, or 4).⁵ This designation includes those species listed on the California Special Animals list that are not otherwise covered by other regulations.⁶ It also includes species afforded protection by the County General Plan, such as some native trees.

Critical Habitat is a designated area defined by the U.S. Fish and Wildlife Services (USFWS) as being important for the survival of species listed pursuant to the federal ESA. The USFWS evaluates the collection of the environmental conditions (i.e., plant communities, range, elevation, food source, etc.) essential to the continued conservation and preservation of each species listed as federally threatened and endangered.

Sensitive Plant Community is a native plant community listed on CDFW Natural Communities List as being rare within California or threatened by human actions.

Waters of the United States are defined as surface waters such as navigable waters and their tributaries, all interstate waters and their tributaries, natural lakes, all wetlands adjacent to other waters, and all impoundments of these waters. On April 21, 2014, the U.S. Environmental Protection Agency (EPA) proposed to refine the definition of waters of the United States to include all tributaries of traditional navigable waters, interstate waters, territorial seas, and impoundments of such tributaries; wetlands adjacent to the foregoing; and waters other than wetlands that are adjacent to other jurisdictional waters.⁷

Federal Wetlands are defined by the USACOE and the EPA as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”⁸

State Wetlands/Streams are defined by the California Fish and Game Code. A *stream* is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. *Wetlands* are defined as areas having riparian vegetation, without regard to wetland vegetation, soils, or hydrology.

⁵ California Native Plant Society. 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society. Sacramento, CA. Available online at: <http://www.rareplants.cnps.org>

⁶ California Department of Fish and Game, Biogeographic Data Branch. Accessed December 2014. Rarefind 5: A Database Application for the Use of the California Department of Fish and Game Natural Diversity Database. Sacramento, CA.

⁷ Federal Register. Vol. 79, No. 76, 21 April 2014. Proposed Rules. Available online at: <http://www.gpo.gov/fdsys/pkg/FR-2014-04-21/pdf/2014-07142.pdf>

⁸ U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetland Delineation Manual. Vicksburg, MS.

Nursery Site is considered habitat in which native wildlife may establish nests, maternity roosts, dens, or otherwise engage in breeding and/or the rearing of offspring.

Wildlife Movement Corridors are characterized as areas of habitat that are used by wildlife for the purpose of moving between locations.

Natural Community Conservation Plan (NCCP) is defined by CDFW as a plan for the conservation of natural communities that identifies and provides for the regional or area wide protection and perpetuation of plants, animals, and their habitats.

Habitat Conservation Plans (HCPs) are required by the USFWS as part of an application for an “incidental take” permit for species listed pursuant to the federal ESA. HCPs describe the anticipated effects of the proposed taking, how the impacts will be minimized and mitigated, and how the HCP is to be funded.

Significant Ecological Areas The SEA Program is a component of the Conservation/Open Space Element of the County of Los Angeles General Plan. This program is a resource identification tool that indicates the existence of important biological resources. SEAs are not preserves, but are areas where the county deems it important to facilitate a balance between limited development and resource conservation. Limited development activities are reviewed closely in these areas where site design is a key element in conserving fragile resources such as streams, oak woodlands and threatened or endangered species and their habitat.

SECTION 2.0

PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The proposed initiative would apply to the entirety of Los Angeles County. However, the area that would be affected by the proposed initiative, as determined by the County's GIS model, consists of 42,867 parcels in the unincorporated territory of Los Angeles County (see Figure 2.1-1, *Proposed Initiative Study Area*, at the end of this section).¹ The combined proposed initiative study area consists of approximately 340,461 acres or approximately 532 square miles.

Although this is a Countywide initiative, the parcels that would potentially be affected by the proposed initiative are located entirely within the 5th Supervisorial District in the northern one-third of the County, including areas located in the San Gabriel Mountains, in the Antelope Valley; areas located northeast of the City of Santa Clarita, north and south of California State Route 14; and areas that are southwest of the City of Palmdale in the communities of Agua Dulce and Acton. The subject parcels have been categorized into seven subareas:

1. **Lake Hughes/Gorman/West of Lancaster:** The Lake Hughes/Gorman/West of Lancaster subarea is located in an area generally located west of State Highway 14 and north of the Angeles National Forest. This subarea consists of 15,166 parcels and encompasses approximately 195.4 square miles (125,041.4 acres). State Highway 138 bisects the subarea in an east-west direction, and State Highway 14 forms the eastern boundary of this subarea. This subarea is adjacent to the northwestern edge of the incorporated City of Lancaster.
2. **Lancaster Northeast:** The Lancaster Northeast subarea is located in an area generally east of State Highway 14 and north of East Avenue J. This subarea consists of 6,794 parcels and encompasses approximately 55.2 square miles (35,324.90 acres). State Highway 14 forms the western boundary and East Avenue J forms the southern boundary of this subarea. Edwards Air Force Base is located north of the study area. This subarea is adjacent to the northeastern edge of the incorporated City of Lancaster.
3. **Antelope Valley Northeast:** The Antelope Valley Northeast subarea is located in an area generally located north of East Avenue E and east of 165th Street East in the far northeastern portion of Los Angeles County. This subarea consists of 1,938 parcels and encompasses approximately 22.7 square miles (14,528.23 acres). This subarea is relatively isolated and is located in the northeastern area of Los Angeles County. This subarea is located approximately 10.9 miles northeast of the incorporated City of Palmdale and approximately 11.3 miles northeast of the incorporated City of Lancaster.

¹ Assessor's Parcels Numbers for the referenced parcels are on file at the Los Angeles County Department of Regional Planning.

4. **Lake Los Angeles/Llano/Valyermo/Littlerock:** The Lake Los Angeles/Llano/Valyermo/Littlerock subarea is located in an area generally south of East Avenue J, east of 47th Street East. This subarea consists of 14,822 parcels and encompasses approximately 168.8 square miles (108,067.33 acres). Avenue J forms the northern boundary, the Cities of Palmdale and Lancaster form the western boundary, and the San Bernardino County line forms the eastern boundary of this subarea. This subarea is adjacent to the eastern edge of the incorporated City of Palmdale.
5. **Acton:** The Acton subarea is located in an area generally east of Hubbard Road and West of 47th Street East. This subarea consists of 1,246 parcels and encompasses approximately 28.2 square miles (18,067.22 acres). The Angeles National Forest is located to the north and south of the subarea. This subarea is adjacent to the southwestern edge of the incorporated City of Palmdale.
6. **Castaic/Santa Clarita/Agua Dulce:** The Castaic/Santa Clarita/Agua Dulce subarea is located generally west of Hubbard Road and north of the 210 Freeway excluding Kagel Canyon. This subarea consists of 2,243 parcels and encompasses approximately 55.2 square miles (35,340.2 acres). This subarea is adjacent to the northern, western, and southern edges of the incorporated City of Santa Clarita and the northern edge of the incorporated City of Los Angeles.
7. **East San Gabriel Mountains:** The East San Gabriel Mountains subarea consists of parcels generally located within the Angeles National Forest east of State Highway 14, north of the 210 Freeway, south of the Pearblossom Highway, and west of the San Bernardino County line. This subarea consists of 658 parcels and encompasses approximately 6.4 square miles (4,092.26 acres). This subarea is adjacent to the northern edges of the San Gabriel and San Fernando Valleys.

The proposed initiative study area is located within 53 USGS 7.5-minute quadrangle maps (see Figure 2.1-2, *USGS 7.5-Minute Quadrangle Index*, at the end of this section):

- Acton
- Adobe Mountain
- Agua Dulce
- Alpine Butte
- Azusa
- Black Mountain
- Burnt Peak
- Chilao Flat
- Condor Peak
- Crystal Lake
- Del Sur
- El Mirage
- Fairmont Butte
- Frazier Mountain
- Glendora
- Green Valley
- Hi Vista
- Jackrabbit Hill
- Juniper Hills
- La Liebre Ranch
- Lake Hughes
- Lancaster East
- Lancaster West
- Lebec
- Liebre Mountain
- Little Buttes
- Littlerock
- Lovejoy Buttes
- Mescal Creek
- Mint Canyon
- Mount Baldy
- Mount San Antonio
- Mount Wilson
- Neenach School
- Newhall
- Oat Mountain
- Pacifico Mountain
- Palmdale
- Pasadena
- Redman
- Ritter Ridge
- Rogers Lake South
- Rosamond
- Rosamond Lake
- San Fernando
- Simi Valley East
- Sleepy Valley
- Sunland
- Val Verde
- Valyermo
- Warm Springs Mountain
- Waterman Mountain
- Whitaker Peak

The elevation of the overall proposed initiative study area ranges from 7,409 feet above sea level in the East San Gabriel Mountains subarea to 862 feet above sea level also in the East San Gabriel Mountains subarea (see Figure 2.1-3, *Topographic Map*, at the end of this section).

2.2 EXISTING CONDITIONS

2.2.1 Lake Hughes/Gorman/West of Lancaster

The Lake Hughes/Gorman/West of Lancaster subarea is located in an area generally west of State Highway 14 and north of the Angeles National Forest; however, there are also several National Forest inholding parcels located along San Francisquito Canyon and Lake Hughes Road. The topography of this subarea is generally flat, except for the parcels located along San Francisquito Canyon and Lake Hughes Road, which are located in mountainous terrain. The highest elevation within this subarea is approximately 4,768 feet above mean sea level (MSL), and the lowest elevation is approximately 2,315 feet above MSL. State Highway 14 provides access to the subarea from the east, and Interstate 5 provides access to the subarea from the west. The main existing land uses in this subarea are agriculture and rural residential uses. The established communities of Del

Sur, Gorman, Lake Hughes, Leona Valley, and Quartz Hill are located in this subarea. The Angeles National Forest surrounds 39 private inholding parcels within this subarea. The parcels that are located within National Forest boundaries are private inholdings that have been designated in the 2005 update to the *Angeles National Forest Land Management Plan* as Non-Forest System Land Ownership and therefore are not subject to the national land management plan.^{2,3} Three Significant Ecological Areas (SEAs) (approximately 44,093.7 acres) intersect with the subject parcels within this subarea and are subject to the provisions of the 1982 Hillside Management and Significant Ecological Areas Ordinance: Joshua Tree Woodland, San Andreas, and Santa Clara River.^{4,5}

2.2.2 Lancaster Northeast

The Lancaster Northeast subarea is located in an area generally east of State Highway 14 and north of East Avenue J. The topography of this subarea is generally flat; the highest elevation within this subarea is approximately 2,688 feet above MSL, and the lowest elevation is approximately 2,298 feet above MSL. State Highway 14 provides access to the subarea from the west. The predominant existing land uses in this subarea consist of agricultural, recreation, and rural residential uses. The established communities of Hi Vista and a small portion of Del Sur are located in this subarea. One SEA (approximately 23,278 acres) intersects with the subject parcels within this subarea: Antelope Valley.^{6,7}

2.2.3 Antelope Valley Northeast

The Antelope Valley Northeast subarea is located in an area generally north of East Avenue E and east of 165th Street East in the far northeastern portion of Los Angeles County. The topography of this subarea is mainly flat, with a few hills to the north. The highest elevation within this subarea is approximately 3,296 feet above MSL, and the lowest elevation is approximately 2,547 feet above MSL. There are no existing primary access roads to the area; however, East Avenue G provides access to the area from the Lancaster area. Presently, the entirety of this subarea is vacant. Saddleback Butte State Park is located to the south of the subarea. A small portion of the established community of Hi Vista is located in this subarea. One SEA (approximately 10,870.5 acres) intersects with the subject parcels within this subarea: Antelope Valley.^{8,9}

² United States Department of Agriculture Forest Service, Angeles National Forest. April 2006. Record of Decision, Angeles National Forest Land Management Plan. Available online at: <http://www.fs.usda.gov/detail/angeles/landmanagement/planning/?cid=stelprdb5324056#l>

³ United States Department of Agriculture Forest Service. September 2005. Final Land Management Plan Alternative 4a Selected: Land Use Zones [Map]. Available online at: http://www.fs.usda.gov/Internet/FSE_MEDIA/stelprdb5311720.pdf

⁴ Los Angeles County Department of Regional Planning. Accessed 4 November 2015. SEA Program: SEA Ordinance. Available online at: <http://planning.lacounty.gov/sea/ordinance>

⁵ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available at: <http://planning.lacounty.gov/tnc>

⁶ Los Angeles County Department of Regional Planning. Accessed 4 November 2015. SEA Program: SEA Ordinance. Available online at: <http://planning.lacounty.gov/sea/ordinance>

⁷ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available at: <http://planning.lacounty.gov/tnc>

⁸ Los Angeles County Department of Regional Planning. Accessed 4 November 2015. SEA Program: SEA Ordinance. Available online at: <http://planning.lacounty.gov/sea/ordinance>

⁹ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available at: <http://planning.lacounty.gov/tnc>

2.2.4 Lake Los Angeles/Llano/Valyermo/Littlerock

The Lake Los Angeles/Llano/Valyermo/Littlerock subarea is located in an area generally south of East Avenue J, east of 47th Street East. The topography of this subarea is generally flat, except for several parcels that are located on slopes of the San Gabriel Mountains to the south. The highest elevation within this subarea is approximately 5,626 feet above MSL, and the lowest elevation is approximately 2,443 feet above MSL. State Highways 138 and 18 provide the primary access to this subarea. Predominant existing land uses within this subarea consist of vacant land, single-family residential subdivisions, agricultural uses, and scattered rural residential uses. The Angeles National Forest forms the southern border of this subarea. The established communities of Llano, Valyermo, Pearblossom, Littlerock, Lake Los Angeles and portions of Hi Vista are located within this subarea. One SEA (approximately 49,384.1 acres) intersects with the subject parcels within this subarea: Antelope Valley.^{10,11}

2.2.5 Acton

The Acton subarea is located in an area generally east of Hubbard Road and West of 47th Street East. The topography of the subarea is mainly mountainous and hilly. The highest elevation within this subarea is approximately 4,900 feet above MSL, and the lowest elevation is approximately 2,290 feet above MSL. State Highway 14 provides the primary access to this subarea. Predominant existing land uses consist of rural residential uses, single-family residential uses, and scattered agricultural uses. The Angeles National Forest forms the southern border of this subarea. The established communities of Acton, South Antelope Valley, and portions of Agua Dulce are located in this subarea. One SEA (approximately 3,684.5 acres) intersects with the subject parcels within this subarea: Santa Clara River.^{12,13}

2.2.6 Castaic/Santa Clarita/Agua Dulce

The Castaic/Santa Clarita/Agua Dulce subarea is located generally west of Hubbard Road and north of the 210 Freeway excluding Kagel Canyon. The topography of this subarea is generally mountainous. The highest elevation within this subarea is approximately 4,430 feet above MSL, and the lowest elevation is approximately 994 feet above MSL. Interstate 5 and State Highway 14 are the primary access roads for this subarea. Additionally, State Highway 126 provides access to areas in the western portion of the subarea. Predominant existing land uses consist of rural residential, single-family residential, and scattered agricultural. The Angeles National Forest forms the northern and southern borders of this subarea. The established communities of Agua Dulce, Castaic Val Verde, Stevenson Ranch, Newhall, Canyon Country, and portions of Acton are located within this subarea. Four SEAs (approximately 14,922.4 acres) intersect with the subject parcels

¹⁰ Los Angeles County Department of Regional Planning. Accessed 4 November 2015. SEA Program: SEA Ordinance. Available online at: <http://planning.lacounty.gov/sea/ordinance>

¹¹ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available at: <http://planning.lacounty.gov/tnc>

¹² Los Angeles County Department of Regional Planning. Accessed 4 November 2015. SEA Program: SEA Ordinance. Available online at: <http://planning.lacounty.gov/sea/ordinance>

¹³ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available online at: <http://planning.lacounty.gov/tnc>

within this subarea: Santa Clara River, Santa Felicia, Cruzan Mesa Vernal Pools, Santa Susana Mountains/Simi Hills.^{14,15}

2.2.7 East San Gabriel Mountains

The East San Gabriel Mountains subarea consists mainly of private inholding parcels located within the eastern San Gabriel Mountain range and is generally located east of State Highway 14, north of the 210 Freeway, south of the Pearblossom Highway, and west of the San Bernardino County line. The topography of the subarea is very mountainous. The highest elevation within this subarea is approximately 7,409 feet above MSL, and the lowest elevation is approximately 862 feet above MSL. Primary access to this subarea is provided by Mount Baldy Road, San Gabriel Canyon Road (Highway 39), Angeles Crest Highway (Highway 2), Big Tujunga Canyon Road, and Little Tujunga Canyon Road from the 210 Freeway to the south and Soledad Canyon Road and Big Pines Road from the north. Predominant existing land uses consist of National Forest recreation, open space, and resource uses; widely scattered residential uses exist in places such as Wrightwood and Mt. Baldy Village. Communication infrastructure uses are located on Mount Wilson. The Angeles National Forest surrounds all 658 private inholding parcels within this subarea, which have been designated in the 2005 update to the Angeles National Forest Land Management Plan as Non-Forest System Land Ownership and therefore are not subject to the national land management plan.^{16,17} The established communities of Angeles National Forest, Altadena, Sylmar, and portions of Acton, Valyermo, Pearblossom, Llano, and Littlerock are located in this subarea. Five SEAs (approximately 561 acres) intersect with the subject parcels within this subarea: Antelope Valley, Santa Clara River, San Dimas Canyon/San Antonio Wash, Altadena Foothills and Arroyos, San Gabriel Canyon.^{18,19}

2.3 PROJECT DESCRIPTION

The Los Angeles County Board of Supervisors has directed the preparation of a proposed ordinance that would allow hauled water as the primary source of potable water for new development of single-family residences on existing vacant legal lots, or lots that are eligible for a certificate of compliance, where the property owner has demonstrated that there is no other feasible source of private or municipal potable water, or capability of developing an on-site well to provide potable water to the property, and only if the property lies outside of the boundaries of the local private and municipal water districts, and is not eligible for service by the nearest public-community water purveyor. The proposed initiative is proposed for parcels that consists of at least 2,000 square feet

¹⁴ Los Angeles County Department of Regional Planning. Accessed 4 November 2015. SEA Program: SEA Ordinance. Available online at: <http://planning.lacounty.gov/sea/ordinance>

¹⁵ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available online at: <http://planning.lacounty.gov/tnc>

¹⁶ United States Department of Agriculture Forest Service, Angeles National Forest. April 2006. Record of Decision, Angeles National Forest Land Management Plan. Available at: <http://www.fs.usda.gov/detail/angeles/landmanagement/planning/?cid=stelprdb5324056#l>.

¹⁷ United States Department of Agriculture Forest Service. September 2005. Final Land Management Plan Alternative 4a Selected: Land Use Zones [Map]. Available at: http://www.fs.usda.gov/Internet/FSE_MEDIA/stelprdb5311720.pdf

¹⁸ Los Angeles County Department of Regional Planning. Accessed 4 November 2015. SEA Program: SEA Ordinance. Available online at: <http://planning.lacounty.gov/sea/ordinance>

¹⁹ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available at: <http://planning.lacounty.gov/tnc>

net parcel size of land under 50 percent average slope (26.6 degrees). The term vacant is used as identified by the County Assessor.

In order to determine which areas would be subject to the proposed initiative, Los Angeles County developed a geographic information system (GIS) suitability model in 2012 based on five criteria defined by the Task Force:

- Parcels located in the unincorporated territory of Los Angeles County
- Vacant parcels
- Parcels located in areas where there is no designated water purveyor
- Zoning and General Plan designation that allow for development of a single-family residence
- Parcel size > 2,000 net square feet with slopes under 50 percent (26.6 degrees)

The model was re-run in 2015 to incorporate the recently adopted Antelope Valley Town and Country Plan and General Plan amendment.²⁰

2.4 CONSTRUCTION SCENARIO

The proposed initiative would not authorize construction of single-family residential development per se. It simply provides for the use of hauled water as an allowable source of potable water during the building permit application process where the property is not located within a public or private water district and where potable water for domestic and fire protection requirements cannot be provided by an on-site groundwater well. To determine historical development trends, 17 years of building permit application data from 1997 through 2014 were reviewed to determine the average number of building permits issued per year for single-family residential development not associated with subdivision development.²¹ An anticipated growth factor of 25 percent has been applied based on Southern California Association of Governments (SCAG) projections for the unincorporated area of Los Angeles County from 2008 to 2035.²²

The reasonable worst-case scenario assumes the annual average rate of issuance of building permits over the 20-year 2015 to 2035 planning horizon would be approximately 32 per year in the Santa Clarita Valley and approximately 151 per year in the Antelope Valley for a total of 184 permits per year for both areas. The total anticipated building permits issued over the 20-year 2015 to 2035 planning horizon would be approximately 3,680. As a result, it is anticipated that the disturbance area for the single-family residences constructed on these parcels would be approximately 5,299 acres (Table 2.4-1, *Estimated Number of Parcels to Be Developed and Disturbance Area in the Unincorporated Antelope Valley and Santa Clarita Valley, 2015–2035*).

²⁰ Los Angeles County Department of Regional Planning. Adopted 6 October 2015. Los Angeles County 2035 General Plan: Chapter 6: Land Use Element. Available online at: planning.lacounty.gov/assets/upl/project/gp_final-general-plan-ch6.pdf

²¹ County Building and Safety Division building permit records have been digitally tracked since 1997; records were not readily available from before 1997.

²² Southern California Association of Governments. 12 March 2012. 2012 Adopted RTP Growth Forecast. Available online at: <http://www.scag.ca.gov/Documents/2012AdoptedGrowthForecastPDF.pdf>

**TABLE 2.4-1
ESTIMATED NUMBER OF PARCELS TO BE DEVELOPED AND
DISTURBANCE AREA IN THE UNINCORPORATED ANTELOPE VALLEY AND
SANTA CLARITA VALLEY, 2015–2035***

Estimated Annual Santa Clarita Valley Building Permits	Estimated Annual Antelope Valley Building Permits	Total Estimated Annual Building Permits** in Unincorporated Santa Clarita and Antelope Valleys ¹	Total Estimated Building Permits over 20-Year Planning Horizon	Total Estimated Disturbance Area over 20-Year Planning Horizon (acres)***
32	151	184	3,680	5,299

NOTES:

* Includes a 25 percent growth factor based on SCAG population projections.²

** Including mobile homes.

*** Based on an average parcel size of four acres with 36 percent disturbance.³

SOURCE:

¹ Los Angeles County Department of Public Works, Building and Safety Division. Electronic Building Permit Data from January 1, 1997 to June 30, 2014.

² Southern California Association of Governments. 12 March 2012. 2012 Adopted RTP Growth Forecast. Available online at: <http://www.scag.ca.gov/Documents/2012AdoptedGrowthForecastPDF.pdf>

³ Sapphos Environmental, Inc. 27 August 2014. Memorandum for the Record. Subject: "Analysis of Residential Development and Existing Disturbance for Parcels within or near the Proposed Hauled Water Initiative Study Area." Prepared for: Los Angeles County Hauled Water Task Force.

An analysis of a small subset of parcels in each subarea was performed in order to determine potential impacts from hauled water infrastructure including a storage tank, a septic leach field, and access for hauled water delivery vehicles. Based on the analysis it was determined that the average area of disturbance for each parcel was approximately 36 percent. The average size of lots analyzed was four gross acres (Table 2.4-1).

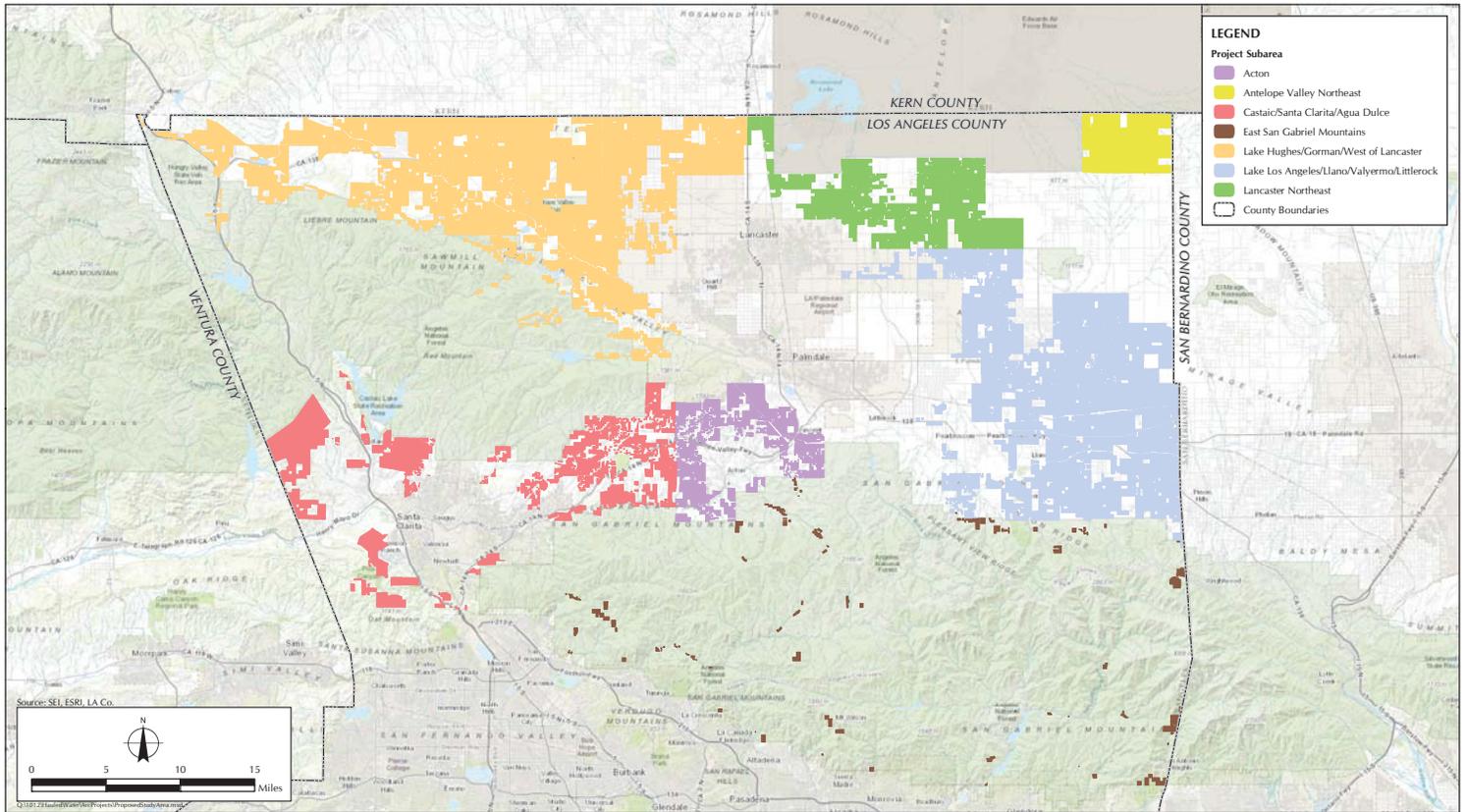


FIGURE 2.1-1
Proposed Initiative Study Area



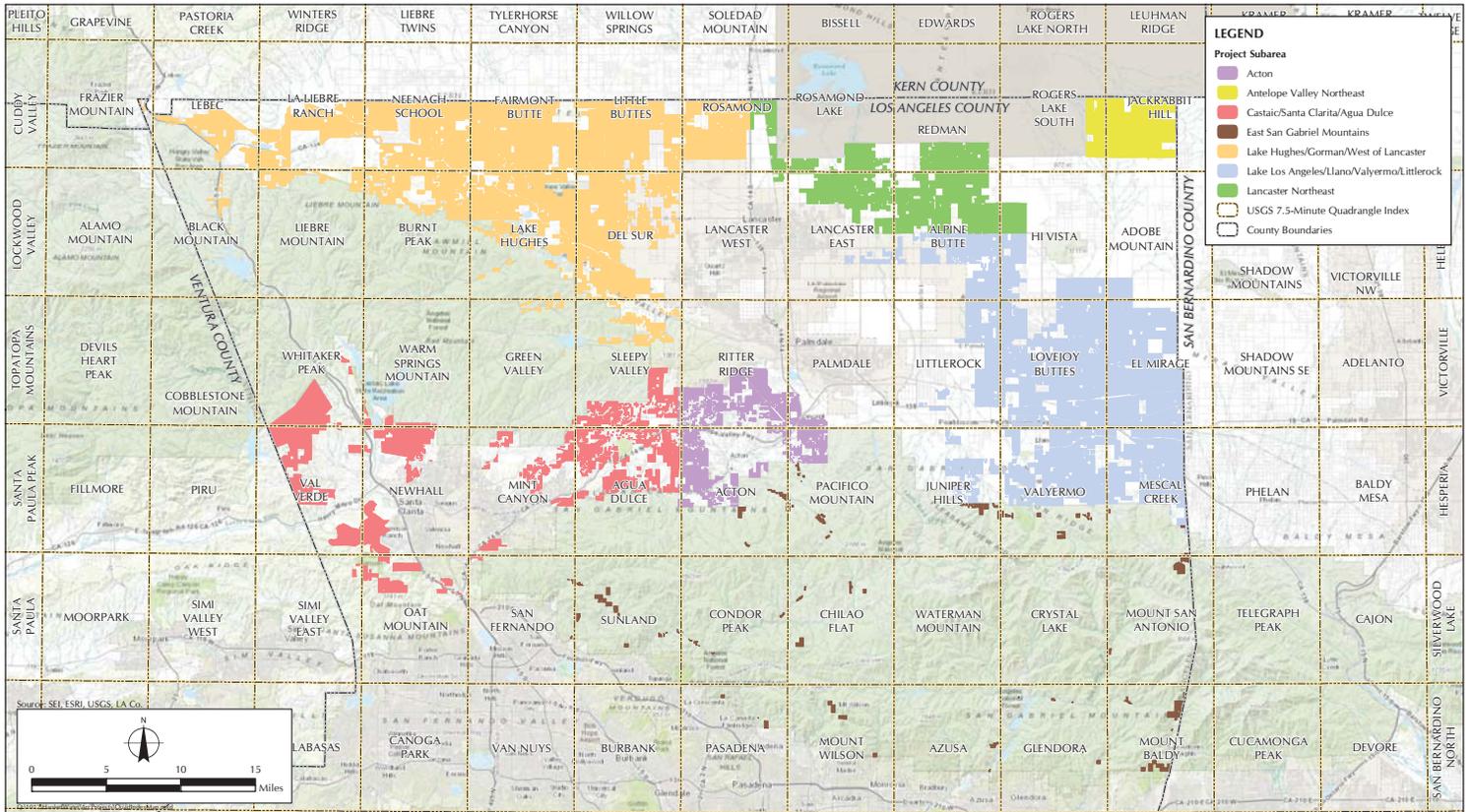


FIGURE 2.1-2
USGS 7.5-Minute Quadrangle Index



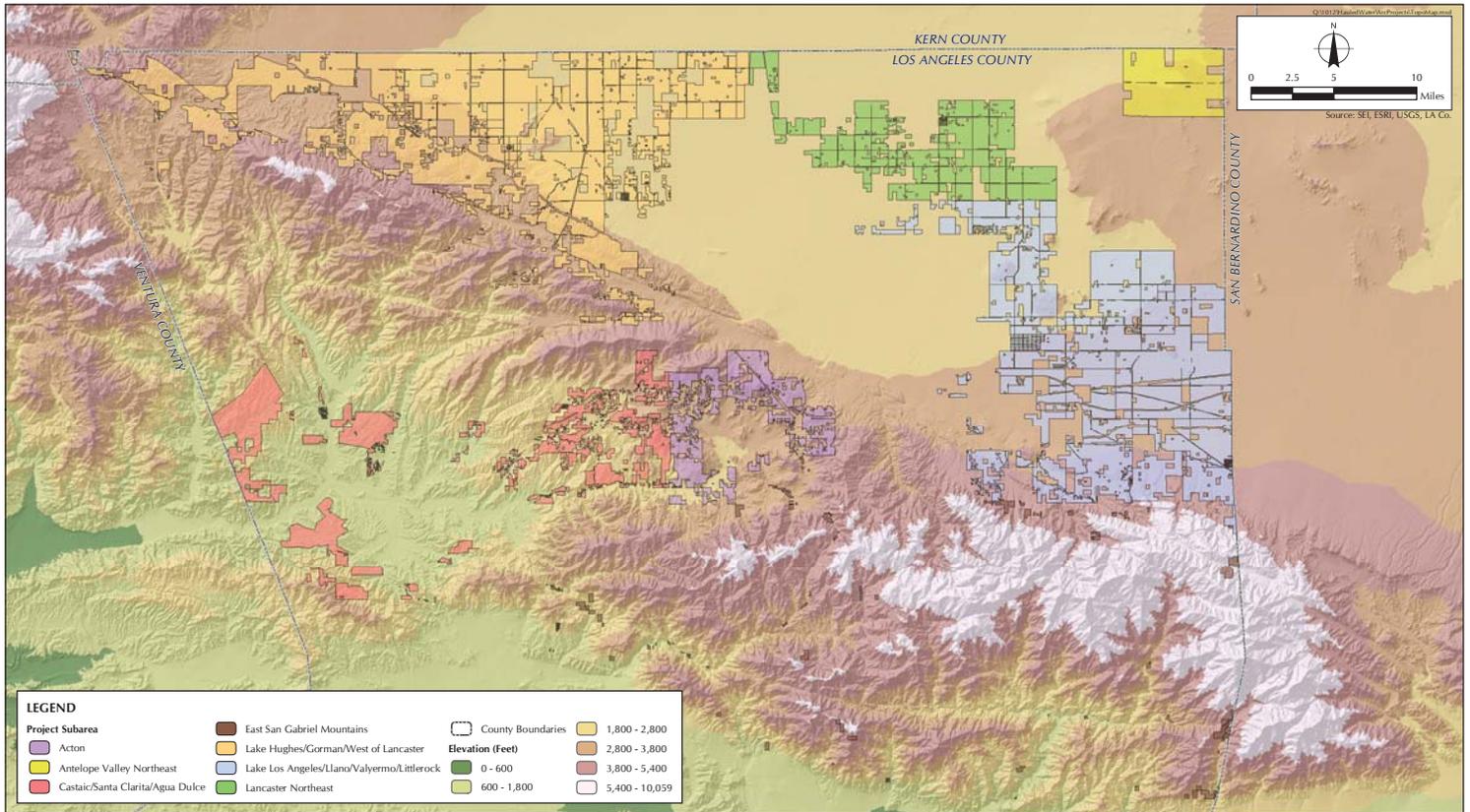


FIGURE 2.1-3
Topographic Map

SECTION 3.0

REGULATORY FRAMEWORK

The potential for the proposed initiative to result in significant impacts to biological resources was evaluated in light of the applicable federal, State, and local statutes and regulations that afford protection to rare, threatened, and endangered species; waters of the State and Waters of the United States; special categories of species, including migratory birds, fur-bearing mammals, and mature oak and walnut trees; and lands afforded long-term conservation.

3.1 FEDERAL

3.1.1 Federal Endangered Species Act

The federal ESA defines listed species as “endangered” or “threatened” and provides regulatory protection for listed species. The federal ESA provides a program for conservation and recovery of threatened and endangered species; it also ensures the conservation of designated critical habitat that the USFWS has determined is required for the survival and recovery of these listed species. Section 9 of the federal ESA prohibits the “take” of species listed by USFWS as threatened or endangered. Take is defined as follows: “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct.” In recognition that take cannot always be avoided, Section 10(a) of the federal ESA includes provisions for take that is incidental to, but not the purpose of, otherwise lawful activities. Section 10(a)(1)(B) permits (incidental take permits) may be issued if take is incidental and does not jeopardize the survival and recovery of the species. As defined in the federal ESA, individuals, organizations, states, local governments, and other nonfederal entities are affected by the designation of critical habitat only if their actions occur on federal lands; require a federal permit, license, or other authorization; or involve federal funding.¹

Compliance with the applicable provisions of the Federal Endangered Species Act, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

3.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, or possess any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and Russia (formerly the Soviet Union).² Similar to the federal ESA, the MBTA authorizes the Secretary of the Interior to issue permits for incidental take.

Compliance with the applicable provisions of the MBTA, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

¹ U.S. Fish and Wildlife Service. Accessed July 2009. Federal Endangered Species Act. Available online at: <http://www.fws.gov/Endangered/pdfs/esaall.pdf>

² U.S. Fish and Wildlife Service. 1918. Migratory Bird Treaty Act of 1918. Available online at: <http://www.fws.gov/laws/lawsdigest/migtrea.html>

3.1.3 Bald and Golden Eagle Protection Act

The purpose of the federal Bald and Golden Eagle Protection Act (BGEPA) of 1940 (BGEPA; 16 USC 668–668c, as amended) that is administered by the USFWS protects bald and golden eagles, their nests, eggs, and parts.³ The BGEPA prohibits the “take” of bald and golden eagles unless pursuant to regulations. Take is defined by the BGEPA as an action “to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb (i.e., agitate or bother to a degree that causes injury, decreased productivity, or nest abandonment).”⁴ In addition, the *National Bald Eagle Management Guidelines* were published by the USFWS in May 2007 in conjunction with delisting the bald eagle to provide provisions to continue to protect bald eagles from harmful actions and impacts.⁵ Under the BGEPA, a final rule was published in May 2008 in the *Federal Register* that proposed authorization for take of bald eagles for those with existing authorization under the federal ESA where the bald eagle is covered in an HCP or the golden eagle is covered as a non-listed species.⁶

Compliance with the applicable provisions of the BGEPA, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

3.1.4 Section 404 of the Federal Clean Water Act

Section 404 of the federal Clean Water Act, which is administered by the USACOE, regulates the discharge of dredged and fill material into waters of the United States, which include surface waters such as navigable waters and their tributaries, all interstate waters and their tributaries, natural lakes, all wetlands adjacent to other waters, and all impoundments of these waters. USACOE has established a series of nationwide permits that authorize certain activities in waters of the United States, provided that a proposed activity can demonstrate compliance with standard conditions. Projects that result in the loss of less than the acreage specified by the applicable nationwide permit can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. If the conditions of a nationwide permit cannot be met, or the project results in more than minimal adverse environmental impact, an individual permit may be required.

Compliance with the applicable provisions of the Section 404 of the Federal Clean Water Act, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

³ U.S. Fish and Wildlife Service. n.d. Bald Eagle Management Guidelines and Conservation Measures: Bald and Golden Eagle Protection Act. Available online at: <http://www.fws.gov/midwest/Eagle/guidelines/bgepa.html>

⁴ U.S. Fish and Wildlife Service. n.d. Bald Eagle Management Guidelines and Conservation Measures: Bald and Golden Eagle Protection Act. Available online at: <http://www.fws.gov/midwest/Eagle/guidelines/bgepa.html>

⁵ U.S. Fish and Wildlife Service. May 2007. National Bald Eagle Management Guidelines. Available online at: <http://www.fws.gov/pacific/eagle/NationalBaldEagleManagementGuidelines.pdf>

⁶ Federal Register. 20 May 2008. “Notices.” 73(98): 29075–29084.

3.2 STATE

3.2.1 State Fish and Game Code

Sections 1600 through 1603, Notification to CDFW of Lake or Streambed Alteration

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California are subject to the regulatory authority of the CDFW (California Fish and Game Code Sections 1600 through 1603) and require preparation of a Streambed Alteration Agreement. Pursuant to the Code, a *stream* is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that support or have supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial waterways valuable to fish and wildlife are subject to CDFW jurisdiction.

Compliance with Section 1600 of the state Fish and Game Code, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

Sections 1900–1913—Native Plant Protection Act

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the Native Plant Protection Act includes those listed as rare and endangered under the California ESA. The Native Plant Protection Act provides limitations that no person would import into this state—or take, possess, or sell within the State of California—any rare or endangered native plant, except in compliance with provisions of the Act. Where individual landowners have been notified by the CDFW that rare or native plants are growing on their land, the landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

Compliance with the Native Plant Protection Act where suitable habitat for rare or endangered native plant species exists on their private land, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

Sections 2080 and 2081—California Endangered Species Act

The California ESA (California Fish and Game Code §§ 2050 et seq.) prohibits the take of listed species, except as otherwise provided in State law. The *take* for the California ESA is defined as it is in the federal ESA; however, unlike the federal ESA, the California ESA also applies the take prohibitions to species petitioned for listing as State candidates rather than only those listed species. State lead agencies are required to consult with CDFW to ensure that any actions undertaken by the lead agency are not likely to jeopardize the continued existence of any State-listed species or result in destruction or degradation of required habitat. CDFW is authorized to enter into Memoranda of Understanding (MOUs) with individuals, public agencies, universities, zoological gardens, and scientific or educational institutions to import, export, take, or possess listed species for scientific, educational, or management purposes. Permits for incidental take of species protected pursuant to the California ESA are available under certain circumstances as described in Sections 2080 and 2081 of the California Fish and Game Code described below.

Section 2080 of the California ESA states:

No person shall import into this state [California], 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 [State Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act.

Pursuant to Section 2081 of the Fish and Game Code, CDFW may authorize individuals or public agencies to import, export, take, or possess, any State-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or MOUs as follows: (1) if the take is incidental to an otherwise lawful activity, (2) if impacts of the authorized take are minimized and fully mitigated, (3) if the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and (4) if the applicant ensures adequate funding to implement the measures required by CDFW. CDFW shall make this determination based on available scientific information and shall include consideration of the ability of the species to survive and reproduce.

Compliance with the California ESA where suitable habitat for state-listed species exists on their private land, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

Section 2800–2835, Natural Community Conservation Planning Act of 1991, as Amended

The Natural Community Conservation Planning Act of 1991, as amended in 2003 (California Fish and Game Code Section 2800-2835) established the Natural Community Conservation Planning program for the protection and perpetuation of the State's biological diversity. The CDFW established the program in order to conserve natural communities at the ecosystem level while accommodating compatible land use. An NCCP identifies and provides for the regional or area-wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. The CDFW provides support, direction, and guidance to participants in order to ensure that NCCPs are consistent with the State ESA.

Sections 3503 and 3503.5 State Protection for Birds

Sections 3503 and 3503.5 of the State Fish and Game Code provide regulatory protection to resident and migratory birds and all birds of prey within the State of California, including the prohibition of the taking of nests and eggs, unless otherwise provided for by the Code. Specifically, these sections of the Code make it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Code.

Compliance with Sections 3503 and 3503.5 of the State Fish and Game Code where suitable nesting habitat for resident and migratory bird species exists on their private land, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

Section 3511, 4700, 5050 and 5515 State Fully Protected Species

The state of California classifies certain animals as “Fully Protected,” in Section 3511 of the State Fish and Game Code. This classification was the State’s initial effort in the 1960s to identify and provide additional protection to certain species that were rare or faced possible extinction. Lists were made for fish, mammals, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under the State and/or federal ESAs. Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code state that Fully Protected species (birds, mammals, fish, reptiles, amphibians) or parts thereof may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Compliance with the applicable provisions of Sections 3511, 4700, 5050, and 5515 of the State Fish and Game Code, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

Section 4150—Non-Game Mammal or Furbearing Mammal

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. The regulations of take of furbearing mammals are established within the California Code of Regulations (CCR), Title 14, Division 1 (Subdivision 2), Chapter 5. Take is prohibited for several furbearing mammals under Title 14, § 460 of the CCR, including but not limited to desert kit fox (*Vulpes macrotis arsipus*), coyote (*Canis latrans*), and American badger (*Taxidea taxus*). Title 14 § 460 is supported by Sections 200, 202, 203, and 4009.5 of the Fish and Game Code.

Compliance with the applicable provisions of Section 4150 of the State Fish and Game Code, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

3.2.2 Division 23 of the California Food and Agriculture Code

The main purpose of the California Desert Native Plant Act (Division 23 of the California Food and Agriculture Code) is to preserve and enhance desert native plants by protecting certain species from unlawful harvesting on both public and privately owned lands. The list of desert native plants afforded protection pursuant to the Desert Native Plant Act includes species within the Mojave Desert portion of Los Angeles County. The Desert Native Plant Act provides limitations that no person will harvest, transport, or possess certain native desert plants without authorization (i.e., valid permit or wood receipt). Authorization for take of native desert plants can be obtained through the sheriff or commissioner of the county where harvesting will occur and subject to county-designated fees. The following species are regulated by the Desert Native Plant Act and may occur within Los Angeles County: panamint dudleya (*Dudleya saxosa*), all species of the family Agavaceae (century plants and yuccas), all species of the family Cactaceae (cacti), all species of mesquites (*Prosopis*), catclaw (*Acacia greggii*), and desert holly (*Atriplex hymenelytra*).

Compliance with the applicable provisions of Division 23 of the California Food and Agriculture Code, in relation to the development of a property using hauled water as the source of potable water, would be the sole responsibility of the property owner.

3.3 LOCAL

The proposed initiative study area is located entirely within unincorporated Los Angeles County and is subject to the County of Los Angeles General Plan 2035 Update.

3.3.1 Los Angeles County General Plan 2035

The Conservation and Natural Resources Element of the Los Angeles County General Plan 2035 Update has established two goals and 13 policies related to biological resources. Of those, 10 of the 12 policies in regard to biological resources are relevant to the consideration of the proposed initiative.⁷ The two goals and seven supporting policies that apply to the proposed initiative are:

- **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 Significant Ecological Area (SEAs).
 - Policy C/NR 3.1: Conserve and enhance the ecological function of diverse natural habitats and biological resources.
 - 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 3.8: 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 hydro-modification 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).
 - Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows on site.

⁷ Los Angeles County Department of Regional Planning. January 2014. Los Angeles County General Plan Public Review Draft: Chapter 9: Conservation and Natural Resources Element. Available online at: http://planning.lacounty.gov/assets/upl/project/gp_2035_Chapter9_2014.pdf Page 146.

- 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, wetlands, and other native woodlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.
- **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 a goal of no net loss of existing woodlands.

3.3.2 Santa Clarita Valley Area Plan

All parcels located within the Santa Clarita Valley are situated within the 2012 Santa Clarita Valley Area Plan, a component of the Los Angeles County General Plan. The Santa Clarita Valley Area Plan has a Conservation and Open Space Element that covers biological resources. There are seven objectives and 32 policies related to Biological Resources but four objectives and eight policies are relevant directly to the consideration of the proposed initiative:

- **Objective CO-3.2**: Identify and protect areas which have exceptional biological resource value due to a specific type of vegetation, habitat, ecosystem, or location.
 - Policy CO-3.2.1: Protect wetlands from development impacts, with the goal of achieving no net loss (or functional reduction) of jurisdictional wetlands within the planning area.
 - Policy CO-3.2.2: Ensure that development is located and designed to protect oak and other significant indigenous woodlands. (Guiding Principle #9)
 - Policy CO-3.2.3: Ensure protection of any endangered or threatened species or habitat, in conformance with State and federal laws.
 - Policy CO-3.2.4: Protect biological resources in the designated Significant Ecological Areas (SEAs) through the siting and design of development which is highly compatible with the SEA resources. Specific development standards shall be identified to control the types of land use, density, building location and size, roadways and other infrastructure, landscape, drainage, and other elements to assure the protection of the critical and important plant and animal habitats of each SEA. In general, the principle shall be to minimize the intrusion and impacts of development in these areas with sufficient controls to adequately protect the resources. (Guiding Principle #10)
- **Objective CO-3.3**: Protect significant wildlife corridors from encroachment by development that would hinder or obstruct wildlife movement.

- Policy CO-3.3.1: Protect the banks and adjacent riparian habitat along the Santa Clara River and its tributaries, to provide wildlife corridors.
- Policy CO-3.3.3: Identify and protect one or more designated wildlife corridors linking the Los Padres and Angeles National Forests through the Santa Clarita Valley (the San Gabriel-Castaic connection).
- **Objective CO-3.5**: Maintain, enhance, and manage the urban forest throughout developed portions of the Santa Clarita Valley to provide habitat, reduce energy consumption, and create a more livable environment.
 - Policy CO-3.5.3: Pursuant to the requirements of the Zoning Ordinance, protect heritage oak trees that, due to their size and condition, are deemed to have exceptional value to the community.
- **Objective CO-3.6**: Minimize impacts of human activity and the built environment on natural plant and wildlife communities.
 - Policy CO-3.6.5: Ensure revegetation of graded areas and slopes adjacent to natural open space areas with native plants (consistent with fire prevention requirements).

3.3.3 2015 Antelope Valley Area Plan – Town & Country

The Antelope Valley Areawide Plan – Town and Country (Antelope Valley Areawide Plan) was approved by the County Board of Supervisors on November 12, 2014, and adopted on June 16, 2015.⁸ The Town and Country Planning Area of the Antelope Valley Area Plan, a component of the Los Angeles County General Plan, provides planning policies for approximately 1,800 square miles of elevated desert terrain bounded by the southern foothills of the San Gabriel Mountains on the south, Kern County to the north, and extending from the eastern border of the community of Agua Dulce and the Ventura County line on the west to the San Bernardino County line on the east, including 94.8 percent of the parcels that would be potentially affected by the proposed initiative.⁹ The Antelope Valley Areawide Plan has one goal and ten policies related to biological resources, seven of which are relevant directly to the consideration of the proposed initiative:

- **Goal COS 4**: Sensitive habitats and species are protected to promote biodiversity.
 - Policy COS 4.1: Direct the majority of the unincorporated Antelope Valley’s future growth to rural town centers and economic opportunity areas, minimizing the potential for habitat loss and negative impacts in Significant Ecological Areas.
 - Policy COS 4.2: Limit the amount of potential development in Significant Ecological Areas, including the Joshua Tree Woodlands, wildlife corridors,

⁸ Los Angeles County Department of Regional Planning. Accessed 1 May 2015. Town & Country: Latest News. Available online at: <http://planning.lacounty.gov/tnc>

⁹ Los Angeles County Department of Regional Planning. November 12, 2014. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available online at: <http://planning.lacounty.gov/tnc/documents/>

and other sensitive habitat areas, through appropriate land use designations with very low residential densities

- Policy COS 4.3: Require new development in Significant Ecological Areas to comply with applicable Zoning Code requirements, ensuring that development occurs on the most environmentally suitable portions of the land.
- Policy COS 4.4: Require new development in Significant Ecological Areas, to consider the following in design of the project, 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 development in the least biologically sensitive areas on the site, prioritizing the preservation or avoidance of the most sensitive biological resources onsite;
 - Design of required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain 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 COS 4.5: Subject to local, state or federal laws, require new development to provide adequate buffers from preserves, sanctuaries, habitat areas, wildlife corridors, State Parks, and National Forest lands, except within Economic Opportunity Areas.
- Policy COS 4.6: Encourage connections between natural open space areas to allow for wildlife movement.
- Policy COS 4.7: Restrict fencing in wildlife corridors. Where fencing is necessary for privacy or safety, require appropriate development standards that maximize opportunities for wildlife movement.

3.3.4 County Municipal Los Angeles County Code Section 22.56.215 – Hillside Management and Significant Ecological Areas – Additional Regulations

Under the adopted ordinance, conditional use permits are required prior to granting a building permit or grading permit within an SEA and must be approved to allow development within SEAs, subject to review by the Significant Ecological Areas Technical Advisory Committee (SEATAC) and a public hearing. However, under the adopted ordinance 22.56.215, single-family residences where not more than one such residence is proposed to be built by the same person on contiguous lots or parcels are exempt from the conditional use permit. Therefore, this ordinance is not applicable to parcels included within the proposed initiative study area.

3.3.5 County Municipal – Los Angeles County Code Sections 22.56.2050 – 22.56.2260 – Oak Trees

The Los Angeles County Oak Tree Ordinance requires a permit prior to the cutting, removing, destroying, relocating, inflicting damage on, or encroaching into a protected zone of any tree within the oak genus.¹⁰ The Ordinance regulates only oak trees (genus *Quercus*) located within unincorporated areas of Los Angeles County. In addition, the circumference of an oak tree with one trunk must be 25 inches (8 inches in diameter) or more. For oak trees with multiple trunks, any two trunks must have a circumference of 38 inches (12 inches in diameter) or more. Measurements must be recorded at 4.5 feet above mean natural grade.

3.3.6 Acton Community Standards District

The Acton Community Standards District (CSD) requires that development plans emphasize the protection of, and revegetation with, native vegetation, including the native plants, grasses, shrubs and trees which intercept, hold and more slowly release rainfall than bare earth surfaces. On any parcel consisting of one acre or greater, the removal or destruction of native vegetation exceeding 10 percent of the parcel area within any 12-month period shall require the director's approval. All permit applications involving grading must include a site plan for director's review. Within hillside areas, such site plan must comply with Section 22.56.215, which requires a conditional use permit for projects in hillside management areas. This information shall not substitute for oak tree permit requirements. Material submitted shall include a landscaping plan supportive of the Acton CSD showing existing and proposed landscaping, acceptable to the department of regional planning. Such plan shall specifically identify California junipers, manzanita, Great Basin sage and Joshua trees and generally describe the type and condition of native vegetation. Relandscaping of disturbed areas should emphasize the use of existing native, drought tolerant vegetation. The director shall approve the site plan with appropriate conditions, for all or a portion of the proposed work when satisfied that the performance of such work is consistent with the intent of the Acton CSD to preserve native vegetation.

3.3.7 Juniper Hills Community Standards District

The Juniper Hills CSD requires that the removal or destruction of vegetation of any kind on a lot or parcel of land two-and-one-half acres or greater in size shall require a conditional use permit pursuant to Part 1 of Chapter 22.56 where the area of removal or destruction is greater than 30 percent of the gross area of the lot or parcel. This requirement does not apply to the removal or destruction of vegetation that is necessary to allow for the construction of additions to existing single-family residences. Where a new single-family residence is proposed on an existing unimproved lot or parcel of land two-and-one-half acres or greater in size, site plans shall be submitted to the director pursuant to Part 12 of Chapter 22.56 that depict existing vegetation. A fuel modification plan shall also be submitted to the director that demonstrates that the proposed removal or destruction of vegetation shall not occur on more than 30 percent of the gross area of the lot or parcel unless such removal or destruction meets the exclusions contained in subsection E.9.b of the CSD. A vegetation conservation covenant shall be recorded with the county recorder for each such parcel or lot to ensure the permanent maintenance of the vegetation on each lot as

¹⁰ Los Angeles County Department of Regional Planning. Accessed 27 March 2014. Los Angeles County, California, Code of Ordinances – Title 22 Planning and Zoning. Available online at: <http://library.municode.com/index.aspx?clientId=16274>

depicted in the approved fuel modification plan. Transplantation of vegetation is encouraged as an alternative to removal.

3.3.8 Elizabeth Lake and Lake Hughes Community Standards District

The Elizabeth Lake and Lake Hughes CSD defines native vegetation as those plants designated for the corresponding Ecological Zone in the Los Angeles County Drought-tolerant Approved Plant List, maintained by the Department of Regional Planning. This CSD requires that all property development shall use only native vegetation in landscaped areas and to re-vegetate graded slopes, provided the available species are determined adequate to prevent erosion by the Department of Public Works. Where fuel modification is required, species from the Desirable Plan List, maintained by the Fire Department, may be used in Fuel Modification Zones A and B. The CSD also determines that in order to remove or destroy greater than thirty (30) percent of the native vegetation on a lot or parcel of land, the applicant shall substantiate that the applicant has obtained verification by an engineer, architect, biologist, or equivalent that removal or destruction is necessary because continued existence at present location(s) precludes the reasonable use of the property for a permitted use in the zone and the cost of alternative development plans would be prohibitive, or that it is required by the Fire Department, or that it is necessary for work performed under a permit issued by the Department of Public Works to control erosion or flood hazards.

3.3.9 Castaic Area Community Standards District

The Castaic Area CSD determines that the removal or destruction of locally indigenous vegetation is prohibited on a parcel of land one acre or greater in size, where the area of removal or destruction is greater than ten percent of the parcel. Locally indigenous vegetation is defined as the vegetation listed on the Castaic Area List of Indigenous Plants, prepared and maintained by regional planning. In addition, the channelization of the Castaic, Hasley Canyon, Violin Canyon, Tapia Canyon, Charlie Canyon, San Martinez Grande Canyon, and San Martinez/Chiquito Canyon creeks shall be permitted by the Castaic Area CSD provided that appropriate mitigation measures are implemented, as approved by the county departments of regional planning and public works, to preserve the indigenous habitats of the creeks and to protect the aesthetics of the creek settings. In formulating such mitigation measures, input from the Castaic Area Town Council and state and federal agencies with expertise in this field shall be considered. The CSD requires that the channels are maintained with soft bottoms, the channel sides slope downward such that, at each cross-section along the length of the channel, the channel has a trapezoidal configuration, channel bank materials are matched with local soils and stone for color and texture compatibility, adequate setbacks are incorporated to allow for the preservation or replanting of locally indigenous vegetation, and to the greatest extent possible, watercourses shall flow naturally within the full width of the improved natural flood plain. In addition, an oak tree permit for the removal or relocation of one oak tree in conjunction with a single-family residence use in the Castaic Area CSD, shall require publishing and hearing as otherwise required in Part 16 of Chapter 22.56 The exemptions permitted in Chapter 22.56 are not applicable in the Castaic Area CSD.

SECTION 4.0 METHODS

This section of the BRTR describes the methods employed in the characterization and evaluation of biological resources within the seven subareas of the proposed initiative study area. The study methods were designed to provide the substantial evidence required to address the scope of analysis recommended in Appendix G of the State CEQA Guidelines, as well as the Conservation and Natural Resources Element of the Los Angeles County General Plan 2035;¹ and the Los Angeles County Code of Ordinances – Title 22 Planning and Zoning goals and policies related to biological resources. The methods used for the characterization and evaluation of biological resources consider the Los Angeles County General Plan 2035, Santa Clarita Valley Area General Plan, Antelope Valley Areawide General Plan goals and policies related to biological resources,^{2,3} areas potentially subject to the jurisdiction of the USACOE pursuant to Section 404 of the Clean Water Act, riparian and other State-designated sensitive habitats including those requiring a Streambed Alteration Agreement pursuant to Section 1600 of the State Fish and Game Code, special-status species and designated critical habitat, native resident or migratory species of fish and wildlife, and any federal, State, and regional conservation plans.

4.1 SPECIAL STATUS SPECIES

4.1.1 Listed and Sensitive Species

Records of listed and sensitive plants and animals were reviewed to determine what the federally and State-listed species and sensitive species are that have the potential to occur within the limits of the proposed initiative. The purpose of reviewing species records was to provide information to characterize the potential for suitable habitat, designated critical habitat, or previously recorded occupied habitat to be affected by the development of single-family residences on parcels that are not served by a water district, and may be developed due to the availability of hauled water, where the provision of potable water from a well is determined to be infeasible. For the purposes of this analysis, species were assumed to be present if the parcel lies within the known historic range of the species and has suitable habitat. In this way, the publicly accessible data can be used to determine (1) if there is designated critical habitat for listed species, (2) if listed or sensitive species have the potential to occur on proposed initiative parcels, or (3) if a species has been determined to be present as a result of a survey. Directed surveys would need to be undertaken to assess the presence or absence of sensitive species and make a determination as to whether or not permits would be required pursuant to Section 10(a)(1) of the federal ESA or Section 2081 of the California ESA.

The search considered federally and State-listed species, other special-status species, and locally important species with the potential to occur within and adjacent to the proposed initiative. The CNDDDB query was supplemented with information from published and unpublished literature, including program- and project-level environmental documents prepared pursuant to CEQA and

¹ Los Angeles County Department of Regional Planning. Adopted 6 October 2015. Los Angeles County 2035 General Plan: Chapter 9: Conservation and Natural Resources Element Available online at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan-ch6.pdf

² Los Angeles County Department of Regional Planning. November 27, 2012. Santa Clarita Valley Area Plan Update. PDF available online at: http://planning.lacounty.gov/assets/upl/project/ovov_2012-fulldoc.pdf

³ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available at: <http://planning.lacounty.gov/tnc>

the National Environmental Policy Act (NEPA) in the vicinity of the proposed initiative study area. The CNDDDB database query for occurrence data within and surrounding the proposed initiative parcels included 53 USGS 7.5-minute series topographic quadrangles:

- Acton⁴
- Adobe Mountain⁵
- Agua Dulce⁶
- Alpine Butte⁷
- Azusa⁸
- Black Mountain⁹
- Burnt Peak¹⁰
- Chilao Flat¹¹
- Condor Peak¹²
- Crystal Lake¹³
- Del Sur¹⁴
- El Mirage¹⁵
- Fairmont Butte¹⁶
- Frazier Mountain¹⁷
- Glendora¹⁸
- Green Valley¹⁹
- Hi Vista²⁰
- Jackrabbit Hill²¹
- Juniper Hills²²
- La Liebre Ranch²³
- Lake Hughes²⁴

⁴ U.S. Geologic Survey. 2012. 7.5-minute Series, Acton, California, Topographic Quadrangle. Reston, VA.

⁵ U.S. Geologic Survey. 2012. 7.5-minute Series, Adobe Mountain, California, Topographic Quadrangle. Reston, VA.

⁶ U.S. Geologic Survey. 2012. 7.5-minute Series, Agua Dulce, California, Topographic Quadrangle. Reston, VA.

⁷ U.S. Geologic Survey. 2012. 7.5-minute Series, Alpine Butte, California, Topographic Quadrangle. Reston, VA.

⁸ U.S. Geologic Survey. 2012. 7.5-minute Series, Azusa, California, Topographic Quadrangle. Reston, VA.

⁹ U.S. Geologic Survey. 2012. 7.5-minute Series, Black Mountain, California, Topographic Quadrangle. Reston, VA.

¹⁰ U.S. Geologic Survey. 2012. 7.5-minute Series, Burnt Peak, California, Topographic Quadrangle. Reston, VA.

¹¹ U.S. Geologic Survey. 2012. 7.5-minute Series, Chilao Flat, California, Topographic Quadrangle. Reston, VA.

¹² U.S. Geologic Survey. 2012. 7.5-minute Series, Condor Peak, California, Topographic Quadrangle. Reston, VA.

¹³ U.S. Geologic Survey. 2012. 7.5-minute Series, Crystal Lake, California, Topographic Quadrangle. Reston, VA.

¹⁴ U.S. Geologic Survey. 2012. 7.5-minute Series, Del Sur, California, Topographic Quadrangle. Reston, VA.

¹⁵ U.S. Geologic Survey. 2012. 7.5-minute Series, El Mirage, California, Topographic Quadrangle. Reston, VA.

¹⁶ U.S. Geologic Survey. 2012. 7.5-minute Series, Fairmont Butte, California, Topographic Quadrangle. Reston, VA.

¹⁷ U.S. Geologic Survey. 2012. 7.5-minute Series, Frazier Mountain, California, Topographic Quadrangle. Reston, VA.

¹⁸ U.S. Geologic Survey. 2012. 7.5-minute Series, Glendora, California, Topographic Quadrangle. Reston, VA.

¹⁹ U.S. Geologic Survey. 2012. 7.5-minute Series, Green Valley, California, Topographic Quadrangle. Reston, VA.

²⁰ U.S. Geologic Survey. 2012. 7.5-minute Series, Hi Vista, California, Topographic Quadrangle. Reston, VA.

²¹ U.S. Geologic Survey. 2012. 7.5-minute Series, Jackrabbit Hill, California, Topographic Quadrangle. Reston, VA.

²² U.S. Geologic Survey. 2012. 7.5-minute Series, Juniper Hills, California, Topographic Quadrangle. Reston, VA.

²³ U.S. Geologic Survey. 2012. 7.5-minute Series, La Liebre Ranch, California, Topographic Quadrangle. Reston, VA.

- Lancaster East²⁵
- Lancaster West²⁶
- Lebec²⁷
- Liebre Mountain²⁸
- Little Buttes²⁹
- Littlerock³⁰
- Lovejoy Buttes³¹
- Mescal Creek³²
- Mint Canyon³³
- Mount Baldy³⁴
- Mount San Antonio³⁵
- Mount Wilson³⁶
- Neenach School³⁷
- Newhall³⁸
- Oat Mountain³⁹
- Pacifico Mountain⁴⁰
- Palmdale⁴¹
- Pasadena⁴²
- Redman⁴³
- Ritter Ridge⁴⁴
- Rogers Lake South⁴⁵
- Rosamond⁴⁶

²⁴ U.S. Geologic Survey. 2012. 7.5-minute Series, Lake Hughes, California, Topographic Quadrangle. Reston, VA.

²⁵ U.S. Geologic Survey. 2012. 7.5-minute Series, Lancaster East, California, Topographic Quadrangle. Reston, VA.

²⁶ U.S. Geologic Survey. 2012. 7.5-minute Series, Lancaster West, California, Topographic Quadrangle. Reston, VA.

²⁷ U.S. Geologic Survey. 2012. 7.5-minute Series, Lebec, California, Topographic Quadrangle. Reston, VA.

²⁸ U.S. Geologic Survey. 2012. 7.5-minute Series, Liebre Mountain, California, Topographic Quadrangle. Reston, VA.

²⁹ U.S. Geologic Survey. 2012. 7.5-minute Series, Little Buttes, California, Topographic Quadrangle. Reston, VA.

³⁰ U.S. Geologic Survey. 2012. 7.5-minute Series, Littlerock, California, Topographic Quadrangle. Reston, VA.

³¹ U.S. Geologic Survey. 2012. 7.5-minute Series, Lovejoy Buttes, California, Topographic Quadrangle. Reston, VA.

³² U.S. Geologic Survey. 2012. 7.5-minute Series, Mescal Creek, California, Topographic Quadrangle. Reston, VA.

³³ U.S. Geologic Survey. 2012. 7.5-minute Series, Mint Canyon, California, Topographic Quadrangle. Reston, VA.

³⁴ U.S. Geologic Survey. 2012. 7.5-minute Series, Mount Baldy, California, Topographic Quadrangle. Reston, VA.

³⁵ U.S. Geologic Survey. 2012. 7.5-minute Series, Mount San Antonio, California, Topographic Quadrangle. Reston, VA.

³⁶ U.S. Geologic Survey. 2012. 7.5-minute Series, Mount Wilson, California, Topographic Quadrangle. Reston, VA.

³⁷ U.S. Geologic Survey. 2012. 7.5-minute Series, Neenach School, California, Topographic Quadrangle. Reston, VA.

³⁸ U.S. Geologic Survey. 2012. 7.5-minute Series, Newhall, California, Topographic Quadrangle. Reston, VA.

³⁹ U.S. Geologic Survey. 2012. 7.5-minute Series, Oat Mountain, California, Topographic Quadrangle. Reston, VA.

⁴⁰ U.S. Geologic Survey. 2012. 7.5-minute Series, Pacifico Mountain, California, Topographic Quadrangle. Reston, VA.

⁴¹ U.S. Geologic Survey. 2012. 7.5-minute Series, Palmdale, California, Topographic Quadrangle. Reston, VA.

⁴² U.S. Geologic Survey. 2012. 7.5-minute Series, Pasadena, California, Topographic Quadrangle. Reston, VA.

⁴³ U.S. Geologic Survey. 2012. 7.5-minute Series, Redman, California, Topographic Quadrangle. Reston, VA.

⁴⁴ U.S. Geologic Survey. 2012. 7.5-minute Series, Ritter Ridge, California, Topographic Quadrangle. Reston, VA.

⁴⁵ U.S. Geologic Survey. 2012. 7.5-minute Series, Rogers Lake South, California, Topographic Quadrangle. Reston, VA.

⁴⁶ U.S. Geologic Survey. 2012. 7.5-minute Series, Rosamond, California, Topographic Quadrangle. Reston, VA.

- Rosamond Lake⁴⁷
- San Fernando⁴⁸
- Simi Valley East⁴⁹
- Sleepy Valley⁵⁰
- Sunland⁵¹
- Val Verde⁵²
- Valyermo⁵³
- Warm Springs Mountain⁵⁴
- Waterman Mountain⁵⁵
- Whitaker Peak⁵⁶

The initial consideration of listed and sensitive species of plants and animals was presented in the Initial Study. After the Initial Study was completed, the addition of new parcels to be analyzed under the proposed initiative added additional species for consideration. A total of 181 listed and sensitive species were considered in the Initial Study. As a result of the revised study area, three additional listed species (one federally endangered, one State rare, and one federally threatened and State endangered) and 13 sensitive species were evaluated after the parcels were updated. For all evaluated species, one of the following determinations were made for each species: (1) Present (many recent records within subareas), (2) Presumed Present (many recent records near or next to subareas), (3) Potentially Present (fewer, less recent records but these species are hard to detect and habitat is present), (4) Presumed Absent (few, old records without definite locational data and not likely to occur), and (5) Absent (no habitat present, records distant from parcels, or species has been extirpated).

Species previously determined to be absent or presumed absent were disclosed only within the Initial Study unless additional scoping letters specified that the absent species were indeed present or additional records or reports were uncovered as a result of preparation of this BRTR. The additional reports or records evaluated included the Los Angeles County General Plan 2035,⁵⁷ Santa Clarita Valley Area General Plan,⁵⁸ Antelope Valley Areawide General Plan,⁵⁹ Inventory of

⁴⁷ U.S. Geologic Survey. 2012. 7.5-minute Series, Rosamond Lake, California, Topographic Quadrangle. Reston, VA.

⁴⁸ U.S. Geologic Survey. 2012. 7.5-minute Series, San Fernando, California, Topographic Quadrangle. Reston, VA.

⁴⁹ U.S. Geologic Survey. 2012. 7.5-minute Series, Simi Valley East, California, Topographic Quadrangle. Reston, VA.

⁵⁰ U.S. Geologic Survey. 2012. 7.5-minute Series, Sleepy Valley, California, Topographic Quadrangle. Reston, VA.

⁵¹ U.S. Geologic Survey. 2012. 7.5-minute Series, Sunland, California, Topographic Quadrangle. Reston, VA.

⁵² U.S. Geologic Survey. 2012. 7.5-minute Series, Val Verde, California, Topographic Quadrangle. Reston, VA.

⁵³ U.S. Geologic Survey. 2012. 7.5-minute Series, Valyermo, California, Topographic Quadrangle. Reston, VA.

⁵⁴ U.S. Geologic Survey. 2012. 7.5-minute Series, Warm Springs Mountain, California, Topographic Quadrangle. Reston, VA.

⁵⁵ U.S. Geologic Survey. 2012. 7.5-minute Series, Waterman Mountain, California, Topographic Quadrangle. Reston, VA.

⁵⁶ U.S. Geologic Survey. 2012. 7.5-minute Series, Whitaker Peak, California, Topographic Quadrangle. Reston, VA.

⁵⁷ Los Angeles County Department of Regional Planning. Adopted 6 October 2015. Los Angeles County 2035 General Plan: Chapter 9: Conservation and Natural Resources Element Available online at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan-ch6.pdf

⁵⁸ Los Angeles County, Santa Clarita Valley Area Plan, 2012. PDF available online at: http://planning.lacounty.gov/assets/upl/data/pd_santa-clarita-area-plan-2012.pdf Page 3-4, Section IV. Planning Area.

Rare and Endangered Plants,⁶⁰ Consortium of California Herbaria,⁶¹ CalFlora,⁶² California Bird Species of Special Concern,⁶³ ebird⁶⁴ and contact with the United States Forest Service (USFS) and the Transition Habitat Conservancy, which manage lands adjacent to parcels. Species that were determined to be absent or presumed absent in the Initial Study that were later determined to be present, presumed present, or potentially present within or adjacent to the additional parcels were also evaluated in this BRTR. All species that were categorized previously as present, presumed present, or potentially present were classified as “Present” for the purpose of this BRTR, unless there was sufficient evidence that the species had been extirpated or no habitat was present.

4.1.2 Critical Habitat

Sapphos Environmental, Inc. used geographic information systems (GIS) to overlay the parcels affected by the proposed initiative with designated critical habitat for all federally threatened and endangered species. The designated critical habitat information was obtained from the USFWS critical habitat portal.⁶⁵

4.1.3 Locally Important Plants and Animals

Some species are protected by local and State policies but the species themselves are considered common. For example, all native cacti are protected in the Mojave Desert but few are listed or considered sensitive. Sapphos Environmental, Inc. reviewed the list of species protected under the Native Plant Protection Act, Division 23 of the California Food and Agriculture Code (Desert Native Plant Act), and California Fish and Game Code Sections 3511 and 4150 regarding State Fully Protected Species and Non-game Furbearing Mammals. Common species were evaluated as having a potential presence using range maps, Consortium of California Herbaria,⁶⁶ CalFlora,⁶⁷ and other environmental documents and surveys completed in the vicinity of the study area.⁶⁸ Portions of the study area containing suitable habitat were overlaid with parcels using GIS to determine where habitat for these species may be affected by the proposed initiative.

⁵⁹ Los Angeles County Department of Regional Planning. Adopted 16 June 2015. Antelope Valley Area Plan – Town & Country: A Component of the Los Angeles County General Plan. Available at: http://planning.lacounty.gov/tnchhttp://planning.lacounty.gov/assets/upl/data/pd_antelope-valley.pdf Page I-2

⁶⁰ California Native Plant Society. 2011. Inventory of Rare and Endangered Plants. Available at: <http://www.rareplants.cnps.org/>

⁶¹ Consortium of California Herbaria. 2011. Consortium of California Herbaria: Search Page. Available at: <http://ucjeps.berkeley.edu/consortium>.

⁶² CalFlora Information on California Plants for Education, Research and Conservation [Web Application]. 2011. The Cal Flora Database. Available at: <http://www.calflora.org/>

⁶³ Shuford, W.D., and T. Gardali, eds. 2008. California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. Studies of Western Birds 1. Camarillo, CA: Western Field Ornithologists; and Sacramento, CA: California Department of Fish and Game.

⁶⁴ See www.ebird.org

⁶⁵ See <http://ecos.fws.gov/crithab/>

⁶⁶ Consortium of California Herbaria. 2011. Consortium of California Herbaria: Search Page. Available at: <http://ucjeps.berkeley.edu/consortium>.

⁶⁷ CalFlora Information on California Plants for Education, Research and Conservation [Web Application]. 2011. The Cal Flora Database. Available at: <http://www.calflora.org/>

⁶⁸ CalFlora Information on California Plants for Education, Research and Conservation [Web Application]. 2011. The Cal Flora Database. Available at: <http://www.calflora.org/>

4.2 RIPARIAN AND SENSITIVE PLANT COMMUNITIES

4.2.1 State Sensitive Native Plant Communities

Existing published literature, maps, aerial photographs, and the results of previously completed surveys in the vicinity of the study area were evaluated to characterize the riparian and other state-designated plant communities that may be present on parcels that would be potentially eligible for development of a single-family residence if the proposed initiative were approved. The analysis resulted in the identification of the plant communities that have a potential to occur in the study area. In this way, the publicly accessible data were used to characterize the baseline conditions for riparian and other State-designated plant communities to be present in relation to four criteria: (1) presence determination based on recorded survey work; (2) likelihood to be present based on elevation, aspect, soil, and dominant vegetation; (3) if riparian areas and isolated wetlands subject to CDFW jurisdiction may be present based on the presence or absence of drainages or other aquatic or wetland features as mapped by the USGS; or the presence of riparian, aquatic, or wetland resources as mapped on the National Wetlands Inventory.

All of the parcels that would be potentially affected by the proposed initiative are privately held parcels, and the condition of the plant communities present on these parcels can range from undisturbed parcels with native plants, to grazing lands dominated primarily by non-native species, to highly degraded or cleared lots. Furthermore, surveys cannot be conducted on private parcels without permission; therefore, existing plant communities can only be assessed through existing available plant community data. However, private parcel owners would still be required to comply with any applicable federal, State, and local regulations.

Two types of plant community data are publically available within the study area of the proposed initiative: the Desert Renewable Energy Conservation Plan (DRECP) and Classification and Assessment with LANDSAT of Visible Ecological Groupings (CalVeg).⁶⁹ Both data sets used aerial imagery to preliminarily classify the communities and then used ground-truthing (i.e., physically checking the accuracy of the plant community) to determine dominant plant community. The DRECP plant community data are newer than the CalVeg data, and the areas covered by this data have been more recently ground-truthed.

Parcels located within the Mojave Desert have DRECP plant community data available, but parcels south of the Mojave Desert only have CalVeg plant community data available. Plant communities from these data sets were intersected with the parcel data using GIS. No overlap exists between the two data sets on any individual parcel; however, a single subarea may be covered by both data sets. The parcels within the Castaic/Santa Clarita/Agua Dulce subarea exist exclusively within the CalVeg data set and parcels within the Antelope Valley Northeast and Lancaster Northeast subareas exist exclusively within the DRECP data set. All other proposed initiative subareas are covered by both data sets to some degree, such that the entirety of the proposed initiative study area was covered by these data sets (Table 4.2.1-1, *Plant Community Data Sources for Each Subarea*). The Lake Hughes/Gorman/West of Lancaster and Lake Los Angeles/Llano/Valyermo/Littlerock subareas are located primarily within the DRECP data limits except for parcels located in the foothills of the San Gabriel Mountains, along Portal Ridge, and within the Sierra Pelona Mountains and valleys.

⁶⁹ See www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347188

**TABLE 4.2.1-1
PLANT COMMUNITY DATA SOURCES FOR EACH SUBAREA**

Type of Publically Available Plant Community Data	Proposed Initiative Subareas						
	C	A	LH	LL	AV	LN	SG
Desert Renewable Energy Conservation Plan (DRECP)		X	X	X	X	X	X
Classification and Assessment with LANDSAT of Visible Ecological Groupings (CalVeg)	X	X	X	X			X

KEY: C = Castaic/Santa Clarita/Agua Dulce subarea; LL = Lake Los Angeles/Llano/Valyermo/Littlerock subarea; A = Acton subarea; LH = Lake Hughes/Gorman/West of Lancaster subarea; AV = Antelope Valley Northeast subarea; LN = Lancaster Northeast subarea; SG = East San Gabriel Mountains subarea

The classification system used by the DRECP differed from CalVeg. Therefore, both sets of data needed to be converted into the standard plant communities recognized by CDFW. By converting the plant community data into one standard system, the plant communities could be assessed with regard to potential CDFW sensitive plant communities that could be present.⁷⁰ The current classification system for plant communities recognized by CDFW is based on *A Manual of California Vegetation*, second edition (MCV).⁷¹

The Appendices of the MCV allow for the conversion of plant communities from other vegetation classification systems into MCV format/recognized CDFW plant communities.^{72,73} Although both data sets had to be converted to MCV format, converting the DRECP data to MCV standards is simpler than converting from CalVeg to MCV standards because:

- The DRECP data has more recently been ground-truthed
- The DRECP data uses the U.S. National Vegetation Classification System (NVCS), which closely matches the communities within the MCV. The NVCS classification system uses a hierarchical system with macrogroups, groups, and specific communities (e.g., macrogroup-California Forest and Woodland, group-Californian broadleaf forest and woodland, community-coast live oak woodland)
- The DRECP data generally provides notes on the dominant plant species; most of the DRECP data lists the dominant plant within the community

Conversely, CalVeg data tends to be less reliable and harder to convert to MCV format without field verification because:

- The CalVeg data is older, resulting in plant community changes that would not be detected, such as the result of fire or recent development
- CalVeg mapping covers a broader area than the DRECP, resulting in misclassifications of the plant community
- CalVeg data often lumps together a broad range of plant communities into one term, resulting in multiple corresponding plant communities

⁷⁰ See <http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf>

⁷¹ Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. Second Edition. Sacramento, CA: California Native Plant Society Press.

⁷² Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. Second Edition. Sacramento, CA: California Native Plant Society Press.

⁷³ See <http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf>

- CalVeg data requires a thorough review of the plant community descriptions, which often do not provide information on the most dominant plant species⁷⁴

Given the potential errors in the existing data, Sapphos Environmental, Inc. reviewed the DRECP and CalVeg data carefully. Each data set was converted to MCV format using the appendices in the MCV.⁷⁵ The boundaries of the CalVeg and DRECP designated communities were not changed but the names of the communities were changed to the MCV format. In cases where plant communities were grouped within datasets, all corresponding MCV plant communities within the group with ranges in the study area were presumed to be present. For example, the plant community group “Mediterranean California naturalized annual and perennial grassland” corresponds to four different MCV plant communities; therefore, all four communities were assumed to be present within areas designated as “Mediterranean California naturalized annual and perennial grassland” on proposed initiative parcels. If the DRECP/CalVeg designation was a type of development (e.g., orchard, agriculture, urban), then these areas were grouped to be classified as “Developed.”

Plant communities were ranked based on their State sensitivity, where State ranks S1–S3 are considered sensitive and S4–S5 are not considered sensitive. However, some of the S4–S5 communities could have sensitive associations, which were verified with the CDFW list of sensitive plant alliances and associations.⁷⁶ Whenever a sensitive association was determined to be potentially present, the entire community was classified as sensitive. This resulted in a potentially inflated estimate of the presence of sensitive plant communities in the study area. For example, Creosote Bush–White Burr Sage Scrub (*Larrea tridentata*–*Ambrosia dumosa* Shrubland Alliance) has a State rank of S5 and has the potential for the *Larrea tridentata*–*Ambrosia dumosa*–*Petalonyx thurberi* Association, which is designated as State-designated sensitive habitat. Therefore, any area noted as Creosote Bush–White Burr Sage Scrub must be considered sensitive. All plant communities that are known to occur within wetlands and riparian areas were noted, given that CDFW jurisdiction on wetlands and waterways is based on presence of riparian habitat.

After the data sets were converted to MCV format, any plant communities that could not occur within the study area based on range maps and descriptions in MCV were removed from analysis.⁷⁷ Discrepancies were investigated using aerial imagery to determine if the plant community type was appropriate. As a result of reviewing the range and aerial imagery, three main problems were observed: (1) converting from CalVeg to MCV often resulted in plant communities that occur only in northern and central parts of California, (2) trees were dominant in areas designated only as shrub communities, and (3) recent fire and development resulted in a change of the plant community.

The methods described above allowed for an informed estimate of the number and type of sensitive plant communities present within the proposed initiative study area. Definitive classification of the plant community(s) present on any given parcel within the proposed initiative subarea would require on-site plant community mapping by a qualified botanist.

⁷⁴ See http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_045405.pdf

⁷⁵ Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. Second Edition. Sacramento, CA: California Native Plant Society Press.

⁷⁶ See <http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf>

⁷⁷ Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. Second Edition. Sacramento, CA: California Native Plant Society Press.

4.2.2 State Wetlands and Riparian

The purpose of evaluating state wetlands and riparian areas is to assess the potential for the proposed initiative to result in development of properties that may potentially require a Streambed Alteration Agreement from CDFW pursuant to Section 1600 of the State Fish and Game Code. Pursuant to Section 1600 of the California Fish and Game Code, all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California are subject to the regulatory authority of CDFW. CDFW's jurisdiction over State wetland and waterways places emphasis on riparian plant community habitat, dry lakes and playas, and other isolated wetlands that do not connect to navigable water. CDFW jurisdictional wetlands and waterways are defined by wetland or riparian vegetation and a defined bed and bank, and does not need to exhibit wetland hydrology, hydrophytic vegetation, and hydric soils.

For the purpose of this BRTR, State wetlands and waterways were determined to be: (1) all USGS blue-line drainages (as no width is associated with blue-line drainage data, a reasonable buffer was added to account for acreage); and (2) National Wetlands Inventory (NWI) features. To avoid overestimating the size of potential State Jurisdictional Areas, riparian plant communities and plant communities with associated wetland plants that fell outside of existing blue line drainages and NWI features were not included in the analysis of State Jurisdictional Areas for the purposes of this BRTR, although the State may choose to take jurisdiction over these communities during the Streambed Alteration Agreement process. Individual properties would require a jurisdictional delineation to be undertaken to assess the presence or absence of lake or streambed habitat and the potential to for alterations to such features subject to Notification of Lake or Streambed Alteration Application to the CDFW pursuant to Section 1600 of the State Fish and Game Code.

4.3 FEDERAL WETLANDS

The purpose of evaluating federal Waters of the United States was to determine what federal wetlands and waterways are present and which agency (federal or State) may have jurisdiction. The purpose was not to definitively perform a jurisdictional delineation. Rather, the purpose was to use existing data to develop a list of *potential* federal wetlands and waterways that could be subject to jurisdiction by the USACOE. In this way, publically accessible data on the blue-line features, existing plant communities, and known wetlands can be used to determine which parcels have the potential for jurisdictional wetlands and waterways to be present.

Federal wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."⁷⁸ Furthermore, federal wetland definition requirements state that "evidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland determination."⁷⁹ Sapphos Environmental, Inc. used the NWI database to determine if federal wetlands are known to occur on parcels affected by the proposed initiative. All NWI wetlands within the Santa Clara River, Los Angeles River, and San Gabriel River watersheds were considered federal wetlands; NWI wetlands within the western Mojave generally are not subject to USACOE jurisdiction and were only considered to be classified as State wetlands and riparian. For the purpose of this BRTR, all NWI wetlands are assumed to be USACOE jurisdictional wetlands, but these wetlands may also fall under other jurisdictions. If an NWI

⁷⁸ U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetland Delineation Manual. Vicksburg, MS.

⁷⁹ U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetland Delineation Manual. Vicksburg, MS.

wetland occurred on the parcels, federal wetlands were considered to be present and were evaluated based on potential impacts.

Federal waterways are based waterways that connect to navigable water bodies.⁸⁰ For instance, for rivers that drain into large lakes or oceans, the river and all tributaries would be subject to USACOE jurisdiction, including periodically wet washes with a defined bed and bank. The USACOE jurisdiction within these federal waterways is limited to the Ordinary High Water Mark (OHWM). The OHWM is defined as “that line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas.”⁸¹ Sapphos Environmental, Inc. used USGS maps and blue-line drainage data to find navigable water bodies and blue-line features that connect to the Santa Clara, Los Angeles, and San Gabriel Rivers. In addition, Sapphos Environmental, Inc. reviewed reports on the Santa Clara River watershed.^{82,83} For the purpose of this BRTR, all potentially navigable water bodies and blue-line streams, rivers, and washes that connect to them were assumed to be federal waterways. Individual properties would require a jurisdictional delineation to be undertaken to assess the presence or absence of Waters of the United States and the potential to for development of a property to result in dredge or fill activities within such features subject to Section 404 of the Federal Clean Water Act and requiring either a pre-construction notification pursuant to a Nationwide Permit or an individual permit from USACOE.

4.4 MIGRATORY CORRIDORS AND NURSERY SITES

Sapphos Environmental, Inc. used GIS to overlay the parcels affected by the proposed initiative with topographic, plant community, and published data for migratory corridors and nursery sites for wildlife species to characterize the baseline conditions for these resources within the study area. Where parcels within the subareas affected by the proposed initiative have the potential to be located within wildlife corridors and nursery sites, the empirical data from the analysis of single-family residences developed with hauled water and historically issued permits were used to estimate the level of impact that would be expected as a result of the proposed initiative. Publicly accessible data were used to determine (1) which areas are mostly important to wildlife movement and (2) potential locations of nursery sites.

The County has established SEAs primarily with the goal of protecting plants and animals and their corridors. During the selection of these SEAs, qualified biologists evaluated the significant wildlife corridors in the County and SEAs where these corridors were determined to be essential. Sapphos Environmental, Inc. reviewed the SEAs. Sapphos Environmental, Inc. used the SEAs as indicators of the presence of wildlife corridors. After reviewing South Coast Missing Linkages,^{84,85,86,87} additional

⁸⁰ U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetland Delineation Manual. Vicksburg, MS.

⁸¹ Code of Federal Regulations 328.3(e).

⁸² U.S. Army Corps of Engineers. 2012. Santa Clara River Watershed Feasibility Study. Prepared by CDM Smith, Irvine, CA.

⁸³ Los Angeles Department of Public Works. 2014. Upper Santa Clara River Integrated Regional Water Management Plan. Prepared by Kennedy/Jenks Consultants

⁸⁴ <http://www.scwildlands.org/reports/SCMLRegionalReport.pdf>

⁸⁵ http://www.scwildlands.org/reports/SCML_SantaMonica_SierraMadre.pdf

⁸⁶ http://www.scwildlands.org/reports/SCML_SierraMadre_Castaic.pdf

⁸⁷ http://www.scwildlands.org/reports/SCML_SanGabriel_Castaic.pdf

migratory corridors were added to the analysis using GIS to overlay the parcels affected by the proposed initiative. In addition, Sapphos Environmental, Inc. reviewed comment letters on the newly adopted SEAs, specifically for comments on the size, location, and width of the proposed SEA wildlife corridors. Individual properties would require a directed survey to assess the presence or absence of migratory corridors or nursery sites and the potential to for development of a property to result in impacts to such resources. In particular, those parcels that are located in or adjacent to an SEA would be subject to a Conditional Use Permit and discretionary review by the Significant Ecological Area Technical Advisory Committee (SEATAC). As part of the mandated discretionary review process, those parcels located in or adjacent to an SEA would require preparation of a Biological Constraints Analysis. Where the presence of sensitive biological resources, including migratory corridors or nursery sites, are identified and would have the potential to be effected by development of a single-family residence or appurtenant facilities, the development would be subject to additional evaluation of impacts pursuant to a Biota Report, subject to the review and approval of SEATAC.⁸⁸

4.5 GENERAL PLANS AND POLICIES

The County General Plan, Specific Plans, and Community Service District Plans were evaluated to determine if the proposed initiative has the potential to conflict with adopted goals, policies, and ordinances related to conservation of biological resources that are applicable to the parcels within the proposed initiative study area. The parcels affected by the proposed initiative are within the unincorporated territory of the County that is managed consistent with the Los Angeles County General Plan 2035, including provisions related to SEAs, was reviewed with respect to its application regarding the proposed initiative and the parcels within. Sapphos Environmental, Inc. also reviewed goals and policies within the 2012 Santa Clarita Valley Area Plan and 2015 Antelope Valley Areawide General Plan – Town and Country. The parcels affected by the proposed initiative also fall under the jurisdiction of the Los Angeles County Oak Tree Ordinance and the existing and proposed SEA Ordinances as well as the Acton, Juniper Hills, Elizabeth Lake and Lake Hughes, and Castaic Area Community Standards Districts (CSDs). To quantify the most likely locations where the Oak Tree Ordinance applies, Sapphos Environmental, Inc. used existing plant community data sources (see Section 4.2) as a the basis of evaluation. Oak trees were assumed to be most likely present within plant communities designated as forested, oak woodland/scrub communities, or urban (given oaks are commonly planted); while oaks may occur occasionally within desert environs and scrub communities, this is generally the exception rather than the norm.

4.6 HCPs AND NCCPs

Adopted and proposed HCPs and NCCPs within and adjacent to the proposed initiative study area were mapped using data obtained from the USFWS and CDFW. The boundaries of any HCP or NCCP were compared to the subareas being evaluated within this BRTR using CDFW's NCCP California Regional Conservation Plans Map, which features all NCCPs and HCPs in the State of California.⁸⁹ All applicable HCPs and NCCPs were intensively reviewed to identify provisions for the management of biological resources that are applicable to the proposed initiative.

⁸⁸ Los Angeles County Department of Regional Planning. 2013. Significant Ecological Areas Technical Advisory Committee Procedures Manual. Available online at http://planning.lacounty.gov/assets/upl/case/sea_proc-guide.pdf

⁸⁹ See <https://www.wildlife.ca.gov/Conservation/Planning/NCCP>

SECTION 5.0

RESULTS

This section of the BRTR characterizes the baseline conditions for biological resources; evaluates the potential for the proposed initiative to result in significant direct, indirect, and cumulative impacts and identifies feasible measures capable of avoiding or reducing the significant impacts that would result from reasonably foreseeable development of single-family residences on selected parcels supported by the use of hauled water pursuant to the proposed initiative. The results described in this section address the scope of analysis recommended in Appendix G of the State CEQA Guidelines¹ for biological resources. The analysis includes the consideration of rare, threatened and endangered species and other special status and locally important species; goals and policies, related to the conservation of biological resources articulated in the Los Angeles County General Plan 2035; the 2012 Santa Clarita Valley Area Plan; the 2015 Antelope Valley Areawide General Plan; the Los Angeles County Oak Tree Ordinance; areas potentially subject to the jurisdiction of the USACOE pursuant to Section 404 of the Clean Water Act; riparian and other State-designated sensitive habitats, including those requiring a Lake or Streambed Alteration Agreement pursuant to Section 1600 of the State Fish and Game Code; special-status species and designated critical habitat; native resident or migratory species of fish and wildlife; and the consideration of federal, State, and regional conservation plans.

5.1 EXISTING CONDITIONS

5.1.1 Listed and Sensitive Plants and Animals

Listed and Candidate Species and Critical Habitat

As a result of the records and literature review, coordination with USFWS and CDFW, and focused surveys completed for other County projects in the north County, there are 27 species that are listed or candidate species under protection of the federal ESA or California ESA (CESA) (Table 5.1.1-1, *Total Number of Federally and State-Listed Species with the Potential to Occur in Each Subarea*; see Figure 5.1.1-1, *Federally and State-Listed Species with the Potential to Occur within the Proposed Initiative Subareas*, at the end of this section) that have the potential to be present on or within the vicinity of parcels affected by the proposed initiative including eight listed plants and 19 listed animals. The number of listed and candidate species within a given subarea ranges from six to 20:

¹ California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15386, Appendix G

**TABLE 5.1.1-1
TOTAL NUMBER OF FEDERALLY AND STATE LISTED SPECIES WITH THE
POTENTIAL TO OCCUR IN EACH SUBAREA**

Number of Potentially Present Listed Species	C	A	LH	LL	AV	LN	SG
Plants	6	2	1	—	—	—	5
Invertebrates	1	—	—	—	—	—	—
Fish	2	2	2	—	—	—	1
Amphibians	3	2	3	2	—	—	2
Reptiles	—	—	1	1	1	1	—
Birds	7	3	6	2	1	2	4
Mammals	1	1	2	4	4	4	1
TOTAL*	20	10	15	9	6	7	13

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains.

NOTE: *Each species may occur in more than one subarea; therefore, the total is not necessarily the sum of the data from each subarea.

The proposed initiative study area contains designated critical habitat for six species: spreading narvarretia, Santa Ana sucker, southern mountain yellow-legged frog, desert tortoise, coastal California gnatcatcher, and Arroyo toad. Furthermore, critical habitat occurs in only four of the subareas (Table 5.1.1-2, *Critical Habitat within Subareas*; see Figure 5.1.1-2, *Critical Habitat within the Proposed Initiative Subareas*, at the end of this section). The Antelope Valley Northeast subarea is almost entirely, 99 percent, designated as critical habitat for desert tortoise. Designated critical habitat comprises 5 percent or less of the remaining six subareas. Critical habitat for spreading narvarretia is only within the Castaic/Santa Clarita/Agua Dulce subarea at the Cruzan Mesa. For coastal California gnatcatcher, critical habitat is limited to along the lower slopes of the San Gabriel and Santa Susana Mountains in the Castaic/Santa Clarita/Agua Dulce subarea. Arroyo toad critical habitat is within the Castaic/Santa Clarita/Agua Dulce, Acton, and East San Gabriel Mountains subareas but only within the vicinity of the Santa Clara and San Gabriel Rivers. Santa Ana sucker critical habitat is only within the East San Gabriel Mountains subarea and is limited to the vicinity of the San Gabriel River. Southern mountain yellow-legged frog critical habitat only exists on a very small segment of a single parcel in the East San Gabriel Mountains subarea.

**TABLE 5.1.1-2
CRITICAL HABITAT WITHIN SUBAREAS**

Subarea	Total Subarea Acres	Acres of Critical Habitat	Percentage of Subarea Critical Habitat
C	35,340	1,775	5%
A	18,065	80	<0.1%
LH	125,040	0	0%
LL	108,065	0	0%
AV	14,530	14,530	99%
LN	35,325	0	0%
SG	4,090	85	2%
TOTAL	340,460	16,740	5%

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains.

Each of the 27 federally and/or State-listed or candidate species with the potential to be present in the proposed initiative subareas is discussed in detail below (Table 5.1.1-3, *Federally and State-Listed Species with the Potential to Occur within the Proposed Initiative Area*).

**TABLE 5.1.1-3
FEDERALLY AND STATE-LISTED SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROPOSED INITIATIVE AREA**

Species	Federal/State/ Other Status	Habitat	Potential to Occur within the Proposed Initiative Area						
			C	A	LH	LL	AV	LN	SG
Plants									
Braunton's milk-vetch (<i>Astragalus brauntonii</i>)	FE/ CRPR 1B.1	Chaparral, Closed-cone coniferous forest, Coastal scrub, Limestone, Valley & foothill grassland. Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas; in saline, somewhat alkaline soils high in Ca, Mg, with some K. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 200–650 meters.	X	X					X
California Orcutt grass (<i>Orcuttia californica</i>)	FE/ SE/ CRPR 1B.1	Occurs in vernal-pools and volcanic terraces from Ventura County south to Baja California.	X						
Mt. Gleason paintbrush (<i>Castilleja gleasoni</i>)	SR/ CRPR 1B.2	Occurs within chaparral, lower montane coniferous forest, and pinyon and juniper woodland habitats in granitic soils.							X
Nevin's barberry (<i>Berberis nevinii</i>)	FE/ SE/ CRPR 1B.1	Occurs within riparian habitats, but generally in non-wetlands with sandy to gravelly soils, including washes and chaparral.	X						X
San Fernando Valley spineflower (<i>Chorizanthe parryi</i> var. <i>fermandina</i>)	FC/ SE/ CRPR 1B.1	Occurs in the western Transverse mountains in sandy soils.	X						
slender horned spineflower (<i>Dodecahema leptoceras</i>)	FE/ SE/ CRPR 1B.1	Alluvial fans in chaparral and coastal sage scrub communities in the adjacent foothills of the Transverse and Peninsular ranges.	X	X					X
spreading navarretia (<i>Navarretia fossalis</i>)	FE, CRPR 1B.1	Vernal pools and freshwater marshes including ditches in southwestern California and the Mojave desert.	X		X				
thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	FT/ SE/ CRPR 1B.1	Occurs in chaparral, cismontane woodland, coastal scrub, playa, valley and foothill grassland, and vernal pool habitats, often in clay soils.							X
Invertebrates									
vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Vernal pools from the Transverse Range north into southern Oregon.	X						
Fish									
Santa Ana sucker (<i>Catostomus santaanae</i>)	FT/SSC	Various substrates within water courses for different life stages with cooler waters, intermediate velocities and water courses that contain both pools and riffles.	X	X	X				X
unarmored threespine stickleback (<i>Gasterosteus aculeatus williamsoni</i>)	FE/ SE (FP)	Clear water systems Los Angeles and Santa Barbara Counties with a low current.	X	X	X				
Amphibians									
arroyo toad (<i>Anaxyrus californicus</i>)	FE/SSC	Washes, arroyos, sandy riverbanks, riparian areas with willows, sycamores, oaks, and cottonwoods.	X	X	X	X			X
California red-legged frog (<i>Rana draytonii</i>)	FT/SSC	Humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover, especially in lowlands and foothills.	X	X	X				
southern mountain yellow-legged frog (<i>Rana muscosa</i>)	FE/ SE, SSC/FS	In southern California, inhabits rocky streams in narrow canyons and in the chaparral belt.				X			X
Tehachapi slender salamander (<i>Batrachoseps stebbinsi</i>)	ST	Needs north facing moist canyons and ravines in oak and mixed woodlands in arid to semi-arid locations.	X		X				
Reptiles									
desert tortoise (<i>Gopherus agassizii</i>)	FT/ ST	Arid sandy or gravelly locations along riverbanks, washes, sandy dunes, alluvial fans, canyon bottoms, desert oases, rocky hillsides, creosote flats and hillsides.			X	X	X	X	
Birds									
bald eagle (<i>Haliaeetus leucocephalus</i>)	FDEL, BGEPA/SE (FP)/FS	Found near water that provides fish or waterfowl as a food source. Breeds in forested areas near large bodies of water; winters in coastal areas, along large rivers, and large unfrozen lakes.	X		X				X
California condor (<i>Gymnogyps californianus</i>)	FE/SE	Chaparral, coniferous forests, and oak savannah in southern and central California.	X		X				
coastal California gnatcatcher	FT/SSC	Coastal chaparral and sage scrub.	X		X				X

**TABLE 5.1.1-3
FEDERALLY AND STATE-LISTED SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROPOSED INITIATIVE, *Continued***

Species	Federal/State/ Other Status	Habitat	Potential to Occur within the Proposed Initiative Area							
			C	A	LH	LL	AV	LN	SG	
<i>(Polioptila californica californica)</i>										
least Bell's vireo <i>(Vireo bellii pusillus)</i>	FE/SE	Dense willow-dominated riparian habitat, usually with a well-developed understory. The thick understory provides nesting habitat.	X	X	X					X
southwestern willow flycatcher <i>(Empidonax traillii extimus)</i>	FE/SE	Riparian areas and large wet meadows with abundant willows.	X	X						X
Swainson's hawk <i>(Buteo swainsoni)</i>	ST	Requires large, open grassland with abundant prey, with suitable nest trees. Foraging areas may include native grassland, lightly grazed pastures, alfalfa and hay crops, and other croplands.	X		X	X	X	X	X	
tricolored blackbird <i>(Agelaius tricolor)</i>	SCT	Freshwater marsh, Marsh & swamp, Swamp, Wetland. Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.	X	X	X	X			X	
Mammals										
Mohave ground squirrel <i>(Xerospermophilus mohavensis)</i>	ST	Found in desert scrub and Joshua Tree woodland plant communities in the western Mojave desert, and is generally found in flat to moderate terrain.			X	X	X	X	X	
Nelson's antelope squirrel <i>(Ammospermophilus nelsoni)</i>	ST	Found in grasslands with moderate shrub cover which may include the following species, salt bush, ephedra, bladder pod, goldenbush, and snakeweed.				X	X	X	X	
San Bernardino kangaroo rat <i>(Dipodomys merriami parvus)</i>	FE/SSC	Two CNDDDB records from a specimen collected in 1958 and 1962 at an unknown location near Pearblossom.				X	X	X	X	
Townsend's big-eared bat <i>(Corynorhinus townsendii)</i>	SCT/WBWG:H	Cliff, desert, conifer forest, hardwood forest, mixed forest, grassland/herbaceous, old field, savanna, shrubland/chaparral, conifer woodland, hardwood woodland, mixed woodland. Roosts in caves and mine tunnels. Nests and roosts in caves or mines. CNDDDB records within parcels date from before 1950. Recent records are all outside impact areas.	X	X	X	X	X	X	X	X
TOTAL			20	10	15	9	6	7	13	

KEY:
 BGEPA – Bald and Golden Eagle Protection Act ; FDEL – federal delisted species; FC – federal candidate; FE – federal endangered; FT – federal threatened; SCT – State candidate threatened SE – state endangered SE (FP) – state endangered fully protected; SSC – California species of special concern SR – State Rare FS – Forest Service Sensitive ST – State threatened CRPR – California Rare Plant Rank WBWG:H – Western Bat Working Group High Priority.
 C – Castaic/Santa Clarita/Agua Dulce; A – Acton; LH – Lake Hughes/Gorman/West of Lancaster; LL – Lake Los Angeles/Llano/Valyermo/Littlerock; AV – Antelope Valley Northeast; LN – Lancaster Northeast; SG – East San Gabriel Mountains

NOTE:

CNPS categories: California Rare Plant Rank:
 List 1B: Rare, threatened, or endangered in California and elsewhere (0.1: Seriously endangered in California, 0.2: Fairly endangered in California, 0.3: Not very endangered in California)

Plant Species

Braunton's milk-vetch is listed as endangered pursuant to the Federal ESA, and has a California Rare Plant Rank (CRPR) of 1B.1, which is considered seriously endangered in California. Critical habitat has been designated for this species by the USFWS; however, no critical habitat for Braunton's milk-vetch exists within 500 feet of the proposed initiative subarea parcels. A member of the legume family, Braunton's milk-vetch is found in recently burned or disturbed areas in chaparral, coastal scrub, and valley and foothill grassland habitats with sandstone soils with carbonate layers. Braunton's milk-vetch is a soil specialist that requires shallow soils and open areas. Braunton's milk-vetch is threatened by development, alteration of fire regimes, and vegetation and fuel management activities. Only 21 records of Braunton's milk-vetch in Los Angeles County have been reported in the past 100 years. The proposed initiative study area is within the known historic range of this species. Habitat and records for the Braunton's milk-vetch exist within the Castaic/Santa Clarita/Agua Dulce, Acton, and East San Gabriel Mountains subareas.

California Orcutt grass is listed as endangered pursuant to the Federal ESA and CESA, and has a CRPR of 1B.1, which is considered seriously endangered in California. No critical habitat has been designated for this species by the USFWS. California Orcutt grass is in the grass family, and is a densely tufted bright green annual grass. California Orcutt grass blooms from April through June, and seeds can remain dormant for over three years, germinating after the vernal pools have flooded in the spring. As vernal pools flood, the California Orcutt grass produces aquatic leaves that will float on the pool surface. After the pools dry, new foliage will emerge for flowering. The proposed initiative study area is within the known historic range of this species. Habitat and records for the California Orcutt grass exist within the Castaic/Santa Clarita/Agua Dulce and specifically in the vernal pools of the Cruzan Mesa.

Mt. Gleason paintbrush is listed as rare pursuant to CESA, and has a CRPR of 1B.2, which is considered fairly endangered in California. No critical habitat has been designated for this species by the USFWS. A member of the broomrape family, Mt. Gleason paintbrush is found in granitic soils in chaparral, lower montane coniferous forest, and pinyon and juniper woodland habitats. Mt. Gleason paintbrush is often found near campgrounds in the Angeles National Forest and is threatened by recreation associated with campgrounds including off-highway vehicle use, fuel wood cutting, and maintenance to roads. The proposed initiative study area is within the known historic range of this species. Only 45 records of Mt. Gleason Paintbrush in Los Angeles County have been reported in the past 100 years. Habitat and records for the Mt. Gleason Paintbrush exist within the East San Gabriel Mountains subarea.

Nevin's barberry is listed as endangered pursuant to the Federal ESA and CESA, and has a CRPR of 1B.1, which is considered seriously endangered in California. Critical habitat has been designated for this species by the USFWS; however, no critical habitat for Nevin's barberry exists within 500 feet of the proposed initiative subarea parcels. A member of the barberry family, Nevin's barberry is an evergreen shrub with prickly compound leaves. It has yellow flowers, and produces yellow-red berries. Nevin's barberry is found in gravelly wash margins in alluvial scrub habitats, and coarse soils in chaparral habitats. The proposed initiative study area is within the known historic range of this species. Most records from the CNDDDB adjacent to parcels within the proposed initiative subareas have been extirpated; however some recent records are located near the East San Gabriel Mountains and Castaic/Santa Clarita/Agua Dulce subareas. Habitat for the Nevin's barberry exists within the East San Gabriel Mountains and Castaic/Santa Clarita/Agua Dulce subareas.

San Fernando Valley spineflower is listed as endangered pursuant to CESA, and has a CRPR of 1B.1, which is considered seriously endangered in California. No critical habitat has been designated for this species by the USFWS. A member of the buckwheat family, the San Fernando Valley spineflower is found in open sites in coastal sage scrub and chaparral plant communities, and forms clusters of white flowers, enclosed in a covering with spines, at the end of branches stemming from a rosette of basal leaves. Though the plant had previously been thought to have been extirpated from the San Fernando Valley, populations have recently been rediscovered along the slopes of the Santa Clara River as well as within the Upper Las Virgenes Canyon Open Space Preserve. The proposed initiative study area is within the known historic range of this species. Habitat for the San Fernando Valley spineflower exists within the Castaic/Santa Clarita/Agua Dulce subarea, particularly near the communities of Val Verde and Stevenson Ranch.

Slender-horned spineflower is listed as endangered pursuant to the Federal ESA and CESA, and has a CRPR of 1B.1, which is considered seriously endangered in California. No critical habitat has been designated for this species by the USFWS. The slender-horned spineflower is a member of the buckwheat family, and can be found in alluvial fans, floodplains, stream terraces, washes, and their benches. It is commonly found in soils that are generally silty and low in organic matter, and can be found in areas with other species of spineflower, along with brittlebush, California buckwheat, yucca, white sage, and lemonade berry. The slender-horned spineflower blooms from April until June, and is characterized by a small rosette of basal leaves, and spreading flowering stems. The proposed initiative study area is within the known historic range of this species. CNDDDB records for the species occur within the Big Tujunga Creek, Santa Clara River, and Mint Canyon areas. Habitat for the slender-horned spineflower exists within the Castaic/Santa Clarita/Agua Dulce, East San Gabriel Mountains, and Acton subareas.

Spreading navarretia is listed as endangered pursuant to the Federal ESA, and has a CRPR of 1B.1, which is considered seriously endangered in California. There is less than one acre of critical habitat for the spreading navarretia within parcels in the Castaic/Santa Clarita/Agua Dulce subarea. The spreading navarretia can be found in wet areas including vernal pools, riparian areas and ditches. CNDDDB records for the species occur within the Cruzan Mesa area. The proposed initiative study area is within the known historic range of this species. Habitat for spreading navarretia exists within the Lake Hughes/Gorman/West of Lancaster subarea and the Castaic/Santa Clarita/Agua Dulce subarea, specifically within the vernal pools of the Cruzan Mesa. Critical habitat has been designated for this species by the USFWS.

Thread-leaved brodiaea is listed as threatened pursuant to the Federal ESA and endangered pursuant to CESA, and has a CRPR of 1B.1, which is considered seriously endangered in California. Critical habitat has been designated for this species by the USFWS; however, no critical habitat for thread-leaved brodiaea exists within 500 feet of the proposed initiative subarea parcels. A member of the family Themidaceae, thread-leaved brodiaea is often found in clay soils in chaparral, cismontane woodland, coastal scrub, playa, valley and foothill grassland, and vernal pool habitats. Thread-leaved brodiaea is threatened by residential development and agriculture and the factors associated with these such as grazing, foot and vehicular traffic, and non-native plants. The proposed initiative study area is within the known historic range of this species. Only 12 records of thread-leaved brodiaea in Los Angeles County have been reported in the past 100 years. Habitat and records for the thread-leaved brodiaea exist within the East San Gabriel Mountains subarea.

Invertebrates

Vernal pool fairy shrimp is listed as threatened pursuant to the Federal ESA. Critical habitat has been designated for this species by the USFWS; however, no critical habitat for vernal pool fairy shrimp exists within 500 feet of the proposed initiative subarea parcels. Vernal pool fairy shrimp are generally found in cool-water pools with low to moderate dissolved solids that are less predictable and short lived. The proposed initiative study area is within the known historic range of this species. Vernal pool fairy shrimp were observed in the Cruzan Mesa during surveys conducted in 2010/2011.² The vernal pools on the Cruzan Mesa, within the Castaic/Santa Clarita/Agua Dulce subarea are habitat and have the potential to support vernal pool fairy shrimp.

Fish Species

The Santa Ana sucker is listed as threatened pursuant to the Federal ESA and a SSC by CDFW. There are 40 acres of critical habitat for Santa Ana sucker within parcels in the East San Gabriel Mountains subarea. The proposed initiative study area is within the known historic range of this species. Habitat for the Santa Ana sucker exists within the Castaic/Santa Clarita/Agua Dulce, Acton, Lake Hughes/Gorman/West of Lancaster, and East San Gabriel Mountains subareas, primarily along the Santa Clara and San Gabriel Rivers but also within tributaries with flowing water. Critical habitat has been designated for this species by the USFWS.

Unarmored threespine stickleback is listed as endangered pursuant to the Federal ESA and CESA. It is also a fully protected species in the State of California. No critical habitat has been designated for this species by the USFWS. The unarmored threespine stickleback is a small scaleless fish that is smaller than two and a half inches long. These fish are found in shallow pools and riffles that have abundant cover. The proposed initiative study area is within the known historic range of this species. Recent records in the CNDDDB are located within the Santa Clara River south of Agua Dulce and west of Acton, San Francisquito Canyon, and Castaic Creek. Habitat for the Santa Ana sucker exists within the Castaic/Santa Clarita/Agua Dulce, Acton and Lake Hughes/Gorman/West of Lancaster subareas.

Amphibian Species

Arroyo toad is listed as endangered pursuant to the Federal ESA and a SSC by CDFW. Critical habitat has been designated for this species by the USFWS. There are 80 acres of critical habitat for Arroyo toad within parcels in the Acton subarea, 310 acres of critical habitat within parcels in the Castaic/Santa Clarita/Agua Dulce subarea, and 50 acres of critical habitat within parcels in the East San Gabriel Mountains subarea. The Arroyo toad is generally nocturnal, and is active from as early as January to as late as September. The Arroyo toads are plump and stocky with warty skin that can secrete a poison that can deter predators. Arroyo toads have specialized habitat needs, and can be found in washes, arroyos, sandy riverbanks, and riparian areas with willows, sycamores, oaks, and cottonwoods with quiet water free of predatory fishes and with silt free sandy bottoms. The proposed initiative study area is within the known historic range of this species. Habitat for the arroyo toad exists within the Castaic/Santa Clarita/Agua Dulce, Acton, Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/Valyermo/Littlerock, and East San Gabriel Mountains subareas. Critical habitat has been designated for this species by the USFWS.

² Juhasz, Thomas. 2011. 90-Day Protocol Survey Report for U.S. Fish and Wildlife Service Listed Vernal Pool Banchipods; City of Santa Clarita. Prepared for Impact Sciences Inc. Pasadena, CA

California red-legged frog is listed as threatened pursuant to the Federal ESA and a SSC by CDFW. Critical habitat has been designated for this species by the USFWS; however, no critical habitat for California red-legged frog exists within 500 feet of the proposed initiative subarea parcels. The California red-legged frog is a medium sized frog, with prominent dorsolateral folds and long legs. The hind legs and lower belly are red underneath, and the red coloring extends to the belly and sides in older frogs. Generally active during the day, California red-legged frogs are usually found near water, but are known to wander over dry land, and can also be found in damp places far from water. California red-legged frogs can be active all year if there is water, or they will find somewhere moist to estivate. The proposed initiative study area is within the known historic range of this species. California red-legged frogs have been documented in the CNDDDB within the Santa Clara River and its tributaries, as well as ponds near Leona Valley. Habitat for the California red-legged frog exists within the Castaic/Santa Clarita/Agua Dulce, Acton and Lake Hughes/Gorman/West of Lancaster subareas.

Southern mountain yellow-legged frog is listed as endangered pursuant to the Federal ESA and CESA, as well as a SSC by CDFW, and a sensitive species by the U.S. Forest Service. Critical habitat has been designated for this species by the USFWS. There is less than one acre of critical habitat for southern Mountain yellow-legged frog within a parcel in the East San Gabriel Mountains subarea. The southern mountain yellow-legged frog is a medium-sized frog, without distinct dorsolateral folds. The hind legs and below are a pale orange to yellow. Generally found at higher elevations, southern mountain yellow-legged frogs are diurnal, and found near the water in rocky streams in narrow canyons and in the chaparral belt. The proposed initiative study area is within the known historic range of this species. Recent CNDDDB records in the San Gabriel Mountains are located upstream from parcels within the proposed initiative. Habitat for the southern mountain yellow-legged frog exists within the Lake Los Angeles/ Llano/ Valyermo/Littlerock and East San Gabriel Mountains subareas.

Tehachapi slender salamander is listed as threatened pursuant to CESA. No critical habitat has been designated for this species by the USFWS. Habitats are usually those that contain loamy soils, or woodland or hardwood communities capable of producing organic debris to provide the required cover of this species, such as blue oak and gray pine-oak woodlands. The Tehachapi slender salamander is relatively large compared to other slender salamanders, with a broad head, long leads, and broad toes. The proposed initiative study area is within the known historic range of this species. The closest CNDDDB records of Tehachapi slender salamanders to the proposed initiative are located approximately five miles to the north of parcels near the intersection of Kern-Los Angeles county border and Interstate 5. Habitat for the Tehachapi slender salamander is found within the Castaic/Santa Clarita/Agua Dulce and Lake Hughes/Gorman/West of Lancaster subareas.

Reptile Species

Desert tortoise is listed as threatened pursuant to the ESA and CESA. There are 14,530 acres of critical habitat for desert tortoise within parcels in the Antelope Valley Northeast subarea. Typical vegetation used by the desert tortoise throughout their geographic range includes Mojave Creosote Bush Scrub, Joshua Tree Woodland, and Joshua Tree Woodland/Juniper Woodland. The proposed initiative study area is within the known historic range of this species. Habitat for the desert tortoise is found within the Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/ Valyermo/ Littlerock, Antelope Valley Northeast and Lancaster Northeast subareas; however, areas west of Lancaster/Palmdale are less suitable given much of the area is now dominated by nonnative grasslands. Critical habitat has been designated for this species by the USFWS.

Avian Species

Bald eagle is listed as endangered pursuant to CESA. The bald eagle has been delisted under the Federal ESA. Bald eagles continue to be protected from “take” pursuant to BGEPA, and are a fully protected species in the State of California. As this species has been delisted, no critical habitat is designated for this species. The proposed initiative study area is within the known historic range of this species. Habitat is found within the vicinity of the Castaic/Santa Clarita/Agua Dulce, Lake Hughes/Gorman/West of Lancaster, and East San Gabriel Mountains subareas. This species typically forages over and is found near open water bodies such as lakes and reservoirs. This species winters along Castaic Reservoir, Quail Lake, and Lake Elizabeth. A pair of bald eagles was recently reported to be nesting adjacent to the San Gabriel Reservoir in the East San Gabriel Mountains subarea.

California condor is listed as endangered pursuant to the Federal ESA and CESA. Critical habitat has been designated for this species by the USFWS; however, no critical habitat for the California condor exists within 500 feet of the proposed initiative subarea parcels. California condors are the largest birds in North America, and are scavengers. California condors forage in open grasslands, and nest on cliffs. They are found in central and southern California in the coastal, transverse, and southern Sierra Nevada ranges. The proposed initiative study area is within the known historic range of this species. Foraging habitat is found within the vicinity of the Castaic/Santa Clarita/Agua Dulce and Lake Hughes/Gorman/West of Lancaster subareas, especially within the Sierra Pelona Mountains. These subareas are located within the historic range for this species. More likely, any observations of this species in the subareas will be of individuals moving through the area as they disperse between populations in Sespe Condor Preserve and the Tehachapi Mountains.

Coastal California gnatcatcher is listed as threatened pursuant to the Federal ESA and an SSC by CDFW. There are 1,465 acres of critical habitat for coastal California gnatcatcher within parcels in the Castaic/Santa Clarita/Agua Dulce subarea. This species depends on coastal scrub habitat found along the slopes of the San Gabriel Mountains. The proposed initiative study area is within the known historic range of this species. This species has recently been seen in Santa Clarita Valley within Placerita Canyon. Habitat is found within the Castaic/Santa Clarita/Agua Dulce, Lake Hughes/Gorman/West of Lancaster, and East San Gabriel Mountains subareas, but only Placerita Canyon and portions of the Santa Susana Mountains are highly suitable habitat. Critical habitat has been designated for this species by the USFWS.

Least Bell's vireo is listed as endangered pursuant to the Federal ESA and CESA. Critical habitat has been designated for this species by the USFWS; however, no critical habitat for the least Bell's vireo exists within 500 feet of the proposed initiative subarea parcels. Least Bell's vireos are small songbirds that are a drab gray to green. This species needs riparian areas with dense understory. The proposed initiative study area is within the known historic range of this species. Habitat is found within the Castaic/Santa Clarita/Agua Dulce, Acton, Lake Hughes/Gorman/West of Lancaster, and East San Gabriel Mountains subareas. More specifically, suitable habitat may be provided by riparian habitats associated with the Santa Clara and San Gabriel Rivers, and tributaries with a wide riparian band comprised of willows and cottonwoods.

Southwestern willow flycatcher is listed as endangered pursuant to the Federal ESA and CESA. Critical habitat has been designated for this species by the USFWS; however, no critical habitat for the Southwestern willow flycatcher exists within 500 feet of the proposed initiative subarea parcels. Southwestern willow flycatchers are small flycatchers with drab coloration. They are found in wet brushy areas in riparian habitat with a moderate-dense understory. The proposed initiative

study area is within the known historic range of this species. Generally, there are few records of recent breeding of southwestern willow flycatcher in the Santa Clara River watershed. Habitat is found within the Castaic/Santa Clarita/Agua Dulce, Acton, and East San Gabriel Mountains subareas. More specifically, this species would most likely occur within areas of a broad riparian forest dominated by cottonwood located within San Fransquito Canyon and Soledad Canyon; however, the species could be found nearly anywhere along the Santa Clara River, San Gabriel River, and tributaries.

Swainson's hawk is listed as threatened pursuant to CESA. No critical habitat has been designated for this species by the USFWS. Swainson's hawks are known to migrate through the Antelope Valley and the surrounding areas in Southern California. In addition, a handful of Swainson's hawks nest in the Antelope Valley. The proposed initiative study area is within the known historic range of this species. Habitat is found within the Castaic/Santa Clarita/Agua Dulce, Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/ Llano/Valyermo/Littlerock, Antelope Valley Northeast and Lancaster Northeast subareas; however, recent breeding has only been documented within the proposed initiative subareas located within the Mojave Desert, usually near agricultural areas where planted trees serve as nest sites.

Tricolored blackbird is a candidate for listing pursuant to CESA. No critical habitat has been designated for this species by the USFWS. Tricolored blackbirds occur in grasslands and agricultural areas and have been experiencing a drastic population decline. As a result, CDFW is currently reviewing a petition to list tricolored blackbird as State endangered. Therefore, this species is currently treated as all other listed species. The proposed initiative study area is within the known historic range of this species. Habitat is found within the Castaic/Santa Clarita/Agua Dulce, Acton, Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/Valyermo/Littlerock, and Lancaster Northeast subareas; however, recent breeding has only been documented within the Lake Hughes/Gorman/West of Lancaster subarea particularly at Holiday Lake which is considered the most important tricolored blackbird breeding site in Los Angeles County.

Mammals

Mohave ground squirrel is listed as threatened pursuant to CESA. No critical habitat has been designated for this species by the USFWS. Mohave ground squirrel is found in open desert scrub, alkali scrub, and Joshua tree woodland habitats. It is also known to feed in annual grasslands. The range of the Mohave ground squirrel is restricted to the Mojave Desert where it prefers sandy to gravelly soils and avoids rocky areas. The Mohave ground squirrel usually burrows at the base of shrubs for cover and uses its burrows as nests. The proposed initiative study area is within the known historic range of this species. Habitat is found within the Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/Valyermo/Littlerock, Antelope Valley Northeast and Lancaster Northeast subareas. Numerous records of Mohave ground squirrel exist within or in the vicinity of the proposed initiative subareas located within the Mojave Desert.

Nelson's antelope squirrel is listed as threatened pursuant to CESA. Nelson's antelope squirrel is found in the western San Joaquin Valley in chenopod scrub habitat from 200 to 1,200 feet in elevation. Nelson's antelope squirrel is typically found on dry, sparsely vegetated loam soils where it will either dig its own burrows or use old kangaroo rat burrows. This species requires widely scattered shrubs, forbs, and grasses in its habitat and is often found in broken terrain with gullies and washes. The proposed initiative study area is within the known historic range of this species. Habitat is found within the Lake Los Angeles/Llano/Valyermo/Littlerock, Antelope Valley Northeast

and Lancaster Northeast subareas. The most recent record of Nelson's antelope squirrel is south of Highway 18 approximately six miles east of Llano in the Mojave Desert within the Lake Los Angeles/Llano/Valyermo/Littlerock subarea. No critical habitat has been designated for this species by the USFWS.

San Bernardino kangaroo rat is listed as endangered pursuant to the Federal ESA and is a California SSC. Critical habitat has been designated for this species by the USFWS; however, no critical habitat for the San Bernardino kangaroo rat exists within 500 feet of the proposed initiative subarea parcels. The San Bernardino kangaroo rat is found in coastal scrub habitat within alluvial scrub vegetation on sandy loam substrates. This species requires early to intermediate seral stages of coastal scrub habitat. The proposed initiative study area is within the known historic range of this species. Habitat is found within the Lake Los Angeles/Llano/Valyermo/Littlerock, Antelope Valley Northeast and Lancaster Northeast subareas. There are two recent records of San Bernardino Kangaroo Rat within the vicinity of the parcels affected by the proposed initiative. Both records are within the Lake Los Angeles/Llano/Valyermo/Littlerock subarea in the Mojave Desert within the vicinity of Highway 18.

Townsend's Big Eared Bat is listed as a candidate threatened species pursuant to CESA and is a California SSC. No critical habitat has been designated for this species by the USFWS. Habitat for Townsend's big-eared bat ranges throughout most of California in a wide variety of vegetation communities including forest, chaparral, grassland, and scrub habits, but is most common within mesic sites. The proposed initiative study area is within the known historic range of this species. The Townsend's big-eared bat will roost in open habitats and hang from walls and ceilings of buildings. This species of bat is highly sensitive to human roost disturbance and will often abandon a roosting site once it has been discovered by humans. Habitat is found within the Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/Valyermo/Littlerock, Antelope Valley Northeast and Lancaster Northeast subareas. There are five records of Townsend's big-eared bat within the vicinity of parcels affected by the proposed initiative.

Fully Protected and Sensitive Species

A total of 75 potentially present species that are considered sensitive or rare in the State of California have the potential to be present in the proposed initiative study area (Table 5.1.1-4, *Total Number of Rare Plants and Sensitive Wildlife Species with the Potential to Occur in Each Subarea*; see Figure 5.1.1-3, *Other Sensitive Plant Species with the Potential to Occur within the Proposed Initiative*; and Figure 5.1.1-4, *Other Sensitive Wildlife Species with the Potential to Occur within the Proposed Initiative*, at the end of this section). This includes: 41 plants, two fish, two amphibians, five reptiles, nine birds, and 16 mammals. There are 41 rare plants and 34 sensitive animals potentially present in the proposed initiative study area. The number of rare plants and sensitive wildlife species within a given subarea ranges from 12 to 49.

**TABLE 5.1.1-4
TOTAL NUMBER OF RARE PLANTS AND SENSITIVE WILDLIFE SPECIES WITH THE
POTENTIAL TO OCCUR IN EACH SUBAREA**

Number of Potentially Present Rare Plants and Sensitive Wildlife Species	C	A	LH	LL	AV	LN	SG
Plants	16	12	16	14	4	6	27
Fish	1	1	—	—	—	—	2
Amphibians	2	1	1	—	—	—	—
Reptiles	4	4	4	3	—	1	4
Birds	7	6	8	5	2	3	3
Mammals	14	10	15	12	6	7	13
TOTAL*	44	10	44	34	12	17	49

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains.

NOTE: *Each species may occur in more than one subarea; therefore, the total is not necessarily the sum of the data from each subarea.

Each of the 75 rare plant and sensitive wildlife species with the potential to be present in the proposed initiative subareas is discussed in detail below (Table 5.1.1-5, *Rare Plants and Sensitive Wildlife Species with the Potential to Occur within the Proposed Initiative Area*).

**TABLE 5.1.1-5
RARE PLANTS AND SENSITIVE WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROPOSED INITIATIVE AREA**

Species	Status	Habitat	Potential to Occur within the Proposed Initiative Area							
			C	A	IH	LL	AV	LN	SG	
Plants										
alkali mariposa-lily (<i>Calochortus striatus</i>)	CRPR 1B.2	Chaparral, Chenopod scrub, Desert wash, Meadow & seep, Mojavean desert scrub, Wetland. Alkaline meadows and ephemeral washes. 90-1595 m.			X	X	X	X	X	X
Baja navaretia (<i>Navaretia peninsularis</i>)	CRPR 1B.2	Chaparral, Lower montane coniferous forest. Wet areas in open forest. 1500-2425 m.	X		X					X
Big Bear Valley woollypod (<i>Astragalus leucolobus</i>)	CRPR 1B.2	Lower montane coniferous forest, pebble (pavement) plain, pinyon and juniper woodland, upper montane coniferous forest. Occurs in rocky soils. 1,100 – 2885 m.								X
California satintail (<i>Imperata brevifolia</i>)	CRPR 2B.1	Coastal scrub, chaparral, riparian scrub, Mojavean scrub, meadows and seeps (alkali), riparian scrub. Mesic sites, alkali seeps, riparian areas. 0-1215 m.	X	X	X					X
Clokey's cryptantha (<i>Cryptantha clokeyi</i>)	CRPR 1B.2	Mojavean desert scrub. Sandy or gravelly soils. One site: 850m.	X	X	X	X				
Davidson's bush-mallow (<i>Malacothamnus davidsonii</i>)	CRPR 1B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland. Sandy washes. 185-855 m.	X	X	X	X			X	X
desert cymopterus (<i>Cymopterus deserticola</i>)	CRPR 1B.2	Joshua tree woodland, Mojavean desert scrub. Most occurrences located near or in Edwards AFB. On fine to coarse, loose, sandy soil of flats in old dune areas with well-drained sand. 625-910m.			X	X	X	X	X	
Ewan's cinquefoil (<i>Drymocalis cuneifolia</i> var. <i>ewanii</i>)	CRPR 1B.3	Lower montane coniferous forest (near seeps and springs), meadows and seeps. Occurs between 1,900 and 2,400 meters.								X
Great's aster (<i>Symphytichum greatae</i>)	CRPR 1B.3	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland. Mesic canyons. 300-2010 m.	X	X						X
grey-leaved violet (<i>Viola pinetorum</i> var. <i>grisea</i>)	CRPR 1B.3	Meadows and seeps, subalpine coniferous forest, upper montane coniferous forest. Occurs between 1,500 and 3,400 meters.								X
Hall's monardella (<i>Monardella macrantha</i> ssp. <i>hallii</i>)	CRPR 1B.3	Broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Occurs between 730 and 2,195 m.								X
Kern Canyon clarkia (<i>Clarkia xantiana</i> ssp. <i>parviflora</i>)	CRPR 4.3	Cismontane woodland, Great Basin scrub. Dry slopes. 800-3620 m.	X	X	X	X				
late-flowered mariposa-lily (<i>Calochortus fimbriatus</i>)	CRPR 1B.3	Chaparral, Cismontane woodland, Riparian woodland, Ultramafic. Dry, open coastal woodland, chaparral; on serpentine. 275-1905 m.	X							
lemon lily (<i>Lilium parryi</i>)	CRPR 1B.2	Lower montane coniferous forest, Meadow & seep, Riparian forest, Upper montane coniferous forest, Wetland. Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows & seeps. 1220-2745 m.					X			X
Lincoln rockcress (<i>Boechea lincolnensis</i>)	CRPR 2B.3	Chenopod scrub, Limestone, Mojavean desert scrub. On limestone. 1100-2075m.			X					
Mason's neststraw (<i>Stylocline masonii</i>)	CRPR 1B.1	Chenopod scrub, Desert wash, Pinyon & juniper woodlands. Sandy washes. 100-1200 m.	X	X						
Newhall sunflower (<i>Helianthus inexpectatus</i>)	CRPR 1B.1	Marsh & swamp, Meadow & seep, wetland, riparian woodland. 305 m.	X							
Ojai navaretia (<i>Navaretia ojaiensis</i>)	CRPR 1B.1	Chaparral, Coastal scrub, Valley & foothill grassland. Openings in shrublands or grasslands. 275-620 m.	X	X						
Palmer's mariposa-lily (<i>Calochortus palmeri</i> var. <i>palmeri</i>)	CRPR 1B.2	Chaparral, Lower montane coniferous forest, Meadow & seep. Vernal moist places in yellow-pine forest, chaparral. 1000-2390 m.			X	X				X
Peirson's lupine (<i>Lupinus peirsonii</i>)	CRPR 1B.3	Joshua tree woodland, lower montane coniferous forest, pinyon and juniper woodland, lower montane coniferous forest, pinyon and								X

**TABLE 5.1.1-5
RARE PLANTS AND SENSITIVE WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROPOSED INITIATIVE, *Continued***

Species	Status	Habitat	Potential to Occur within the Proposed Initiative Area							
			C	A	LH	LL	AV	LN	SG	
		juniper woodland, upper montane coniferous forest. Occurs in gravelly or rocky soil between 1,000 and 2,500 m.								
Peirson's morning-glory (<i>Calystegia peirsonii</i>)	CRPR 4.2	Chaparral, Chenopod scrub, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley & foothill grassland. Often in disturbed areas or along roadsides or in grassy, open areas. 30-1500 m.	X	X	X	X				
Piute Mountains navarretia (<i>Navarretia setiloba</i>)	CRPR 1B.1	Cismontane woodland, Pinyon & juniper woodlands, Valley & foothill grassland. Red clay soils, other clay soils (?), or on gravelly loam. 285-2100 m.	X	X	X					
Plummer's mariposa-lily (<i>Calochortus plummerae</i>)	CRPR 4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley & foothill grassland. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 100-1700 m.	X	X						X
Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	CRPR 4.3	Chaparral and coastal scrub habitat. Occurs between 1 and 885 m.								X
Rock Creek broomrape (<i>Orobanche valida</i> ssp. <i>valida</i>)	CRPR 1B.2	Chaparral, Pinyon & juniper woodlands. On slopes of loose decomposed granite; parasitic on various chaparral shrubs. 1705-1820m.					X			X
round-leaved filaree (<i>California macrophylla</i>)	CRPR 1B.1	Cismontane woodland, Valley & foothill grassland. Clay soils. 15-1200 m.	X		X					
Rosamond eriastrum (<i>Eriastrum rosamondense</i>)	CRPR 1B.1	Chenopod scrub and vernal pool habitat. Occurs in alkaline hummocks often in sandy soils. 700 to 715 m.								X
sagebrush loeflingia (<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>)	CRPR 2B.2	Desert dunes, Great Basin scrub, Sonoran desert scrub. Sandy flats and dunes. Sandy areas around clay slicks w/Sarcobatus, Atriplex, Tetradymia, etc. 700-1615 m.			X	X	X	X		
San Antonio milk-vetch (<i>Astragalus lentiginosus</i> var. <i>antonius</i>)	CRPR 1B.3	Lower and upper montane coniferous forests, occurs between 1,500 and 2,600 m.								X
San Bernardino aster (<i>Symphoricarpos defoliatus</i>)	CRPR 1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Valley & foothill grassland, Wetland. Vernal mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040m.			X					X
San Gabriel bedstraw (<i>Galium grande</i>)	CRPR 1B.2	Broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest. Occurs between 425 and 1,500 m.								X
San Gabriel linanthus (<i>Linanthus concinnus</i>)	CRPR 1B.2	Chaparral, lower montane coniferous forest, upper montane coniferous forest. Occurs in rocky openings between 1,520 and 2,800 m.				X				X
San Gabriel manzanita (<i>Arctostaphylos glandulosa</i> ssp. <i>gabrielensis</i>)	CRPR 1B.2	Chaparral habitat in rocky soil. Occurs between 595 and 1,500 m.								X
San Gabriel Mountains dudleya (<i>Dudleya densiflora</i>)	CRPR 1B.1	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland. Found in granitic soils on cliffs and canyon walls. Between 244 and 610 m.								X
short-jointed beavertail (<i>Opuntia basilaris</i> var. <i>brachyclada</i>)	CRPR 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, Pinyon & juniper woodlands, Riparian woodland. Sandy soil or coarse, granitic loam. 425-1800 m.	X	X	X	X				X
slender mariposa-lily (<i>Calochortus clavatus</i> var. <i>gracilis</i>)	CRPR 1B.2	Chaparral, Coastal scrub, Valley & foothill grassland. Shaded foothill canyons; often on grassy slopes within other habitat. 320-1000 m.	X	X	X	X				X
Sonoran maiden fern (<i>Thelypteris puberula</i> var. <i>sonorensis</i>)	CRPR 2B.2	Meadow and seep, streams, wetland. Between 50 and 610 meters.								X
southern alpine buckwheat (<i>Eriogonum kennedyi</i> var. <i>alpigenum</i>)	CRPR 1B.3	Alpine boulder and rock field, subalpine coniferous forest. Found in granitic and gravelly soils. Between 2,600 and 3,500 m.								X
western sedge (<i>Carex occidentalis</i>)	CRPR 2B.3	Lower montane coniferous forests, meadows and seeps. Between 1,645 and 3,135 m.								X
white pygmy-poppy (<i>Canbya candida</i>)	CRPR 4.2	Joshua tree woodland, Mojavean desert scrub, Pinyon & juniper woodlands. Sandy places. 600-1460 m.				X	X	X		
woolly mountain-parsley (<i>Oreonana vestita</i>)	CRPR 1B.3	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest; found in gravel or talus; between 1,615 and 3,500 m.								X

TABLE 5.1.1-5
RARE PLANTS AND SENSITIVE WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROPOSED INITIATIVE, *Continued*

Species	Status	Habitat	Potential to Occur within the Proposed Initiative Area						
			C	A	LH	LL	AV	LN	SG
Fish									
arroyo chub (<i>Gila orcuttii</i>)	SSC/FS	Aquatic; South coast flowing waters. Native to streams from Malibu Cr to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mohave & San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation & associated invertebrates.	X	X					X
Santa Ana speckled dace (<i>Rhinichthys osculus</i> ssp. 3)	SSC	Aquatic, south coast flowing waters; freshwater creeks, shallow gravel and cobble riffles.							X
Amphibians									
western spadefoot (<i>Spea hammondi</i>)	SSC	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland. Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	X	X					
yellow-blotched salamander (<i>Ensatina eschscholtzii croceator</i>)	SSC/FS	Broadleaved upland forest, Chaparral. Forests and well-shaded canyons, as well as oak woodlands and old chaparral. Needs surface objects, such as logs, boards, and rocks. Also needs old rodent burrows or other underground retreats.	X		X				
Reptiles									
California mountain kingsnake (San Bernardino population) (<i>Lampropeltis zonata (parvirubra)</i>)	SSC	Coniferous forest, oak-pine woodland, riparian woodland, chaparral, manzanita, coastal sage scrub. Often found near streams and rock outcrops.							X
coast horned lizard (<i>Phrynosoma blainvillii</i>)	SSC	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinyon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland. Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, & abundant supply of ants & other insects.	X	X	X	X			X
silvery legless lizard (<i>Anniella pulchra pulchra</i>)	SSC/FS	Chaparral, Coastal dunes, Coastal scrub. Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	X	X	X	X		X	
two-striped garter snake (<i>Thamnophis hammondi</i>)	SSC	Marsh & swamp, Riparian scrub, Riparian woodland, Wetland. Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	X	X	X	X			X
western pond turtle (<i>Emys marmorata</i>)	SSC/FS	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland. A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	X	X	X				X
Birds									
American peregrine falcon (<i>Falco peregrinus anatum</i>)	FDEL/ FP nesting	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	X	X	X	X			X
black swift (<i>Cypseloides niger</i>)	SSC	Coastal bluffs, canyons with waterfalls; aerial; forages over forests and in open areas; may forage far from nesting sites; nests behind or next to waterfalls and wet cliffs, on sea cliffs and in sea caves, and occasionally in limestone caves; nests in dark inaccessible sites with unobstructed flight path; nest is a cup-like structure of mud, mosses and algae.							X
burrowing owl (<i>Athene cucularia</i>)	SSC	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland. Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	X	X	X	X	X	X	
golden eagle (<i>Aquila chrysaetos</i>)	BGEPA/FP	Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinyon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland. Rolling foothills, mountain areas, sage-juniper flats, & desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	X	X	X	X			
grasshopper sparrow (<i>Ammodramus savannarum</i>)	SSC	Valley & foothill grassland. Dense grasslands on rolling hills, lowland plains, in valleys & on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs & scattered shrubs. Loosely colonial when nesting.	X		X				
loggerhead shrike (<i>Lanius ludovicianus</i>)	SSC	Broadleaved upland forest, Desert wash, Joshua tree woodland, Mojavean desert scrub, Pinon & juniper woodlands, Riparian woodland, Sonoran desert scrub. Broken woodlands, savannah, pinyon-juniper, Joshua tree, & riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	X	X	X	X	X	X	X
mountain plover (<i>Charadrius montanus</i>)	SSC	Chenopod scrub, Valley & foothill grassland. Short grasslands, freshly plowed fields, newly sprouting grain fields, & sometimes sod farms. Short vegetation, bare ground & flat topography. Prefers grazed areas & areas with burrowing rodents.			X	X		X	

TABLE 5.1.1-5
RARE PLANTS AND SENSITIVE WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROPOSED INITIATIVE, *Continued*

Species	Status	Habitat	Potential to Occur within the Proposed Initiative Area						
			C	A	LH	LL	AV	LN	SG
white-tailed kite (<i>Elanus leucurus</i>)	FP	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland. Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	X	X	X				
yellow warbler (<i>Dendroica petechia brewsteri</i>)	SSC nesting	Riparian forest, Riparian scrub, Riparian woodland. Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	X	X	X				
Mammals									
American badger (<i>Taxidea taxus</i>)	SSC	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, lone formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Old growth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils & open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	X	X	X	X	X	X	X
desert bighorn sheep (<i>Ovis canadensis nelsoni</i>)	FP	Alpine, alpine dwarf scrub, chaparral, chenopod scrub, great basin scrub, Mojavean desert scrub, pinyon and juniper woodlands, riparian woodland, Sonoran desert scrub. This species prefers steep and rocky habitat on or near mountainous terrain above the desert floor.							X
fringed myotis (<i>Myotis thysanodes</i>)	WBWG:H, FS	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer. Uses caves, mines, buildings or crevices for maternity colonies and roosts.	X	X	X	X	X	X	X
hoary bat (<i>Lasiurus cinereus</i>)	WBWG:M	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest. Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water. Ranges throughout most of California.	X	X	X	X			X
long-eared myotis (<i>Myotis evotis</i>)	WBWG:M	Found in all brush, woodland & forest habitats from sea level to about 9000 ft. prefers coniferous woodlands & forests. Also found in grassland/herbaceous and shrubland/chaparral habitats. Nursery colonies in buildings, crevices, spaces under bark, & snags. Also roosts in buildings, caves, hollow trees, and mines. Caves used primarily as night roosts.	X	X	X	X			X
pallid bat (<i>Antrozous pallidus</i>)	SSC/ WBWG:H, FS	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland. Deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	X	X	X	X			X
pallid San Diego pocket mouse (<i>Chaetodipus fallax pallidus</i>)	SSC	Desert wash, Pinyon & juniper woodlands, Sonoran desert scrub. Desert border areas in eastern San Diego Co. in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Sandy herbaceous areas, usually in association with rocks or coarse gravel.	X	X	X	X	X	X	X
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	SSC	Coastal scrub. Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	X		X				X
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	SSC	Coastal scrub. Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops & rocky cliffs & slopes.	X		X				X
silver-haired bat (<i>Lasionycteris noctivagans</i>)	WBWG:M	Lower montane coniferous forest, old growth, riparian forest. Primarily a coastal & montane forest dweller feeding over streams, ponds & open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes & rarely under rocks. Primarily forested areas adjacent to lakes, ponds, or streams, including areas that have been altered by humans. Summer roosts and nursery sites are in tree foliage, cavities, or under loose bark, sometimes in buildings.	X	X	X	X			X
southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	SSC	Chenopod scrub. Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions & orthopteran insects.	X		X	X			
spotted bat (<i>Euderma maculatum</i>)	SSC/ WBWG:M	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	X		X	X	X	X	
Tehachapi pocket mouse (<i>Perognathus alticola inexpectatus</i>)	SSC/FS	Chaparral, Joshua tree woodland, Valley & foothill grassland. Arid annual grassland & desert shrub communities, but also taken in fallow grain field & in Russian thistle. Burrows for cover & nesting. Aestivates and hibernates during extreme weather. Forages on open ground & under shrubs.			X				

**TABLE 5.1.1-5
RARE PLANTS AND SENSITIVE WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROPOSED INITIATIVE, *Continued***

Species	Status	Habitat	Potential to Occur within the Proposed Initiative Area						
			C	A	LH	LL	AV	LN	SG
western mastiff bat (<i>Eumops perotis californicus</i>)	SSC/ WBWG:H	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland. Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral etc. Roosts in crevices in cliff faces, high buildings, trees & tunnels. This species can utilize a variety of habitat types including chaparral, oak woodland, pine forests, agricultural areas and desert washes; roosts primarily in vertical rock crevices on cliffs; common in open habitats when foraging.	X	X	X	X	X	X	X
western small-footed myotis (<i>Myotis ciliolabrum</i>)	WBWG:M	Bare rock/talus/scree, cliff, grassland/herbaceous, shrubland/chaparral, conifer woodland, mixed woodland. Also common in arid desert, badland, and semiarid habitats. Roosts primarily in caves and trees, and is extremely sensitive to the disturbance of roosting sites; will abandon the maternity roost if disturbed.	X	X	X	X	X	X	X
Yuma myotis (<i>Myotis yumanensis</i>)	WBWG:LM	Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest. Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	X	X	X	X		X	X
TOTAL			44	34	44	34	12	17	49

KEY: SSC = California species of special concern; BGEPA = Bald and Golden Eagle Protection Act; FDEL = federal delisted species; CRPR = California Rare Plant Rank; FS = Forest Service Sensitive; SDEL = State delisted species; CNDDDB = California Natural Diversity Database; CNPS = California Native Plant Society. C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains.

NOTE:

Western Bat Working Group categories:

WBWG:H = High Priority, WBWG:M = Medium Priority, WBWG:LM = Low-Medium Priority

CNPS categories:

California Rare Plant Rank: List 1B: Rare, threatened, or endangered in California and elsewhere (0.1: Seriously endangered in California, 0.2: Fairly endangered in California, 0.3: Not very endangered in California)

List 2: Rare, threatened, or endangered in California, but more common elsewhere (0.2: Fairly endangered in California)

List 3: Review list, more information required; List 4: Limited distribution (Watch List) (0.1: Seriously endangered in California, 0.2: Fairly Endangered in California, 0.3: Not very endangered in California).

Plant Species

There are 41 rare plant species with historic ranges and records present within the proposed initiative study area. Seven of these species have a CNPS ranking of 1B.1, indicating that they are rare, threatened, or endangered in California and elsewhere and seriously threatened in California with over 80 percent of occurrences of the plant threatened and a high degree and immediacy of threat: Mason's neststraw, Newhall sunflower, Ojai navarretia, Piutte Mountains navarretia, round-leaved filaree, Rosamond eriastrum, and San Gabriel Mountains dudleya.

Fifteen of these species have a CNPS ranking of 1B.2 indicating that they are rare, threatened, or endangered in California and elsewhere and moderately threatened in California with 20 to 80 percent occurrences threatened and a moderate degree and immediacy of threat: alkalai mariposa-lily, baja navarretia, Big Bear Valley woollypod, Clokey's cryptantha, Davidson's bush-mallow, desert cympterus, lemon lily, Palmer's mariposa-lily, rock creek broomrape, San Bernardino aster, San Gabriel bedstraw, San Gabriel linanthus, San Gabriel manzanita, short-jointed beavertail, and slender mariposa lily.

Nine of these species have a CNPS ranking of 1B.3 indicating that they are rare, threatened, or endangered in California and elsewhere and not very threatened in California with less than 20 percent of occurrences threatened and a low degree and immediacy of threat or no current threats known: Ewan's cinquefoil, Greata's Aster, grey-leaved violet, Hall's monardella, late-flowered mariposa-lily, Peirson's lupine, San Antonio milk-vetch, southern alpine buckwheat, and woolly mountain-parsley.

One species, California satintail, has a CNPS ranking of 2B.1, indicating that it is rare, threatened, or endangered in California but more common elsewhere and is seriously threatened in California with over 80 percent of occurrences of the plant threatened and a high degree and immediacy of threat. Two species, sagebrush loeflingia and Sonoran maiden fern, have a CNPS ranking of 2B.2, indicating that they are rare, threatened, or endangered in California but more common elsewhere and are moderately threatened in California with 20 to 80 percent occurrences threatened and a moderate degree and immediacy of threat. Two species, Lincoln rockcress and western sedge, have a CNPS ranking of 2B.3, indicating that they are rare, threatened, or endangered in California but more common elsewhere and not very threatened in California with less than 20 percent of occurrences threatened and a low degree and immediacy of threat or no current threats known.

Three species, Peirson's morning-glory, Plummer's mariposa-lily, white pygmy-poppy, have a CNPS ranking of 4.2 indicating that they are Watch List species with limited distribution that are moderately threatened in California with 20 to 80 percent occurrences threatened and a moderate degree and immediacy of threat. Two species, Kern Canyon clarkia and Robinson's pepper-grass, have a CNPS ranking of 4.3 indicating that they are a Watch List species with limited distribution and are and not very threatened in California with less than 20 percent of occurrences threatened and a low degree and immediacy of threat or no current threats known.

Of these species, 66 percent are potentially present in the East San Gabriel Mountains subarea, 39 percent are potentially present in the Lake Hughes/Gorman/West of Lancaster subarea, 39 percent are potentially present in the Castaic/Santa Clarita/Agua Dulce subarea, 34 percent are potentially present in the Lake Los Angeles/Llano/Valyermo/Littlerock subarea, 29 percent are potentially present in the Acton subarea, 15 percent are potentially present in the Lancaster Northeast and East San Gabriel Mountains subareas, and 10 percent are potentially present in the Antelope Valley Northeast subarea.

The high percentage of potentially present plant species in the Acton, Lake Hughes/Gorman/West of Lancaster, and Lake Los Angeles/Llano/Valyermo/Littlerock subareas is likely due to the presence of transition areas between mountainous and desert habitats allowing for the diversity of plants and plant community types. In contrast, there is a smaller percentage of potentially present plants in the Lancaster Northeast and Antelope Valley Northeast subareas because desert sensitive plants tend to congregate around alkali areas which are concentrated in small areas in the desert habitats. The high percentage of potentially present plants in the East San Gabriel Mountains subarea is primarily because this subarea covers the broadest area and includes the San Gabriel Mountains, which have a high elevation gradient and are habitat for rare endemic plants. There is a high percentage of potentially present plants in the Castaic/Santa Clarita/Agua Dulce subarea because there is a high number and diversity of plant communities in this subarea and the Santa Clara River and Cruzan Vernal Pools are present in this subarea.

Fish Species

There are two sensitive fish species with historic ranges and records present within the proposed initiative study area: arroyo chub and Santa Ana speckled dace. Both species are California SSC and USFWS sensitive species. The arroyo chub is a small fish that is found in south coast flowing waters in southern California. It is found in small to medium rivers, creeks, and intermittent streams. The arroyo chub only has the potential to be present in the Castaic/Santa Clarita/Agua Dulce, Acton, and East San Gabriel Mountains subareas because these subareas contain the only habitat for this species, the Santa Clara River and the San Gabriel River. The Santa Ana speckled dace is also small fish found in south coast flowing waters and is also found in freshwater creeks, particularly those with shallow gravel and cobble riffles. The range of the Santa Ana speckled dace is limited the Los Angeles, Santa Ana, and San Gabriel Rivers. The Santa Ana speckled dace only has the potential to be present in the East San Gabriel Mountains subarea because this subarea contains the only habitat in the study area for this species, the San Gabriel River.

Amphibian Species

There are two sensitive amphibian species with historic ranges and records present within the proposed initiative study area: western spadefoot and yellow-blotched salamander. Both species are California SSC, and the yellow-blotched salamander is also a USFWS sensitive species. The western spadefoot only has the potential to be present within the Castaic/Santa Clarita/Agua Dulce and Acton subareas. Historical records for the western spadefoot within the proposed initiative study area occur only within the vicinity of these subareas and these subareas contain the only habitat for western spadefoot in the proposed initiative study area within the Santa Clara River. Historical records for the yellow-blotched salamander in the proposed initiative study area only occur within the vicinity of the Lake Hughes/Gorman/West of Lancaster subarea. However, habitat for this species also occurs within well-shaded canyon areas within the Castaic/Santa Clarita/Agua Dulce subarea.

Reptile Species

There are five sensitive reptile species with historic ranges and records present within the proposed initiative study area: California mountain kingsnake (San Bernardino population), coast horned lizard, silvery legless lizard, two-striped garter snake, and western pond turtle. All of these species are California SSC, and California mountain kingsnake, silvery legless lizard, and western pond turtle are also USFWS sensitive species. None of these species have the potential to be present in

the Antelope Valley Northeast subareas as this subarea does not contain habitat for any of these species, and there are no records of these species in this subarea. Historical records within the proposed initiative study area for the California mountain kingsnake (San Bernardino population) only exist within the East San Gabriel Mountains subarea, as this is the only subarea that is within the historical range for this subspecies.

Three of the five species, coast horned lizard, two-striped garter snake, and western pond turtle, have the potential to be present within the Acton, Castaic/Santa Clarita/Agua Dulce, Lake Hughes/Gorman/West of Lancaster, and East San Gabriel Mountains subareas due to historical records of these species and habitat within the vicinity of these subareas. With the exception of the western pond turtle, these three species also have the potential to be present in the Lake Los Angeles/Llano/Valyermo/Littlerock subarea as a result of habitat and historical records of these species in this subarea. There is no potential for the western pond turtle to be present in the Lake Los Angeles/Llano/Valyermo/Littlerock subarea because this subarea lacks the aquatic habitat typically required by this species. The silvery legless lizard has the potential to be present in the Acton, Castaic/Santa Clarita/Agua Dulce, Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/Valyermo/Littlerock, and Lancaster Northeast subareas as a result of habitat and historical records of this species in these subareas.

Avian Species

There are nine sensitive bird species with historic ranges and records present within the proposed initiative study area. Mountain Plovers generally congregate near agricultural areas. Agricultural areas east and west of Lancaster are especially important overwintering areas for Mountain Plover. As such, mountain plover has the potential to be present within the Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/Valyermo/Littlerock, and Lancaster Northeast subareas. Peregrine Falcons and Golden Eagle can occur anywhere during migration and winter; however, subareas with portions located in the mountains are foraging habitat for both species. Nesting habitat on the proposed initiative parcels is unlikely given the terrain (i.e., lack of cliffs), current level of development, and the availability of better quality nesting habitat within adjacent, remote mountains. As such, these two species are both potentially present within the Acton, Castaic/Santa Clarita/Agua Dulce, Lake Hughes/Gorman/West of Lancaster, and Lake Los Angeles/Llano/Valyermo/Littlerock subareas. The American peregrine falcon is also potentially present in the East San Gabriel Mountains subarea due to the presence of large reservoirs in the subarea as is the black swift, which requires large forests and wet cliffs present in the San Gabriel Mountains. In contrast, loggerhead shrike and burrowing owl can occur almost anywhere within the study area, but the burrowing owl tends to be more abundant in areas with burrowing ground animals. As such, both species are potentially present in all seven subareas, with the exception of burrowing owl which is not present in the East San Gabriel Mountains subarea only. Grasshopper Sparrow is a rare grassland sparrow that could occur within grasslands of the Lake Hughes/Gorman/West of Lancaster and Castaic/Santa Clarita/Agua Dulce subareas but there are scant records in Los Angeles County, although it was documented in 2013 in the Santa Clarita Valley. White-Tailed Kite is similar, but generally needs oak interspersed within grassland; areas that meet this condition are along the southern portions of the Santa Clarita Valley and western portions of Portal Ridge in the Acton, Castaic/Santa Clarita/Agua Dulce, and Lake Hughes/Gorman/West of Lancaster subareas. Yellow Warbler has habitat within the Santa Clara River and tributaries, generally within cottonwoods and large willow trees and are potentially present in the Acton, Castaic/Santa Clarita/Agua Dulce, and Lake Hughes/Gorman/West of Lancaster subareas.

Mammal Species

There are 16 sensitive mammal species with historic ranges and records present within the proposed initiative study area: American badger, desert bighorn sheep, fringed myotis, hoary bat, long-eared myotis, pallid bat, pallid San Diego pocket mouse, San Diego black-tailed jackrabbit, San Diego desert woodrat, silver-haired bat, southern grasshopper mouse, Tehachapi pocket mouse, western mastiff bat, western small-footed myotis, and yuma myotis. The American badger, pallid bat, pallid San Diego pocket mouse, San Diego black-tailed jackrabbit, San Diego desert woodrat, southern grasshopper mouse, spotted bat, Tehachapi pocket mouse, and western mastiff bat are all California Species of Special Concern. The desert bighorn sheep is a California Fully Protected Species. All of the bat species have sensitivity rankings designated by the Western Bat Working Group.

Of these 16 species, 15 species are potentially present in the Lake Hughes/Gorman/West of Lancaster subarea, 14 species are potentially present in the Castaic/Santa Clarita/Agua Dulce subarea, 13 species are potentially present in the East San Gabriel Mountains subarea, 12 species are potentially present in the Lake Los Angeles/Llano/Valyermo/Littlerock subarea, 10 species are potentially present in the Acton subarea, seven species are potentially present in the Lancaster Northeast subarea, and six species are potentially present in the Antelope Valley Northeast subarea.

With the exception of the desert bighorn sheep and Tehachapi pocket mouse, all of these mammal species have the potential to be present within the Castaic/Santa Clarita/Agua Dulce due to the presence of historical records and habitat. The Tehachapi pocket mouse is an isolated subspecies that is only found within the Tehachapi Mountains. The western range of the desert bighorn sheep is limited to the San Gabriel Mountains. In addition, all of the mammal species are potentially present in the Lake Hughes/Gorman/West of Lancaster subarea with the exception of desert bighorn sheep. The only mammal species potentially present within the Antelope Valley Northeast subarea are species that are adapted to and commonly found in arid desert environments.

The high number of potentially present mammal species in the Acton, Lake Hughes/Gorman/West of Lancaster, and Lake Los Angeles/Llano/Valyermo/Littlerock subareas is likely due to the presence of transition areas between mountainous and desert habitats allowing for the diversity of habitat types to support several mammal species. In contrast, there are a smaller number of potentially present mammals in the Lancaster Northeast and Antelope Valley Northeast subareas due to the arid desert environments and limited habitat diversity. The high number of potentially present mammals in the East San Gabriel Mountains subarea is primarily because this subarea covers the broadest area and includes the San Gabriel Mountains which are habitat for rare endemic species. There is a high number of potentially present mammals in the Castaic/Santa Clarita/Agua Dulce subarea because there is a high number and diversity of habitat types in this subarea and the Santa Clara River and Cruzan Vernal Pools are present in this subarea which provide year-round aquatic resources that are essential to the persistence of many mammal species.

Locally Important Species

The proposed initiative study area is within the known historic range for 12 common plant species that are protected under the Desert Native Plant Act (DNPA) and two mammals protected under fur-bearing mammal regulations (Table 5.1.1-6, *Locally Important Species with the Potential to Occur within the Proposed Initiative Area*). Plants protected by the DNPA require coordination with the sheriff or commissioner of the county where harvesting will occur prior to their removal. Authorization of plant removal may also include the requirement to pay county-designated fees. Plants protected by the DNPA are not limited to only subareas within the Mojave Desert as a few of these species also occur in coastal scrub habitats. Fur-bearing mammals protected by the California Code of Regulations Title 14 cannot be taken at any time. The number of locally important species within a given subarea ranges from three to 12.

**TABLE 5.1.1-6
LOCALLY IMPORTANT SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROPOSED INITIATIVE AREA**

Species	Status	Habitat	Potential to Occur within the Proposed Initiative Area						
			C	A	LH	LL	AV	LN	SG
Plants									
Beavertail cactus (<i>Opuntia basilaris</i> var. <i>basilaris</i>)	DNPA	Creosote bush scrub, Joshua tree woodland, chaparral, southern oak woodland, coastal sage scrub, pinyon-juniper woodland, valley grassland.	X	X	X	X	X	X	X
Branched pencil cholla (<i>Cylindropuntia ramosissima</i>)	DNPA	Creosote bush scrub, Joshua Tree woodland.			X	X	X	X	
Buck horn cholla (<i>Cylindropuntia acanthocarpa</i>)	DNPA	Creosote bush scrub, Joshua Tree woodland. < 1,600 m.			X	X	X	X	
Cane cholla (<i>Cylindropuntia californica</i> var. <i>parkeri</i>)	DNPA	Chaparral, Pinyon-juniper woodland. 700-1,900 m.	X	X					
Chaparral yucca (<i>Hesperoyucca whipplei</i>)	DNPA	Chaparral, Coastal Sage Scrub, Creosote Bush Scrub, Joshua Tree Woodland, Pinyon-Juniper Woodland, Yellow Pine Forest.	X	X	X	X			X
Desert holly (<i>Atriplex hymenelyta</i>)	DNPA	Creosote bush scrub.			X	X	X	X	
Honey mesquite (<i>Prosopis glandulosa</i>)	DNPA	Creosote bush scrub, alkali sink.			X	X	X	X	
Joshua Tree (<i>Yucca brevifolia</i>)	DNPA	Joshua tree woodland.			X	X	X	X	
Mojave prickly pear (<i>Opuntia phaeacantha</i>)	DNPA	Joshua Tree woodland, Pinyon-Juniper woodland.			X	X	X	X	
Panamint dudleya (<i>Dudleya saxosa</i>)	DNPA	Creosote Bush Scrub, Pinyon-Juniper Woodland, Chaparral.			X	X	X	X	
Western prickly pear (<i>Opuntia littoralis</i>)	DNPA	Coastal sage scrub.	X	X					
Wiggins' cholla (<i>Cylindropuntia echinocarpa</i>)	DNPA	Creosote bush scrub, Joshua tree woodland, pinyon-juniper woodland.			X	X	X	X	
Mammals									
red fox (<i>Vulpes vulpes</i>)	FBM	Wide range of habitats. Coastal scrub, grasslands, woodlands and forests.	X	X	X	X			X
desert kit fox (<i>Vulpes macrotis macrotis</i>)	FBM	Occur within desert habitats, such as creosote bush scrub.			X	X	X	X	
TOTAL			5	5	12	12	10	10	3

KEY: DNPA = Desert Native Plant Act; FBM = Furbearing Mammal. C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains.

5.1.2 Riparian Communities and State-Designated Sensitive Habitat

Data Sources

Two data sources were used to analyze riparian habitat and other sensitive plant communities: DRECP and CalVeg (see Section 4.0, *Methods*, for a detailed explanation of these data sets). Parcels located within the Mojave Desert have DRECP plant community data available, but parcels south of the Mojave Desert only have CalVeg plant community data available. No overlap exists between the two data sets on any individual parcel; however, a single subarea may be covered by both data sets. The parcels within the Castaic/Santa Clarita/Agua Dulce subarea exist exclusively within the CalVeg data set and parcels within the Antelope Valley Northeast and Lancaster Northeast subareas exist exclusively within the DRECP data set. All other proposed initiative subareas are covered by both data sets to some degree, such that the entirety of the proposed initiative study area was covered by these data sets (see Figure 5.1.2-1, *CalVeg Plant Communities Present within the Proposed Initiative Subareas*; and Figure 5.1.2-2, *DRECP Plant Communities Present within the Proposed Initiative Subareas*, at the end of this section). Communities in both of these data sets were converted to standard plant communities recognized by CDFW (based on *A Manual of California Vegetation*, second edition).³ As such, the analysis of the riparian habitats and sensitive plant communities below is presented for both the DRECP and CalVeg datasets. This allowed for the entirety of the study area to be analyzed for potentially present sensitive plant communities.

Sensitive Plant Communities

Based on the existing data and brief field visits, there are 136 plant community alliances with the *potential* of being present on parcels within the proposed initiative study area (Table 5.1.2-1, *Plant Communities Potentially Present within the Proposed Initiative Area*). This includes 27 woodland/forest alliances, 74 shrubland alliances, and 35 herbaceous alliances. Of the 137 plant community alliances, there are 59 State-designated sensitive habitats, including 55 plant community alliances and four additional alliances that have a sensitive association.

³ Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. Second Edition. Sacramento, CA: California Native Plant Society Press.

**TABLE 5.1.2-1
PLANT COMMUNITIES POTENTIALLY PRESENT WITHIN THE PROPOSED INITIATIVE AREA**

State Rarity Ranking	MCV Plant Community Name	Potential Wetland/Riparian Community	CalVeg Designation	DRECP dominant plants or NVCS groupings	
Woodland Alliances					
S3.2	<i>Fraxinus latifolia</i> Oregon Ash Groves	Yes	White Alder		
	<i>Juglans californica</i> California Walnut Groves	No	California Walnut		
	<i>Populus fremontii</i> Fremont Cottonwood Forest	Yes	Bigcone Douglas-Fir, Fremont Cottonwood, Riparian Mixed Hardwood, Riparian Mixed Shrub, Willow, Willow (Shrub)	Madrean Warm Semi-Desert Wash Woodland/Scrub, <i>Populus fremontii</i>	
	<i>Prosopis glandulosa</i> Mesquite Thicket	Yes		Madrean Warm Semi-Desert Wash Woodland/Scrub, <i>Prosopis glandulosa</i>	
	<i>Pseudotsuga macrocarpa</i> Bigcone Douglas Fir Forest	No	Bigcone Douglas-Fir	<i>Pseudotsuga macrocarpa</i>	
	<i>Salix lucida (lasianдра)</i> Shining Willow Thicket	Yes	Willow		
	<i>Yucca brevifolia</i> Joshua Tree Woodland	No	Joshua Tree, Semi-desert Chaparral	<i>Yucca brevifolia</i>	
	<i>Aesculus californica</i> California buckeye scrub	No	California Buckeye	<i>Aesculus californica</i>	
S3	<i>Platanus racemosa</i> California Sycamore Woodland	Yes	California Sycamore, Willow	Madrean Warm Semi-Desert Wash Woodland/Scrub, <i>Platanus racemosa</i>	
	<i>Populus trichocarpa</i> Black Cottonwood Forest	Yes	Coastal Mixed Hardwood		
	<i>Quercus lobata</i> Valley Oak Woodland	No	Gray Pine, Interior Mixed Hardwood, Valley Oak	<i>Quercus douglasii</i> , <i>Quercus lobata</i>	
	<i>Salix gooddingii</i> Black Willow Thicket	Yes	Willow		
	<i>Salix laevigata</i> Red Willow Thicket	Yes	Riparian Mixed Hardwood, Willow, Willow (Shrub)	<i>Salix laevigata</i>	
	<i>Umbellularia californica</i> California Bay Forest	No	California bay		
	S4 (Some Associations Sensitive)	<i>Pinus coulteri</i> Coulter Pine Woodland	No	Coulter Pine	
		<i>Alnus rhombifolia</i> White alder groves	Yes	White Alder	<i>Alnus rhombifolia</i>
S4	<i>Juniperus californica</i> California Juniper Woodland	No	California Juniper (shrub), California Juniper (tree), Desert Mixed Shrub, Great Basin - Desert Mixed Scrub, Great Basin - Mixed Chaparral Transition, Joshua Tree	<i>Juniperus californica</i>	
	<i>Pinus jeffreyi</i> Jeffrey Pine Forest	No	Eastside Pine		
	<i>Pinus ponderosa</i> Ponderosa Pine Forest	No	Eastside Pine		
	<i>Pinus ponderosa</i> – <i>Pseudotsuga menziesii</i> Ponderosa Pine – Douglas Fir Forest	No	Douglas Fir – Ponderosa Pine		

**TABLE 5.1.2-1
PLANT COMMUNITIES POTENTIALLY PRESENT WITHIN THE PROPOSED INITIATIVE AREA, *Continued***

State Rarity Ranking	MCV Plant Community Name	Potential Wetland/Riparian Community	CalVeg Designation	DRECP dominant plants or NVCS groupings
	<i>Pinus sabiniana</i> Ghost Pine Woodland	No	Gray Pine	<i>Pinus sabiniana</i>
	<i>Pinus monophylla</i> Singleleaf Pinyon Woodlands	No	Singleleaf Pinyon Pine, Tucker/Muller Scrub Oak	<i>Pinus monophylla</i>
	<i>Quercus agrifolia</i> Coast Live Oak Woodland	No	Bigcone Douglas-Fir, Canyon Live Oak, Coast Live Oak, Coastal Mixed Hardwood, Riparian Mixed Hardwood	
	<i>Quercus agrifolia</i> , <i>douglasii</i> , <i>garryana</i> , <i>kelloggi</i> , <i>lobata</i> , <i>wislizeni</i> Mixed Oak Forest	No	Interior Live Oak	
	<i>Quercus douglasii</i> Blue Oak Woodland	No	Blue Oak, Canyon Live Oak, Interior Mixed Hardwood	<i>Quercus douglasii</i>
	<i>Quercus wislizeni</i> Interior Live Oak Woodland	No	Canyon Live Oak, Interior Live Oak	<i>Quercus wislizeni</i> tree
S5	<i>Quercus chrysolepis</i> Canyon Live Oak Forest	No	Canyon Live Oak, Gray Pine, Riparian Mixed Hardwood	<i>Quercus chrysolepis</i> tree
Shrubland Alliances				
S2.2	<i>Forestiera pubescens</i> Desert Olive Patches	No		<i>Forestiera pubescens</i>
S2	<i>Ribes quercetorum</i> Oak Gooseberry Thickets	No		<i>Ribes quercetorum</i>
S2?	<i>Baccharis emoryi</i> Emory's Baccharis Thicket	Yes	Baccharis (riparian), Perennial Grasses and Forbs	
S3.2	<i>Atriplex spinifera</i> Spinescale Scrub	Yes		<i>Ambrosia dumosa</i> , <i>Atriplex spinifera</i> , North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat
	<i>Suaeda moquinii</i> Bush Seepweed Scrub	Yes		North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat, <i>Suaeda moquinii</i>
S3.3	<i>Ephedra californica</i> California Joint Fir Scrub	No	Desert Mixed Shrub, Semi-desert Chaparral	<i>Lycium cooperi</i> , Madrean Warm Semi-Desert Wash Woodland/Scrub, <i>Ephedra nevadensis</i>
	<i>Grayia spinosa</i> Spiny Hop Sage Scrub	No	Desert Mixed Shrub	<i>Lycium cooperi</i> , <i>Encelia (actoni, virginensis)</i> , <i>Ericameria teretifolia</i> , <i>Salazaria mexicana</i>
	<i>Pluchea sericea</i> Arrow Weed Thickets	Yes		Madrean Warm Semi-Desert Wash Woodland/Scrub
	<i>Prunus fasciculata</i> Desert Almond Scrub	Yes		Madrean Warm Semi-Desert Wash Woodland/Scrub, <i>Prunus fasciculata</i>
S3	<i>Adenostoma fasciculatum</i> — <i>Salvia apiana</i> Chamise—White Sage Scrub	No	Chamise	<i>Adenostoma fasciculatum</i>
	<i>Allenrolfea occidentalis</i> Iodine Bush Scrub	Yes		North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat
	<i>Ceanothus greggii</i> Cup Leaf Ceanothus Chaparral	No	Ceanothus Mixed Chaparral, Chaparral Yucca	<i>Fremontodendron californicum</i>
	<i>Ceanothus oliganthus</i> Hairy Leaf Ceanothus Chaparral	No	Ceanothus Mixed Chaparral, Chaparral Yucca	

**TABLE 5.1.2-1
PLANT COMMUNITIES POTENTIALLY PRESENT WITHIN THE PROPOSED INITIATIVE AREA, *Continued***

State Rarity Ranking	MCV Plant Community Name	Potential Wetland/Riparian Community	CalVeg Designation	DRECP dominant plants or NVCS groupings
	<i>Eriodictyon crassifolium</i> Thick Leaf Yerba Santa Scrub	No	Ceanothus Mixed Chaparral, Lower Montane Mixed Chaparral	<i>Eriodictyon (crassifolium, trichocalx)</i>
	<i>Ericameria paniculata</i> Black-stem Rabbitbush Scrub	Yes	Desert Mixed Shrub	<i>Lycium cooperi</i> , Madrean Warm Semi-Desert Wash Woodland/Scrub
	<i>Ericameria linearifolia</i> Narrowleaf Goldenbush Scrub	No		<i>Ericameria linearifolia</i>
	<i>Krascheninnikovia lanata</i> Winterfat Scrubland	No		<i>Ericameria teretifolia</i> , <i>Salazaria mexicana</i>
	<i>Lepidospartum squamatum</i> Scale Broom Scrub	Yes	Riversidean Alluvial Scrub, Scalebroom	Madrean Warm Semi-Desert Wash Woodland/Scrub, <i>Ephedra nevadensis</i> , <i>Lepidospartum squamatum</i>
	<i>Lycium andersonii</i> Anderson's Boxthorn Scrub	No	Desert Mixed Shrub	<i>Ericameria teretifolia</i> , <i>Lycium cooperi</i> , <i>Salazaria mexicana</i>
	<i>Prunus ilicifolia</i> Holly Leaf Cherry Chaparral	No	Lower Montane Mixed Chaparral, Chaparral Yucca	
	<i>Purshia tridentata</i> Bitter Bush Scrub	No	Great Basin Mixed Scrub	<i>Ericameria teretifolia</i> , <i>Purshia tridentata</i> , <i>Salazaria mexicana</i>
	<i>Quercus chrysolepis</i> Canyon Live Oak Chaparral	No	Canyon Live Oak, Lower Montane Mixed Chaparral, Scrub Oak, Chaparral Yucca	
	<i>Rhus integrifolia</i> Lemonade Berry Scrub	No	Sumac Shrub	
S3?	<i>Ericameria linearifolia</i> Narrowleaf Goldenbush Scrub	No	Desert Mixed Shrub	
	<i>Rhus trilobata</i> Basket Bush Thickets	No	Tucker/Muller Scrub Oak	
S4 (Some Associations Sensitive)	<i>Quercus berberidifolia</i> Scrub Oak Chaparral	No	Lower Montane Mixed Chaparral, Scrub Oak, Soft Scrub Mixed Chaparral, Chaparral Yucca	
	<i>Salix lasiolepis</i> Arroyo Willow Thickets	Yes	Riparian Mixed Hardwood, Riparian Mixed Shrub, Willow, Willow (Shrub)	<i>Salix lasiolepis</i>
S4?	<i>Heteromeles arbutifolia</i> Toyon Chaparral	No	Chaparral	
S4.2	<i>Atriplex confertifolia</i> Shadscale Scrub	No		<i>Atriplex confertifolia</i> , North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat
	<i>Quercus cornelius-mulleri</i> Muller oak chaparral	No	Chaparral Yucca	
S4	<i>Acacia greggii</i> Catclaw Acacia Thorn Scrub	Yes		Madrean Warm Semi-Desert Wash Woodland/Scrub
	<i>Ambrosia dumosa</i> White Burr Sage Scrub	No	White Bursage	<i>Ambrosia dumosa</i> , <i>Encelia (actoni, virginensis)</i>
	<i>Ambrosia salsola</i> Cheesebush Scrub	No	Buckwheat, Desert Mixed Scrub, Riversidean Alluvial Shrub, White Burr Sage, Willow (Shrub)	<i>Ambrosia salsola</i>

**TABLE 5.1.2-1
PLANT COMMUNITIES POTENTIALLY PRESENT WITHIN THE PROPOSED INITIATIVE AREA, *Continued***

State Rarity Ranking	MCV Plant Community Name	Potential Wetland/Riparian Community	CalVeg Designation	DRECP dominant plants or NVCS groupings
	<i>Arctostaphylos glauca</i> Bigberry Manzanita Chaparral	No	Lower Montane Mixed Chaparral, Manzanita Chaparral, Chaparral Yucca	<i>Arctostaphylos glauca</i>
	<i>Arctostaphylos glandulosa</i> Eastwood Manzanita Chaparral	No	Chaparral, Manzanita Chaparral, California Yucca	<i>Arctostaphylos glandulosa</i>
	<i>Artemisia californica</i> — <i>Eriogonum fasciculatum</i> California Sagebrush— California Buckwheat Scrub	No	Barren, Buckwheat, California Sagebrush, Ceanothus Mixed Chaparral, Encelia Scrub	
	<i>Atriplex canescens</i> Fourwing Saltbush Scrub	Yes	Great Basin - Desert Mixed Scrub, Great Basin Mixed Scrub, Riversidean Alluvial Scrub	<i>Atriplex canescens</i> , <i>Atriplex confertifolia</i> , North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat
	<i>Atriplex hymenelytra</i> Desert Holly Scrub	No		North American Warm Desert Bedrock Cliff and Outcrop
	<i>Atriplex lentiformis</i> Quailbush Scrub	Yes		North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat
	<i>Atriplex polycarpa</i> Allscale Scrub	Yes		<i>Atriplex polycarpa</i>
	<i>Baccharis salicifolia</i> Mulefat Thicket	Yes	<i>Baccharis</i> (Riparian), Riparian Mixed Hardwood, Riparian Mixed Shrub, Willow (Shrub)	<i>Baccharis salicifolia</i> , Madrean Warm Semi-Desert Wash Woodland/Scrub
	<i>Ceanothus crassifolius</i> Hoary Leaf Ceanothus Chaparral	No	Ceanothus Mixed Chaparral, Lower Montane Mixed Chaparral, Chaparral Yucca	<i>Ceanothus crassifolius</i>
	<i>Ceanothus cuneatus</i> Wedge Leaf Ceanothus Chaparral	No	Lower Montane Mixed Chaparral, Chaparral Yucca	
	<i>Ceanothus integerrimus</i> Deer Brush Chaparral	No	Chaparral Yucca	
	<i>Ceanothus leucodermis</i> White Thorn Chaparral	No	Chaparral Yucca	<i>Ceanothus leucodermis</i>
	<i>Ceanothus megacarpus</i> Big Pod Ceanothus Chaparral	No	Chaparral Yucca	
	<i>Ceanothus spinosus</i> Green Bark Ceanothus Chaparral	No	Chaparral Yucca	
	<i>Cercocarpus montanus</i> Birch Leaf Mountain Mahogany Chaparral	No	Birchleaf Mountain Mahogany, Buckwheat, Lower Montane Mixed Chaparral, Urban or Industrial Impoundment, Chaparral Yucca	<i>Cercocarpus montanus</i> , <i>Fremontodendron californicum</i>
	<i>Dendromecon rigida</i> Bush Poppy Scrub	No	Chaparral Yucca	
	<i>Coleogyne ramosissima</i> Black Brush Scrub	No		<i>Ericameria teretifolia</i> , <i>Salazaria mexicana</i>
	<i>Ericameria teretifolia</i> Needleleaf Rabbitbush Scrub	No		<i>Encelia (actoni, virginensis)</i> , <i>Ericameria teretifolia</i> , Madrean Warm Semi-Desert Wash Woodland/Scrub

**TABLE 5.1.2-1
PLANT COMMUNITIES POTENTIALLY PRESENT WITHIN THE PROPOSED INITIATIVE AREA, *Continued***

State Rarity Ranking	MCV Plant Community Name	Potential Wetland/Riparian Community	CalVeg Designation	DRECP dominant plants or NVCS groupings
	<i>Eriogonum fasciculatum</i> — <i>Salvia apiana</i> California Buckwheat—White Sage Scrub	No	Buckwheat, Soft Scrub Mixed Chaparral	
	<i>Lupinus albitrims</i> Silver Bush Lupine Scrub	No	Chaparral Yucca	
	<i>Malacothamnus fasciculatus</i> Bush Mallow Scrub	No	Chaparral Yucca	
	<i>Malosma laurina</i> Laurel Sumac Scrub	No	Sumac Shrub, Chaparral Yucca	
	<i>Quercus berberidifolia</i> — <i>Adenostoma fasciculatum</i> Scrub Oak—Chamise Chaparral	No	Chamise, Lower Montane Mixed Chaparral, Scrub Oak, Soft Scrub Mixed Chaparral, Urban or Industrial Impoundment, Chaparral Yucca	
	<i>Quercus john-tuckeri</i> Tucker Oak Chaparral	No	Great Basin - Mixed Chaparral Transition, Semi-desert Chaparral, Singleleaf Pinyon Pine, Soft Scrub Mixed Chaparral, Tucker/Muller Scrub Oak, Chaparral Yucca	<i>Quercus johntuckeri</i>
	<i>Quercus wislizeni</i> Interior Live Oak Chaparral	No	Gray Pine, Interior Live Oak, Scrub Oak, Chaparral Yucca	<i>Quercus wislizeni</i> tree
	<i>Rhus ovata</i> Sugarbush Chaparral	No	Semi-desert Chaparral, Sumac Shrub, Chaparral Yucca	
	<i>Salazaria mexicana</i> Bladder Sage Scrub	No	Desert Mixed Shrub	<i>Salazaria mexicana</i>
	<i>Salix exigua</i> Sandbar Willow Thickets	Yes	Riparian Mixed Shrub, Willow (Shrub)	<i>Salix exigua</i>
	<i>Sarcobatus vermiculatus</i> Greasewood Scrub	age		<i>Atriplex canescens</i> , <i>Atriplex confertifolia</i> , North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat
	<i>Toxicodendron diversilobum</i> Poison oak scrub	No	Chaparral Yucca	
S5 (Some Associations Sensitive)	<i>Larrea tridentata</i> — <i>Ambrosia dumosa</i> Creosote Bush—White Burr Sage Scrub	No	Creosote Bush	<i>Ephedra nevadensis</i> , <i>Larrea tridentata</i> - <i>Ambrosia dumosa</i>
S5	<i>Adenostoma fasciculatum</i> Chamise Chaparral	No	Buckwheat, Ceanothus Mixed Chaparral, Chamise, Encelia Scrub, Great Basin - Mixed Chaparral Transition, Lower Montane Mixed Chaparral, Perennial Grasses and Forbs, Semi-desert Chaparral, Soft Scrub Mixed Chaparral, Urban or Industrial Impoundment	<i>Adenostoma fasciculatum</i>
	<i>Adenostoma fasciculatum</i> — <i>Salvia mellifera</i> Chamise—Black Sage Chaparral	No	Ceanothus Mixed Chaparral, Chamise, Lower Montane Mixed Chaparral, Urban or Industrial Impoundment	<i>Adenostoma fasciculatum</i>
	<i>Artemisia californica</i> California Sagebrush Scrub	No	Barren, California Sagebrush	
	<i>Artemisia tridentata</i> Big Sagebrush	No	Basin Sagebrush, Desert Mixed Shrub, Great Basin - Desert Mixed Scrub, Great Basin Mixed Scrub, Semi-desert Chaparral, Soft Scrub Mixed Chaparral	<i>Artemisia tridentata</i> , <i>Artemisia tridentata</i> spp. <i>parishii</i>
	<i>Artemisia tridentata</i> ssp. <i>vaseyana</i> Mountain Big Sagebrush	No	Basin Sagebrush	<i>Artemisia tridentata</i>

**TABLE 5.1.2-1
PLANT COMMUNITIES POTENTIALLY PRESENT WITHIN THE PROPOSED INITIATIVE AREA, *Continued***

State Rarity Ranking	MCV Plant Community Name	Potential Wetland/Riparian Community	CalVeg Designation	DRECP dominant plants or NVCS groupings
	<i>Ericameria nauseosa</i> Rubber Rabbitbrush Scrub	No	Basin Sagebrush, Buckwheat, Great Basin Mixed Scrub, Rabbitbrush	<i>Ericameria nauseosa</i> , Madran Warm Semi-Desert Wash Woodland/Scrub
	<i>Eriogonum fasciculatum</i> California Buckwheat Scrub	No	Barren, Buckwheat, Chamise, Encelia Scrub, Great Basin - Mixed Chaparral Transition, Perennial Grasses and Forbs, Semi-desert Chaparral	<i>Encelia (actoni, virginensis)</i> , <i>Ephedra nevadensis</i> , <i>Eriogonum fasciculatum</i>
	<i>Larrea tridentata</i> Creosote Bush Scrub	No	Creosote Bush, White Bursage	<i>Larrea tridentata</i>
	<i>Lotus scoparius (Acmispon glaber)</i> Deer Weed Scrub	No	Perennial Grasses and Forbs, Semi-desert Chaparral, Soft Scrub Mixed Chaparral, Chaparral Yucca	
Invasive	<i>Tamarix</i> spp. Tamarisk Thickets	Yes	Tamarisk	<i>Salix exigua</i> , <i>Tamarix</i> spp.
Herbaceous Alliances				
S1.2	<i>Achnatherum [Stipa] hymenoides</i> Indian Rice Grass Grassland	No		<i>Achnatherum hymenoides</i> , <i>Ericameria teretifolia</i>
S2.2 (Sensitive, Fairly Threatened)	<i>Achnatherum speciosum [Stipa speciosa]</i> Desert Needlegrass Grassland	No		<i>Encelia (actoni, virginensis)</i>
	<i>Sporobolus airoides</i> Alkali Sacaton Grassland	Yes		North American Warm Desert Alkaline Scrub and Herb Playa and Wet Flat
S2 (Sensitive)	<i>Juncus (oxymiris, xiphioides)</i> Iris-leaf Rush Seeps	Yes	Wet Meadows	
	<i>Muhlenbergia rigens</i> Deer Grass Beds	Yes	Wet Meadows	
	<i>Scirpus microcarpus</i> Small-fruited Bulrush Marsh	Yes	Tule - Cattail	
S2? (Sensitive)	<i>Anemopsis californica</i> Yerba Mansa Meadows	Yes	Perennial Grasses and Forbs, Wet Meadows	
S3 (Sensitive)	<i>Bolboschoenus maritimus</i> Salt Marsh Bullrush Marshes	Yes	Tule-Cattail	
	<i>Carex (aquatilis, lenticularis)</i> Water Sedge and Lakeshore Sedge Meadows	Yes	Tule-Cattail	
	<i>Carex simulata</i> Short-beaked Sedge Meadows	Yes	Tule-Cattail	
	<i>Leymus triticoide</i> Creeping Rye Grass Turfs	Yes	Perennial Grasses and Forbs, Wet Meadows	California mixed annual/perennial freshwater vernal pool
S3? (Sensitive)	<i>Hydrocotyle (ranunculoideis, umbellata)</i> Mats of Floating Pennywort	Yes	Tule-Cattail	
	<i>Nassella cernua</i> Nodding Needle Grass Grassland	No		California Annual and Perennial Grassland
	<i>Nassella pulchra</i> * Purple Needle Grass Grassland	No		California Annual and Perennial Grassland

TABLE 5.1.2-1
 PLANT COMMUNITIES POTENTIALLY PRESENT WITHIN THE PROPOSED INITIATIVE AREA, *Continued*

State Rarity Ranking	MCV Plant Community Name	Potential Wetland/Riparian Community	CalVeg Designation	DRECP dominant plants or NVCS groupings
	<i>Sparganium (angustifolium)</i> Mats of Burr-Reed Leaves	Yes	Tule – Cattail	
	<i>Stuckenia (pectinata)</i> Pond Weed Mats	Yes	Tule – Cattail	
S4	<i>Amsinckia (menziesii, tessellata)</i> Fiddleneck Fields	No		<i>Amsinckia (menziesii, tessellata)</i> , California Annual and Perennial Grassland, California annual herb/grass
	<i>Azolla (filiculoides, mexicana)</i> Mosquito Fern Mats	Yes	Tule – Cattail	
	<i>Eleocharis macrostachya</i> Pale Spike Rush Marshes	Yes	Wet Meadows	California mixed annual/perennial freshwater vernal pool
	<i>Eschscholzia (californica)</i> California Poppy Fields	No		California Annual and Perennial Grassland, California annual herb/grass, <i>Eschscholzia (californica)</i>
	<i>Juncus arcticus</i> Baltic and Mexican Rush Marshes	Yes	Wet Meadows	<i>Juncus arcticus (var. balticus, mexicanus)</i>
	<i>Lasthenia californica—Plantago erecta—Vulpia microstachys</i> California Goldfields—Dwarf Plantain—Six-weeks Fescue Flower Fields	No		California Annual and Perennial Grassland, California annual herb/grass, <i>Lasthenia californica - Plantago erecta - Vulpia microstachys</i>
	<i>Periscaria lapathifolia—Xanthium strumarium</i> Smartweed—Cocklebur Patches	Yes	Wet Meadows	
<i>Schoenoplectus acutus</i> Hardstem Bullrush Marsh	Yes	Tule – Cattail		
S4?	<i>Lemna (minor)</i> Duckweed blooms	Yes	Tule – Cattail	
	<i>Schoenoplectus californicus</i> California Bullrush Marsh	Yes	Tule – Cattail	

**TABLE 5.1.2-1
PLANT COMMUNITIES POTENTIALLY PRESENT WITHIN THE PROPOSED INITIATIVE AREA, *Continued***

State Rarity Ranking	MCV Plant Community Name	Potential Wetland/Riparian Community	CalVeg Designation	DRECP dominant plants or NVCS groupings
S5	<i>Typha (angustifolia, domingensis, latifolia)</i> Cattail Marshes	Yes	Tule – Cattail	Madrean Warm Semi-Desert Wash Woodland/Scrub
Invasive	<i>Arundo donax</i> Giant Reed Breaks	Yes	Riparian Mixed Hardwood	
	<i>Avena (barbata, fatua)</i> Wild Oats Grassland	No	Annual Grasses and Forbs, Barren, Non-native/Ornamental Grass, Soft Scrub Mixed Chaparral	California Annual and Perennial Grassland, Mediterranean California naturalized annual and perennial grassland
	<i>Brassica (nigra)</i> and Other Mustard Upland Mustards	No	Non-native/Ornamental Grass, Soft Scrub Mixed Chaparral	California Annual and Perennial Grassland, Mediterranean California naturalized annual and perennial grassland
	<i>Bromus (diandrus, hordeaceus)</i> Annual Brome Grassland	No	Annual Grasses and Forbs, Barren, Non-native/Ornamental Grass, Perennial Grasses and Forbs, Wet Meadows	
	<i>Bromus rubens</i> — <i>Schismus (arabicus, barbatus)</i> Red Brome or Mediterranean Grass Grassland	No		California Annual and Perennial Grassland, California annual herb/grass, Mediterranean California naturalized annual and perennial grassland
	<i>Centaurea (solstitialis, melitensis)</i> Yellow Star-thistle Fields	No		California Annual and Perennial Grassland, Mediterranean California naturalized annual and perennial grassland
	<i>Lepidium latifolium</i> Perennial Pepper Weed Patches	Yes	Wet Meadows	
<i>Ludwigia (hexapetala, peploides)</i> Water Primrose Wetlands	Yes	Tule – Cattail		
Developed Groupings				
None	Developed	No	Barren, Upper Montane Mixed Chaparral, Urban-related Bare Soil, Urban/Developed (General)	<i>Eriodictyon (crassifolium, trichocaks)</i> , Urban
	Developed – Planted/Ornamental	No	Non-native/Ornamental Conifer, Non-native/Ornamental Hardwood, Non-native/Ornamental Grass, Non-native/Ornamental Shrub	
	Developed - Agricultural	No	Orchard Agriculture, Pastures and Crop Agriculture, Vineyard - Shrub Agriculture, Tilled Earth	Deciduous Orchard Vineyard, Irrigated Row and Field Crops
	Developed - Impoundments	Yes	Water (General), Perennial Lake or Pond	Lacustrine

KEY:
S1 – Critically Imperiled; S2 – Imperiled; S3 – Vulnerable; S4 – Apparently Secure; S5 – Secure; ? – Represents uncertainty in ranking (0.1: Very Threatened, 0.2: Threatened, 0.3: No Current Threat Known)

NOTE: The species name for this plant has been officially changed to *Stipa pulchra*; however, the Manual of California Vegetation gives the older species name; therefore, the older name is used when referring to this plant's alliance.

Comparing the amount of area likely to contain a sensitive plant community in relation to the total acres within each subarea indicates that parcels located within the following subareas have the greatest potential to contain sensitive plant communities: Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/Valyermo/Littlerock, Antelope Valley Northeast, and East San Gabriel Mountains (Table 5.1.2-2, *Sensitive Plant Communities with the Potential to Occur in Subareas – CalVeg Data*; Table 5.1.2-3, *Sensitive Plant Communities with the Potential to Occur in Subareas – DRECP Data*). The Lake Hughes/Gorman/West of Lancaster subarea is the most diverse in term of plant communities and sensitive plant communities, likely because of the convergence of several mountain ranges and the Mojave Desert. The East San Gabriel Mountains has the highest percentage of the subarea potentially sensitive because almost 25 percent of the subarea is classified as Interior Mixed Hardwood, which could potentially contain the sensitive *Quercus lobata*–Valley Oak Woodland plant community. It should be noted that the potential presence of State-designated sensitive habitats is likely inflated for Antelope Valley Northeast because the sensitive *Larrea tridentata*–*Ambrosia dumosa*–*Petalonyx thurberi* Association may occur within the most common plant community, *Larrea tridentata*–*Ambrosia dumosa* Creosote–White Burr Sage Scrub (Figure 5.1.2-2).

In contrast, parcels within the following subareas have the least potential to contain sensitive plant communities: Acton, Castaic/Santa Clarita/Agua Dulce, and Lancaster Northeast. The Acton subarea has the fewest acres of potentially present sensitive plant communities, but is also very diverse in the number of sensitive plant communities that could be present.

**TABLE 5.1.2-2
SENSITIVE PLANT COMMUNITIES
WITH THE POTENTIAL TO OCCUR IN SUBAREAS – CALVEG DATA**

Subarea	Total Subarea Acres	Potentially Present Sensitive Plant Communities		
		No. of Sensitive Communities	Acres of Sensitive	Percentage of Subarea Sensitive
C	35,340	32	9,655	27%
A	18,065	26	1,670	9%
LH	125,040	40	12,655	10%
LL	108,065	27	1,565	1%
AV	—*	—	—	—
LN	—	—	—	—
SG	4,090	33	2,705	67%
Total	290,610		28,245	10%

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains

NOTE: *The subareas for which values are entered as “—” are areas for which no CalVeg data is available. Plant community data for these subareas is represented by DRECP data in table below.

**TABLE 5.1.2-3
SENSITIVE PLANT COMMUNITIES
WITH THE POTENTIAL TO OCCUR IN SUBAREAS – DRECP DATA**

Subarea	Total Subarea Acres	Potentially Present Sensitive Plant Communities		
		No. of Sensitive Communities	Acres of Sensitive	Percentage of Subarea Sensitive
C	—*	—	—	—
A	18,065	26	10	< 1%
LH	125,040	40	42,670	35%
LL	108,065	27	53,410	49%
AV	14,530	17	14,020	97%
LN	35,325	16	7,720	22%
SG	4,090	33	70	2%
Total	305,120		117,900	39%

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains

NOTE: *The subareas for which values are entered as “—” are areas for which no DRECP data are available. Plant community data for these subareas is represented by CalVeg data in table below.

There are 59 sensitive plant communities and 146,145 acres (28,245 acres covered by CalVeg data and 117,900 acres covered by DRECP data) that have the potential to contain a sensitive plant community within parcels affected by the proposed initiative. Further evaluation of the sensitive plant communities may need to be conducted prior to obtaining a building permit for parcels that have one or more of the potential sensitive communities on site. While these habitats must be evaluated under CEQA, there are no federal, State, or local statutes that afford protection to State-designated sensitive habitats.

Riparian and Wetland Communities

Most of the riparian and wetland communities that are subject to USACOE jurisdiction are included within the sensitive plant communities listed above. However, some of the more common plant communities also occur along desert washes and within riparian areas and may be subject to CDFW jurisdiction. As such, there are 20 additional, non-sensitive plant communities that should be considered “riparian” or “wetland” plant communities (Table 5.1.2-4, *Likely Riparian and Wetland Plant Communities*). Although Canyon Live Oak Woodland (*Quercus chrysolepis* Forest Alliance) was observed within canyon bottom, this community was not considered riparian within this BRTR because it generally occurs near but not within the riparian zone.

**TABLE 5.1.2-4
LIKELY RIPARIAN AND WETLAND PLANT COMMUNITIES**

State-Sensitive Plant Communities That Are Riparian/Wetland	Non-State-Sensitive Plant Communities That Are Riparian/Wetland
<i>Allenrolfea occidentalis</i> – Iodine Bush Scrub	<i>Acacia greggii</i> – Catclaw Acacia Thorn Scrub
<i>Anemopsis californica</i> – Yerba Mansa Meadows	<i>Alnus rhombifolia</i> – White alder groves
<i>Atriplex spinifera</i> – Spinescale Scrub	<i>Arundo donax</i> – Giant Reed Breaks
<i>Baccharis emoryi</i> – Emory’s Baccharis Thicket	<i>Atriplex canescens</i> – Fourwing Saltbush Scrub
<i>Bolboschoenus maritimus</i> – Salt Marsh Bullrush Marshes	<i>Atriplex lentiformis</i> – Quailbush Scrub
<i>Carex (aquatilis, lenticularis)</i> – Water Sedge and Lakeshore Sedge Meadows	<i>Atriplex polycarpa</i> – Allscale Scrub
<i>Carex simulate</i> – Short-beaked Sedge Meadows	<i>Azolla (filiculoides, mexicana)</i> – Mosquito Fern Mats
<i>Ericameria paniculata</i> – Black-stem Rabbitbush Scrub	<i>Baccharis salicifolia</i> – Mulefat Thicket
<i>Fraxinus latifolia</i> – Oregon Ash Groves	Developed - Impoundments
<i>Hydrocotyle (ranunculoides, umbellata)</i> – Mats of Floating Pennywort	<i>Eleocharis macrostachya</i> – Pale Spike Rush Marshes
<i>Juncus (oxymenis, xiphioides)</i> – Iris-leaf Rush Seeps	<i>Juncus arcticus</i> – Baltic and Mexican Rush Marshes
<i>Lepidospartum squamatum</i> – Scale Broom Scrub	<i>Lemna (minor)</i> – Duckweed blooms
<i>Leymus triticoide</i> – Creeping Rye Grass Turfs	<i>Lepidium latifolium</i> – Perennial Pepper Weed Patches
<i>Muhlenbergia rigens</i> – Deer Grass Beds	<i>Ludwigia (hexapetala, peploides)</i> – Water Primrose Wetlands
<i>Platanus racemosa</i> – California Sycamore Woodland	<i>Periscaria lapathifolia</i> — <i>Xanthium strumarium</i> Smartweed—Cocklebur Patches
<i>Pluchea sericea</i> – Arrow Weed Thickets	<i>Tamarix</i> spp. – Tamarisk Thickets
<i>Populus fremontii</i> – Fremont Cottonwood Forest	<i>Typha (angustifolia, domingensis, latifolia)</i> – Cattail Marshes
<i>Populus trichocarpa</i> – Black Cottonwood Forest	<i>Salix exigua</i> – Sandbar Willow Thickets
<i>Prosopis glandulosa</i> – Mesquite Thicket	<i>Schoenoplectus acutus</i> – Hardstem Bullrush Marsh
<i>Prunus fasciculata</i> – Desert Almond Scrub	<i>Schoenoplectus californicus</i> – California Bullrush Marsh
<i>Salix gooddingii</i> – Black Willow Thicket	
<i>Salix laevigata</i> – Red Willow Thicket	
<i>Salix lasiolepis</i> – Arroyo Willow Thickets	
<i>Salix lucida (lasiandra)</i> – Shining Willow Thicket	
<i>Scirpus microcarpus</i> – Small-fruited Bullrush Marsh	
<i>Sparganium (angustifolium)</i> – Mats of Burr-Reed Leaves	
<i>Sporobolus airoides</i> – Alkali Sacaton Grassland	
<i>Stuckenia (pectinata)</i> – Pond Weed Mats	
<i>Suaeda moquinii</i> – Bush Seepweed Scrub	

Overall, one percent of the study area covered by CalVeg data and 14 percent of the study area covered by DRECP data has the potential for riparian and wetland plant communities. Subareas with the greatest potential to have these riparian and wetland plant communities include Lancaster Northeast, and Lake Los Angeles/Llano/Valyermo/Littlerock (Table 5.1.2-5, *Riparian Plant Communities with the Potential to Occur in Subareas*). The reason the Lancaster Northeast subarea has the greatest percent cover of potential riparian and wetland habitat is because this area is in

proximity to the dry lakes on Edwards Air Force Base. As such, alkali sinks are located in these areas and water will pool after large rain events; as such, there is a high potential for a playa to occur. In contrast, most of the State riparian and wetland plant communities in the Acton, East San Gabriel Mountains, and Castaic/Santa Clarita/Agua Dulce subareas are also subject to USACOE jurisdiction because they are within watersheds of the Santa Clara, Los Angeles, and San Gabriel Rivers.

**TABLE 5.1.2-5
RIPARIAN PLANT COMMUNITIES
WITH THE POTENTIAL TO OCCUR IN SUBAREAS**

Subarea	Total Subarea Acres	Riparian Plant Communities		State Riparian/Wetland Acres (CalVeg)	State Riparian/Wetland Acres (DRECP)	Percent of Subarea (CalVeg)	Percent of Subarea (DRECP)
		No. of Sensitive Communities	No. of Non-Sensitive Communities				
C	35,340	16	11	490	—	1%	—
A	18,065	11	4	1,080	0	6%	0%
LH	125,040	17	13	610	9,725	<1%	8%
LL	108,065	10	9	600	14,095	<1%	13%
AV	14,530	8	5	—	795	—	5%
LN	35,325	11	8	—	21,885	—	62%
SG	4,090	12	6	530	<5	13%	<1%
Total	340,460			3,310	46,505	1%	14%

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains

There are up to 49,815 acres (1 percent of the study area covered by CalVeg data and 14 percent of the study area covered by DRECP data) of parcels within the proposed initiative study area that have the potential to contain a riparian plant community.

State Jurisdictional Areas

State Jurisdictional Areas are potentially present on two percent (8,020 acres) of the proposed initiative study area (Table 5.1.2-6, *State Jurisdictional Areas with the Potential to Occur in Subareas*; see Figure 5.1.2-3, *State Jurisdictional Areas Potentially Present within the Proposed Initiative Subareas*, at the end of this section). To avoid overestimating the size of potential State Jurisdictional Areas, riparian plant communities and plant communities with associated wetland plants that fell outside of existing blue line drainages and NWI features were not included in the analysis of State Jurisdictional Areas, although the State may choose to take jurisdiction over these communities during the Streambed Alteration Agreement process.

**TABLE 5.1.2-6
STATE JURISDICTIONAL AREAS WITH THE POTENTIAL TO OCCUR IN SUBAREAS**

Subarea	Total Subarea Acres	State Jurisdictional Areas	Percentage of Subarea State Jurisdictional
C	35,340	800	2%
A	18,065	275	2%
LH	125,040	1,535	1%
LL	108,065	3,315	3%
AV	14,530	565	4%
LN	35,325	1,310	4%
SG	4,090	210	5%
Total	340,460	8,020	2%

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains

Subareas with the greatest potential to have State Jurisdictional Areas include: Lancaster Northeast, Lake Hughes/Gorman/West of Lancaster, and Lake Los Angeles/Llano/Valyermo/Littlerock (Table 5.1.2-6).

5.1.3 Waters of the United States

There are 19 lakes and reservoirs and three rivers within the study area of the proposed initiative, including Santa Clara River and tributaries, Tujunga Wash (a tributary of the Los Angeles River), San Gabriel River and tributaries, Lake Piru, Upper Castaic Lake, Castaic Lagoon, Pyramid Lake, Bouquet Reservoir, Hughes Lake, Lake Elizabeth, Munz Lakes, Quail Lake, Lake Palmdale, San Gabriel Reservoir and Morris Reservoir, Little Rock Reservoir, Big Tujunga Reservoir, Crystal Lake, Pacoima Reservoir, Cogswell Reservoir, Big Dalton Reservoir and San Dimas Reservoir.

Waters of the United States, consisting of wetlands and waterways, are potentially present on less than 1 percent (1,440 acres) of the total area of parcels that may be affected by the proposed initiative (Table 5.1.3-1, *Waters of the United States with the Potential to Occur in Subareas*, see Figure 5.1.3-1, *Federal Waters of the United States Potentially Present within the Proposed Initiative Subareas*, at the end of this section). Waters of the United States are generally not found within any of the four subareas located in the Mojave Desert, with the exception of the Lake Hughes/Gorman/West of Lancaster subarea (the other three being Lake Los Angeles/Llano/Valyermo/Littlerock, Antelope Valley Northeast, and Lancaster Northeast), which has a small amount of potential Waters of the United States. The three remaining subareas contain varying amounts of potential Waters of the United States with the largest total estimated amount of Waters of the United States occurring in the Castaic/Santa Clarita/Agua Dulce subarea and the lowest total amount occurring in the Acton subarea. Waters of the United States are most abundant within the East San Gabriel Mountains and Castaic/Santa Clarita/Agua Dulce subareas due to the branching nature of the Tujunga Wash, San Gabriel River, and Santa Clara River. Much of the Waters of the United States acreage within these two subareas is classified as riverine. Castaic/Santa Clarita/Agua Dulce subarea also contains Waters of the United States in the form of vernal pools located on the Cruzan Mesa. Waters of the United States in the Lake Hughes/Gorman/West of Lancaster subarea tend to be wet meadows, including wet meadows near Quail Lake and within Leona Valley. Waters of the United States in the Acton subarea were shrubby/forested wetlands located along the Santa Clara River.

**TABLE 5.1.3-1
WATERS OF THE UNITED STATES WITH THE POTENTIAL TO OCCUR IN SUBAREAS**

Subarea	Total Subarea Acres	Total Acres of Federal Wetlands/Waterways	Percentage of Subarea
C	35,340	800	2%
A	18,065	215	1%
LH	125,040	245	0.2%
LL	108,065	0	0%
AV	14,530	0	0%
LN	35,325	0	0%
SG	4,090	180	4%
Total	340,460	1,440	0.4%

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains

A total of 217.6 linear miles of potential federal waterways were identified from blue-line features (Table 5.1.3-2, *Miles of Blue-Line Drainages within Proposed Subareas*). Lake Piru, Pyramid Lake, Hughes Lake, Lake Elizabeth, Munz Lakes, Upper Castaic Lake, Castaic Lagoon and Bouquet Reservoirs are within the Santa Clara River watershed; therefore, these water bodies and blue-line features that connect to them were classified as Waters of the United States.^{4,5} The Acton, Castaic/Santa Clarita/Agua Dulce, and Lake Hughes/Gorman/West of Lancaster subareas are located within the Santa Clara River watershed. The Lake Hughes/Gorman/West of Lancaster subarea contains Quail Lake, which is a man-made feature connected to the California Aqueduct system. For the purpose of this BRTR, Quail Lake and blue-line drainages that connect to it were considered Waters of the United States.⁶ There are very few blue-line drainages around Quail Lake and existing blue-lines are composed of short drainage features from the immediate area. In the East San Gabriel Mountains subarea, blue-line drainages that connect to Little Tujunga Wash, San Gabriel River, San Gabriel Reservoir, Morris Reservoir, Big Tujunga Reservoir, Crystal Lake, Pacoima Reservoir, Cogswell Reservoir, Big Dalton Reservoir, and San Dimas Reservoir also were classified as Waters of the United States. Any new roads, driveway, and road improvements that would discharge fill into Waters of the United States would be subject to the jurisdiction of the USACOE pursuant to Section 404 of the Clean Water Act.

⁴ U.S. Army Corps of Engineers. 2012. Santa Clara River Watershed Feasibility Study. Prepared by CDM Smith, Irvine, CA.

⁵ Los Angeles Department of Public Works. 2014. Upper Santa Clara River Integrated Regional Water Management Plan. Prepared by Kennedy/Jenks Consultants

⁶ http://www.epa.gov/tp/pdf/wous_guidance_4-2011.pdf

**TABLE 5.1.3-2
MILES OF BLUE-LINE DRAINAGES WITHIN PROPOSED INITIATIVE SUBAREAS**

Subareas	Federal Waterway	Federal Blue-Line Linear Miles
C	Santa Clara River watershed	125
A	Santa Clara River watershed	40
LH	Santa Clara River watershed; Quail Lake	35
LL	None	0
AV	None	0
LN	None	0
SG	Los Angeles River and San Gabriel River watersheds	20
Total		220

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains

5.1.4 Migratory Corridors

Although SEAs are not preserves, SEAs are areas where the County General Plan deems it important to facilitate a balance between limited development and resource conservation. Limited development activities are reviewed closely in these areas where site design is a key element in conserving fragile resources such as streams, oak woodlands and threatened or endangered species and their habitat. Due to the relatively high quality of habitat associated with SEAs, they can be indicators of the presence of wildlife movement corridors. As of the adoption of the 2035 General Plan Update, there are ten SEAs present on 146,715 acres of the proposed initiative parcels, making up approximately 43 percent of the total study area (Table 5.1.4-1, *Subareas Located within SEAs*; see Figure 5.1.4-1, *Proposed Initiative Subareas Located within SEAs*, at the end of this section).

**TABLE 5.1.4-1
SUBAREAS LOCATED WITHIN EXISTING SEAS**

Subareas	Total Subarea Acres	Acres within SEAs	Percentage of Subarea within SEAs
C	35,340	14,920	42%
A	18,065	3,685	20%
LH	125,040	44,095	35%
LL	108,065	49,385	46%
AV	14,530	10,870	75%
LN	35,325	23,280	66%
SG	4,090	485	12%
Total	340,460	146,715	43%

KEY: C = Castaic/Santa Clarita/Agua Dulce; A = Acton; LH = Lake Hughes/Gorman/West of Lancaster; LL = Lake Los Angeles/Llano/Valyermo/Littlerock; AV = Antelope Valley Northeast; LN = Lancaster Northeast; SG = East San Gabriel Mountains

The size and location of the Santa Clara River, San Felicia, and Santa Susana Mountains/Simi Hills SEAs were designed to protect corridors and nurseries and connect wildlife habitats. In contrast, Cruzan Mesa Vernal Pools and Joshua Tree Woodlands SEAs meet the standards of being able to provide stopover/habitat connectivity, but their small size and isolation from other corridors limits their value as migratory corridors. In addition, the South Coast Missing Linkages identified a

migratory pathway between the Sierra Pelona Mountains and the San Gabriel Mountains along a pathway that crosses Agua Dulce.⁷ There are six general areas within the proposed initiative study area where wildlife movement corridors are present (see Figure 5.1.4-2, *Migratory Corridors Potentially Present within the Proposed Initiative Subareas*, at the end of this section). The primary wildlife movement corridors within the study area are as follows:

- 1) The Big Rock Wash, Little Rock Wash, and other small washes that feed into Rogers and Rosamond Dry Lakes are known migration routes for wildlife. Such washes allow wildlife to move between the foothills of the San Gabriel Mountains and Rogers/Rosamond Dry Lakes and between Rogers/Rosamond Dry Lakes and El Mirage Dry Lake. Furthermore, the dry lakes on Edwards Air Force Base are considered a globally significant area for wintering and migrating birds.
- 2) The junction of several mountain ranges at Gorman is expected to be an important area for migrating birds because species migrating into the Central Valley have to pass through Tejon Pass in Gorman. Further, the area is at the convergence of the Tehachapi Mountains (northeast), Sierra Pelona Mountains (southeast), San Emigdio Mountains (northwest), and Topatopa Mountains (southwest). Condors may move through the area given that populations have been reintroduced into the Topatopa and Tehachapi Mountains.
- 3) Portal Ridge and Leona Valley are expected to be important for local movement and bird migration. Portal Ridge separates the Mojave Desert from the Sierra Pelona Mountains. The Leona Valley is situated along the San Andreas Fault and is bordered by Portal Ridge to the north and the Sierra Pelona Mountains to the south. Together, the valley and ridgeline allow wildlife movement between the San Gabriel Mountains and Acton to the east and Quail Lake and Gorman to the west. Furthermore, wildlife can move through the lush vegetation of the Leona Valley rather than the more arid Antelope Valley and Mojave Desert north of Portal Ridge.
- 4) The Santa Clara River and tributaries such as Castaic Creek, Mint Canyon, San Francisquito Canyon, and Bouquet Canyon are expected to be a wildlife movement corridor for wildlife moving between the Santa Susana Mountains, the Sierra Pelona Mountains, and the San Gabriel Mountains. Further movement can occur for wildlife moving from Soledad Canyon and Acton area to downstream areas, such as the flood plains around Fillmore. Soledad Canyon between Acton and Santa Clarita, at the convergence of the Santa Clara River and Castaic Creek, and in the San Francisquito Canyon near the old dam site have been designated as a Southern California Threespine Stickleback Stream, meaning that movement for this fish species likely occurs in these areas. Therefore, the Santa Clara River also is designated at a nursery site for these fish.
- 5) The Sierra Pelona Mountains and the San Gabriel Mountains through Vasquez Rocks are expected to be important linkages between mobile species, such as mountain lion (*Puma concolor*), and less mobile species, such as trees and invertebrates. Between these two mountain ranges are a series of foothills that are undeveloped, and Agua Dulce, a rural community with some undeveloped areas at the edge of more densely populated areas.

⁷ http://www.scwildlands.org/reports/SCML_SanGabriel_Castaic.pdf

- 6) The San Gabriel Mountains and the San Bernardino Mountains through Lytle Creek and the Cajon Pass are important linkages between habitats for native mammal species such as mountain lion, American badger, and desert bighorn sheep. These two mountain ranges contain habitat for numerous listed and endemic species.

Much of Lancaster Northeast, Antelope Valley Northeast, and Lake Los Angeles/Llano/Valyermo/Littlerock subareas are within the migratory corridor moving along the Big Rock Wash, Little Rock Wash, and other small washes that feed into Rogers and Rosamond Dry Lakes. The corridor that exists at the junction of several mountain ranges at Gorman and the corridor that spans Portal Ridge are both located within the Lake Hughes/Gorman/West of Lancaster subarea. The Castaic/Santa Clarita/Agua Dulce and Acton subareas occur within the wildlife corridors along the Santa Clara River and between the San Gabriel-Sierra Pelona Mountain Ranges. The eastern edge of the East San Gabriel Mountains subarea is within the corridor connecting the San Gabriel and San Bernardino Mountains.

The Santa Clara River Watershed is a nursery site for several fish species, especially near the junction of Castaic Creek and downstream because of more regularly flowing water. The Santa Clara River is the largest natural river remaining in southern California.⁸ Similarly, the San Gabriel River Watershed which occupies the eastern portion of the East San Gabriel Mountains subarea is a nursery site for many endemic fish species such as the Santa Ana sucker and the Santa Ana Speckled Dace. Many similar rivers in southern California have been channelized. As such, these natural areas allow for the movement of wildlife from upstream to downstream populations. Although there are no know bird rookeries in the proposed initiative study area, many species of birds breed within the proposed initiative study area. Nesting birds protected under the MBTA have the potential to be present on any parcel within the proposed initiative study area.

5.1.5 General Plans and Policies

Los Angeles County General Plan 2035

Every parcel within the proposed initiative study area exists within unincorporated Los Angeles County and is subject to the goals and policies of the Los Angeles County General Plan 2035. Goal C/NR 3 of the Los Angeles County General Plan 2035 is applicable to the proposed initiative because the County must promote “permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems including: habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, and SEAs.” In support of this goal, there are six policies within the Plan Update that are applicable to the proposed initiative: Policies C/NR 3.1, 3.6, 3.8, 3.9, 3.10, and 3.11.

Goal C/NR 3 is applicable to the proposed initiative because the Plan modifies the boundaries of existing SEAs and proposes the adoption of new SEAs. As of the adoption of the General Plan 2035 in October 2015, there are 10 SEAs within the vicinity of the proposed initiative parcels:

- 1) Antelope Valley SEA: Designated to protect wildlife movement from the San Gabriel Mountains to the dry lakes on Edwards Air Force Base. Also protects nesting raptors on buttes migrating birds, and overlaps Desert Tortoise Critical Habitat. Further, it protects sensitive upland plant communities, riparian plant communities, and alkali plants and communities. Indeed, areas on Edwards Air Force Base are the

⁸ Upper Santa Clara River IRWMP, February 2014

most pristine desert habitat in the Antelope Valley area. This SEA includes parcels within the Lake Los Angeles/Llano/Valyermo/Littlerock, Lancaster Northeast, Antelope Valley Northeast, and East San Gabriel Mountains subareas.

- 2) Joshua Tree Woodland SEA: Primarily designated to protect the Joshua tree woodland, a State sensitive community. Through protection of the woodlands, it provides a migration stopover for migrating birds and potential nesting habitat for raptors, including State-threatened Swainson's hawk. This SEA includes parcels within the Lake Hughes/Gorman/West of Lancaster subarea.
- 3) San Andreas SEA: Designated as an SEA because of the area's importance for wildlife movement and plant communities that are only found in Los Angeles County within these areas. This SEA serves as an important linkage between the San Gabriel Mountains, the Tehachapi Mountains, and the Coastal Ranges. The slopes along Portal Ridge are designated by the National Audubon Society as an Important Bird Area (IBA). This SEA includes parcels within the Lake Hughes/Gorman/West of Lancaster subarea.
- 4) Santa Clara River SEA: Important for a large number of sensitive wildlife, especially for fish, amphibians, and riparian birds. Large number of protected plant communities, including riparian communities and areas with bigcone Douglas fir. Overlaps California Gnatcatcher Critical Habitat and Arroyo Toad Critical Habitat. Migration corridor is especially important because wildlife can safely cross under Highway 14. The area is designated as an IBA. This SEA includes parcels within the Acton, Castaic/Santa Clarita/Agua Dulce, Lake Hughes/Gorman/ West of Lancaster, and East San Gabriel Mountains subareas.
- 5) Santa Felicia SEA: Protects native plant communities, including areas considered nearly pristine that are uncommon within Los Angeles County. Further protects the tributaries of Piru Creek, an import source of water for the Santa Clara River. This SEA includes parcels within the Castaic/Santa Clarita/Agua Dulce subarea.
- 6) San Dimas Canyon/San Antonio Wash SEA: Designated to protect rare plants including the rock monardella (*Monardella saxicola*), and plant communities including riparian woodlands, coastal sage scrub, walnut woodlands. Protects major canyons and areas that have a large elevation gradient which provide habitat for sensitive species. Protects a large area of undisturbed native biotic communities. This SEA includes parcels within the East San Gabriel Mountains subarea.
- 7) Altadena Foothills and Arroyos SEA: Designated to protect areas where mountain and coastal plain communities meet and plants and wildlife unique to this ecotone are found. This SEA also protects important habitat linkage areas for movement between the San Gabriel Mountains and the Verdugo and Santa Monica Mountains. This SEA includes parcels within the East San Gabriel Mountains subarea.
- 8) San Gabriel Canyon SEA: Designated to protect core habitat for many native fish species including Santa Ana sucker, arroyo chub, and Santa Ana speckled dace. Also protected under this SEA is habitat for the San Gabriel bedstraw and San Gabriel Mountains Dudleya, as well as several sensitive plant communities. This SEA includes parcels within the East San Gabriel Mountains subarea.

- 9) Cruzan Mesa Vernal Pools SEA: Designated to protect seasonally wet vernal pools and surrounding coastal sage scrub and chaparral habitats which support sensitive plant species with specific habitat requirements that include seasonal pools and clay soils, and sensitive animal species such as western spadefoot and Riverside fairy shrimp. The vernal pools located within this SEA represent the only vernal pools found in Los Angeles County. This SEA includes parcels within the Castaic/Santa Clarita/Agua Dulce subarea.
- 10) Santa Susana Mountains/Simi Hills SEA: Designated to protect sensitive coastal sage scrub, alluvial scrub, valley oak woodland, mainland cherry woodland, native grassland, southern willow scrub, and cottonwood-willow riparian forest plant communities. Sensitive plants found in these plant communities include Lyon's pentachaeta, Nevin's barberry, and slender-horned spineflower. This SEA was also designated to protect sensitive wildlife species including California condor, Swainson's hawk, and arroyo southwestern toad. This SEA contains several important linkages for wildlife movement. This SEA includes parcels within the Castaic/Santa Clarita/Agua Dulce subarea.

Policy C/NR 3.1 is applicable to the proposed initiative because the proposed initiative study area contains "diverse natural habitats and biological resources." Policy C/NR 3.6 is applicable to the proposed initiative because "special status species and their associated habitat and wildlife movement corridors" are present within the proposed initiative study area. Policies C/NR 3.8 and C/NR 3.9 are applicable to the proposed initiative because 146,715 acres of the proposed initiative parcels are within SEAs. Policies C/NR 3.10 and C/NR 3.11 are applicable to the proposed initiative because proposed initiative parcels are located within or in the vicinity of biologically sensitive areas including riparian habitats, streambeds, wetlands, and native woodlands. Goal C/NR 4, Policy C/NR 4.1 is applicable to the proposed initiative because there is the potential for the presence of oak woodlands within every subarea except for the Antelope Valley Northeast and Lancaster Northeast subareas.

Santa Clarita Valley Area Plan

Of the 42,867 parcels in the proposed initiative study area, 2,243 are located within the Castaic/Santa Clarita/Agua Dulce subarea. Only parcels located within this subarea fall within the 2012 Santa Clarita Valley Area Plan. Parcels located within the Santa Clarita Valley are situated within the 2012 Santa Clarita Valley Area Plan. The Conservation and Open Space Element of the Santa Clarita Valley Area Plan has four objectives (CO-3.2, CO-3.3, CO-3.5 and CO-3.6) and eight policies (CO- 3.2.1, CO-3.2.2, CO-3.2.3, CO-3.2.4, CO-3.3.1, CO-3.3.3, CO-3.5.3, and CO-3.6.5) that cover biological resources as described in Chapter 3, *Regulatory Framework*.

The Policies CO-3.2.1 and CO-3.3.1 are applicable to the proposed initiative because wetlands, riparian habitat, and wildlife corridors along the Santa Clara River and tributaries, including the Cruzan Mesa are present within the Castaic/Santa Clarita/Agua Dulce subarea. Policies CO-3.2.2 and CO-3.5.3 are applicable to the proposed initiative because several parcels in the Castaic/Santa Clarita/Agua Dulce subarea are located within Coast Live Oak Woodlands (*Quercus agrifolia* Woodland Alliance) and other plant communities likely to have protected oak species. Policy CO-3.2.3 is applicable to the proposed initiative because endangered or threatened species and/or habitat are present within the Castaic/Santa Clarita/Agua Dulce subarea. Policy CO-3.3.3 is applicable to the proposed initiative because wildlife movement corridors, including between

Castaic and the San Gabriel Mountains, are present in the Castaic/Santa Clarita/Agua Dulce subarea.

Policy CO-3.2.4 is applicable to the proposed initiative because 14,911.3 acres of parcels in the Castaic/Santa Clarita/Agua Dulce subarea are located within existing SEAs. Likewise, Policy CO-3.6.5 is applicable to the proposed initiative because some parcels within the Castaic/Santa Clarita/Agua Dulce subarea are located adjacent to natural open space areas, and development on these parcels may require grading.

2015 Antelope Valley Areawide Plan – Town & Country

The Acton, Antelope Valley Northeast, East San Gabriel Mountains, Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/Valyermo/Littlerock, and Lancaster Northeast subareas are within the Antelope Valley Areawide General Plan. The Antelope Valley Areawide General Plan has one goal and seven policies which are relevant directly to the proposed initiative. Goal COS 4 of the Antelope Valley Areawide General Plan is applicable to the proposed initiative because the County must protect sensitive habitats and species to promote biodiversity. In support of this goal, there are seven policies within the Plan Update that are applicable to the proposed initiative: Policies COS 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, and 4.7. Policies 4.1, and 4.2 are applicable to the proposed initiative because the proposed initiative would indirectly allow for development in areas that were not previously able to be developed and would not dictate which parcels would be developed or the density of parcels to be developed. Policies 4.3, 4.4, 4.5, 4.6, and 4.7 are applicable to the proposed initiative because the proposed initiative would indirectly allow for development in areas that may be within SEAs, or are within the vicinity of wildlife movement areas such as preserve areas and parks.

County Municipal Los Angeles County Code Section 22.56.215 – Hillside Management and Significant Ecological Areas – Additional Regulations

Under the adopted Hillside Management and Significant Ecological Area Ordinances 22.56.215, single-family residences where not more than one such residence is proposed to be built by the same person on contiguous lots or parcels are exempt from the conditional use permit. Therefore, this ordinance is not relevant to the evaluation of conflicts of the proposed initiative with local general plans, policies, and ordinances.

County Municipal – Los Angeles County Code Sections 22.56.2050 – 22.56.2260 – Oak Trees

The Los Angeles County Municipal Code Sections 22.56.2050 – 22.56.2260 outline the County's Oak Tree Ordinance and guide the policies within the proposed and adopted General Plan and the Santa Clarita Valley Area Plan. The Los Angeles County Oak Tree Ordinance requires a permit prior to the cutting, removing, destroying, relocating, inflicting damage on, or encroaching into a protected zone of any tree within the oak genus.⁹

There is the potential for protected oak trees to be present on or within the vicinity of parcels in all subareas affected by the proposed initiative. Oak trees are typically found in oak woodlands and other indigenous woodlands, but may also be found in urban areas as planted trees. Based on

⁹ Los Angeles County Department of Regional Planning. Accessed 27 March 2014. Los Angeles County, California, Code of Ordinances – Title 22 Planning and Zoning. Available online at: <http://library.municode.com/index.aspx?clientId=16274>

existing plant community data, it is anticipated that the subareas within which this ordinance is most applicable are: Acton, East San Gabriel Mountains, Castaic/Santa Clarita/Agua Dulce, Lake Hughes/Gorman/West of Lancaster, and Lake Los Angeles/Llano/Valyermo/Littlerock. However, within Acton and Lake Los Angeles/Llano/Valyermo/Littlerock, the protected oaks are most likely large scrub oaks within Tucker Oak Chaparral (*Quercus john-tuckeri* Shrubland Alliance) along the foothills and lower slopes of the San Gabriel Mountains. In contrast, large oak trees occur within hardwood forests, especially within the Santa Clarita Valley and the Sierra Pelonas near Gorman. Planted oak trees could be within the Lancaster Northeast subarea but are not likely given the conditions are outside the habitat requirements for oak trees. Therefore, this ordinance is relevant to the evaluation of conflicts of the proposed initiative with local general plans, policies, and ordinances.

Acton Community Standards District

The Acton Community Standards District (CSD) requires that development plans emphasize the protection of, and revegetation with, native vegetation, including the native plants, grasses, shrubs and trees which intercept, hold and more slowly release rainfall than bare earth surfaces. Parcels containing native vegetation under the jurisdiction of the Acton CSD are present within the proposed initiative study area. Therefore, the provisions enforced by this CSD are relevant to the evaluation of conflicts of the proposed initiative with local general plans, policies, and ordinances.

Juniper Hills Community Standards District

The Juniper Hills CSD requires that the removal or destruction of vegetation of any kind on a lot or parcel of land two-and-one-half acres or greater in size shall require a conditional use permit pursuant to Part 1 of Chapter 22.56 where the area of removal or destruction is greater than 30 percent of the gross area of the lot or parcel. Parcels containing vegetation that would be removed during the construction of a single-family residence under the jurisdiction of the Juniper Hills CSD are present within the proposed initiative study area. Therefore, the provisions enforced by this CSD are relevant to the evaluation of conflicts of the proposed initiative with local general plans, policies, and ordinances.

Elizabeth Lake and Lake Hughes Community Standards District

The Elizabeth Lake and Lake Hughes CSD requires that all property development shall use only native vegetation in landscaped areas and to re-vegetate graded slopes. The CSD also determines that in order to remove or destroy greater than 30 percent of the native vegetation on a lot or parcel of land, the applicant shall substantiate that the applicant has obtained verification by an engineer, architect, biologist, or equivalent that removal or destruction is necessary because continued existence at present location(s) precludes the reasonable use of the property for a permitted use in the zone. Parcels containing vegetation that would be removed during the construction of a single-family residence under the jurisdiction of the Elizabeth Lake and Lake Hughes CSD are present within the proposed initiative study area. Therefore, the provisions enforced by this CSD are relevant to the evaluation of conflicts of the proposed initiative with local general plans, policies, and ordinances.

Castaic Area Community Standards District

The Castaic Area CSD determines that the removal or destruction of locally indigenous vegetation is prohibited on a parcel of land one acre or greater in size, where the area of removal or destruction is greater than 10 percent of the parcel. In addition, the channelization of creeks shall be permitted by the Castaic Area CSD provided that appropriate mitigation measures are implemented to preserve the indigenous habitats of the creeks. Further, an oak tree permit for the removal or relocation of one oak tree in conjunction with a single-family residence use in the Castaic Area CSD, shall require publishing and hearing. Parcels containing locally indigenous vegetation, oak trees, and in the vicinity of creeks that would be impacted during the construction of a single-family residence under the jurisdiction of the Castaic Area CSD are present within the proposed initiative study area. Therefore, the provisions enforced by this CSD are relevant to the evaluation of conflicts of the proposed initiative with local general plans, policies, and ordinances.

5.1.6 HCPs and NCCPs

Approximately 50 percent of the Acton subarea, 100 percent of the Antelope Valley North East subarea, and approximately 80 percent of the Lake Hughes/Gorman/West of Lancaster subarea are within the DRECP (see Figure 5.1.6-1, *HCPs and NCCPs Present within the Proposed Initiative Subareas*, at the end of this section). The DRECP is a proposed multispecies HCP intended to conserve threatened and endangered species and natural communities in the Mojave and Colorado Desert regions of southern California. However, the DRECP only applies to the development of renewable energy projects.

Similarly, the same areas of the proposed initiative parcels are located within the West Mojave Plan HCP as the boundaries of both HCPs as they affect Los Angeles County are the same. However, the West Mojave Plan HCP does not apply to the proposed initiative because potential hauled water parcels are not located on federal lands and the initiative would not trigger a federal nexus.^{10,11} Therefore, there are no applicable HCPs or NCCPs to the proposed initiative.

¹⁰ California Department of Fish and Wildlife. Natural Community Conservation Planning (NCCP). Website accessed, November 24, 2014. Available online at <http://www.dfg.ca.gov/habcon/nccp/>.

¹¹ Renewable Energy Action Team. Desert Renewable Energy Conservation Plan. Website accessed, November 24, 2014. Available online at: <http://www.drecp.org/>

5.2 IMPACT ANALYSIS

The analysis of significant impacts to biological resources was based on a reasonable worst case scenario which assumes the annual average rate of issuance of building permits over the 20-year 2015 to 2035 planning horizon as a result of the proposed initiative would be approximately 32 per year in the Santa Clarita Valley and approximately 152 per year in the Antelope Valley for a total of 184 permits per year for both areas. The total anticipated building permits over the 20-year 2015 to 2035 planning horizon would be approximately 3,680. The number of parcels forecasted to be issued building permits over the 20-year planning horizon within each subarea is as follows: (a) 735 of 2,243 parcels in the Castaic/Santa Clarita/Agua Dulce subarea; (b) 737 of 1,246 parcels in the Acton subarea; (3c) 847 of 15,166 parcels in the Lake Hughes/Gorman/West of Lancaster subarea; (d) 1,251 of 14,822 parcels in the Lake Los Angeles/Llano/Valyermo/ Littlerock subarea; (e) zero of 1,938 parcels in the Antelope Valley Northeast subarea; (f) 110 of 6,794 parcels in the Lancaster Northeast subarea; and (7g) zero of 648 parcels in the East San Gabriel Mountains subarea. An analysis of a small subset of parcels in each subarea was performed in order to determine potential impacts from hauled water infrastructure including a storage tank, a septic leach field, and access for hauled water delivery vehicles. Based on the analysis it was determined that the average area of disturbance for each parcel was approximately 36 percent. The average size of lots analyzed was four acres.¹² Based on this analysis, potential impacts to biological resources were determined.

5.2.1 Listed and Sensitive Plants and Animals

The proposed initiative would result in significant impacts to biological resources in relation to threatened and/or endangered species, fully protected and sensitive species, locally important species, or associated critical habitat by facilitating development of potentially suitable and occupied habitat for listed and special-status species. Within the entire study area, there are 27 listed or candidate species, 75 sensitive or rare species (including four fully protected species), 14 locally important species (including 12 protected under the Desert Native Plants Act and two protected by California Fish and Game Code furbearing mammal regulations), and up to 16,740 acres of designated critical habitat with the potential to be developed with single-family residences as a result of the ability to use hauled water as the primary source of water pursuant to the proposed initiative. Impacts within each subarea are discussed in detail below. While the proposed initiative would have no direct impacts on candidate, sensitive, or special status species, indirect impacts would occur as a result of development being permitted in areas that are currently undeveloped due to being located outside a water district and not being able to develop a groundwater well with sufficient water to provide a reliable source of potable water. These impacts would include direct habitat loss and fragmentation as parcels are developed, introduction of non-native plants, and introduction of lighting and noise. Further, growth-inducing impacts resulting from the proposed initiative would include not only the development of infrastructure on parcels, but associated road improvements which may impact special-status plants and wildlife through disturbance and removal of vegetation as well as increased light and noise during and after improvements. Development of parcels within the proposed initiative study area would be subject to the provisions of the Federal and State Endangered Species Acts, as well as Sections 1900 –

¹² Sapphos Environmental, Inc. 27 August 2014. Memorandum for the Record. Subject: Analysis of Residential Development and Existing Disturbance for Parcels within or near the Proposed Hauled Water Initiative Study Area. Prepared for: Los Angeles County Hauled Water Task Force.

1913, 3511, 4150, 4700, 5050, 5515 of the State Fish and Game Code and Sections 80071-80075 of the State Food and Agriculture Code.

Approximately 16,740 acres or 5 percent of the proposed initiative study area is located within critical habitat. Given the reasonable worst-case scenario, it can be expected that five percent of the 3,680 building permits or 184 parcels will be issued within areas of critical habitat. This would result in approximately 736 acres of potential development in areas designated as critical habitat and 265 acres of critical habitat disturbance. Facilitating housing development in these areas of critical habitat for federally listed species would conflict with Section 9 of the Federal Endangered Species Act and Section 2080 of the California Endangered Species Act, to promote the survival and recovery of listed species.

This forecast can only predict how many parcels would be issued building permits, not which parcels would be developed. Therefore, all impacts below must be considered as significant impacts to listed and sensitive species and their habitats as a result of the proposed initiative for those parcels where occupied or potentially suitable habitat for special status species is present, requiring the consideration of mitigation measures.

Castaic/Santa Clarita/Agua Dulce

There are 20 federally and State-listed species and associated habitats potentially present in this subarea that may be impacted by the proposed initiative. This subarea is the most diverse subarea with regards to listed species. These include six plants, one invertebrate, two fish, three amphibians, seven birds, and one mammal. This subarea has the greatest number of listed plants and birds and is the only subarea with a listed invertebrate, due to the presence of vernal pools on the Cruzan Mesa. However, the proposed initiative would have the least impact on threatened and endangered birds in this subarea because (1) no nesting habitat is present for bald eagle, California condor, and Swainson's hawk within this subarea; (2) only one percent of the subarea is designated critical habitat for coastal California gnatcatcher; and (3) southwestern willow flycatcher habitat is degraded or lacking in this subarea. In contrast, portions of the Castaic/Santa Clarita/Agua Dulce subarea are ideal habitat for threatened and endangered plants, invertebrates, fish, and amphibians. Most of these species congregate along two resources: (1) the Santa Clara River and tributaries and (2) vernal pools on the Cruzan Mesa; additionally, the San Fernando Valley spineflower may be found in the western parts of the Santa Clarita Valley in the foothills along the Santa Clara River. Critical habitat for federally listed species occurs on 5 percent of this subarea. Both the Santa Clara River and Cruzan Mesa are designated critical habitat. The proposed initiative parcels occur along these vital resources. In addition, this subarea has the potential for a large number of rare plants (16 species), sensitive mammals (15 species), and birds (eight species) and is one of the few subareas with the potential presence of sensitive amphibians, reptiles, and fish. Sensitive species not only occur within the vernal pools and Santa Clara River, but also within the foothill grasslands and oak woodlands that occur along the base of the Santa Susana and San Gabriel Mountains.

Potential impacts to listed, sensitive, and locally important species in this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 1,775 acres or 5 percent of this subarea is located within critical habitat. It can be expected that 5 percent of the 735 building permits or 37 parcels will be issued for areas within critical habitat within this subarea. This would result in approximately 147 acres of potential development in areas designated as critical habitat and 53 acres of potential critical habitat disturbance in this subarea.

Acton

There are 10 federally and State-listed species and associated habitats potentially present in this subarea that may be impacted by the proposed initiative. These include two plants, two fish, two amphibians, three birds, and one mammal. All of these species have habitat within this subarea primarily along the Santa Clara River, which includes the Santa Ana sucker, unarmored threespine stickleback, arroyo toad, California red-legged frog, southwestern willow flycatcher, least Bell's vireo, tricolored blackbird, Braunton's milk-vetch, and slender-horned spineflower; however, California red-legged frog disperses into upland habitat up to a couple miles from the water source and tributaries, and the slender-horned spineflower and Braunton's milk-vetch habitat includes chaparral and coastal scrub. Critical habitat for federally listed species occurs on less than 0.1 percent of this subarea. Critical habitat for arroyo toad is present near the Santa Clara River. Acton has a large number of sensitive plants (12 species) and birds (six species), none of which are concentrated within specific habitats. This subarea is also important for sensitive reptiles, amphibians, and fish, mostly along the Santa Clara River. Plants protected by the DNPA also occur within this subarea.

Potential impacts to listed, sensitive, and locally important species in this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 80 acres or less than 0.1 percent of this subarea is located within critical habitat. It can be expected that less than 0.1 percent of the 737 building permits or one parcel will be issued for areas within critical habitat, resulting in approximately 1 acre of potential critical habitat disturbance in this subarea.

Lake Hughes/Gorman/West of Lancaster

There are 15 federally and State-listed species and associated habitats potentially present in this subarea that may be impacted by the proposed initiative. These include one plant, two fish, three amphibians, one reptile, six birds, and two mammals. The Santa Ana sucker and unarmored threespine stickleback only have habitat near parcels located in Green Valley and Lake Hughes due to the connection of tributaries to populations downstream in the Santa Clara River; however, both species are unlikely to be present given the lack of regularly flowing water throughout most of San Francisquito Canyon and Elizabeth Lake Canyon. However, wintering bald eagles are known to occur along the lakes of this subarea and the presence of the moisture in wooded areas provides habitat for arroyo toad, California red-legged frog, and Tehachapi slender salamander. This subarea is also the most likely place within the study area for California condor given proximity to extant populations and probable movement between populations in the Tehachapi Mountains and those populations in the mountains to the west. In addition, most of the subarea within the Mojave Desert is habitat for desert tortoise. Resources required by listed species in this subarea are not concentrated; rather, they are more widespread given the available habitat. There is no designated critical habitat for federally listed species present on parcels within this subarea. Sensitive species are more concentrated, generally occurring within the mountainous portions of this subarea. This subarea has a high number of sensitive plants (16 species), birds (eight species), reptiles (four species), and mammals (15 species). The high diversity of sensitive species is due to the convergence of the Mojave Desert and Traverse Range and standing water within several lakes and wet meadows. Plants protected by the DNPA also occur within this subarea.

Potential impacts to listed, sensitive, and locally important species in this subarea are substantial. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. However, the reasonable worst-case scenario assumes that 847 of

the 15,166 parcels (6 percent) within the Lake Hughes/Gorman/West of Lancaster subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, the impacts within this subarea described above would be greater than the actual anticipated impacts.

Lake Los Angeles/Llano/Valyermo/Littlerock

There are nine federally and State-listed species and associated habitats potentially present in this subarea that may be impacted by the proposed initiative. These include two amphibians, one reptile, two bird, and four mammals. A majority of this subarea is habitat only for desert tortoise, Mohave ground squirrel, and Swainson's hawk. The plant communities and terrain along Big Rock and Little Rock washes, which bisect this subarea, are ideal habitat for desert tortoise. However, the foothills and creeks/wash near Juniper Hills and Valyermo also have habitat for Nelson's antelope squirrel, San Bernardino kangaroo rat, arroyo toad, and southern mountain yellow-legged frog. Much of the habitat for listed species is in proximity to rural development and agricultural fields, therefore, limiting the habitat value for all species except Swainson's hawk, which will use the cottonwood trees commonly planted as wind breaks around the agricultural fields for roosting and nesting. There is no designated critical habitat for federally listed species present on parcels within this subarea. This subarea has a large number of sensitive plants (14 species) and mammals (12 species), most of which can be expected on and near the lower slopes of the San Gabriel Mountains or along washes. Plants protected by the DNPA also occur within this subarea.

Potential impacts to listed, sensitive, and locally important species in this subarea are substantial. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. However, the reasonable worst-case scenario assumes that 1,251 of the 14,822 parcels (8 percent) within the Lake Los Angeles/Llano Valyermo/Littlerock subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, the impacts within this subarea described above would be larger than the actual anticipated impacts.

Antelope Valley Northeast

There are six federally and State-listed species and associated habitats potentially present in this subarea that may be impacted by the proposed initiative. The Antelope Valley Northeast subarea is the least diverse subarea with regards to listed species. These include one reptile, one bird, and four mammals. The presence of Swainson's hawk is possible, but the lack of trees for nesting within the subarea limits its value as Swainson's hawk habitat. Nelson's antelope squirrel and San Bernardino kangaroo rat are also potentially present given the presence of habitat for these species. This subarea is very likely to have desert tortoise and Mohave ground squirrel, owed to its remoteness, and undeveloped desert plant communities. Almost all of this subarea (99 percent) is within desert tortoise critical habitat. This subarea has fewer sensitive species compared to the other subareas and the sensitive plants are expected to be concentrated within more alkali areas.

The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. However, the reasonable worst-case scenario assumes that zero parcels within the Antelope Valley Northeast subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, it is not anticipated that substantial impacts to listed and special-status species would occur in this subarea.

Lancaster Northeast

There are seven federally and State-listed species and associated habitats potentially present in this subarea that may be impacted by the proposed initiative. These include one reptile, two bird, and four mammals. The list of potentially present species is similar to Antelope Valley Northeast; however, the habitat for these species likely is poorer quality, owed to the proximity to rural settlements around Lancaster. Furthermore, the predominant plants are *Atriplex* species, which are habitat for most of the listed species, but typically these species occur in lower abundance. This subarea also has the greatest amount of agricultural fields, meaning Swainson's hawks are very likely to nest within this subarea. There is no designated critical habitat for federally listed species present on parcels within this subarea. This subarea has fewer sensitive species compared to the other subareas and the sensitive plants are expected to be concentrated within more alkali areas.

Potential impacts to listed, sensitive, and locally important species in this subarea are substantial. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. However, the reasonable worst-case scenario assumes that 110 of the 6,794 parcels (2 percent) within the Lancaster Northeast subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, the impacts within this subarea described above would be greater than the actual anticipated impacts.

East San Gabriel Mountains

There are 13 federally and State-listed species and associated habitats potentially present in this subarea that may be impacted by the proposed initiative. These include five plants, one fish, two amphibians, four birds, and one mammal. This subarea also contains small amounts of critical habitat for arroyo toad, Santa Ana sucker, and southern mountain yellow-legged frog. California gnatcatcher is unlikely to occur because parcels within East San Gabriel Mountains are interspersed with already developed parcels. In contrast, Nevin's barberry was documented in the adjacent Lopez Canyon in 1998, which has the same elevation and plant communities as the East San Gabriel Mountains. Townsend's big-eared bad is a habitat generalist and can occur almost anywhere, including East San Gabriel Mountains. Critical habitat for federally listed species is present on two percent of this subarea. The parcels within this subarea are widespread throughout the San Gabriel Mountains, which contain a large variety of habitat types and a large elevation gradient. As a result, this subarea has the potential for the most sensitive species.

The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. However, the reasonable worst-case scenario assumes that zero parcels within the East San Gabriel Mountains subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, it is not anticipated that substantial impacts to listed and special-status species will occur in this subarea.

5.2.2 Riparian Communities and State-designated Sensitive Habitat

The proposed initiative would result in significant impacts to biological resources in relation to sensitive plant communities and riparian habitat because of allowable development in undeveloped habitats. Throughout the entire study area, the proposed initiative has the potential to indirectly impact up to 59 sensitive plant communities and 146,150 acres (28,245 acres covered by CalVeg data and 117,900 acres covered by DRECP data) that have the potential to contain a sensitive plant community. The proposed initiative indirectly could impact up to 49,812 acres (1 percent of the study area covered by CalVeg data and 14 percent of the study area covered by

DRECP data) that have the potential to contain a riparian plant community. Additionally, the proposed initiative could potentially impact up to 8,020 acres of potential State Jurisdictional Areas throughout the study area. Impacts within each subarea are discussed in detail below. While the proposed initiative would have no direct impacts on riparian habitat or other sensitive natural communities, indirect impacts would occur as a result of development being permitted in areas that are currently undeveloped. These impacts would include direct loss and fragmentation of sensitive communities as parcels are developed and the introduction of non-native plants that would degrade existing communities. Further, growth-inducing impacts resulting from the proposed initiative would include not only the development of infrastructure on parcels, but associated road improvements which may impact sensitive plant communities through the disturbance and removal of vegetation. Development of parcels within the proposed initiative study area would be subject to the provisions of Section 1600 of the State Fish and Game Code. Mitigation measures are required to reduce the level of impacts of the proposed initiative to riparian habitat and other sensitive natural communities.

Approximately 146,150 acres or 43 percent of the proposed initiative study area is potentially located within state-sensitive plant communities. Given the reasonable worst-case scenario of 184 building permits per year for a total of 3,680 building permits over the 20 year planning horizon, it can be expected that 43 percent of these 3,680 building permits or 1,582 parcels will be issued for areas within state-sensitive plant communities resulting in approximately 6,330 acres of potential development in areas potentially containing state-sensitive plant communities and 2,29 acres of state-sensitive plant community disturbance.

Approximately 49,810 acres or 15 percent of the proposed initiative study area is potentially located within riparian habitat. It can be expected that 15 percent of the 3,680 building permits or 552 parcels will be issued for areas within potential riparian habitat. This would result in approximately 2,208 acres of potential development in areas potentially containing riparian habitat and 795 acres of potential riparian habitat disturbance.

Approximately 8,020 acres or 2 percent of the proposed initiative study area is potentially located within State Jurisdictional Areas. It can be expected that 2 percent of the 3,680 building permits or 74 parcels will be issued for areas within State Jurisdictional Areas, resulting in 294 acres of potential development in areas potentially containing State Jurisdictional Areas and 106 acres of potential State Jurisdictional Area disturbance. As such, the potential exists for the proposed initiative to impact state sensitive plant communities and riparian habitat, which constitutes a significant impact requiring the consideration of mitigation measures.

Castaic/Santa Clarita/Agua Dulce

There is potential for 32 sensitive plant communities, 16 of which are riparian communities, and an additional 11 non-sensitive riparian plant communities to be impacted in this subarea. The riparian areas along the Santa Clara River and tributaries are State sensitive Fremont' Cottonwood Forest (*Populus fremontii* Forest Alliance), Scale Broom Scrub (*Lepidospartum squamatum* Shrubland Alliance), and Red Willow Thickets (*Salix laevigata* Shrubland Alliance); in addition, the Arroyo Willow Thicket (*Salix lasiolepis* Shrubland Alliance) that predominates has a State sensitive association, which means the entirety of the community should be considered State sensitive until field verification. Other, non-State sensitive plant communities occur within these riparian habitats along the Santa Clara River and tributaries.

Potential impacts to riparian communities, State-sensitive plant communities, and State Jurisdictional Areas in this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 9,655 acres or 27 percent of this subarea is located within potential state-sensitive plant communities. It can be expected that 27 percent of the 735 building permits or 198 parcels will be issued for areas within state-sensitive plant communities in this subarea. This would result in approximately 794 acres of potential development in areas potentially containing state-sensitive plant communities and 286 acres of potential state-sensitive plant community disturbance in this subarea.

Approximately 490 acres or 1 percent of this subarea is located within potential riparian habitat. It can be expected that 1 percent of the 735 building permits or 7 parcels will be issued for areas potentially within riparian habitat in this subarea. This would result in approximately 29 acres of potential development in areas potentially containing riparian habitat and 11 acres of potential riparian habitat disturbance in this subarea.

Approximately 802 acres or 2 percent of this subarea is located within potential State Jurisdictional Areas. It can be expected that 2 percent of the 735 building permits or 15 parcels will be issued for areas within potential State Jurisdictional Areas in this subarea. This would result in approximately 59 acres of potential development in areas potentially containing State Jurisdictional Areas and 21 acres of potential State Jurisdictional Areas disturbance in this subarea.

The Los Angeles Flood Control District (LACFCD) includes the Newhall Ranch portion of the Castaic/ Santa Clarita/ Agua Dulce subarea. In the event any flood protection facility is built in an upland type area, as a result of increased development resulting from approval of building permits for single-family homes where hauled water is authorized as the primary source of potable water, the Water Resources Division of DPW anticipates that such facilities, due to their function, would likely convert upland area to waters of the United States. Maintenance activities in open earthen bottom channel, check dams, retention and detention basins would have the potential to require routine removal of riparian and aquatic habitats and would thus be subject to regulation under the State Fish and Game Code Section 1601 (Lake/Streambed Alteration Agreements with the CA Department of Fish and Wildlife), and the LACFCD maintenance standards and practices for removal or conversion of aquatic and riparian habitats, in perpetuity over the life of the facility during storm season, before storm season, and after storm season. Facility maintenance would normally involve annual mowing of the facility bottom, dewatering of accumulated debris, and excavation of the debris which could include removal of accumulated debris and the root balls of opportunistic vegetation within the debris cone of the facility during cleanouts of the facility, and hauling material to a disposal site. Therefore, LACFCD would not allow any plantings in the vicinity of the facility right of way that would have the potential to attract sensitive species that would have the potential to constrain maintenance and cleanouts of the facility and its appurtenant features.

As a requirement of the grading permit and the Building Permit application process, the Department of Building and Safety requires the property owner to install a 200-gallon onsite retention basin or include at least two of the Low Impact Development Best Management Practices. These measures are required to minimize the impacts of stormwater runoff from impervious surfaces on natural drainages. The property owner is responsible for maintenance of retention basins and other onsite facilities installed on private property.

Acton

There is potential for 26 sensitive plant communities, 11 of which are riparian communities, and an additional four non-sensitive riparian plant communities to be impacted in this subarea. The reason for the diversity in this subarea is that this area has a mix of riparian (i.e., the Santa Clara River) and chaparral plant communities with a transition to desert plant communities. The riparian habitat in this subarea is similar in composition to the Castaic/Santa Clarita/Agua Dulce subarea but with a higher probability of California Sycamore Woodland (*Platanus racemosa* Woodland Alliance). The difference between Acton and the Castaic/Santa Clarita/Agua Dulce subareas generally is due to the transition into the Mojave Desert, including Joshua Tree Woodlands (*Yucca brevifolia* Woodland Alliance), Narrow-leaf Goldenbush Scrub (*Ericameria linearifolia* Shrubland Alliance), Anderson's Boxthorn Scrub (*Lycium andersonii* Shrubland Alliance), and Nodding Needle Grass Grassland (*Nassella cernua* Herbaceous Alliance).

Potential impacts to riparian communities, State-sensitive plant communities, and State Jurisdictional Areas in this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 1,680 acres or 9 percent of this subarea is located within potential state-sensitive plant communities. It can be expected that 9 percent of the 737 building permits or 66 parcels will be issued for areas within state-sensitive plant communities in this subarea. This would result in 265 acres of potential development in areas potentially containing state-sensitive plant communities and 96 acres of potential state-sensitive plant community disturbance in this subarea.

Approximately 1,080 acres or 6 percent of this subarea is located within potential riparian habitat. It can be expected that 6 percent of the 737 building permits or 44 parcels will be issued for areas potentially within riparian habitat in this subarea. This would result in approximately 177 acres of potential development in areas potentially containing riparian habitat and 64 acres of potential riparian habitat disturbance in this subarea.

Approximately 275 acres or 2 percent of this subarea is located within potential State Jurisdictional Areas. It can be expected that 2 percent of the 737 building permits or 15 parcels will be issued for areas within potential State Jurisdictional Areas in this subarea. This would result in approximately 59 acres of potential development in areas potentially containing State Jurisdictional Areas and 21 acres of potential State Jurisdictional Areas disturbance in this subarea.

The LACFCD includes the Acton portion of the study area. In the event any flood protection facility is built in an upland type area, as a result of increased development resulting from approval of building permits for single-family homes where hauled water is authorized as the primary source of potable water, the Water Resources Division of DPW anticipates that such facilities, due to their function, would likely convert upland area to waters of the United States. Maintenance activities in open earthen bottom channel, check dams, retention and detention basins would have the potential to require routine removal of riparian and aquatic habitats and would thus be subject to regulation under the State Fish and Game Code Section 1601 (Lake/Streambed Alteration Agreements with the CA Department of Fish and Wildlife), and the LACFCD maintenance standards and practices for removal or conversion of aquatic and riparian habitats, in perpetuity over the life of the facility during storm season, before storm season, and after storm season. Facility maintenance would normally involve annual mowing of the facility bottom, dewatering of accumulated debris, and excavation of the debris which could include removal of accumulated debris and the root balls of opportunistic vegetation within the debris cone of the facility during cleanouts of the facility, and hauling material to a disposal site. Therefore, LACFCD would not

allow any plantings in the vicinity of the facility right of way that would have the potential to attract sensitive species that would have the potential to constrain maintenance and cleanouts of the facility and its appurtenant features.

As a requirement of the grading permit and the Building Permit application process, the Department of Building and Safety requires the property owner to install a 200-gallon onsite retention basin or include at least two of the Low Impact Development Best Management Practices. These measures are required to minimize the impacts of stormwater runoff from impervious surfaces on natural drainages. The property owner is responsible for maintenance of retention basins and other onsite facilities installed on private property.

Lake Hughes/Gorman/West of Lancaster

There is potential for 40 sensitive plant communities, 17 of which are riparian communities, and an additional 13 non-sensitive riparian plant communities to be impacted in this subarea. This subarea has the highest diversity of potential sensitive plant communities. The reason for the large numbers and diverse sensitive plant communities is because the subarea is largely undeveloped, has both mountains and desert, and is at the transition zone between major eco-types. This subarea has less *Ceanothus* scrub and more oak woodlands and chaparral, including the State-sensitive Valley Oak Woodland Canyon Live Oak Chaparral (*Quercus chrysolepis* Shrubland Alliance), and Basket Bush Thickets (*Rhus trilobata* Provisional Shrubland Alliance); in addition, the Scrub Oak Chaparral (*Quercus berberidifolia* Shrubland Alliance) that predominates has a State-sensitive association with Cup-leaf Ceanothus (*Ceanothus greggii*), which occurs in the transition zones and the desert. Wet meadows are present within the Leona Valley and near Gorman, which can host a number of State-sensitive herbaceous communities. Within the Mojave Desert portions of this subarea, dry washes have the potential for State-sensitive communities, such as Black-stem Rabbitbush Scrub (*Ericameria paniculata* Shrubland Alliance), and Joshua Tree Woodlands occur along the lower slopes of Portal Ridge.

Potential impacts to riparian communities, State-sensitive plant communities, and State Jurisdictional Areas in this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 55,330 acres or 44 percent of this subarea is located within potential state-sensitive plant communities. It can be expected that 44 percent of the 847 building permits or 373 parcels will be issued for areas within state-sensitive plant communities in this subarea. This would result in approximately 1,491 acres of potential development in areas potentially containing state-sensitive plant communities and 537 acres of potential state-sensitive plant community disturbance in this subarea.

Approximately 10,340 acres or 8 percent of this subarea is located within potential riparian habitat. It can be expected that 8 percent of the 847 building permits or 68 parcels will be issued for areas potentially within riparian habitat in this subarea. This would result in approximately 271 acres of potential development in areas potentially containing riparian habitat and 98 acres of potential riparian habitat disturbance in this subarea.

Approximately 1,535 acres or 1 percent of this subarea is located within potential State Jurisdictional Areas. It can be expected that 1 percent of the 847 building permits or eight parcels will be issued for areas within potential State Jurisdictional Areas in this subarea. This would result in approximately 34 acres of potential development in areas potentially containing State Jurisdictional Areas and 12 acres of potential State Jurisdictional Areas disturbance in this subarea.

Lake Los Angeles/Llano/Valyermo/Littlerock

There is potential for 27 sensitive plant communities, 10 of which are riparian communities, and an additional nine non-sensitive riparian plant communities to be impacted in this subarea. The reason for a large amount of the area being potentially sensitive partially due to the presence of State-sensitive Creosote–White Burr Sage Scrub (*Larrea tridentate*–*Ambrosia dumosa* Shrubland Alliance), which forms a State-sensitive association with *Petalonyx thurberi* in desert washes. Creosote–White Burr Sage Scrub dominates the plant communities in this subarea; so although the State-sensitive alliance only occurs in washes, the large number of washes that originate on the north side of the San Gabriel Mountains warrants considering most of the area as a State-sensitive plant community. The foothills are also areas for other State-sensitive plant communities, such as Andersons Boxthorn Scrub and Canyon Live Oak Chaparral, Indian Rice Grass Grasslands (*Achnatherum [Stipa] hymenoides* Herbaceous Alliance), and Desert Olive Patches (*Forestiera pubescens* Shrubland Alliance). Riparian habitats include State-sensitive Scalebroom Scrub and non-State sensitive Cheesebush Scrub (*Ambrosia salsola* Shrubland Alliance), which are common along the large number of washes in the subarea.

Potential impacts to riparian communities, State-sensitive plant communities, and State Jurisdictional Areas in this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 54,970 acres or 51 percent of this subarea is located within potential state-sensitive plant communities. It can be expected that 51 percent of the 1,251 building permits or 638 parcels will be issued for areas within state-sensitive plant communities in this subarea. This would result in approximately 2,552 acres of potential development in areas potentially containing state-sensitive plant communities and 919 acres of potential state-sensitive plant community disturbance in this subarea.

Approximately 14,695 acres or 14 percent of this subarea is located within potential riparian habitat. It can be expected that 14 percent of the 1,251 building permits or 175 parcels will be issued for areas potentially within riparian habitat in this subarea. This would result in approximately 700 acres of potential development in areas potentially containing riparian habitat and 252 acres of potential riparian habitat disturbance in this subarea.

Approximately 3,315 acres or 3 percent of this subarea is located within potential State Jurisdictional Areas. It can be expected that 3 percent of the 1,251 building permits or 38 parcels will be issued for areas within potential State Jurisdictional Areas in this subarea. This would result in approximately 150 acres of potential development in areas potentially containing State Jurisdictional Areas and 54 acres of potential State Jurisdictional Areas disturbance in this subarea.

Antelope Valley Northeast

There is potential for 17 sensitive plant communities, eight of which are riparian communities, and an additional five non-sensitive riparian plant communities to be impacted in this subarea. The plant communities within this area are not very diverse, with Creosote–White Burr Sage Scrub being the predominant community. Given that the Creosote–White Burr Sage Scrub plant community is considered sensitive because of a State-sensitive association, 14,020 acres of the subarea have potential for sensitive plant communities. The potential riparian habitat, which is about 795 acres, is likely higher than what is actually present within the subarea because Spinescale Scrub (*Atriplex spinifera* Shrubland Alliance), which is a common State-sensitive

community in the subarea, was classified as riparian; this plant community occurs in alkali sinks where playas form (i.e., desert wetlands where water pools) and State-sensitive plants can occur. Other State-sensitive plant communities mostly occur within the washes, but near the alkali flats there is a possibility for Winterfat Scrubland (*Krascheninnikovia lanata* Scrubland Alliance) and Spiny Hop Sage Scrub (*Grayia spinosa* Shrubland Alliance). In addition, it was determined that up to 565 acres of State Jurisdictional Areas have the potential to be present within this subarea.

Potential impacts to riparian communities, State-sensitive plant communities, and State Jurisdictional Areas in this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. However, the reasonable worst-case scenario assumes that zero parcels within the Antelope Valley Northeast subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, it is not anticipated that substantial impacts to State-sensitive and riparian plant communities will occur in this subarea.

Lancaster Northeast

There is potential for 16 sensitive plant communities, 11 of which are riparian communities, and an additional eight non-sensitive riparian plant communities to be impacted in this subarea. The plant communities in the Lancaster Northeast and Antelope Valley Northeast are similar; however, the Lancaster Northeast subarea has more *Atriplex* communities because water flow from the Big Rock and Little Rock Washes begins to slow and pool in the area, ultimately ending in the Rosamond Dry Lake two miles to the north. Almost all of the State-sensitive plant communities in this subarea are associated with the riparian washes or the alkali flats, except for some Creosote Bush–White Burr sage Scrub to the east and Joshua Tree Woodlands close to Lancaster. This subarea had the largest percent considered riparian compared to the other subareas because of the presence of alkali flats and washes. Much of the area is dominated by State-sensitive wash and riparian plant communities or non-State sensitive *Atriplex* communities.

Potential impacts to riparian communities, State-sensitive plant communities, and State Jurisdictional Areas in this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 7,720 acres or 22 percent of this subarea is located within potential state-sensitive plant communities. It can be expected that 22 percent of the 110 building permits or 24 parcels will be issued for areas within state-sensitive plant communities in this subarea. This would result in approximately 97 acres of potential development in areas potentially containing state-sensitive plant communities and 35 acres of potential state-sensitive plant community disturbance in this subarea.

Approximately 21,885 acres or 62 percent of this subarea is located within potential riparian habitat. It can be expected that 62 percent of these 110 building permits or 68 parcels will be issued for areas potentially within riparian habitat in this subarea. This would result in approximately 273 acres of potential development in areas potentially containing riparian habitat and 98 acres of potential riparian habitat disturbance in this subarea.

Approximately 1,310 acres or 4 percent of this subarea is located within potential State Jurisdictional Areas. It can be expected that 4 percent of these 110 building permits or 4 parcels will be issued for areas within potential State Jurisdictional Areas in this subarea. This would result in approximately 18 acres of potential development in areas potentially containing State Jurisdictional Areas and 6 acres of potential State Jurisdictional Areas disturbance in this subarea.

East San Gabriel Mountains

There is potential for 33 sensitive plant communities, 12 of which are riparian communities, and an additional six non-sensitive riparian plant communities to be impacted in this subarea. The reason for the large numbers and diverse sensitive plant communities is because of the subarea is largely undeveloped, spans the entirety of the San Gabriel Mountains, has a large elevation gradient, and is at the transition zone between major eco-types. If all parcels in the East San Gabriel Mountains subarea were developed as a result of the proposed initiative, it would result in up to 2,775 acres of sensitive plant communities potentially impacted. In addition, 530 acres of riparian habitat could be impacted. It was also determined that up to 210 acres of State Jurisdictional Areas have the potential to be present within this subarea. The reasonable worst-case scenario assumes that zero parcels within the East San Gabriel Mountains subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, it is not anticipated that substantial impacts to State-sensitive and riparian plant communities will occur in this subarea.

The LACFCD includes the East San Gabriel Mountains portion of the study area. In the event any flood protection facility is built in an upland type area, as a result of increased development resulting from approval of building permits for single-family homes where hauled water is authorized as the primary source of potable water, the Water Resources Division of DPW anticipates that such facilities, due to their function, would likely convert upland area to waters of the United States. Maintenance activities in open earthen bottom channel, check dams, retention and detention basins would have the potential to require routine removal of riparian and aquatic habitats and would thus be subject to regulation under the State Fish and Game Code Section 1601 (Lake/Streambed Alteration Agreements with the CA Department of Fish and Wildlife), and the LACFCD maintenance standards and practices removal or conversion of aquatic and riparian habitats, in perpetuity over the life of the facility during storm season, before storm season, and after storm season. Facility maintenance would normally involve annual mowing of the facility bottom, dewatering of accumulated debris, and excavation of the debris which could include removal of accumulated debris and the root balls of opportunistic vegetation within the debris cone of the facility during cleanouts of the facility, and hauling material to a disposal site. Therefore, LACFCD would not allow any plantings in the vicinity of the facility right of way that would have the potential to attract sensitive species that would have the potential to constrain maintenance and cleanouts of the facility and its appurtenant features.

As a requirement of the grading permit and the Building Permit application process, the Department of Building and Safety requires the property owner to install a 200-gallon onsite retention basin or include at least two of the Low Impact Development Best Management Practices. These measures are required to minimize the impacts of stormwater runoff from impervious surfaces on natural drainages. The property owner is responsible for maintenance of retention basins and other onsite facilities installed on private property.

The proposed initiative would be expected to result in significant impacts to State-designated riparian and other sensitive plant communities, including areas subject to Section 1600 of the State Fish and Game Code. The County building permit process does not currently require property owners to demonstrate compliance with Section 1600 of the State Fish and Game Code. However, the CDFW requires applicants for Streambed and Lake Alteration Agreements (SLAA) to demonstrate that there will be no net loss of habitat function or value as a result of the SLAA; therefore, alteration of lands subject to the jurisdiction of the CDFW, as a result of the construction of single-family homes and infrastructure, developed as a result of the proposed initiative would be expected to be

reduced to below the level of significance, as required by the SLAA notification and agreement process. However, there is no Federal, State, or local statute that requires avoidance or compensation for State-designated sensitive habitats located beyond the limits of the area subject to the jurisdiction of the CDFW pursuant to Section 1600 of the State Fish and Game Code, and the conversion of an estimated 2,280 acres of State-sensitive plant communities and 795 acres of riparian habitat would be a significant impact.

5.2.3 Federal “Waters of the United States”

The proposed initiative would result in significant impacts to biological resources in relation to federally protected wetlands and Waters of the United States as defined by Section 404 of the Clean Water Act because of allowable development in undeveloped locations, warranting the consideration of mitigation measures. Throughout the entire study area, the proposed initiative may impact up to 1,440 acres of federal wetlands and 220 linear miles of federal waterways. Impacts within each subarea are discussed in detail below. While the proposed initiative would have no direct impacts on federally protected wetlands and waterways, indirect impacts would occur as a result of development being permitted in areas that are currently undeveloped. These impacts would include disruption of streams and wetlands through adjacent development, and dredge and fill activities associated with development. Further, growth-inducing impacts resulting from the proposed initiative would include not only the development of infrastructure on parcels, but associated road improvements which may impact federally protected wetlands via dredge and fill activities. Development of parcels within the proposed initiative study area would be subject to the provisions of Section 404 of the Federal Clean Water Act. Dredge or fill in Waters of the United States is subject to the regulatory authority of the USACOE pursuant to Section 404 of the Federal Clean Water Act. The use of an authorized Nationwide Permit or issuance of an individual permit, requires the project applicant to demonstrate compliance with the Corps’ Final Compensatory Mitigation Rule. Each year thousands of property owners undertake projects that affect the nation’s aquatic resources. Proposed projects that are determined to impact jurisdictional waters are first subject to review under the Clean Water Act. The USACOE reviews these projects to ensure environmental impacts to aquatic resources are avoided or minimized as much as possible. Consistent with the administration’s goal of “no net loss of wetlands” a USACOE permit may require a property owner to restore, establish, enhance or preserve other aquatic resources in order to replace those impacted by the proposed project. This compensatory mitigation process seeks to replace the loss of existing aquatic resource functions and area. Property owners required to complete mitigation are encouraged to use a watershed approach and watershed planning information. The new rule establishes performance standards, sets timeframes for decision making, and to the extent possible, establishes equivalent requirements and standards for the three sources of compensatory mitigation: permittee-responsible mitigation, mitigation banks and in-lieu-fee programs.

Approximately 1,440 acres or 0.4 percent of the proposed initiative study area is potentially located within state-sensitive plant communities. Given the reasonable worst case scenario of 184 building permits per year for a total of 3,680 building permits over the 20 year planning horizon, it can be expected that less than 1 percent of these 3,680 building permits or fewer than 16 parcels will be issued for areas within federal wetlands and waterways. This would result in approximately 62 acres of potential development in areas potentially containing federal wetlands and waterways and 22 acres of federal wetland and waterway disturbance. As such, the potential for the proposed initiative to impact federal wetlands and waterways exists, which constitutes a significant impact requiring the consideration of mitigation measures.

Castaic/Santa Clarita/Agua Dulce

This subarea occurs entirely within the Santa Clara River Watershed. There two types of federally protected wetlands and waterways within the Castaic/Santa Clarita/Agua Dulce subarea: vernal pools on the Cruzan Mesa and riparian/wetland communities along the edge of the Santa Clara River and tributaries. There are approximately 800 acres of federal wetlands/waterways (2 percent of the total subarea) and 125 miles of blue-line waterways that may be impacted within this subarea.

Given the presence of these federal wetlands and waterways, the proposed initiative has the potential to indirectly and significantly affect wetlands and Waters of the United States subject to Section 404 of the Clean Water Act in this subarea. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 800.1 acres or two percent of this subarea is located within areas containing potential federal wetlands and waterways. It can be expected that two percent of the 735 building permits or 15 parcels will be issued for areas containing federal wetlands and waterways in this subarea. This would result in approximately 59 acres of potential development in areas potentially containing Federal wetlands and waterways and 21 acres of potential federal wetlands and waterways disturbance.

The LACFCD includes the Newhall Ranch portion of the Castaic/ Santa Clarita/ Agua Dulce subarea. In the event any flood protection facility is built in an upland type area, as a result of increased development resulting from approval of building permits for single-family homes where hauled water is authorized as the primary source of potable water, the Water Resources Division of DPW anticipates that such facilities, due to their function, would likely convert upland area to waters of the United States. Maintenance activities in open earthen bottom channel, check dams, retention and detention basins would have the potential to require routine removal of riparian and aquatic habitats and would thus be subject to regulation under the Sections 401 and 404 of the Federal Clean Water Act, and the LACFCD maintenance standards and practices for removal or conversion of aquatic and riparian habitats, in perpetuity over the life of the facility during storm season, before storm season, and after storm season. Facility maintenance would normally involve annual mowing of the facility bottom, dewatering of accumulated debris, and excavation of the debris which could include removal of accumulated debris and the root balls of opportunistic vegetation within the debris cone of the facility during cleanouts of the facility, and hauling material to a disposal site. Therefore, LACFCD would not allow any plantings in the vicinity of the facility right of way that would have the potential to attract sensitive species that would have the potential to constrain maintenance and cleanouts of the facility and its appurtenant features.

As a requirement of the grading permit and the Building Permit application process, the Department of Building and Safety requires the property owner to install a 200-gallon onsite retention basin or include at least two of the Low Impact Development Best Management Practices. These measures are required to minimize the impacts of stormwater runoff from impervious surfaces on natural drainages. The property owner is responsible for maintenance of retention basins and other onsite facilities installed on private property.

Acton

This subarea occurs entirely within the Santa Clara River Watershed but contains fewer tributaries of the Santa Clara River compared to the Castaic/Santa Clarita/Agua Dulce subarea. Most of the federally protected wetlands and waterways are within the Santa Clara River itself, with a few

tributaries. There are approximately 215.7 acres of federal wetlands/waterways (one percent of the total subarea) and 40 miles of blue-line waterways that may be impacted within this subarea.

Given the presence of these federal wetlands and waterways, the proposed initiative has the potential to indirectly and significantly affect wetlands and Waters of the United States subject to Section 404 of the Clean Water Act in this subarea. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 215 acres or 1 percent of this subarea is located within areas containing potential Federal wetlands and waterways. It can be expected that 1 percent of the 737 building permits or seven parcels will be issued for areas containing federal wetlands and waterways in this subarea. This would result in approximately 30 acres of potential development in areas potentially containing federal wetlands and waterways and 11 acres of potential federal wetlands and waterways disturbance in this subarea.

The LACFCD includes the Acton portion of the study area. In the event any flood protection facility is built in an upland type area, as a result of increased development resulting from approval of building permits for single-family homes where hauled water is authorized as the primary source of potable water, the Water Resources Division of DPW anticipates that such facilities, due to their function, would likely convert upland area to waters of the United States. Maintenance activities in open earthen bottom channel, check dams, retention and detention basins would have the potential to require routine removal of riparian and aquatic habitats and would thus be subject to regulation under the Sections 401 and 404 of the Federal Clean Water Act, and the LACFCD maintenance standards and practices for removal or conversion of aquatic and riparian habitats, in perpetuity over the life of the facility during storm season, before storm season, and after storm season. Facility maintenance would normally involve annual mowing of the facility bottom, dewatering of accumulated debris, and excavation of the debris which could include removal of accumulated debris and the root balls of opportunistic vegetation within the debris cone of the facility during cleanouts of the facility, and hauling material to a disposal site. Therefore, LACFCD would not allow any plantings in the vicinity of the facility right of way that would have the potential to attract sensitive species that would have the potential to constrain maintenance and cleanouts of the facility and its appurtenant features.

As a requirement of the grading permit and the Building Permit application process, the Department of Building and Safety requires the property owner to install a 200-gallon onsite retention basin or include at least two of the Low Impact Development Best Management Practices. These measures are required to minimize the impacts of stormwater runoff from impervious surfaces on natural drainages. The property owner is responsible for maintenance of retention basins and other onsite facilities installed on private property.

Lake Hughes/Gorman/West of Lancaster

This subarea occurs partially within the Santa Clara River Watershed, which are the parcels south of Portal Ridge and the Mojave Desert. In addition, blue-line drainages and wetlands that feed into Quail Lake in this subarea are classified as federal wetlands and potentially subject to the jurisdiction of the USACOE. Wetlands in this subarea are either within riparian areas, drainages, or wet meadows. There are approximately 245 acres of wetlands/waterways (less than 1 percent of the total subarea) and 35 miles of blue-line waterways that may be impacted within this subarea.

Given the presence of these federal wetlands and waterways, the proposed initiative has the potential to indirectly and significantly affect wetlands and Waters of the United States subject to

Section 404 of the Clean Water Act in this subarea. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 245 acres or less than 1 percent of this subarea is located within areas containing potential federal wetlands and waterways. It can be expected that less than 1 percent of the 847 building permits or two parcels will be issued for areas containing federal wetlands and waterways in this subarea. This would result in approximately 7 acres of potential development in areas potentially containing federal wetlands and waterways and 2 acres of potential federal wetlands and waterways disturbance in this subarea.

Lake Los Angeles/Llano/Valyermo/Littlerock

There are no wetlands or waterways that connect to navigable waterways within this subarea. There are expected to be no impacts to federally-protected wetlands as defined by Section 404 of the Clean Water Act within this subarea.

Antelope Valley Northeast

There are no wetlands or waterways that connect to navigable waterways within this subarea., There are expected to be no impacts to federally-protected wetlands as defined by Section 404 of the Clean Water Act within this subarea.

Lancaster Northeast

There are no wetlands or waterways that connect to navigable waterways within this subarea. There are expected to be no impacts to federally-protected wetlands as defined by Section 404 of the Clean Water Act within this subarea.

East San Gabriel Mountains

This subarea occurs partially within the Los Angeles River Watershed and partially within the San Gabriel River Watershed. There are approximately 180 acres of wetlands/waterways (4 percent of the total subarea) and 20 miles of blue-line waterways that may be impacted within this subarea.

Given the presence of these federal wetlands and waterways, the proposed initiative has the potential to indirectly and significantly affect wetlands and Waters of the United States subject to Section 404 of the Clean Water Act. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. However, the reasonable worst-case scenario assumes that zero parcels within the East San Gabriel Mountains subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, it is not anticipated that substantial impacts to federal wetlands and waterways will occur in this subarea.

The LACFCD includes the East San Gabriel Mountains portion of the study area. In the event any flood protection facility is built in an upland type area, as a result of increased development resulting from approval of building permits for single-family homes where hauled water is authorized as the primary source of potable water, the Water Resources Division of DPW anticipates that such facilities, due to their function, would likely convert upland area to waters of the United States. Maintenance activities in open earthen bottom channel, check dams, retention and detention basins would have the potential to require routine removal of riparian and aquatic habitats and would thus be subject to regulation under the Sections 401 and 404 of the Federal

Clean Water Act, and the LACFCD maintenance standards and practices for removal or conversion of aquatic and riparian habitats, in perpetuity over the life of the facility during storm season, before storm season, and after storm season. Facility maintenance would normally involve annual mowing of the facility bottom, dewatering of accumulated debris, and excavation of the debris which could include removal of accumulated debris and the root balls of opportunistic vegetation within the debris cone of the facility during cleanouts of the facility, and hauling material to a disposal site. Therefore, LACFCD would not allow any plantings in the vicinity of the facility right of way that would have the potential to attract sensitive species that would have the potential to constrain maintenance and cleanouts of the facility and its appurtenant features.

As a requirement of the grading permit and the Building Permit application process, the Department of Building and Safety requires the property owner to install a 200-gallon onsite retention basin or include at least two of the Low Impact Development Best Management Practices. These measures are required to minimize the impacts of stormwater runoff from impervious surfaces on natural drainages. The property owner is responsible for maintenance of retention basins and other onsite facilities installed on private property.

The proposed initiative would be expected to result in significant impacts to Waters of the United States and other wetlands. The County does not currently require property owners to demonstrate compliance with Section 404 of the Federal Clean Water Act during the building permit application process. However, the USACOE requires property owners seeking authorization to exercise a Nationwide Permit or seeking an Individual Permit pursuant to Section 404 of the Federal Clean Water Act to demonstrate that there will be no net loss of habitat function or value as a result of the Section 404 Nationwide or Individual Permit. Therefore, alteration of lands subject to the jurisdiction of the USACOE, as a result of the construction of single-family homes and infrastructure developed as a result of the proposed initiative would be expected to be reduced to below the level of significance, as required by the USACOE Section 404 permitting process.

5.2.4 Migratory Corridors

The proposed initiative would result in significant impacts to biological resources in relation to migratory wildlife corridors and nursery sites because of allowable development in undeveloped locations, warranting the consideration of mitigation measures. Throughout the study area, up to 146,715 acres of 10 SEAs have the potential to be impacted by the proposed initiative. Impacts within each subarea are discussed in detail below. While the proposed initiative would have no direct impacts on migratory corridors and nursery sites, indirect impacts would occur as a result of development being permitted in areas that are currently undeveloped. These impacts would include direct habitat fragmentation that would disrupt corridor functionality as parcels are developed, and introduction of lighting and noise that may disturb nursery sites. Further, growth-inducing impacts resulting from the proposed initiative would include not only the development of infrastructure on parcels, but associated road improvements which may impact wildlife corridors and nursery sites through disturbance and removal of vegetation as well as increased light and noise during and after improvements. The current SEA ordinance does not regulate the development of single-family residences; as such, significant impacts to SEAs within the study area would occur as a result of the proposed initiative.

The proposed initiative allows for development of previously undeveloped areas where development has been limited due to the location of a parcel outside the limits of an established water district, where the property owner has not been able to demonstrate access to a reliable source of potable water. Developing these parcels has the potential to disrupt migratory corridors

differently than the impacts on other biological resources previously disclosed because even one development within a frequented corridor could shift wildlife patterns, especially for more elusive, human-shy species. Furthermore, the proposed initiative would result in habitat fragmentation which could in turn result in many small obstacles for wildlife movement rather than a clear, unobstructed pathway.

Approximately 146,715 acres or 43 percent of the proposed initiative study area is potentially located within state-sensitive plant communities. Given the reasonable worst-case scenario of 184 building permits per year for a total of 3,680 building permits over the 20 year planning horizon, it can be expected that 43 percent of these 3,680 building permits or 1,582 parcels will be issued for areas within SEAs. This would result in approximately 6,330 acres of potential development in areas within SEAs and 2,279 acres of SEA disturbance. As such, the potential for the proposed initiative to impact wildlife movement corridors and nursery sites exists, which constitutes a significant impact requiring the consideration of mitigation measures.

Castaic/Santa Clarita/Agua Dulce

Parcel development along the Santa Clara River in this subarea has the potential to obstruct movement along the river and tributaries if roads and driveways must be developed to cross these corridors. Furthermore, the river itself is an important nursery site for several species of fish. Several parcels in this subarea occur high in the Santa Susanna Mountains, but these parcels appear to have been incorporated into Open Space Preserves, thereby protecting the corridor. Most of the remaining areas within potential migratory corridors are located east of Piru Lake, where wildlife movement occurs between the San Gabriel and the Sierra Pelona Mountains; this linkage has been identified as important within the South Coast Missing Linkages report.¹³

Potential impacts to wildlife movement corridors and nursery sites within this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 14,920 acres or 42 percent of this subarea is located within SEAs. It can be expected that 42 percent of the 735 building permits or 309 parcels will be issued for areas within SEAs in this subarea. This would result in approximately 1,235 acres of potential development in areas within SEAs and 445 acres of potential SEA disturbance in this subarea.

Acton

Parcel development along the Santa Clara River in this subarea has the potential to obstruct movement along the river and tributaries if roads and driveways must be developed to cross these corridors. Furthermore, the river itself is an important nursery site for several species of fish. Several parcels in this subarea occur within a migratory pathway between the Sierra Pelona Mountains the San Gabriel Mountains along a pathway that crosses near Agua Dulce.¹⁴

Potential impacts to wildlife movement corridors and nursery sites within this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 3,685 acres or 20 percent of this subarea is located within SEAs. It can be expected that 20 percent of the 737 building permits or 147 parcels will be issued for areas within SEAs in this subarea. This would result in approximately

¹³ http://www.scwildlands.org/reports/SCML_SierraMadre_Castaic.pdf

¹⁴ http://www.scwildlands.org/reports/SCML_SanGabriel_Castaic.pdf

590 acres of potential development in areas within SEAs and 212 acres of potential SEA disturbance in this subarea.

Lake Hughes/Gorman/West of Lancaster

This subarea is likely important as a migratory corridor because Portal Ridge and Leona Valley move wildlife from the San Gabriel Mountains into the San Emigdio Mountains and Tehachapi Mountains. For this reason, the area around Gorman may be important because of linkages between the Mojave Desert and Central Valley and among the different mountain ranges. It is expected that California Condors may move through the Gorman area given that populations have been reintroduced into the Topatopa and Tehachapi Mountains.

Potential impacts to wildlife movement corridors and nursery sites within this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 44,095 acres or 35 percent of this subarea is located within SEAs. It can be expected that 35 percent of the 847 building permits or 296 parcels will be issued for areas within SEAs. This would result in approximately 1,186 acres of potential development in areas within SEAs and 427 acres of potential SEA disturbance in this subarea.

Lake Los Angeles/Llano/Valyermo/Littlerock

Parcels located along the Big Rock Wash, Little Rock Wash, and other small washes that feed into Rogers and Rosamond Dry Lakes are situated within known migration routes for wildlife. Such washes could allow wildlife to move between the foothills of the San Gabriel Mountains and Rogers/Rosamond Dry Lakes. Furthermore, the dry lakes on Edwards Air Force Base are considered a globally significant area for wintering and migrating birds.

Potential impacts to wildlife movement corridors and nursery sites within this subarea are significant. The impacts described above assume that every parcel within this subarea will be developed as a result of the proposed initiative. Approximately 49,385 acres or 46 percent of this subarea is located within SEAs. It can be expected that 46 percent of the 1,251 building permits or 575 parcels will be issued for areas within SEAs in this subarea. This would result in approximately 2,302 acres of potential development in areas within SEAs and 829 acres of potential SEA disturbance.

Antelope Valley Northeast

This subarea occurs east of the main wildlife corridors between the San Gabriel Mountains and Rogers/Rosamond Dry Lakes. However, this subarea links Antelope Valley to the eastern Mojave Desert, via the Kramer Hills, and may be a corridor between Rogers/Rosamond Dry Lakes and El Mirage Dry Lake. The Antelope Valley SEA covers 10,870 acres or 75 percent of this subarea in part because of the existence of this wildlife movement. Additionally the subarea is within the migratory corridor moving along the Big Rock Wash, Little Rock Wash, and other small washes that feed into Rogers and Rosamond Dry Lakes.

The reasonable worst-case scenario assumes that zero parcels within the Antelope Valley Northeast subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, it is not anticipated that substantial impacts to migratory corridors or nursery sites will occur in this subarea.

Lancaster Northeast

This subarea is within the same corridor as the Antelope Valley Northeast and Lake Los Angeles/Llano/Valyermo/Littlerock subareas. These parcels are located adjacent to the Rogers and Rosamond Dry Lakes, which are considered globally important areas for wintering and migrating birds.

Therefore, potential impacts to wildlife movement corridors and nursery sites within this subarea have the potential to be substantial. Approximately 23,280 acres or 66 percent of this subarea is located within SEAs. It can be expected that 66 percent of the 110 building permits or 73 parcels will be issued for areas within SEAs in this subarea. This would result in approximately 290 acres of potential development in areas within SEAs and 105 acres of potential SEA disturbance in this subarea.

East San Gabriel Mountains

The eastern edge of the East San Gabriel Mountains subarea is within the corridor connecting the San Gabriel and San Bernardino Mountains. The San Gabriel River Watershed, which occupies the eastern portion of the East San Gabriel Mountains subarea, is a nursery site for many endemic fish species such as the Santa Ana sucker and the Santa Ana speckled dace. In total, approximately 485 acres (12 percent of the total subarea) of the subarea that may be impacted by the proposed initiative are located within SEAs, which often serve as wildlife corridors.

The reasonable worst-case scenario assumes that zero parcels within the East San Gabriel Mountains subarea would be issued building permits over the 20-year 2015 to 2035 planning horizon. As such, it is not anticipated that substantial impacts to migratory corridors or nursery sites will occur in this subarea.

The proposed initiative would be expected to result in significant impacts to wildlife movement corridors, particularly whose importance is recognized pursuant to a designation as an SEA, as a result of the development of single-family homes and related infrastructure that would be expected to result in the development of up to 1,582 parcels, and conversion of 2,279 acres of habitat within SEAs. However, there is no federal, State, or local statute that requires avoidance or compensation for natural habitat or wildlife movement corridors within SEAs that are converted to single-family residences or related infrastructure. The conversion of an estimated 2,279 acres of habitat and potential wildlife movement areas would be a significant impact.

5.2.5 General Plans and Policies

The proposed initiative would result in significant impacts to biological resources in relation to conflicts with local polices or ordinances protecting biological resources because of allowable development in currently undeveloped locations, warranting the consideration of mitigation measures. Facilitating development throughout the study area has the potential to conflict with local policies protecting biological resources that are relevant to the proposed initiative. Conflicts with each applicable Plan and/or Ordinance are discussed below. The potential for the proposed initiative to impact biological resources in relation to conflicts with local policies and ordinances exists, which constitutes a significant impact requiring the consideration of mitigation measures.

Los Angeles County General Plan 2035

Policy C/NR 3.1 of the Plan states that the County will “conserve and enhance the ecological function of diverse natural habitats and biological resources.” The proposed initiative would be expected to conflict with this policy because the initiative would allow for building residences in areas that currently cannot be developed for single-family residences due to lack of a reliable source of potable water, including parcels that may contain natural habitats and sensitive biological resources. If development occurs on these parcels as a result of the proposed initiative, then the ecological function of the parcels would be disrupted. Furthermore, although single-family residences are currently permitted within SEAs, any development within the SEAs could result in a decrease in function of the ecosystems.

Policy C/NR 3.6 states that the County will “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.” The proposed initiative would not affect the County’s ability to coordinate with state and federal agencies regarding special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs. Therefore, the proposed initiative is not expected to conflict with this policy.

Policy C/NR 3.8 states that the County will “Discourage development in areas with identified significant biological resources, such as SEAs.” The proposed initiative would conflict with this policy because it would indirectly encourage development within SEAs (which cover approximately 23 percent of the study area) through allowing the use of hauled water for ministerial single-family residential development. Similarly, Policy C/NR 3.11 states that the County will “discourage development in riparian habitats, streambeds, wetlands, and other native woodlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.” The proposed initiative is expected to partially conflict with this policy because while any alteration of waters of the State would require a Streambed Alteration Agreement for which CDFW would ensure that no net loss of habitat functions or values occurs, other native woodlands are not afforded this protection under state or federal statutes. Any discharge of dredge or fill material into federal Waters of the United States would be subject to a permit under Section 404 of the Clean Water Act. As such, adherence to state and federal regulations related to watersheds, streams, and riparian vegetation would partially eliminate conflicts with this policy. However, conflicts related to development in native woodlands would remain.

Policy C/NR 3.9 states that the County will “consider [biological resources] in the design of a project that is located within an SEA.” The proposed initiative is not expected to conflict with this policy because this policy is wholly directed to developments, exclusive of single-family residences. Further, the proposed initiative is not expected to conflict with Policy C/NR 3.10 because the proposed initiative does not affect the County’s ability to “require environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanently preserve mitigation sites.”

The proposed initiative is expected to conflict with Goal C/NR 4.1 of the Plan Update that promotes “conserved and sustainably managed woodlands” The proposed initiative may result in impacts to oak woodlands as a result of allowing single-family residential development in areas that are currently limited by water availability. Therefore, the proposed initiative is expected to conflict with Policy C/NR 4.1 because of potential effects on the County’s ability to “preserve and restore

oak woodlands and other native woodlands that are conserved in perpetuity with a goal of no net loss of existing woodlands.” The County building permit process notifies property owners of the need to comply with the County’s Oak Tree Ordinance. The County requires applicants for Oak Tree Permits to demonstrate that oak trees will be avoided during construction and/or the loss of the oak tree will be compensated as a result of the issuance of the Permit; therefore, the removal of oak trees, as a result of the construction of single-family homes and infrastructure, developed as a result of the proposed initiative would be expected to be reduced to below the level of significance, as required by the County’s Oak Tree permitting process.

Santa Clarita Valley Area Plan

Of the 42,867 parcels in the proposed initiative study area, 2,243 are located within the Castaic/Santa Clarita/Agua Dulce subarea. Only parcels located within this subarea fall within the 2012 Santa Clarita Valley Area Plan.

The proposed initiative is expected to conflict with Policies CO-3.2.1 and CO-3.3.1 because the proposed initiative could indirectly result in impacts to wetlands, riparian habitat, and wildlife corridors along the Santa Clara River and tributaries, including the Cruzan Mesa; these wetlands are expected to be jurisdictional to the USACOE and CDFW. Any alteration of waters of the State would require a Streambed Alteration Agreement for which CDFW would ensure that no net loss of habitat functions or values occurs. Similarly, any discharge of dredge or fill material into federal Waters of the United States would be subject to a permit under Section 404 of the Clean Water Act. As such, adherence to state and federal regulations related to watersheds, streams, and riparian vegetation would reduce conflicts with this policy.

The proposed initiative also is expected to conflict with Policy CO-3.2.2 and CO-3.5.3 because parcels in the Castaic/Santa Clarita/Agua Dulce subarea are located within Coast Live Oak Woodlands and other plant communities likely to have protected oak species. The Los Angeles County Oak Tree Ordinance requires the replacement of mature and heritage oak trees should they be impacted or removed. As such, adherence to this ordinance would reduce conflicts with this policy. In addition, the proposed initiative is expected to conflict with Policy CO-3.2.3 because it affects the County’s ability to “ensure protection of any endangered or threatened species or habitat, in conformance with State and federal laws” within the Castaic/Santa Clarita/Agua Dulce subarea. Development as a result of the proposed initiative could affect wildlife movement corridors, including between Castaic and the San Gabriel Mountains, which is in conflict with Policy CO-3.3.3.

The proposed initiative is expected to conflict with Policy CO-3.2.4 because single family residences are exempt from the conditions of the SEA CUP and the SEA Technical Advisory Committee (SEATAC) process. This will conflict with the County’s ability to “protect biological resources in the designated Significant Ecological Areas (SEAs) through the siting and design of development which is highly compatible with the SEA resources.” The proposed initiative would result in an incremental degradation of habitat and habitat conversion which would conflict with this policy. The proposed initiative is not expected to conflict with Policy CO-3.6.5 which states that the County will “ensure revegetation of graded areas and slopes adjacent to natural open space areas with native plants (consistent with fire prevention requirements)” because the plan will not impact the County’s ability to enforce this policy.

2015 Antelope Valley Areawide Plan – Town & Country

The Acton, Antelope Valley Northeast, East San Gabriel Mountains, Lake Hughes/Gorman/West of Lancaster, Lake Los Angeles/Llano/Valyermo/Littlerock, and Lancaster Northeast subareas are within the adopted Antelope Valley Areawide Plan – Town and Country (Antelope Valley Areawide Plan).

The proposed initiative would conflict with Policy COS 4.1 of the Antelope Valley Areawide Plan because the policy states that the County will “direct the majority of the unincorporated Antelope Valley’s future growth to rural town centers and economic opportunity areas, minimizing the potential for habitat loss and negative impacts in Significant Ecological Areas”. The proposed initiative would allow for the development of areas outside of rural town centers and within SSEAs, thus directly conflicting with this policy. Similarly, the proposed initiative would conflict with Policy COS 4.2 because the policy states that the County shall “limit the amount of potential development in Significant Ecological Areas, including the Joshua Tree Woodlands, wildlife corridors, and other sensitive habitat areas, through appropriate land use designations with very low residential densities”. Residential densities would increase in these sensitive areas as result of the proposed initiative, thus the proposed initiative conflicts with this policy. Policy COS 4.3 states that the County shall “require new development in SEAs to comply with applicable Zoning Code requirements, ensuring that development occurs on the most environmentally suitable portions of the land”. The proposed initiative will not impact the way that the County shall evaluate building permits in SEAs and therefore will not conflict with the County’s ability to enforce this policy. Similarly, Policy COS 4.4 states that the County shall require new development in Significant Ecological Areas to consider [biological resources] in the design of the project to the greatest extent feasible.” The proposed initiative is not expected to conflict with this policy because this policy is wholly directed to developments, exclusive of single-family residences.

Policies COS 4.5 and COS 4.7 state that the County shall “require new development to provide adequate buffers from preserves, sanctuaries, habitat areas...” and “restrict fencing in wildlife corridors”. The proposed initiative would not prevent the county from enforcing these requirements for new development, therefore the proposed initiative is not expected to conflict with these policies. Policy 4.6 states that the County shall “encourage connections between natural open space areas to allow for wildlife movement”. The proposed initiative would conflict with this policy because residential densities would increase in wildlife movement areas as result of the proposed initiative which would reduce connections between natural open space areas.

County Municipal Los Angeles County Code Section 22.56.215 – Hillside Management and Significant Ecological Areas – Additional Regulations

Under the adopted Hillside Management and Significant Ecological Area Ordinances 22.56.215, single-family residences where not more than one such residence is proposed to be built by the same person on contiguous lots or parcels are exempt from the conditional use permit. Therefore, there would be no impacts related to conflicts with existing ordinance 22.56.215 resulting from the proposed initiative.

Municipal County Code Sections 22.56.2050 – 22.56.2260 – Oak Trees

There is the potential for protected oak trees to be present on or within the vicinity of parcels in all subareas affected by the proposed initiative. However, any development on parcels within unincorporated Los Angeles County is required to demonstrate compliance with this ordinance as a

part of the site plan review process. This requirement would not change as a result of the proposed initiative. Therefore, the proposed initiative is not expected to conflict with the Los Angeles County Oak Tree Ordinance.

Acton Community Standards District

Parcels containing native vegetation under the jurisdiction of the Acton CSD are present within the proposed initiative study area, and may be impacted as a result of development influenced by the proposed initiative. However, any development of parcels within the Acton CSD would be required to comply with the provisions of the CSD. Therefore, it is not expected that the proposed initiative would conflict with the provisions of the Acton CSD.

Juniper Hills Community Standards District

Parcels containing vegetation that would be removed during the construction of a single-family residence under the jurisdiction of the Juniper Hills CSD are present within the proposed initiative study area. However, any development of parcels within the Juniper Hills CSD would be required to comply with the provisions of the CSD. Therefore, it is not expected that the proposed initiative would conflict with the provisions of the Juniper Hills CSD.

Elizabeth Lake and Lake Hughes Community Standards District

Parcels containing vegetation that would be removed during the construction of a single-family residence under the jurisdiction of the Elizabeth Lake and Lake Hughes CSD are present within the proposed initiative study area. However, any development of parcels within the Elizabeth Lake and Lake Hughes CSD would be required to comply with the provisions of the CSD. Therefore, it is not expected that the proposed initiative would conflict with the provisions of the Elizabeth Lake and Lake Hughes CSD.

Castaic Area Community Standards District

Parcels containing locally indigenous vegetation, oak trees, and in the vicinity of creeks that would be impacted during the construction of a single-family residence under the jurisdiction of the Castaic Area CSD are present within the proposed initiative study area. However, any development of parcels within the Castaic Area CSD would be required to comply with the provisions of the CSD. Therefore, it is not expected that the proposed initiative would conflict with the provisions of the Castaic Area CSD.

5.2.6 HCPs and NCCPs

The proposed initiative would not result in significant impacts to biological resources in relation to a conflict with an applicable HCP or NCCP. Approximately 50 percent of the Acton subarea, 100 percent of the Antelope Valley North East sub area, and approximately 80 percent of the Lake Hughes/Gorman/West of Lancaster subarea are within the DRECP. The DRECP is a proposed multispecies HCP intended to conserve threatened and endangered species and natural communities in the Mojave and Colorado Desert regions of southern California. However, the DRECP only applies to the development of renewable energy projects.

Similarly, the same areas of the proposed initiative parcels are located within the West Mojave Plan HCP as the boundaries of both HCPs as they affect Los Angeles County are the same. However, the West Mojave Plan HCP does not apply to the proposed initiative because potential hauled water parcels are not located on federal lands and the initiative would not trigger a federal nexus.^{15,16} Therefore, the proposed initiative would not result in impacts to biological resources in relation to a conflict with an applicable HCP or NCCP and no mitigation measures are required.

¹⁵ California Department of Fish and Wildlife. Natural Community Conservation Planning (NCCP). Website accessed, November 24, 2014. Available online at <http://www.dfg.ca.gov/habcon/nccp/>.

¹⁶ Renewable Energy Action Team. Desert Renewable Energy Conservation Plan. Website accessed, November 24, 2014. Available online at: <http://www.drecp.org/>

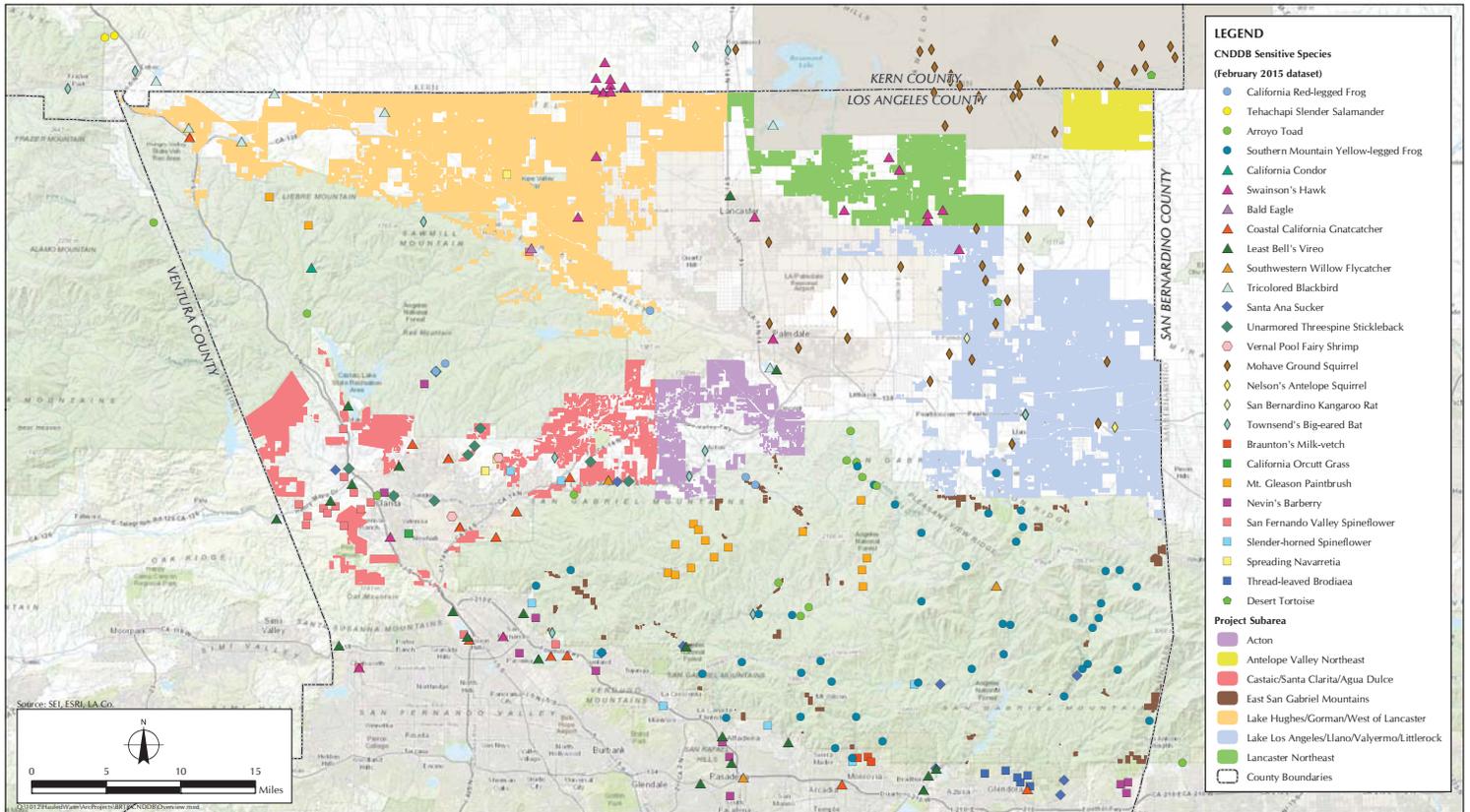


FIGURE 5.1.1-1
Federally and State-Listed Species With the Potential to Occur Within The Proposed Initiative Subareas

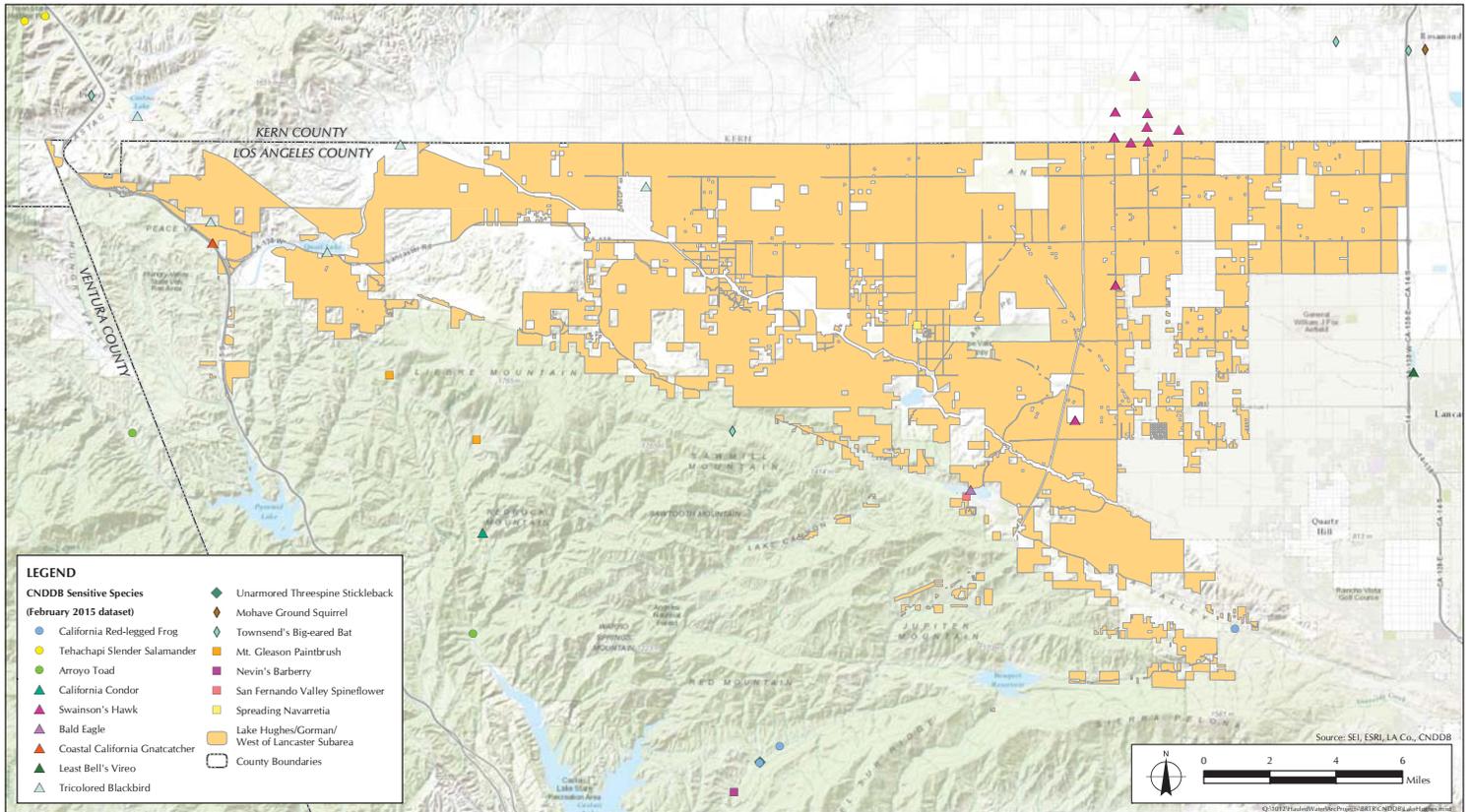


FIGURE 5.1-1A
 Federally and State-Listed Species With the Potential to Occur Within The Proposed Initiative Subareas
 Lake Hughes/Gorman/West of Lancaster Subarea

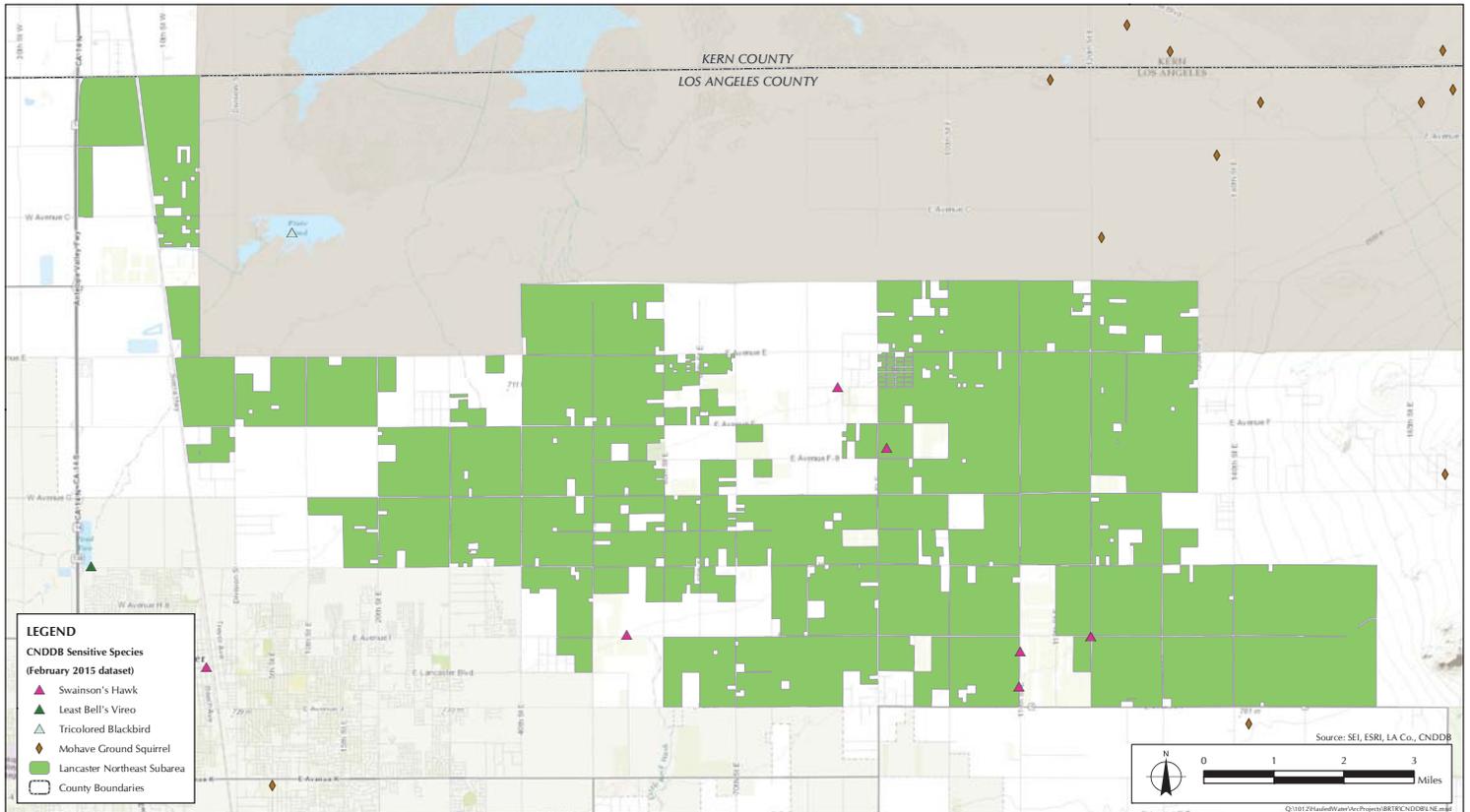


FIGURE 5.1.1-B
 Federally and State-Listed Species With the Potential to Occur Within The Proposed Initiative Subareas
 Lancaster Northeast Subarea

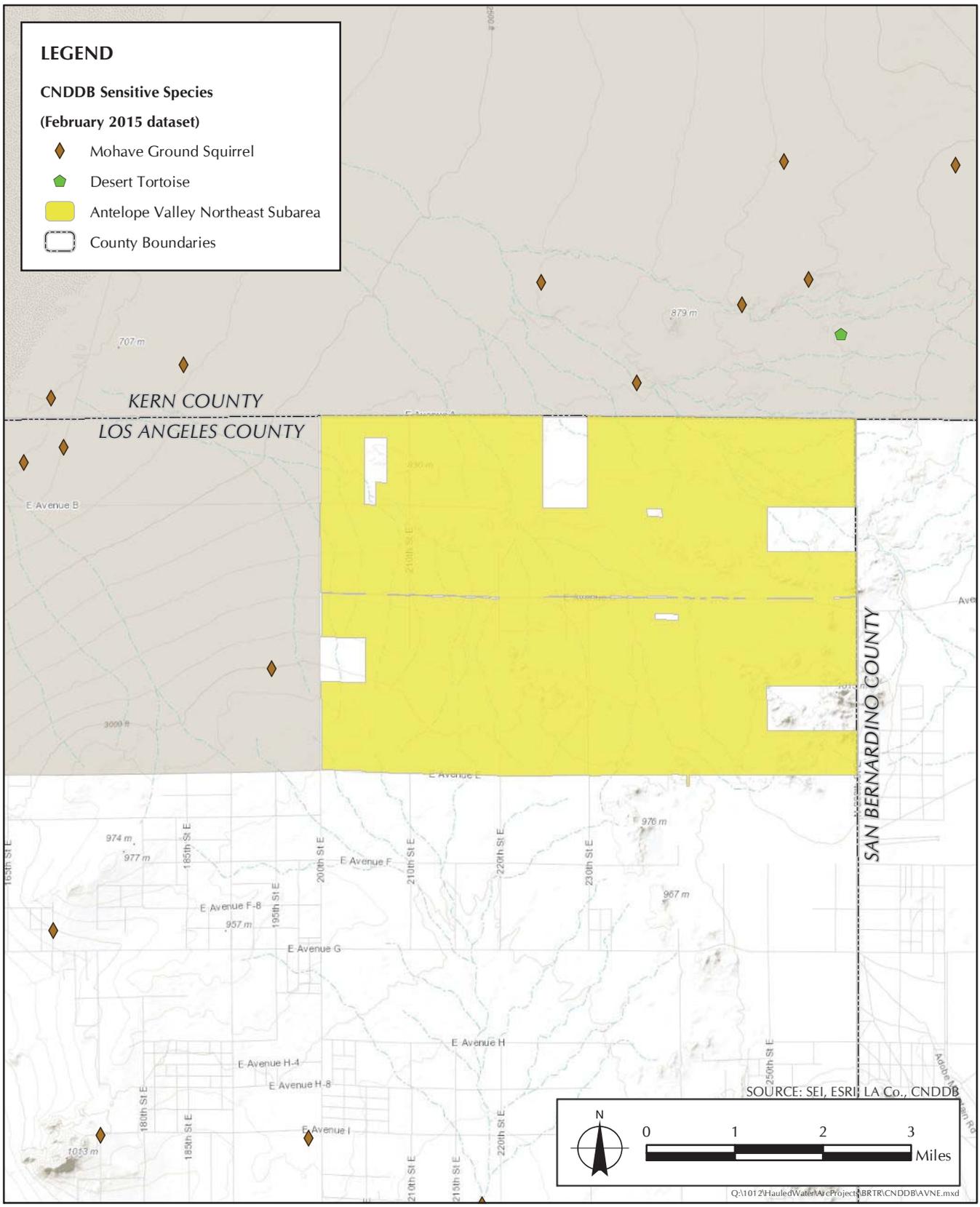


FIGURE 5.1.1-1C
 Federally and State-Listed Species With the Potential to Occur Within The Proposed Initiative Subareas
 Antelope Valley Northeast Subarea

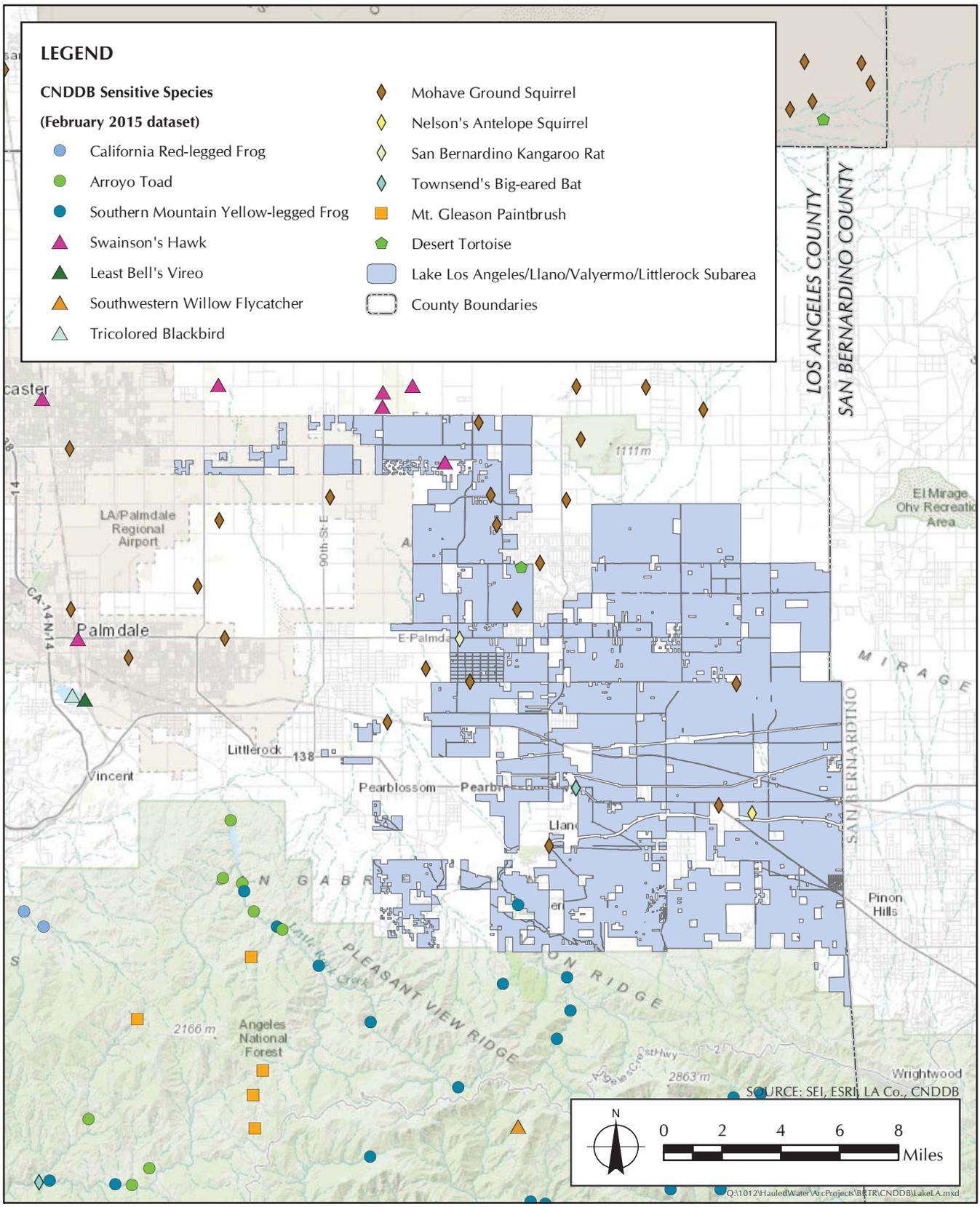


FIGURE 5.1.1-1D
 Federally and State-Listed Species With the Potential to Occur Within The Proposed Initiative Subareas
 Lake Los Angeles/Llano/Valyermo/Littlerock Subarea

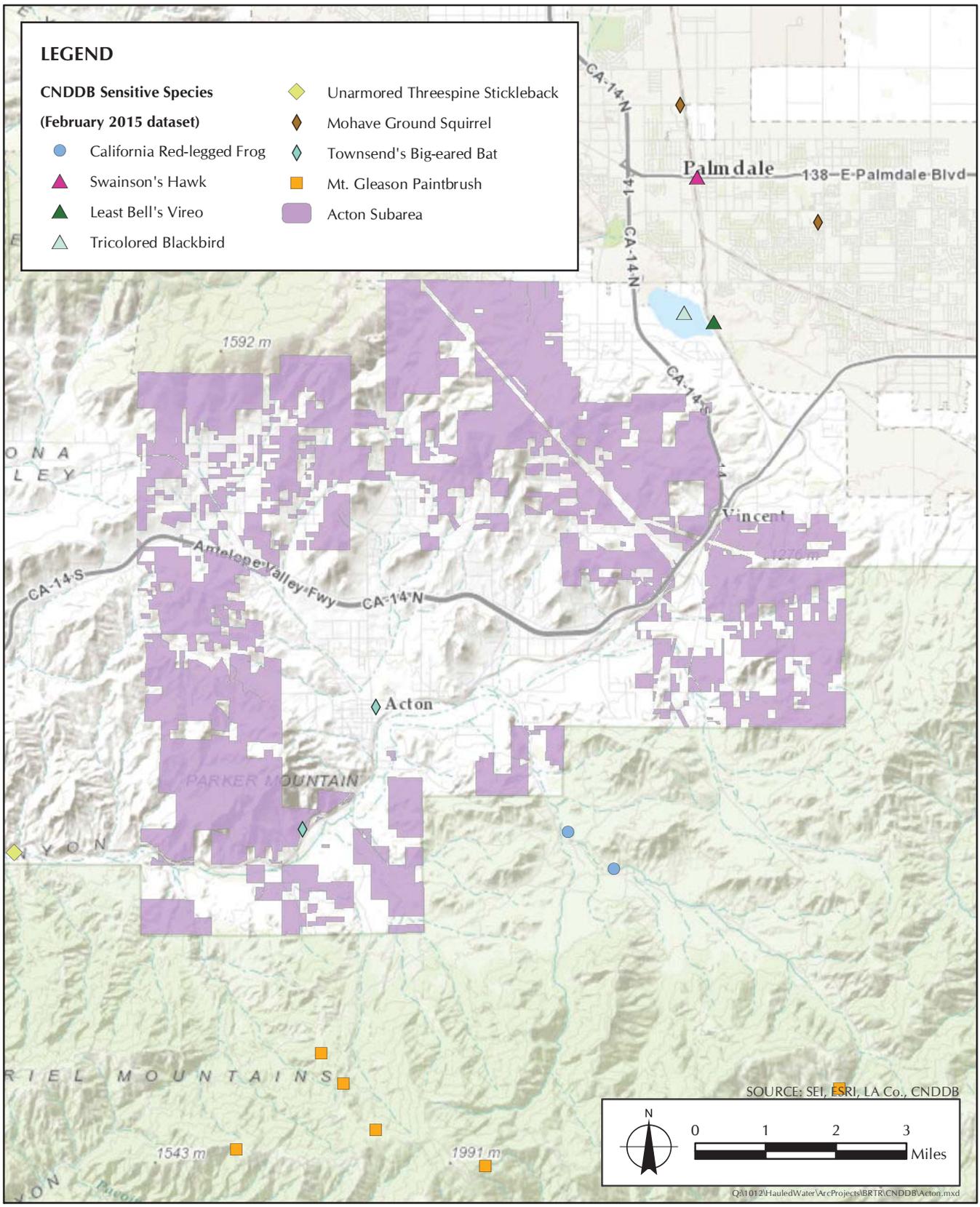


FIGURE 5.1.1-1E
 Federally and State-Listed Species With the Potential to Occur Within The Proposed Initiative Subareas
 Acton Subarea

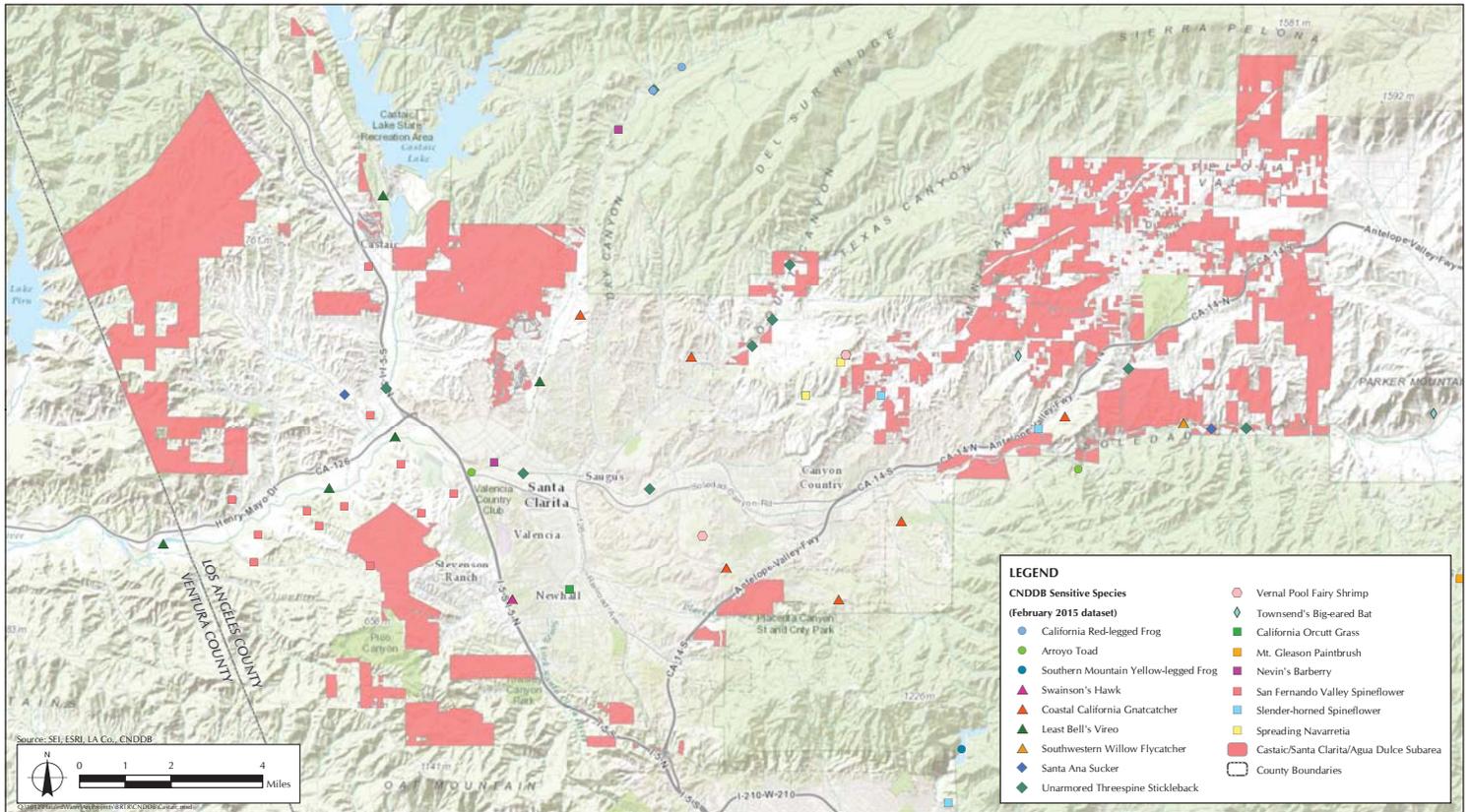


FIGURE 5.1.1-1F
 Federally and State-Listed Species With the Potential to Occur Within The Proposed Initiative Subareas
 Castaic/Santa Clarita/Agua Dulce Subarea

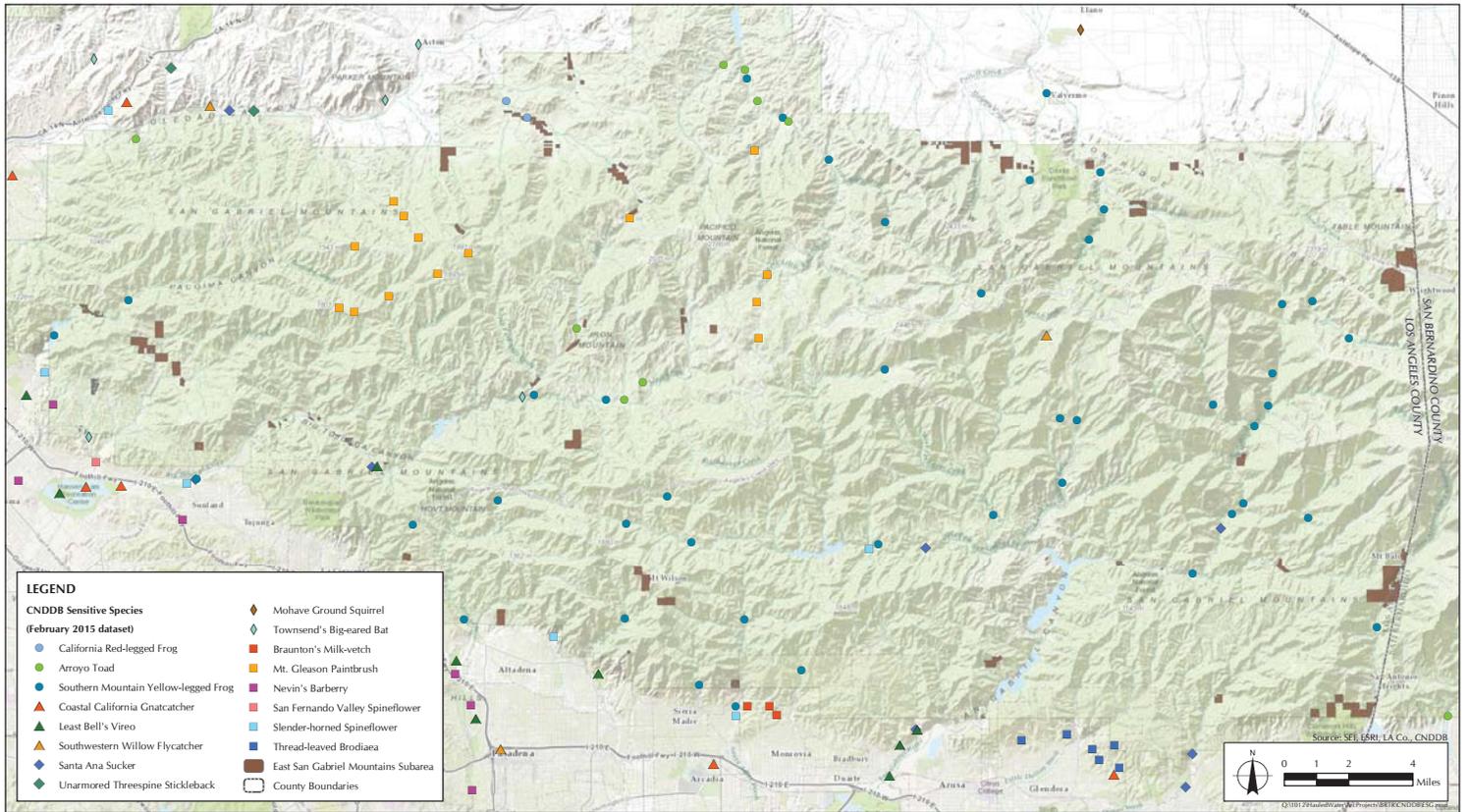


FIGURE 5.1.1-1G
 Federally and State-Listed Species With the Potential to Occur Within The Proposed Initiative Subareas
 East San Gabriel Mountains Subarea

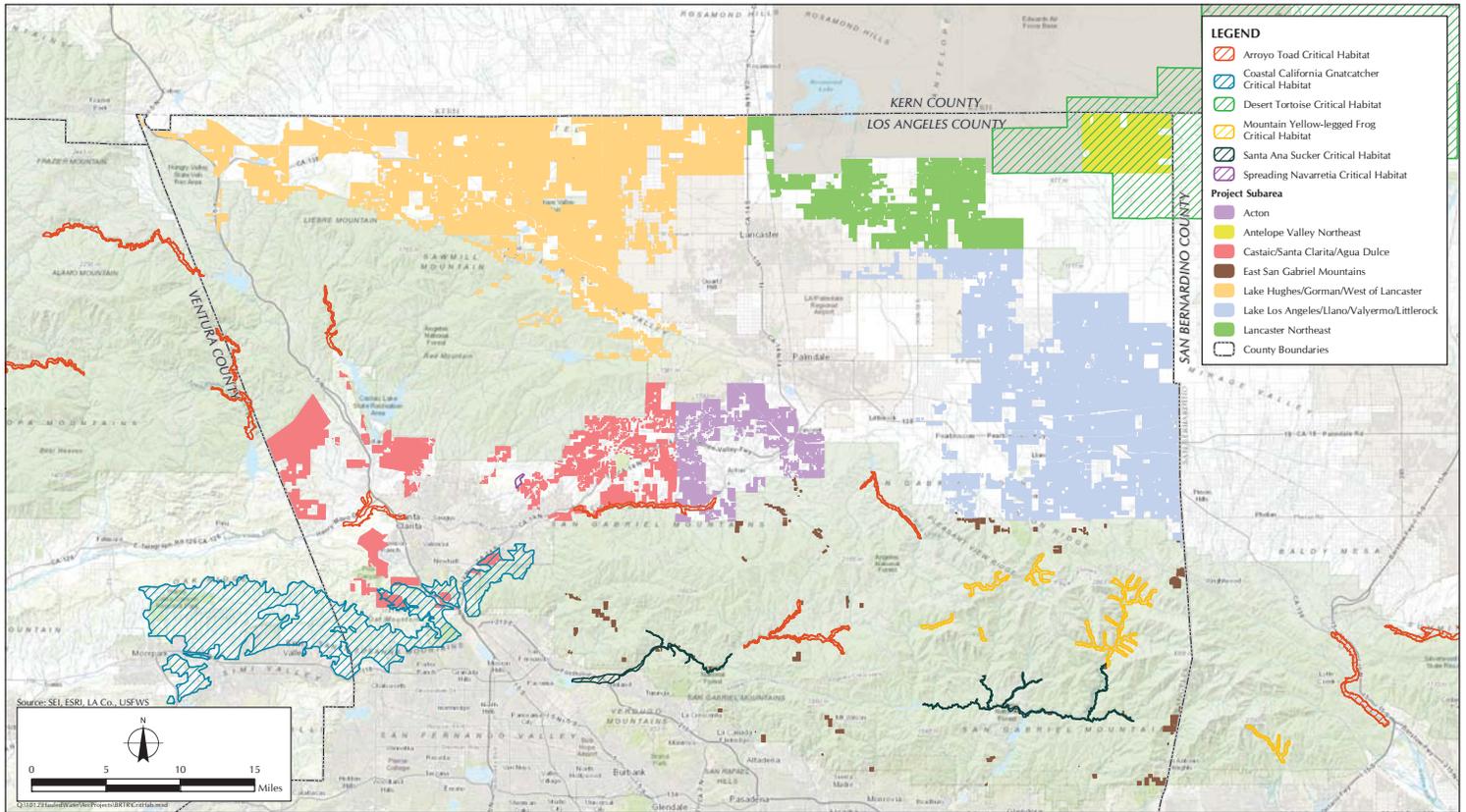


FIGURE 5.1.1-2
Critical Habitat Within The Proposed Initiative Subareas



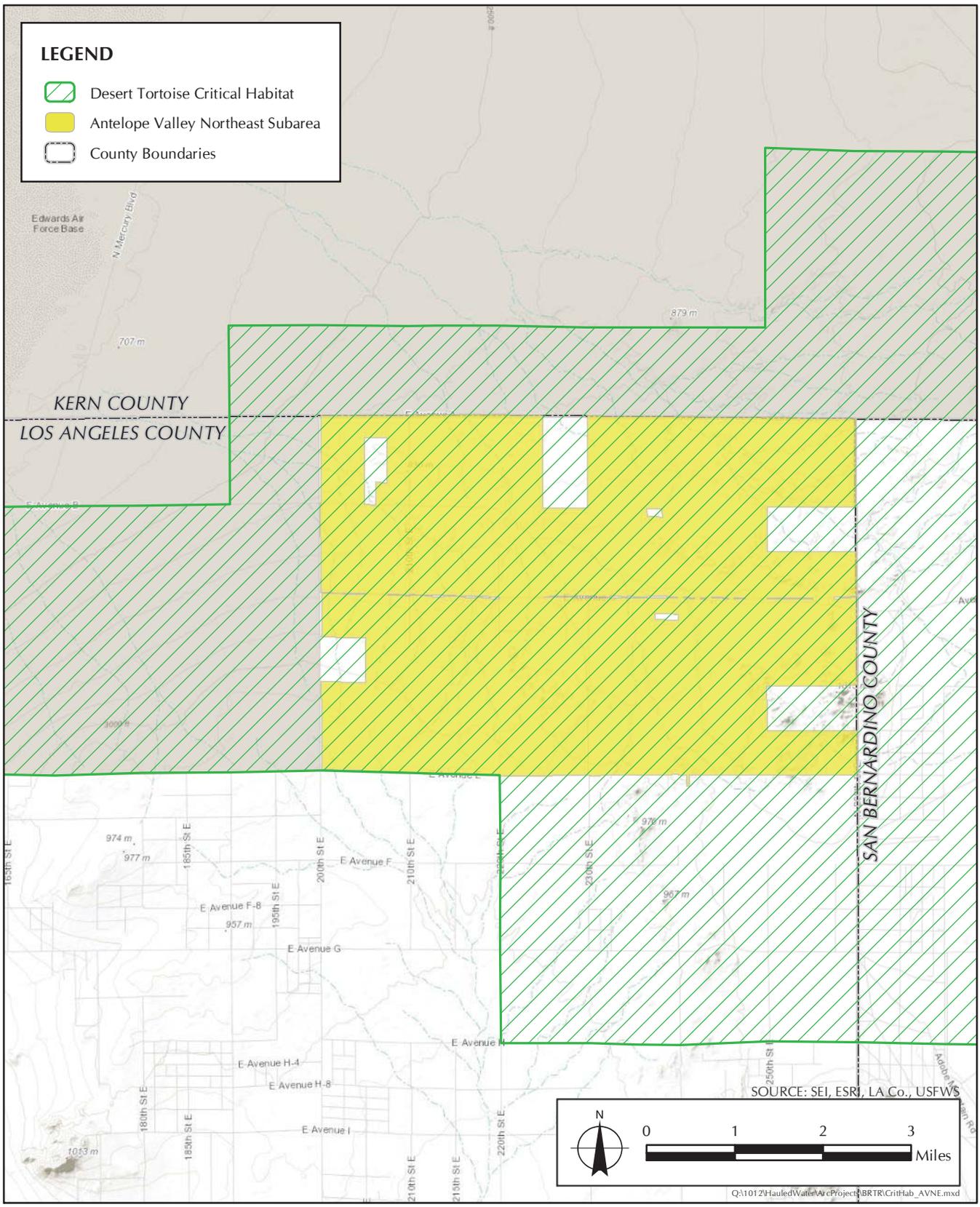


FIGURE 5.1.1-2A

Critical Habitat Within The Proposed Initiative Subareas
Antelope Valley Northeast Subarea

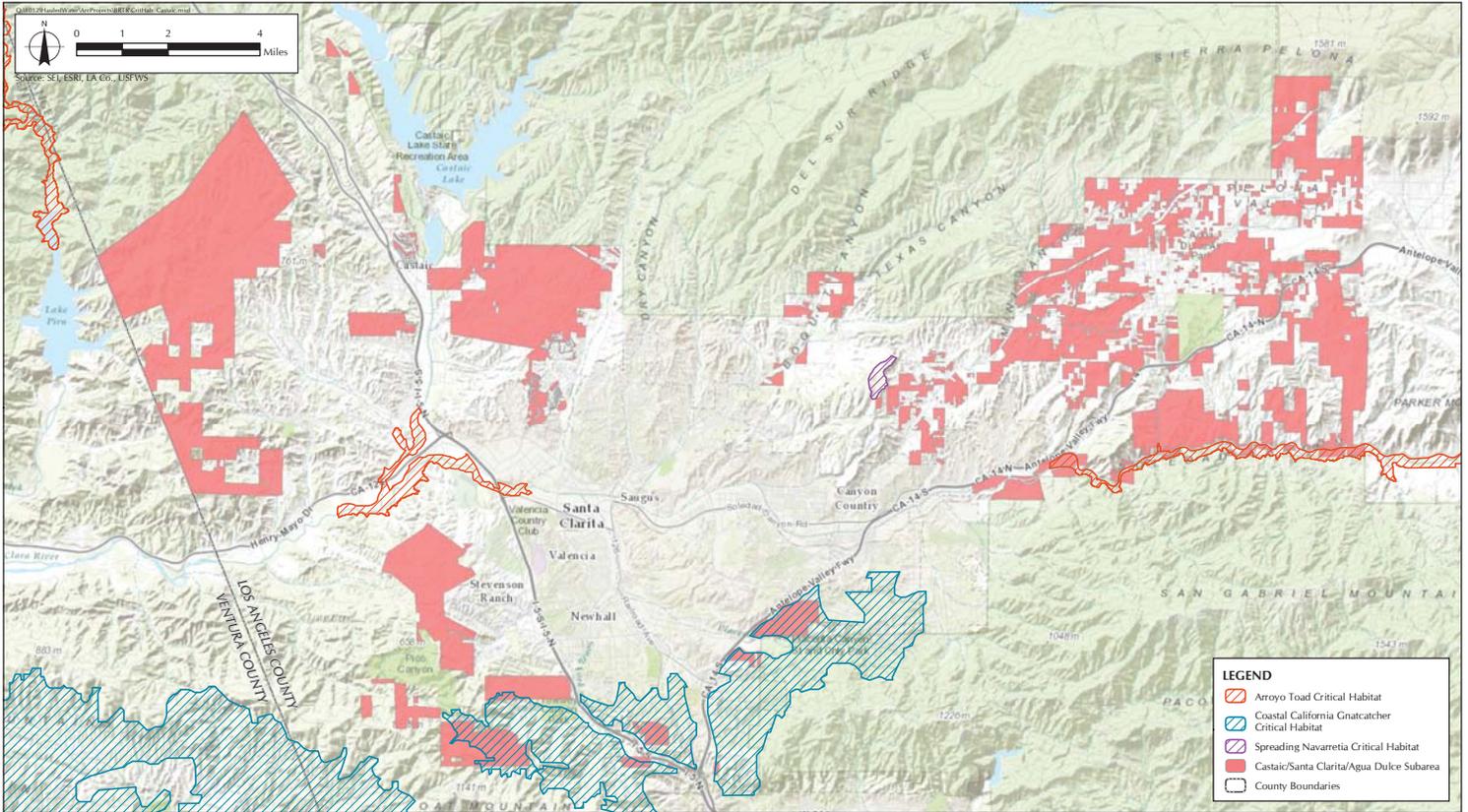


FIGURE 5.1.1-2B
 Critical Habitat Within The Proposed Initiative Subareas
 Castaic/Santa Clarita/Agua Dulce Subarea

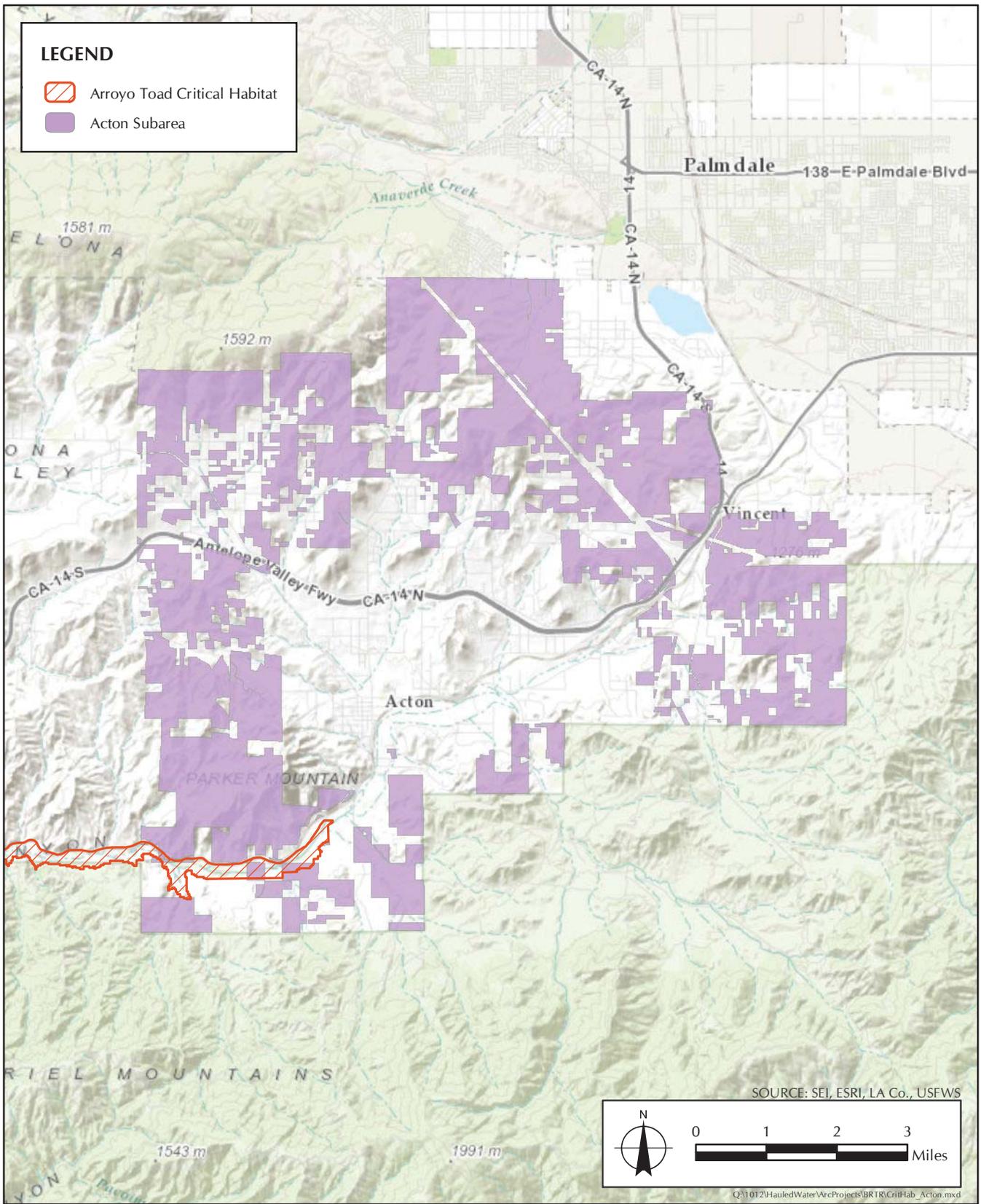


FIGURE 5.1.1-2C

Critical Habitat Within The Proposed Initiative Subareas
Acton Subarea

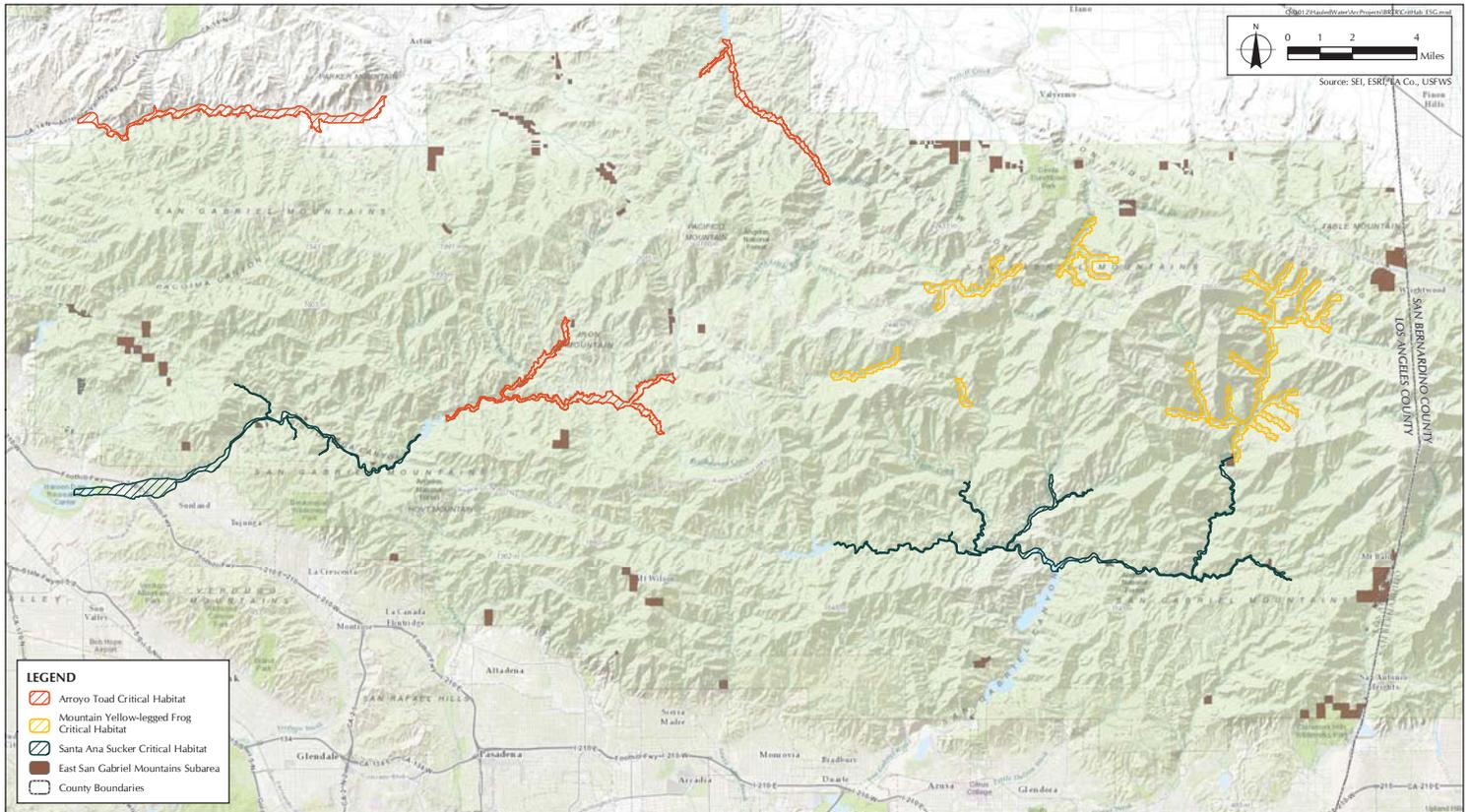


FIGURE 5.1.1-2D
 Critical Habitat Within The Proposed Initiative Subareas
 East San Gabriel Mountains Subarea

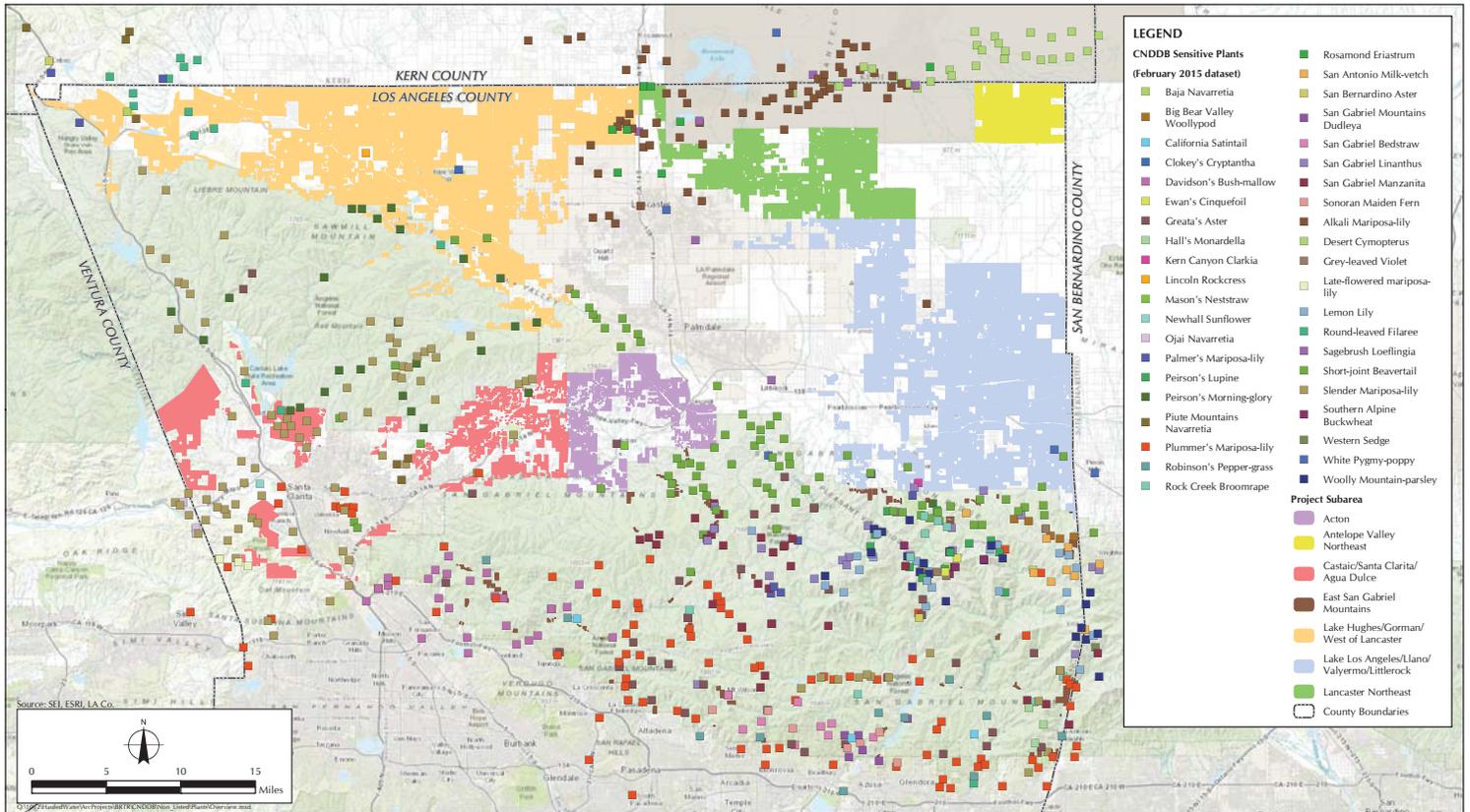


FIGURE 5.1.1-3
Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas



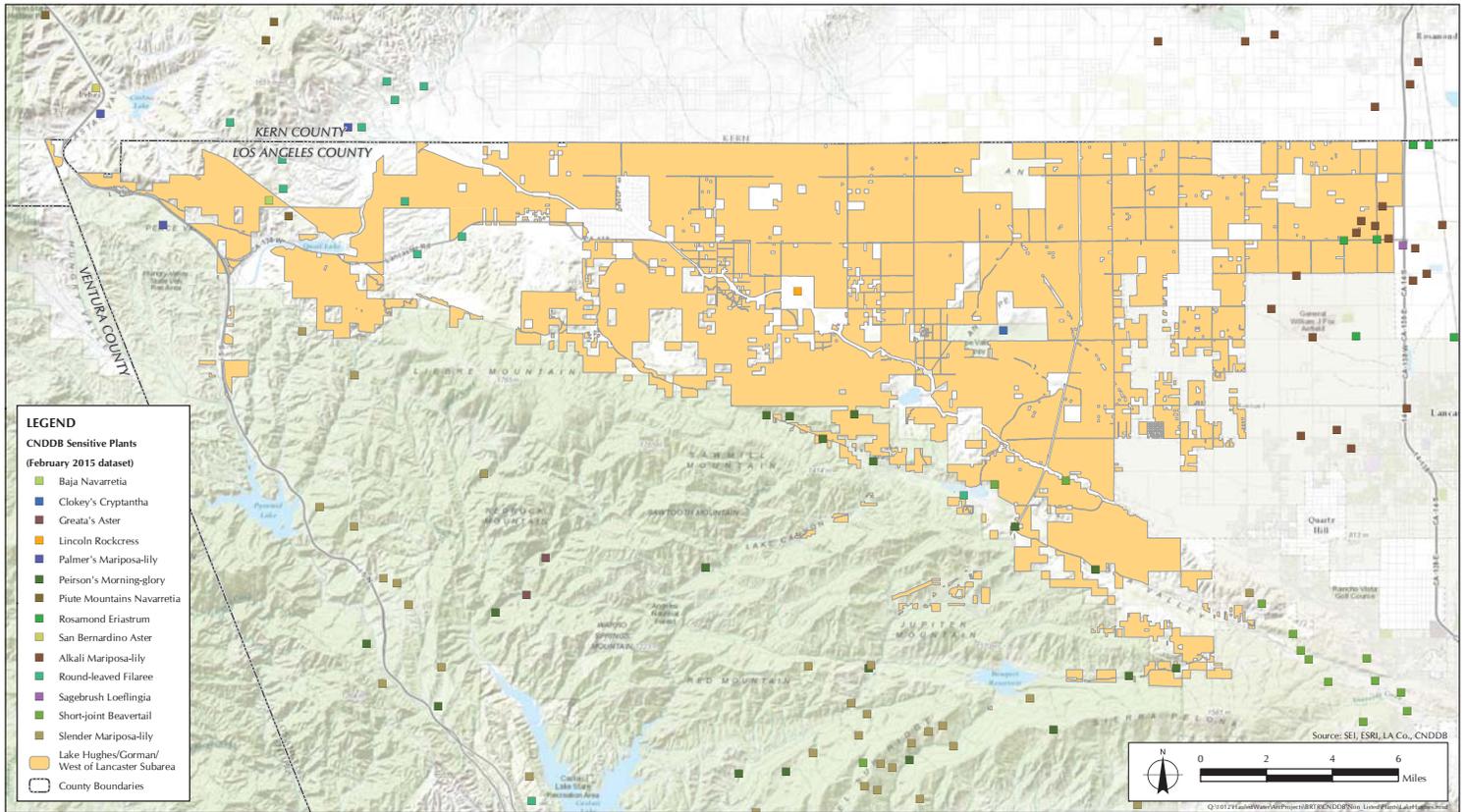


FIGURE 5.1.1-3A
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 Lake Hughes/Gorman/West of Lancaster Subarea

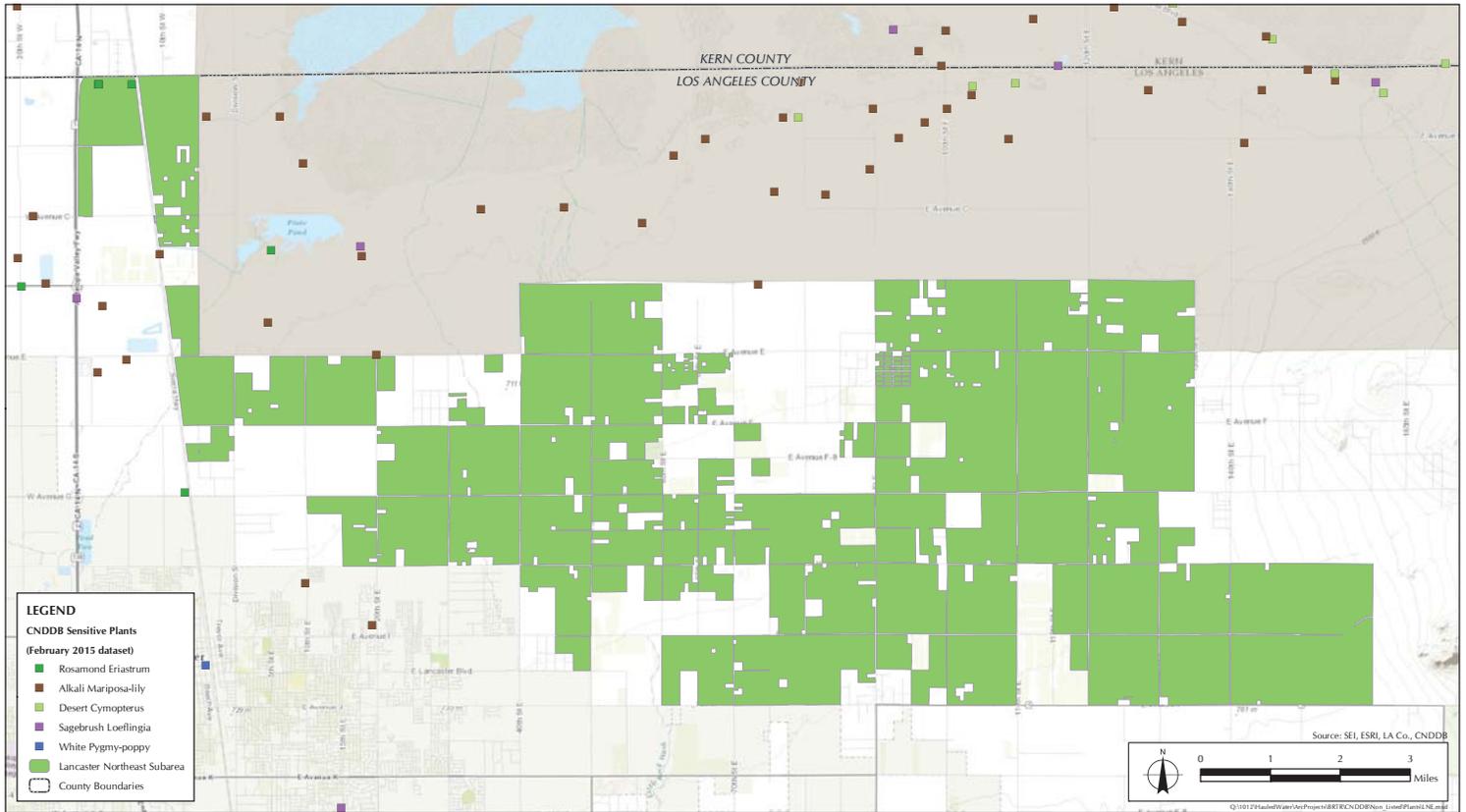


FIGURE 5.1.1-3B
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 Lancaster Northeast Subarea

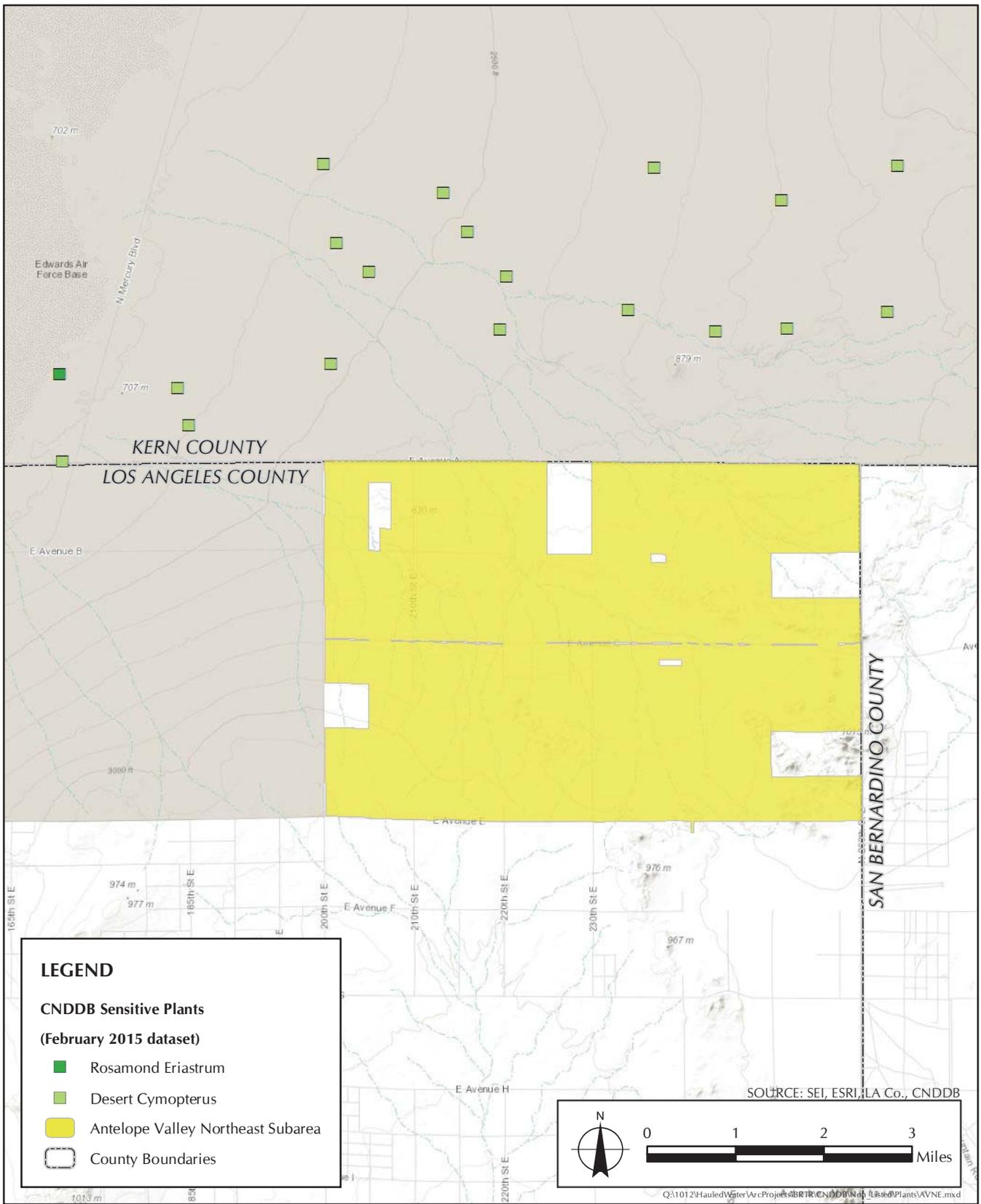


FIGURE 5.1.1-3C
Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
Antelope Valley Northeast Subarea

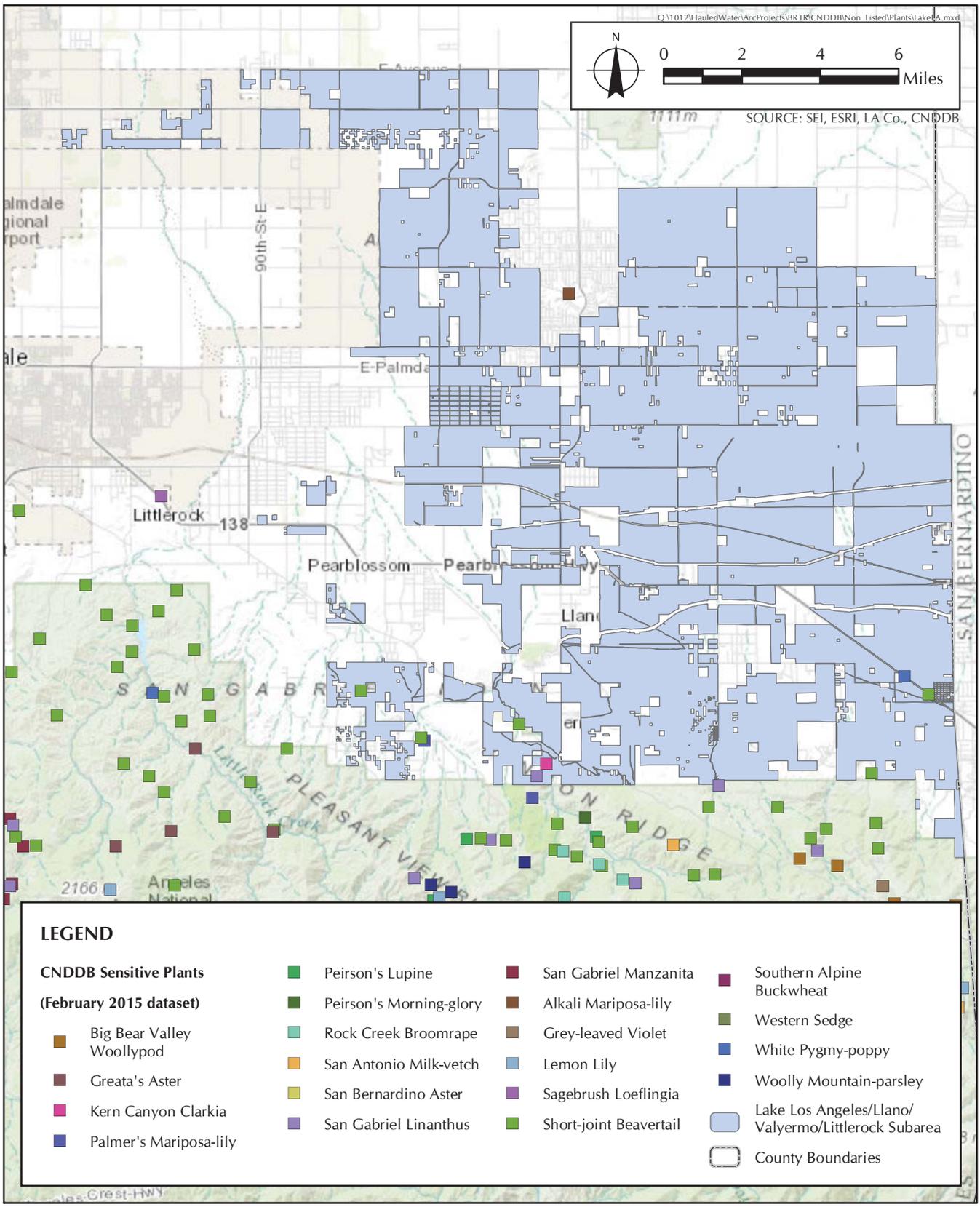


FIGURE 5.1.1-3D

Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
Lake Los Angeles/Llano/Valyermo/Littlerock Subarea

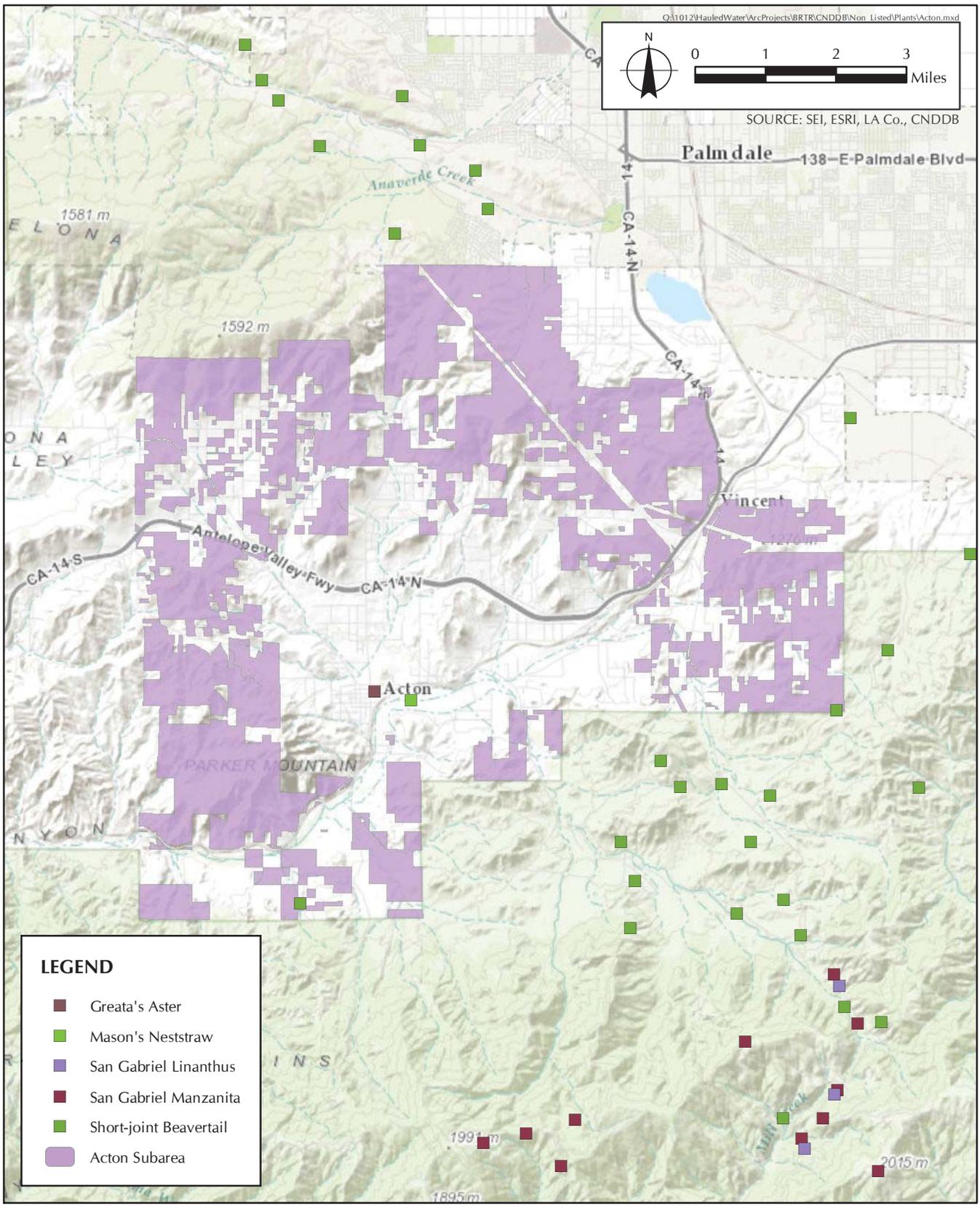


FIGURE 5.1.1-3E
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 Acton Subarea

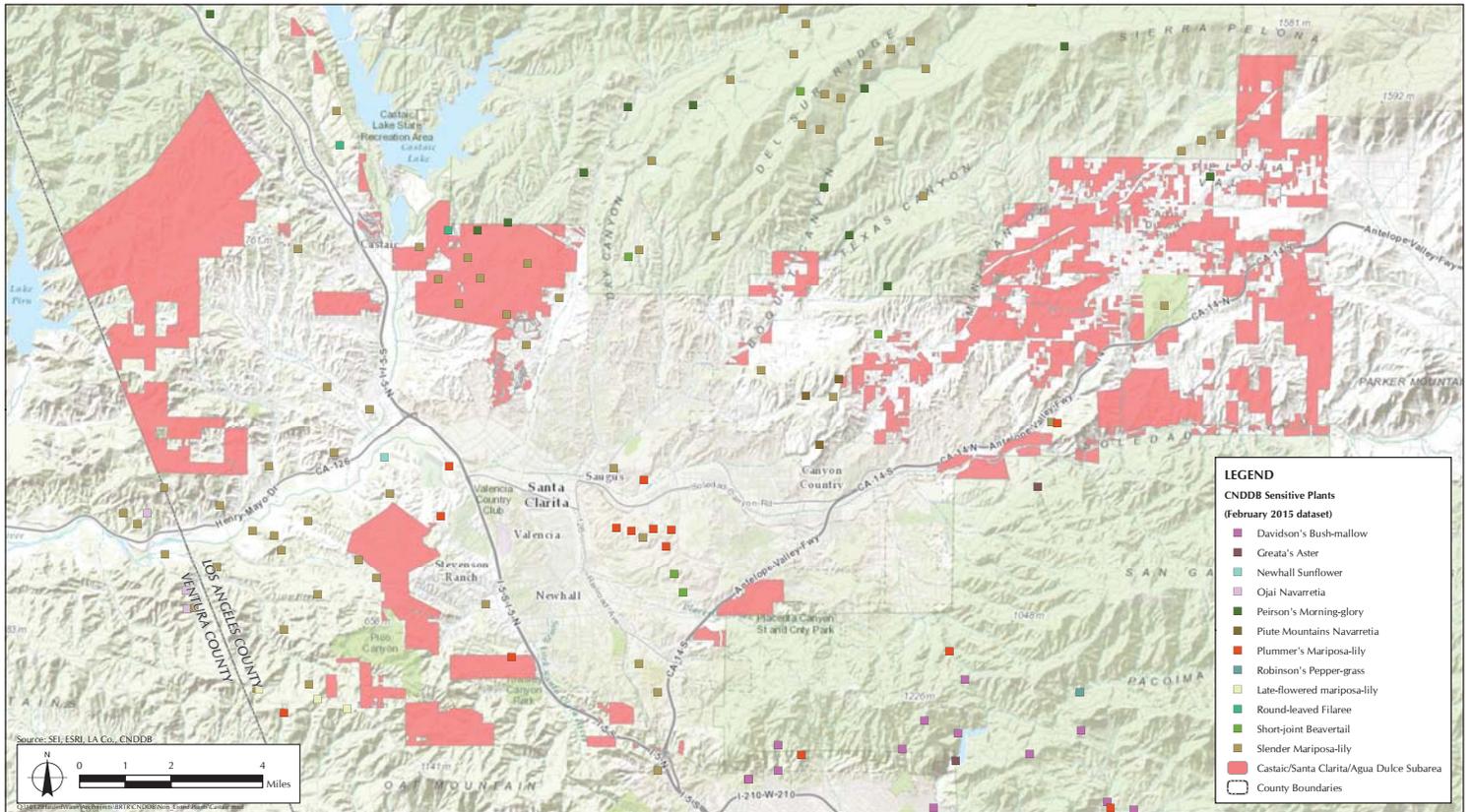


FIGURE 5.1.1-3F
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 Castaic/Santa Clarita/Agua Dulce Subarea

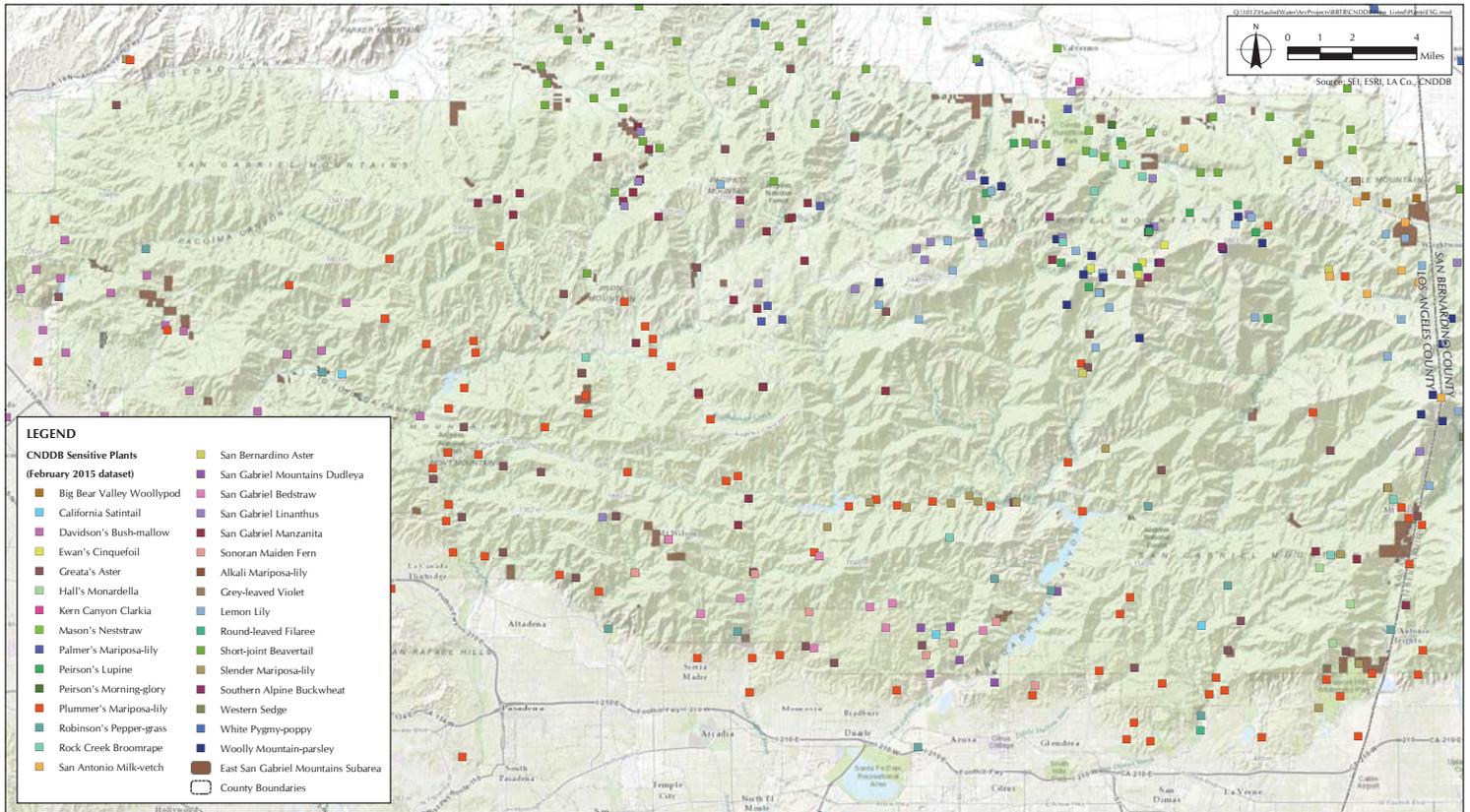


FIGURE 5.1.1-3G
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 East San Gabriel Mountains Subarea

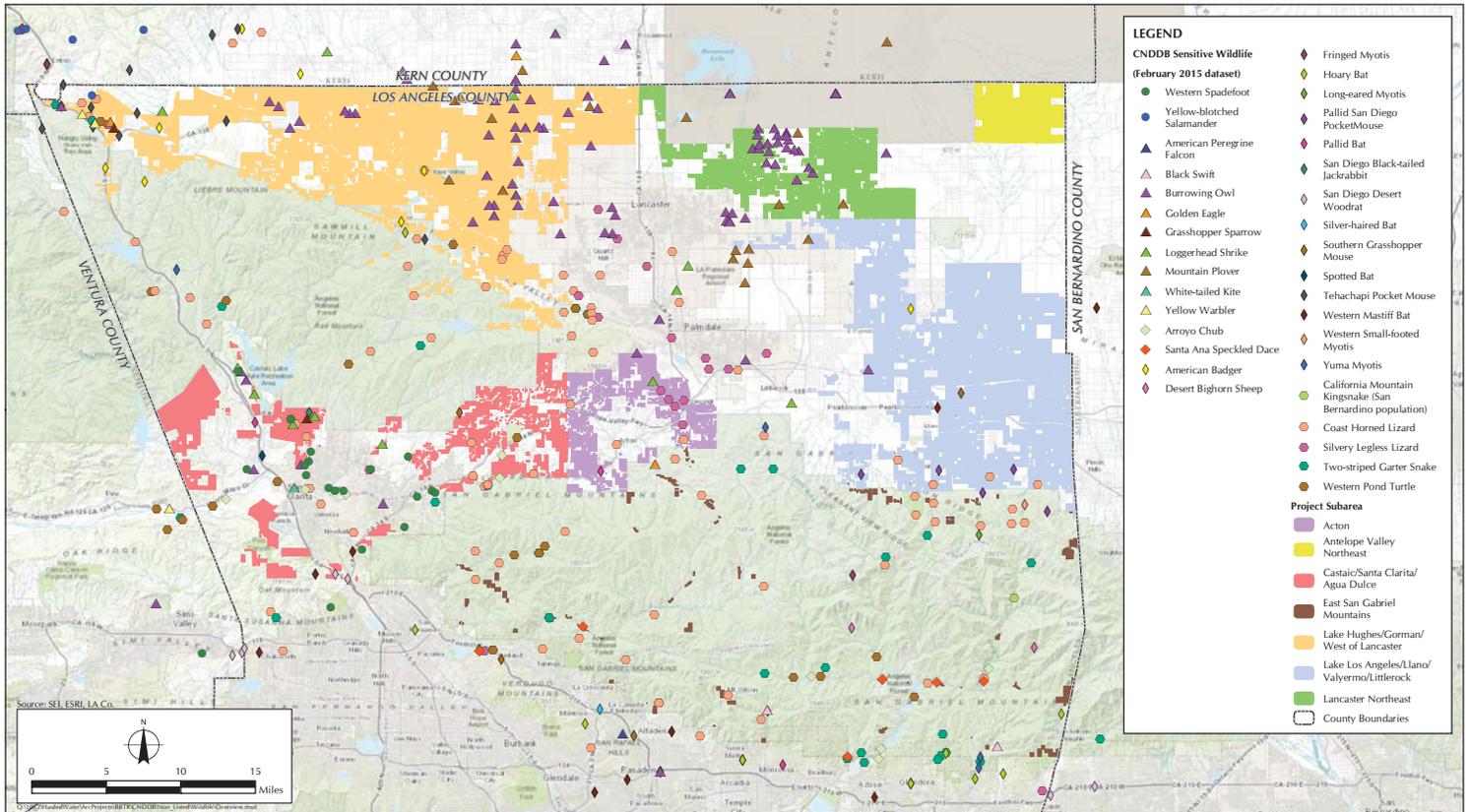


FIGURE 5.1.1-4
Other Sensitive Wildlife Species With the Potential to Occur Within The Proposed Initiative Subareas



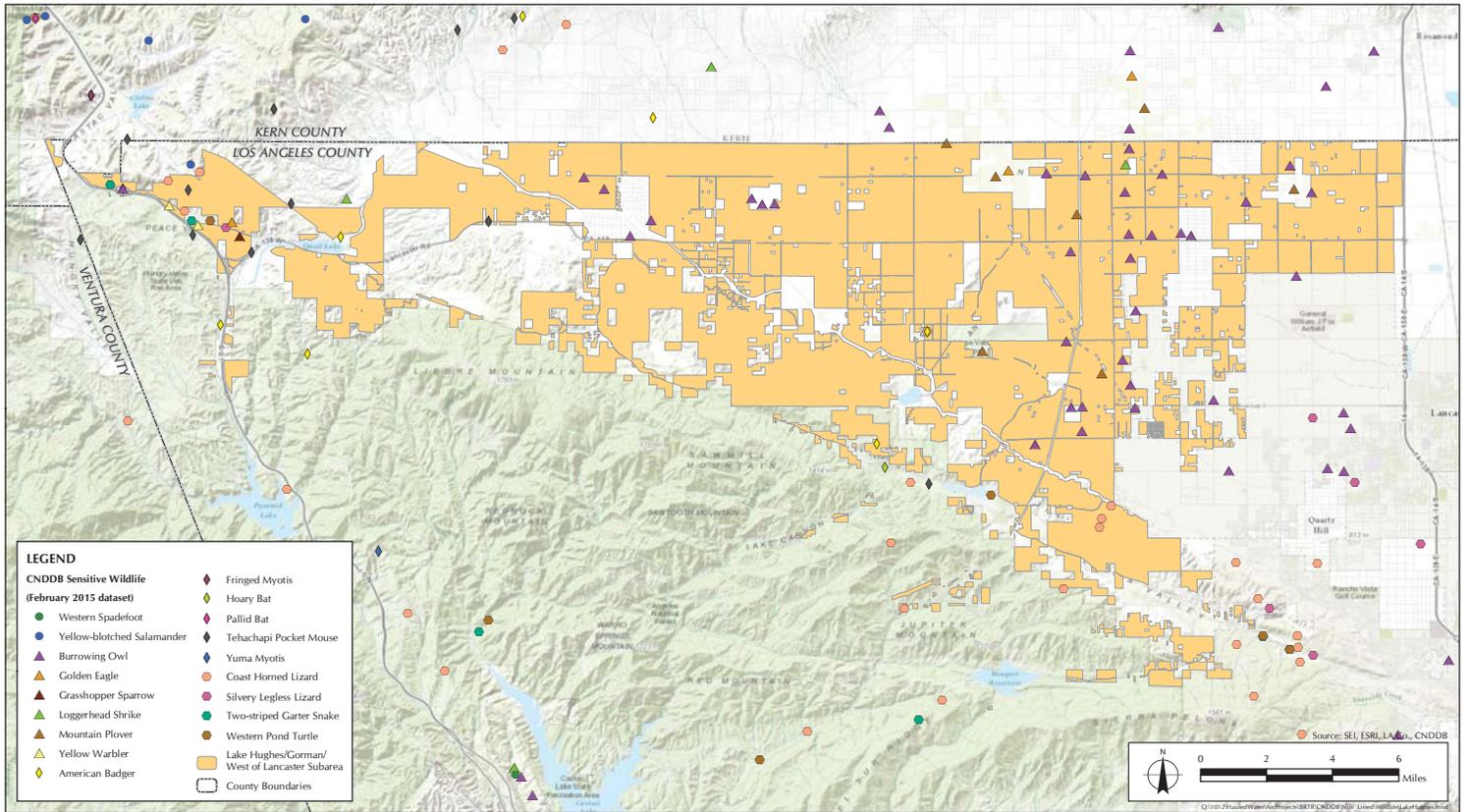


FIGURE 5.1.1-4A
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 Lake Hughes/Gorman/West of Lancaster Subarea

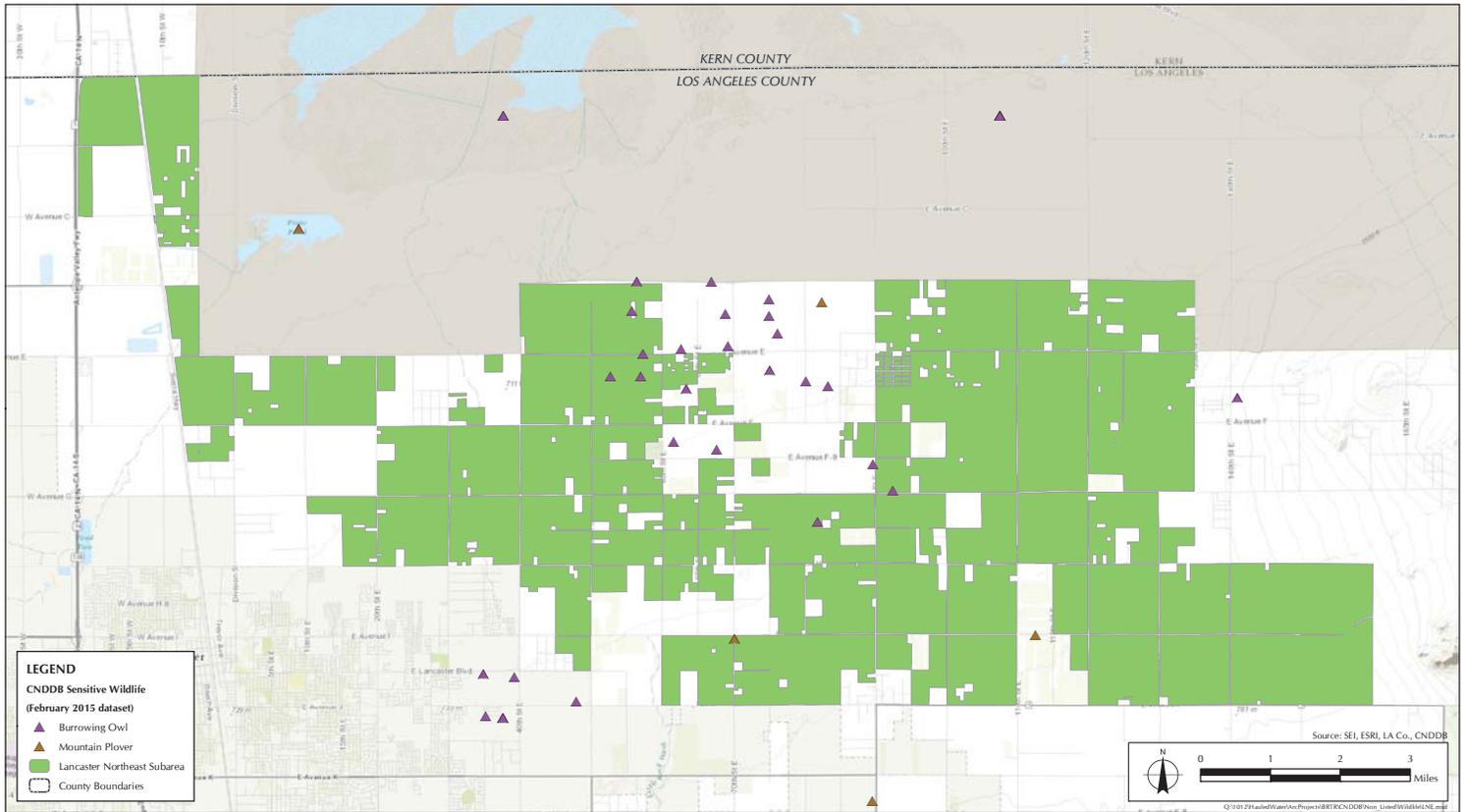


FIGURE 5.1.1-4B
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 Lancaster Northeast Subarea

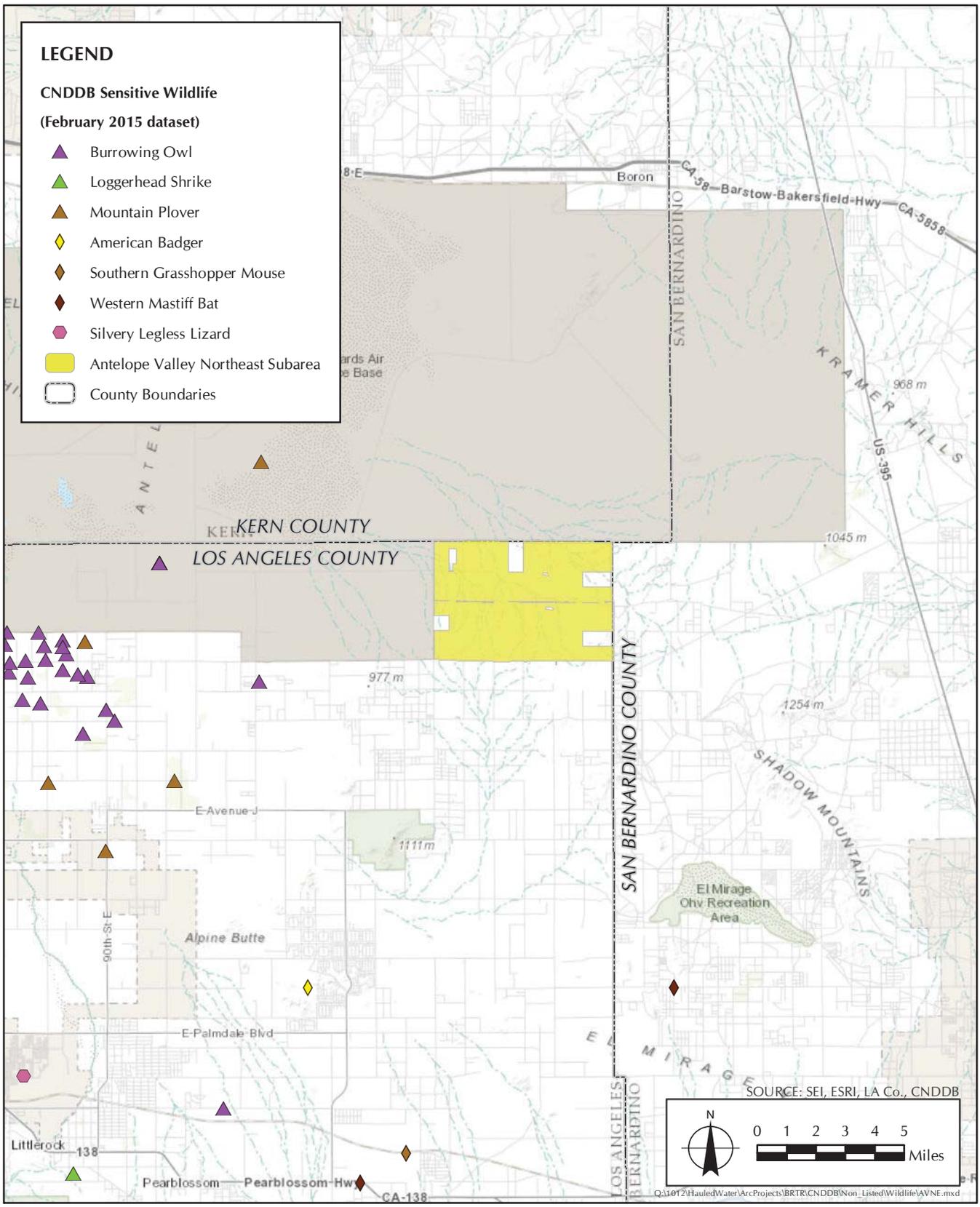


FIGURE 5.1.1-4C
Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
Antelope Valley Northeast Subarea

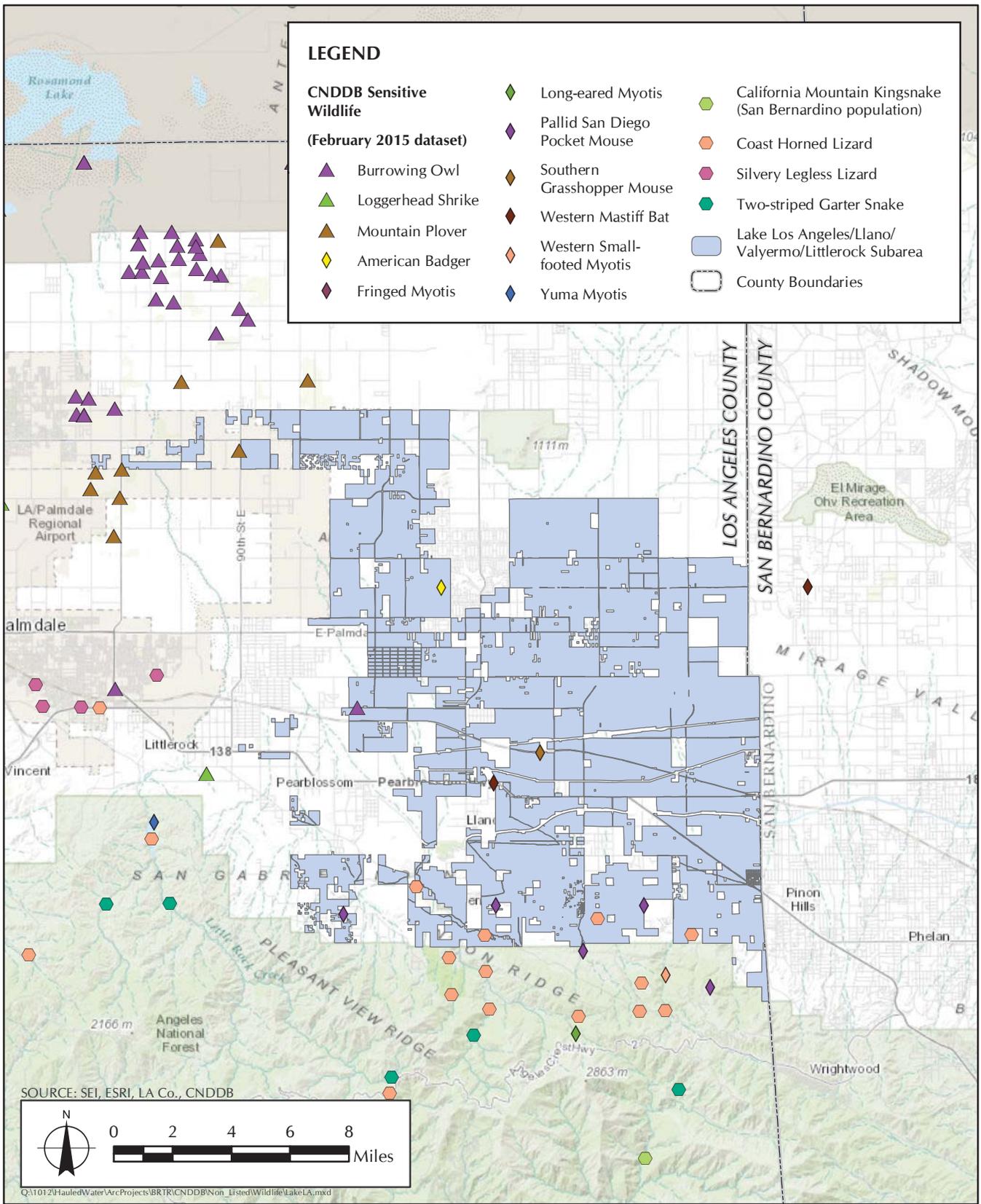


FIGURE 5.1.1-4D
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 Lake Los Angeles/Llano/Valyermo/Littlerock Subarea

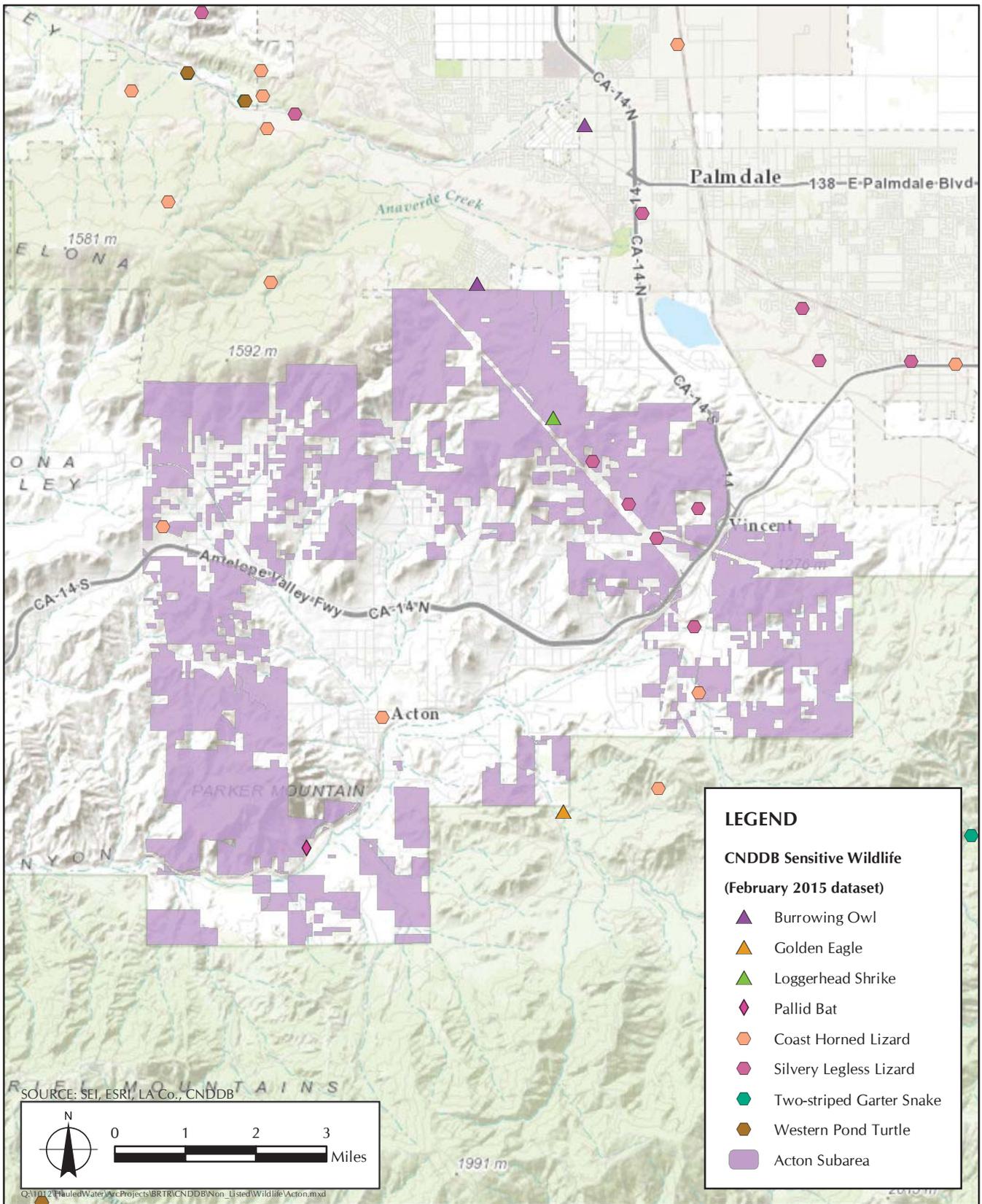


FIGURE 5.1.1-4E

Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
Acton Subarea

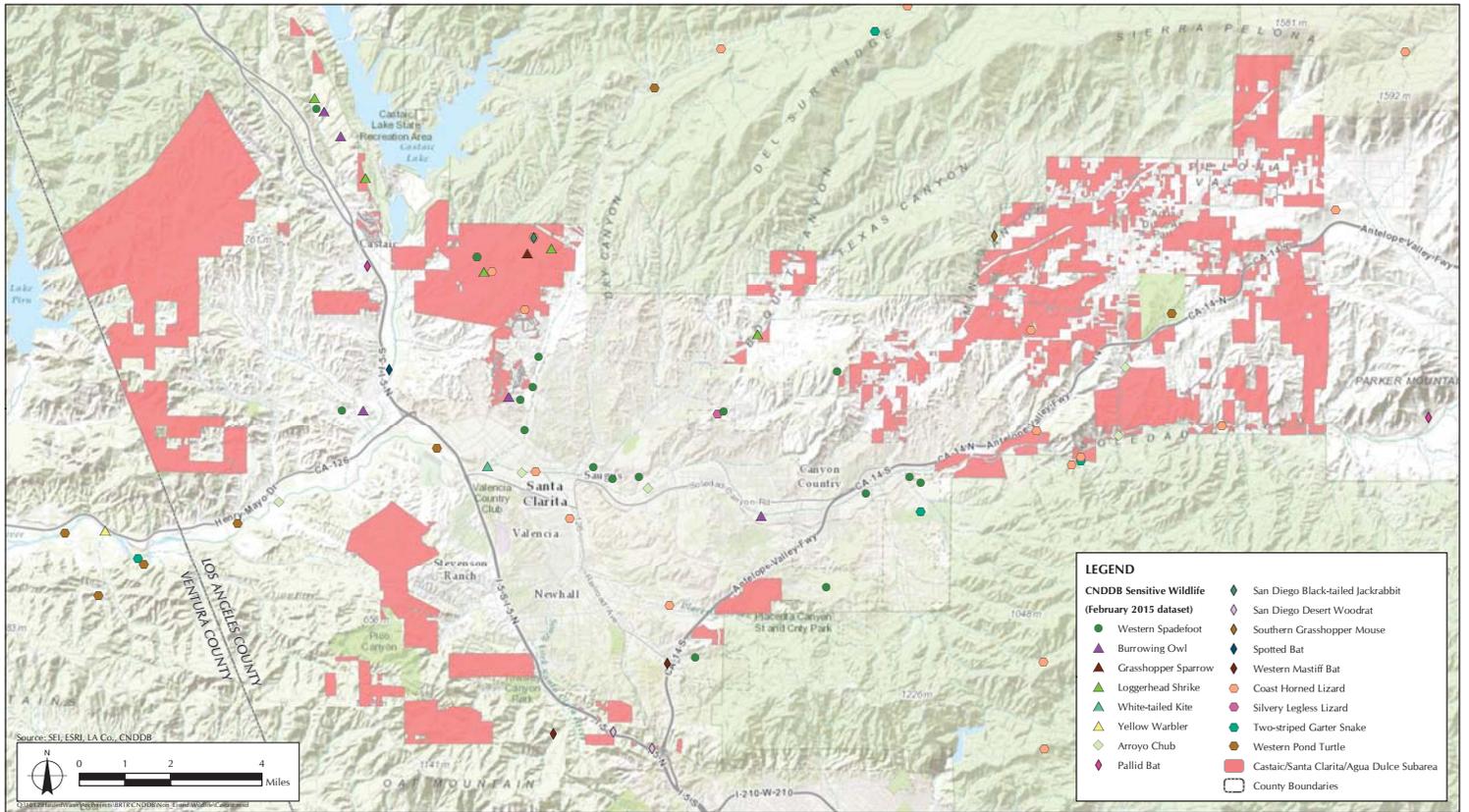


FIGURE 5.1.1-4F
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 Castaic/Santa Clarita/Agua Dulce Subarea

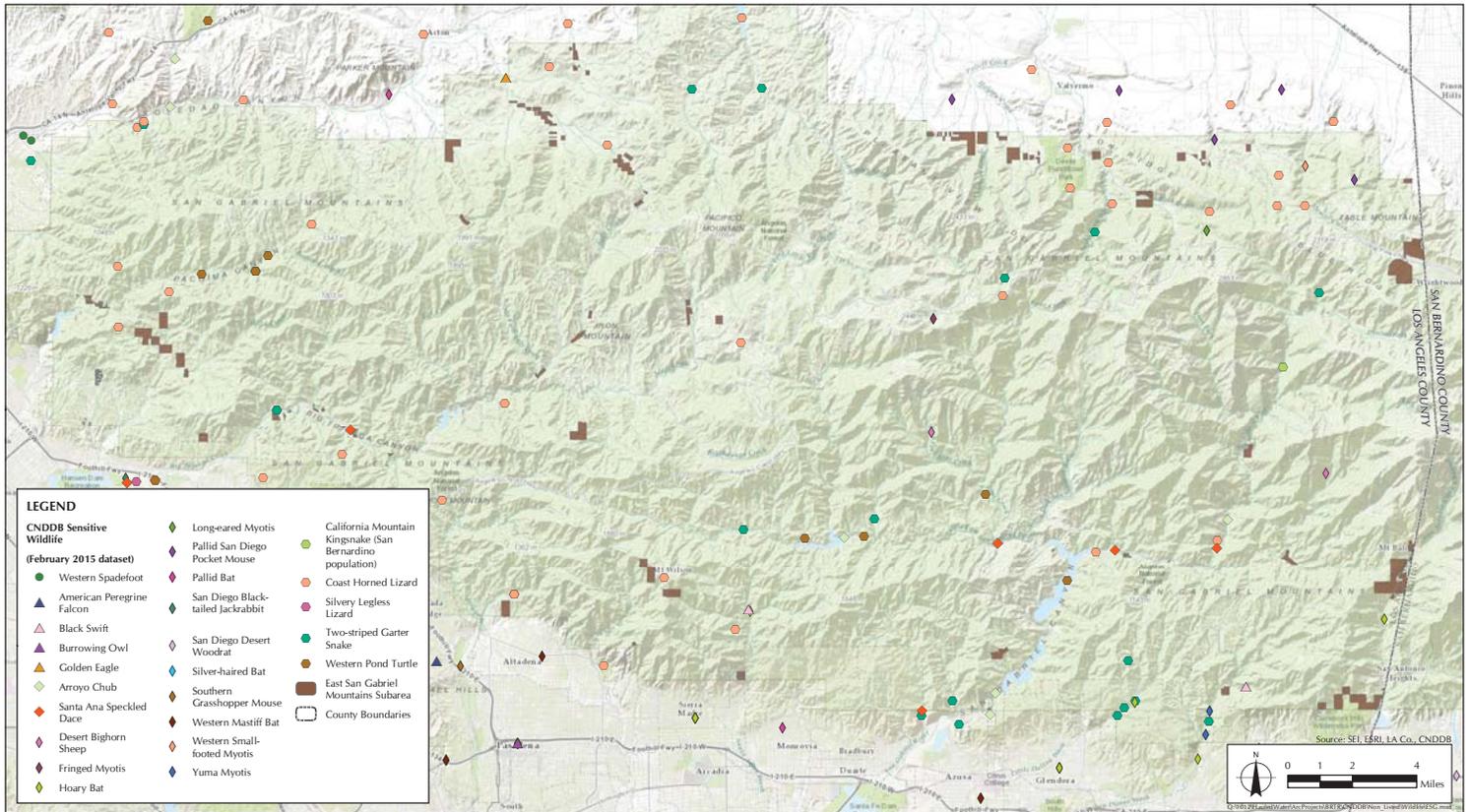


FIGURE 5.1.1-4G
 Other Sensitive Plant Species With the Potential to Occur Within The Proposed Initiative Subareas
 East San Gabriel Mountains Subarea

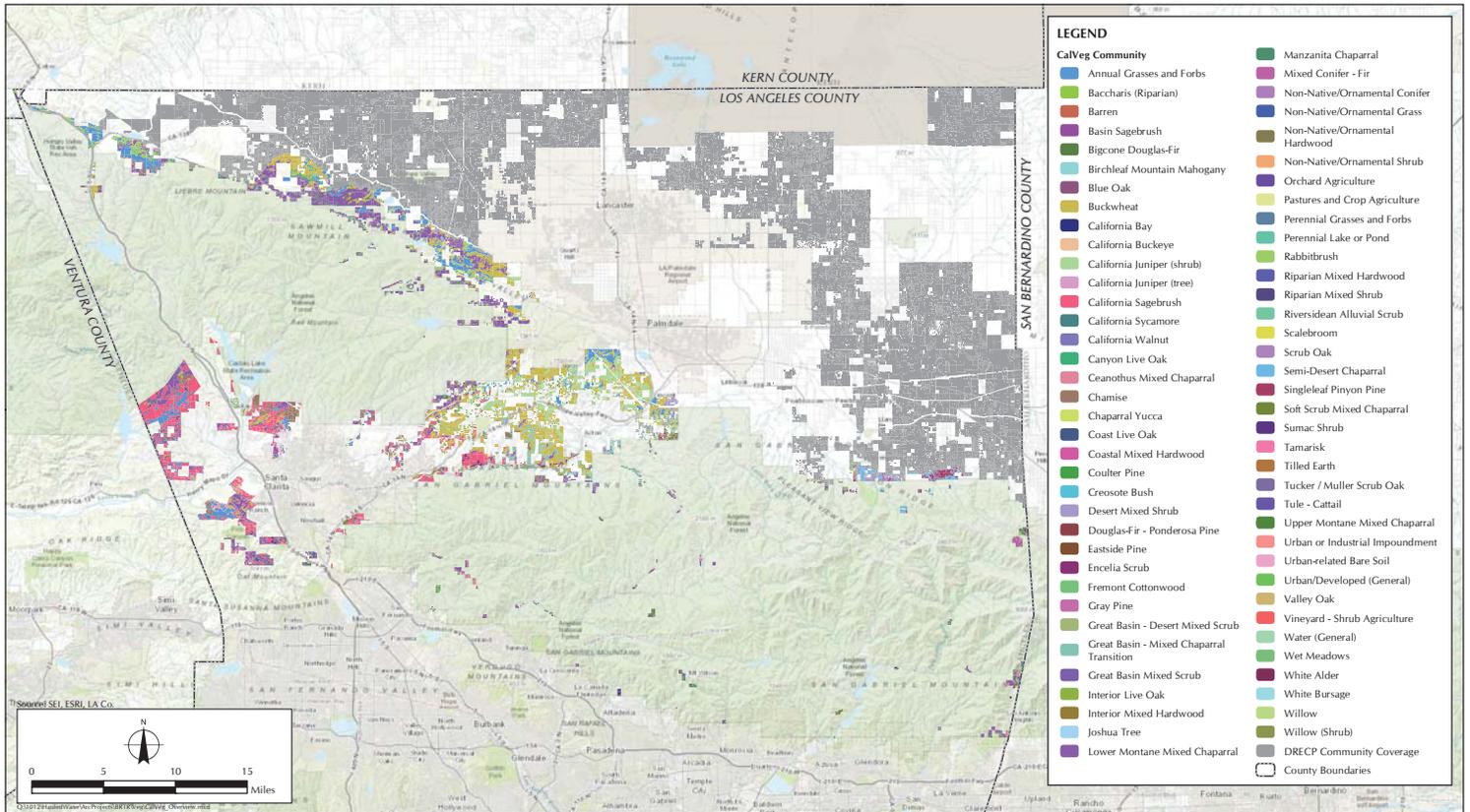


FIGURE 5.1.2-1
CalVeg Plant Communities Present Within the Proposed Initiative Subareas



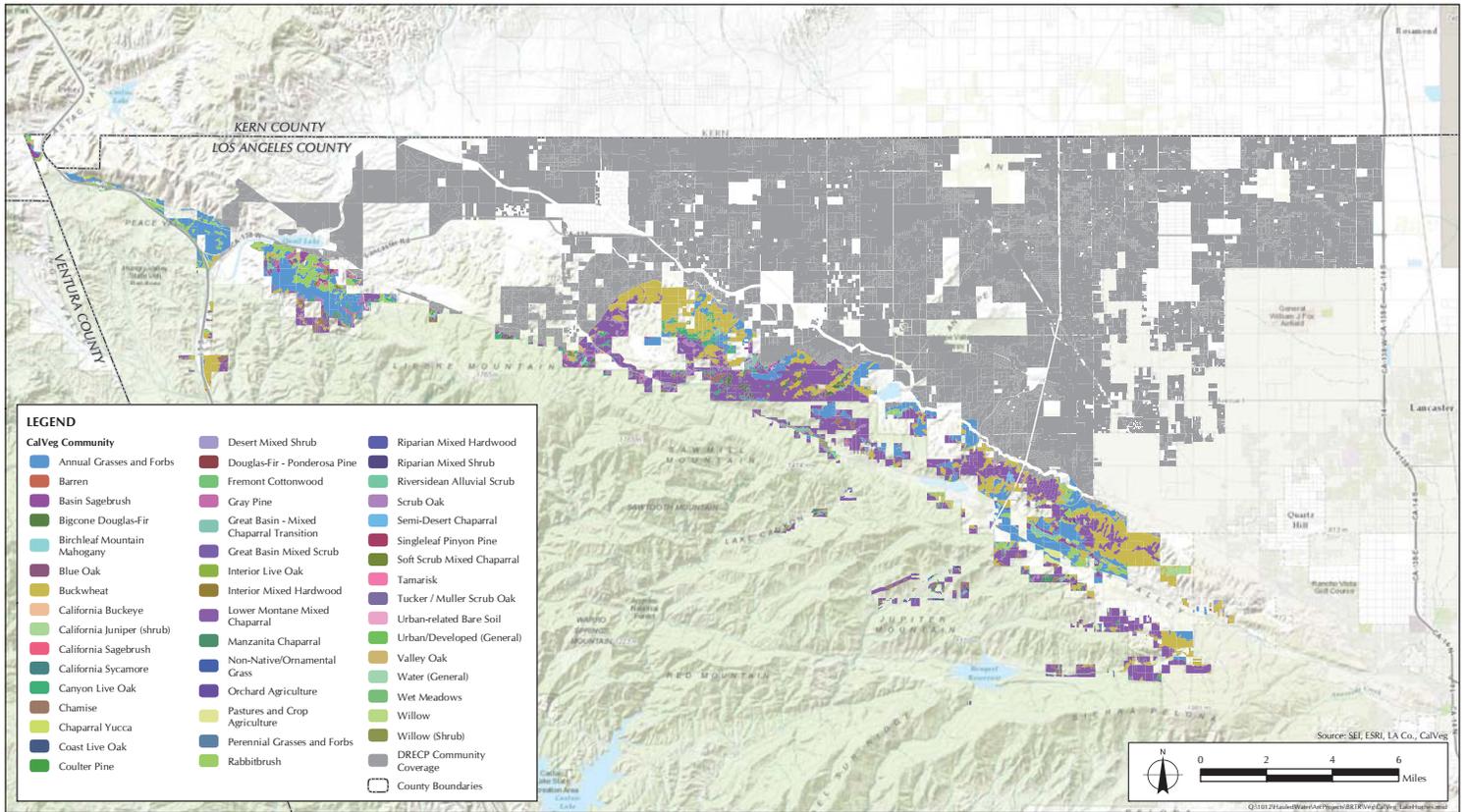


FIGURE 5.1.2-1A
 CalVeg Plant Communities Present Within the Proposed Initiative Subareas
 Lake Hughes/Gorman/West of Lancaster Subarea

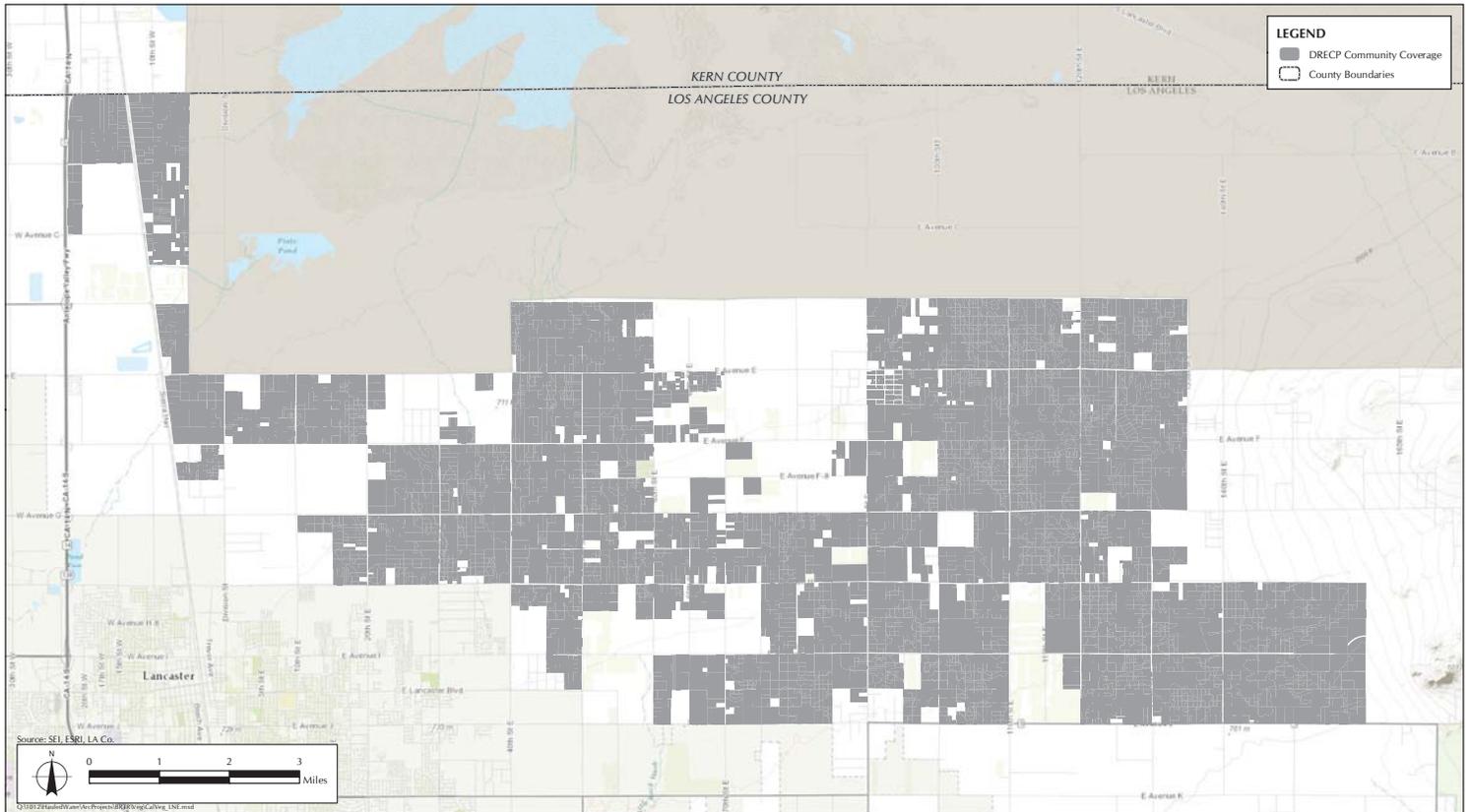


FIGURE 5.1.2-1B
CalVeg Plant Communities Present Within the Proposed Initiative Subareas
Lancaster Northeast Subarea

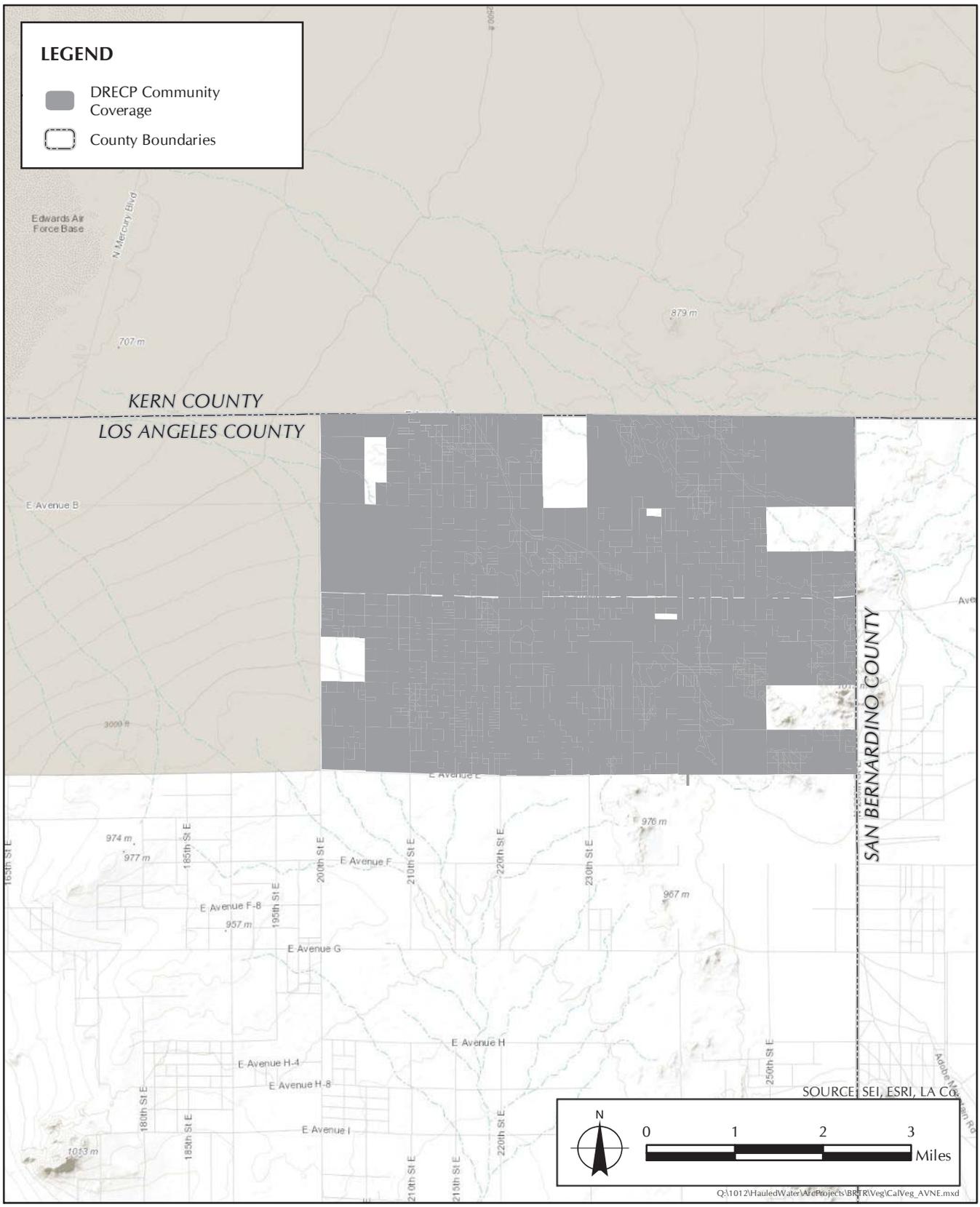


FIGURE 5.1.2-1C
 CalVeg Plant Communities Present Within the Proposed Initiative Subareas
 Antelope Valley Northeast Subarea

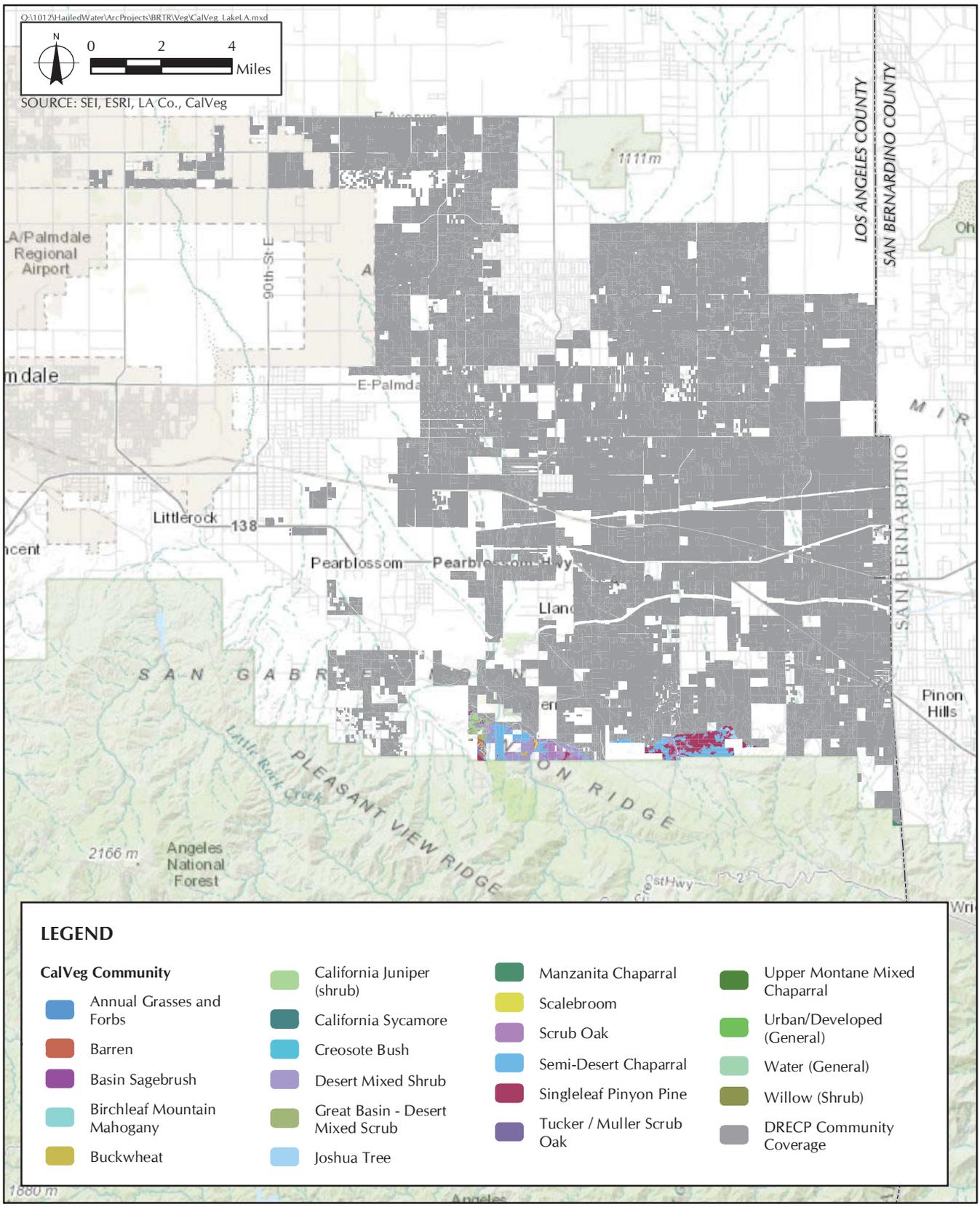


FIGURE 5.1.2-1D
CalVeg Plant Communities Present Within the Proposed Initiative Subareas
Lake Los Angeles/Llano/Valyermo/Littlerock Subarea

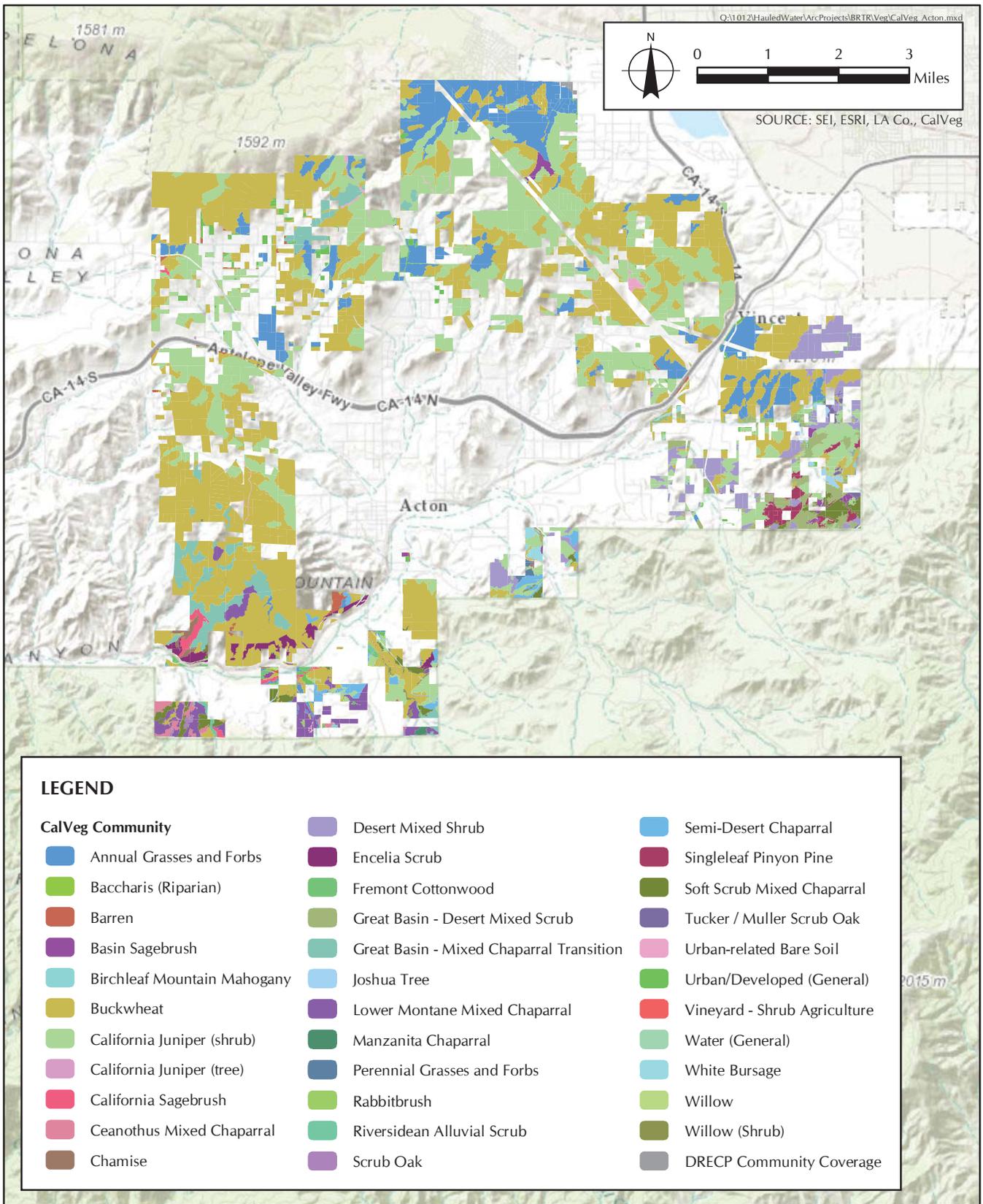


FIGURE 5.1.2-1E
 CalVeg Plant Communities Present Within the Proposed Initiative Subareas
 Acton Subarea

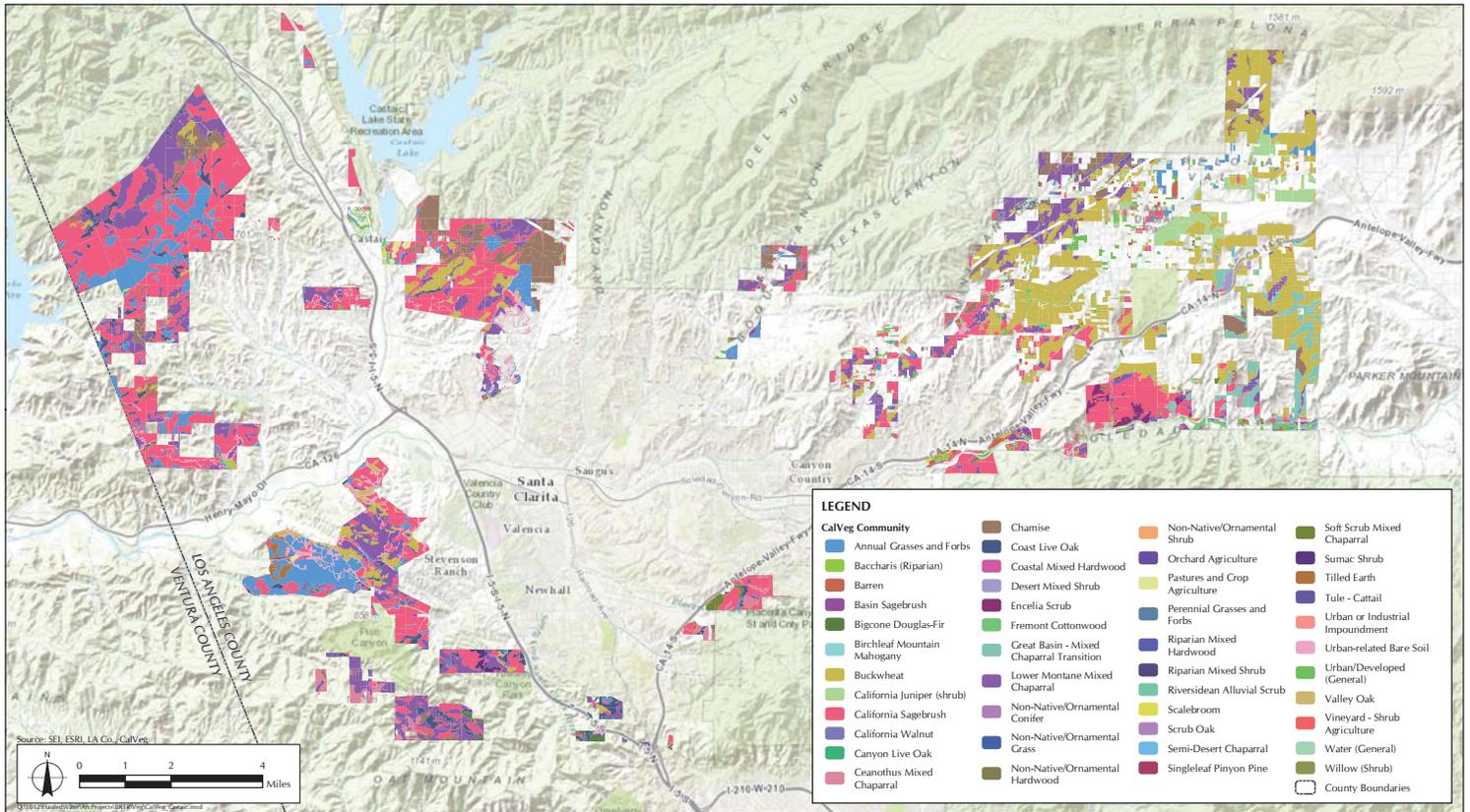


FIGURE 5.1.2-1F
 CalVeg Plant Communities Present Within the Proposed Initiative Subareas
 Castaic/Santa Clarita/Agua Dulce Subarea

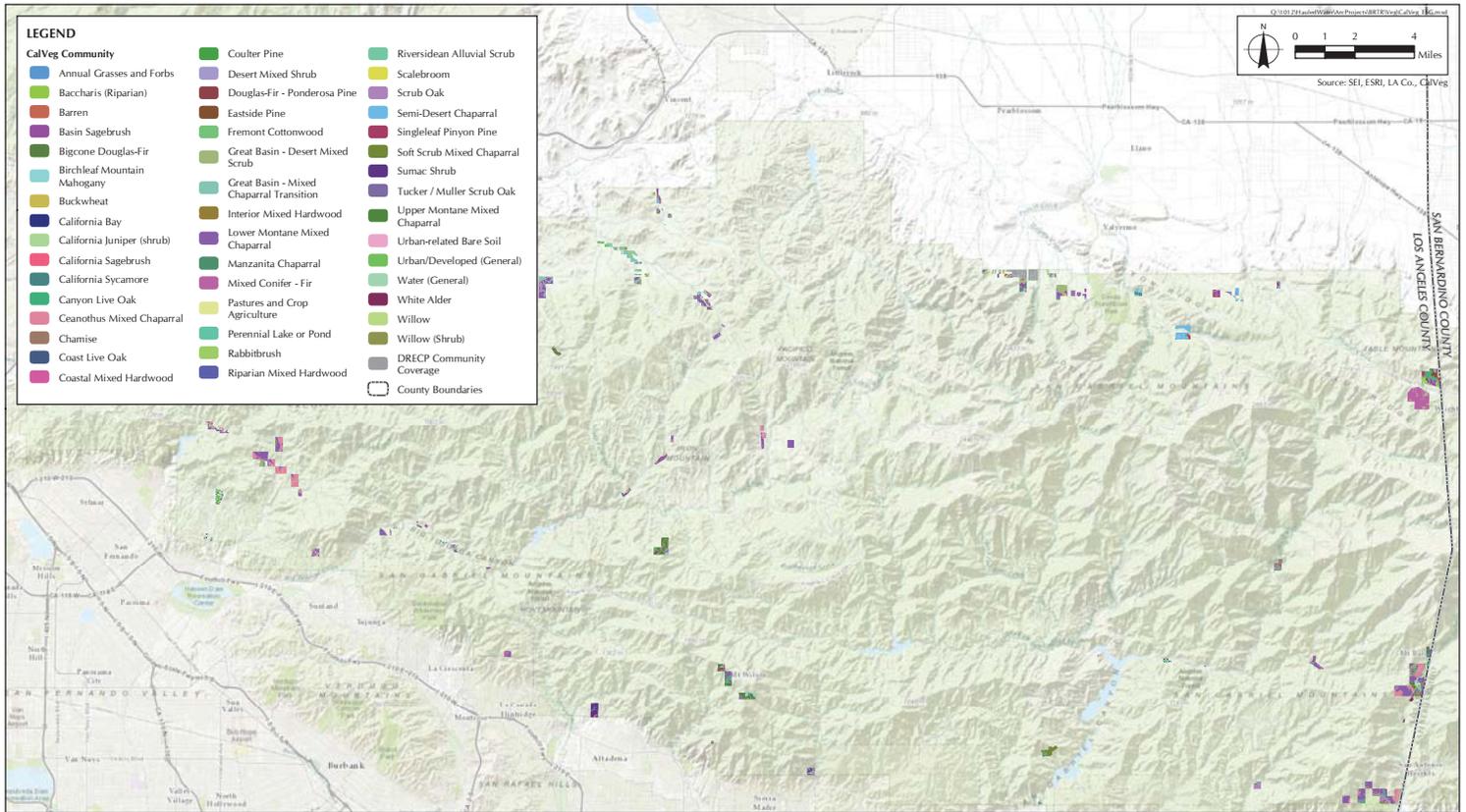


FIGURE 5.1.2-1G
 CalVeg Plant Communities Present Within the Proposed Initiative Subareas
 East San Gabriel Mountains Subarea

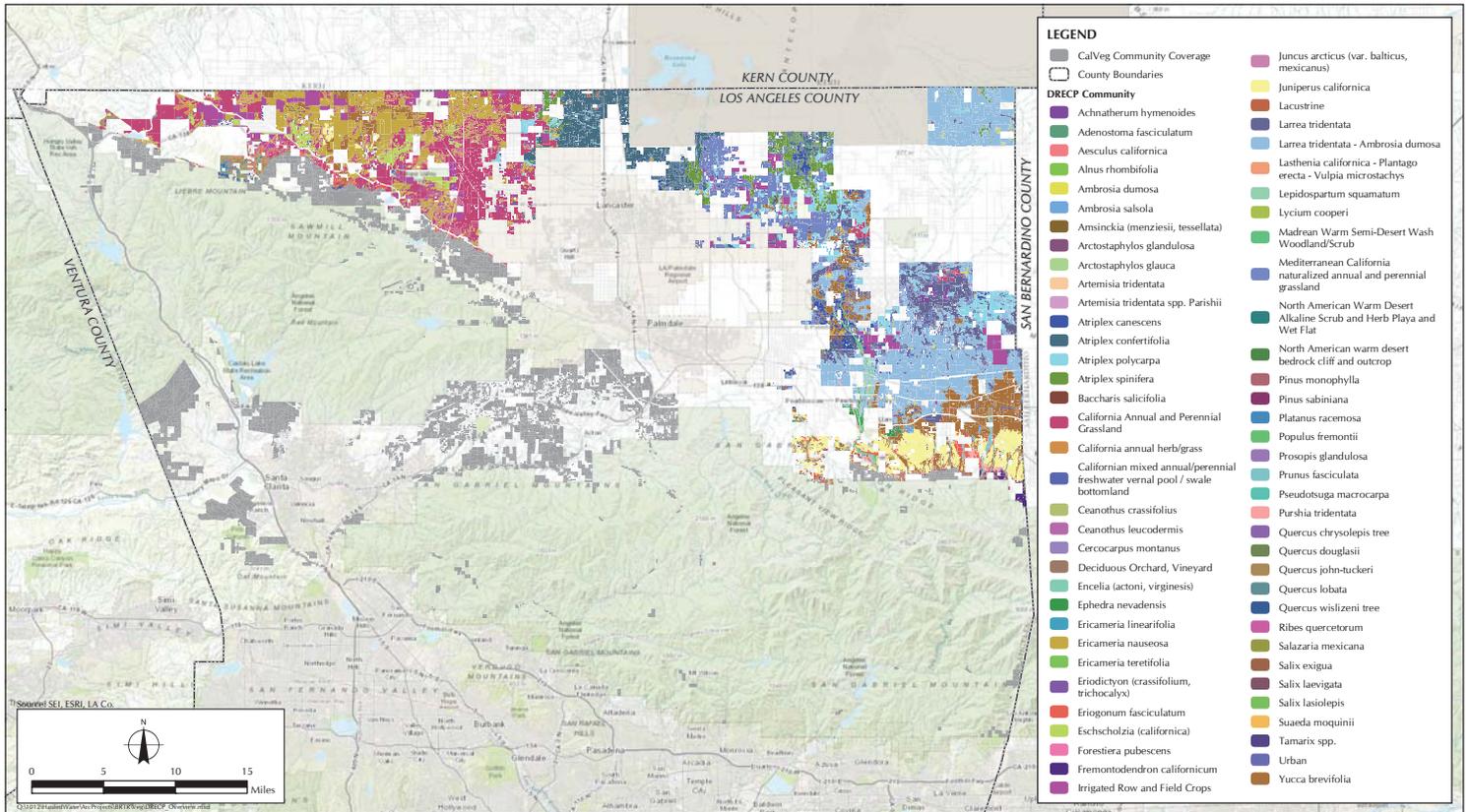


FIGURE 5.1.2-2
DRECP Plant Communities Present Within the Proposed Initiative Subareas



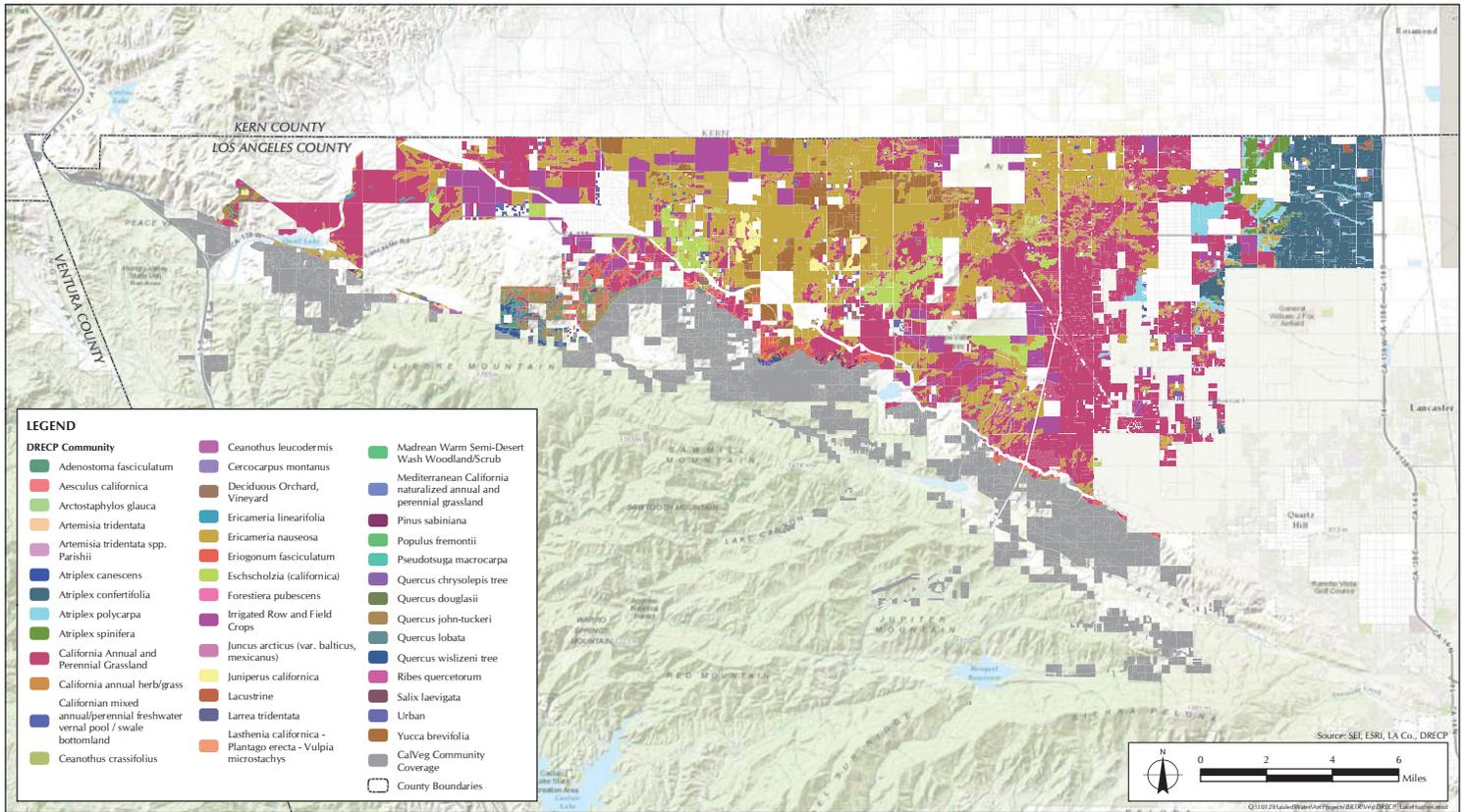


FIGURE 5.1.2-2A
DRECP Plant Communities Present Within the Proposed Initiative Subareas
Lake Hughes/Gorman/West of Lancaster Subarea

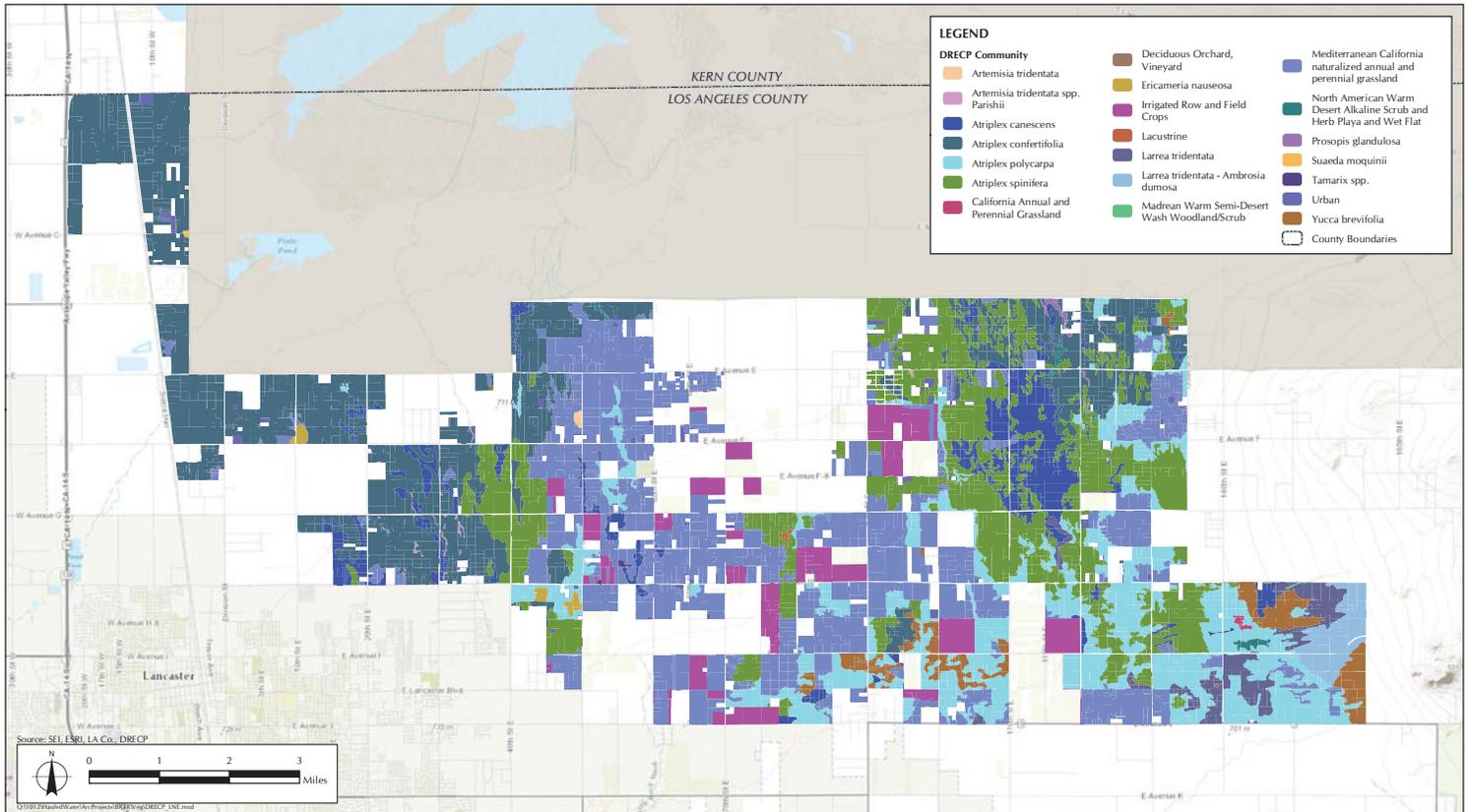
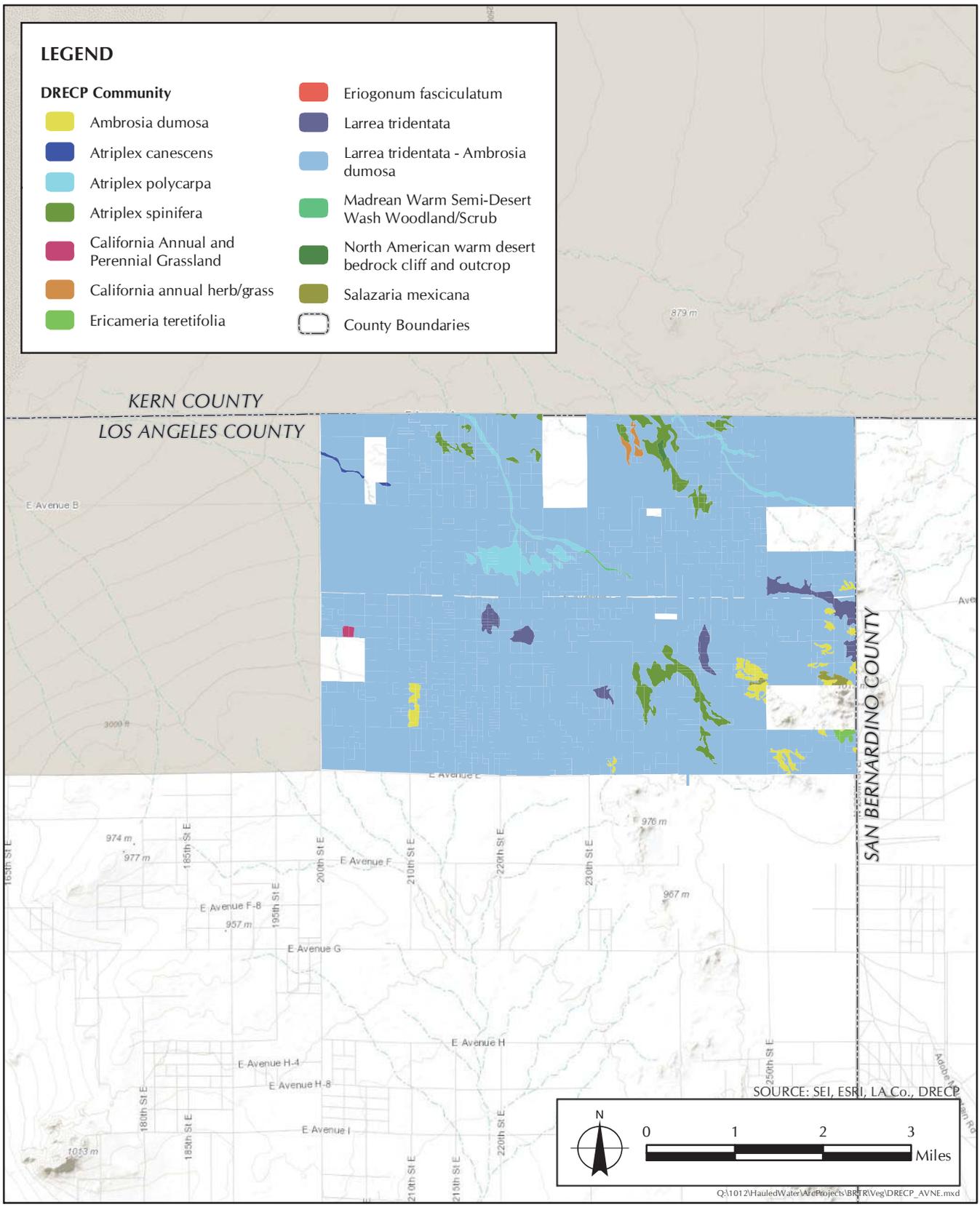


FIGURE 5.1.2-2B
 DRECP Plant Communities Present Within the Proposed Initiative Subareas
 Lancaster Northeast Subarea



LEGEND

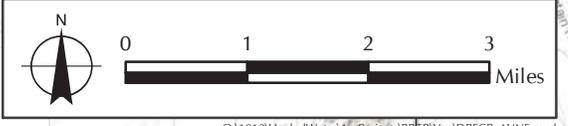
DRECP Community

- Ambrosia dumosa
- Atriplex canescens
- Atriplex polycarpa
- Atriplex spinifera
- California Annual and Perennial Grassland
- California annual herb/grass
- Ericameria teretifolia
- Eriogonum fasciculatum
- Larrea tridentata
- Larrea tridentata - Ambrosia dumosa
- Madrean Warm Semi-Desert Wash Woodland/Scrub
- North American warm desert bedrock cliff and outcrop
- Salazaria mexicana
- County Boundaries

KERN COUNTY
LOS ANGELES COUNTY

SAN BERNARDINO COUNTY

SOURCE: SEI, ESRI, LA Co., DRECP



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FIGURE 5.1.2-2C

DRECP Plant Communities Present Within the Proposed Initiative Subareas
Antelope Valley Northeast Subarea

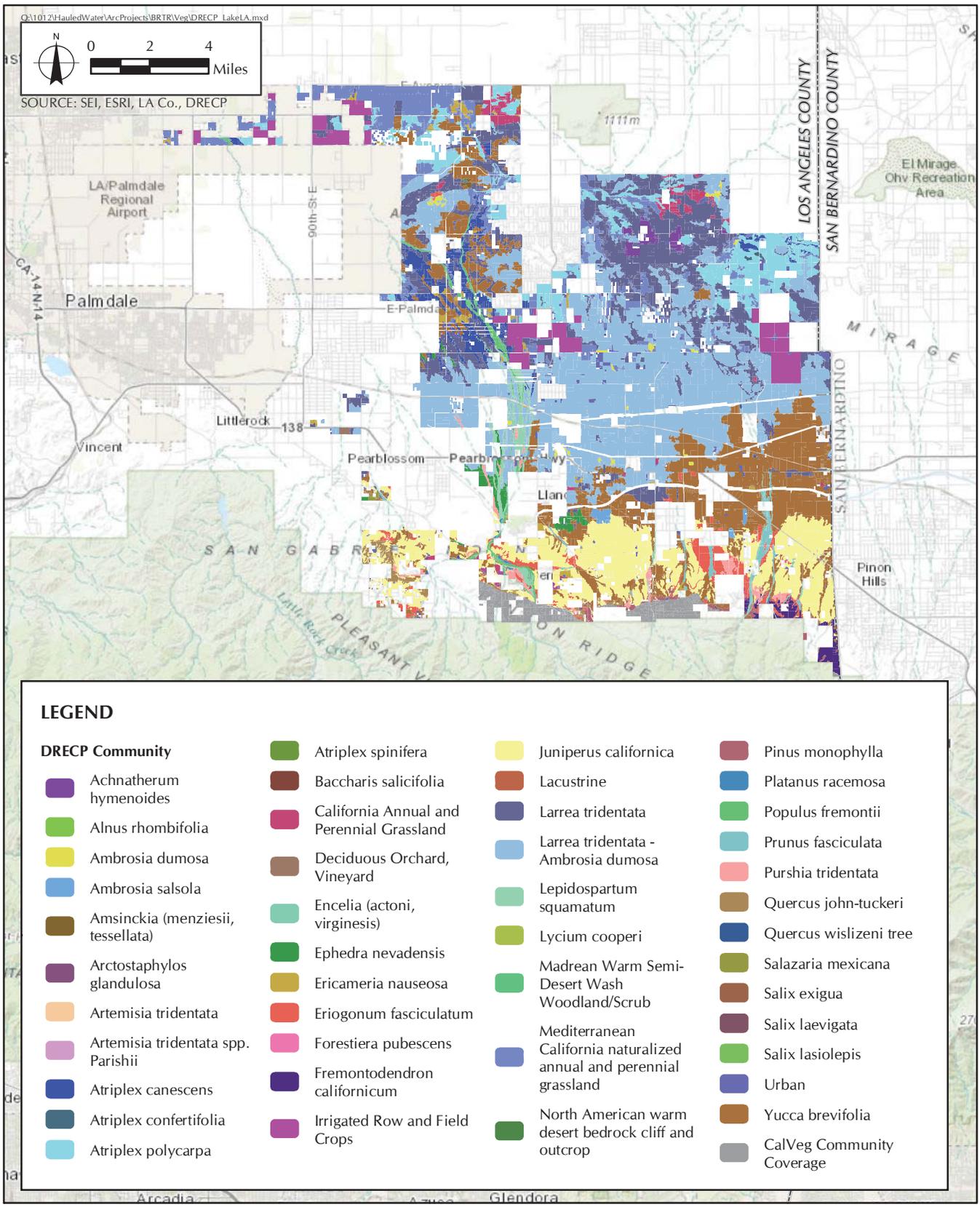


FIGURE 5.1.2-2D
DRECP Plant Communities Present Within the Proposed Initiative Subareas
Lake Los Angeles/Llano/Valyermo/Littlerock Subarea

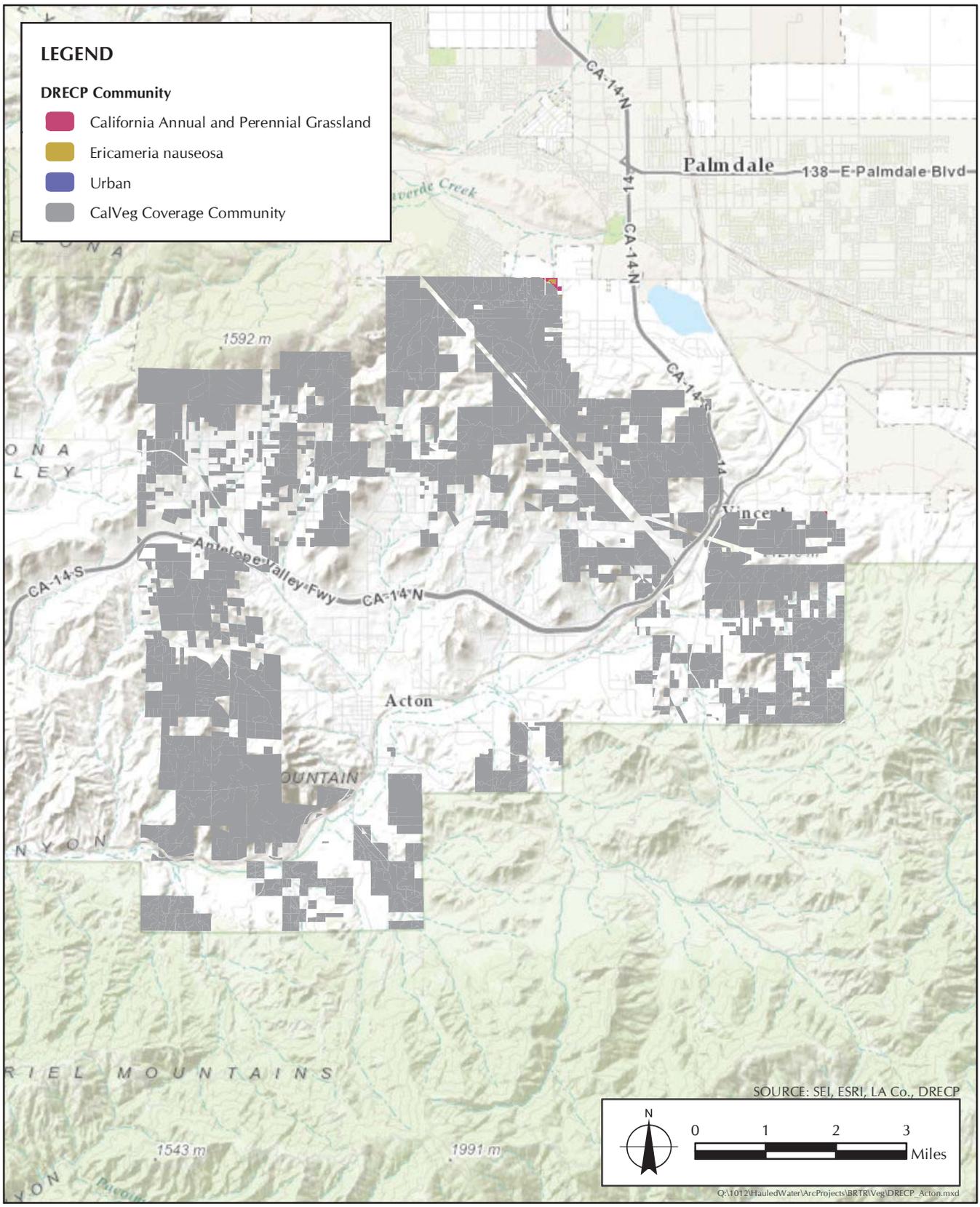


FIGURE 5.1.2-2E

DRECP Plant Communities Present Within the Proposed Initiative Subareas
Acton Subarea

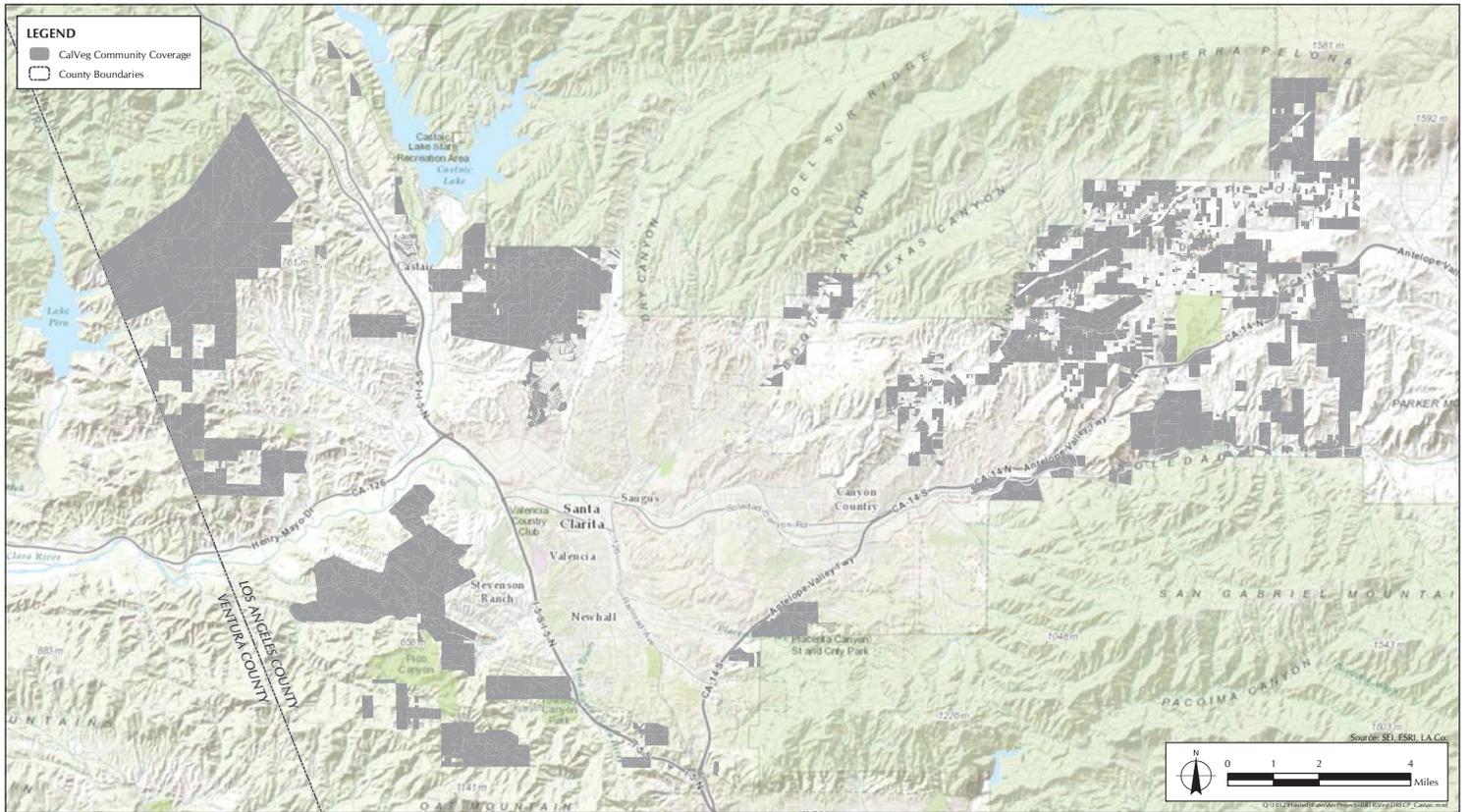


FIGURE 5.1.2-2F
 DRECP Plant Communities Present Within the Proposed Initiative Subareas
 Castaic/Santa Clarita/Agua Dulce Subarea

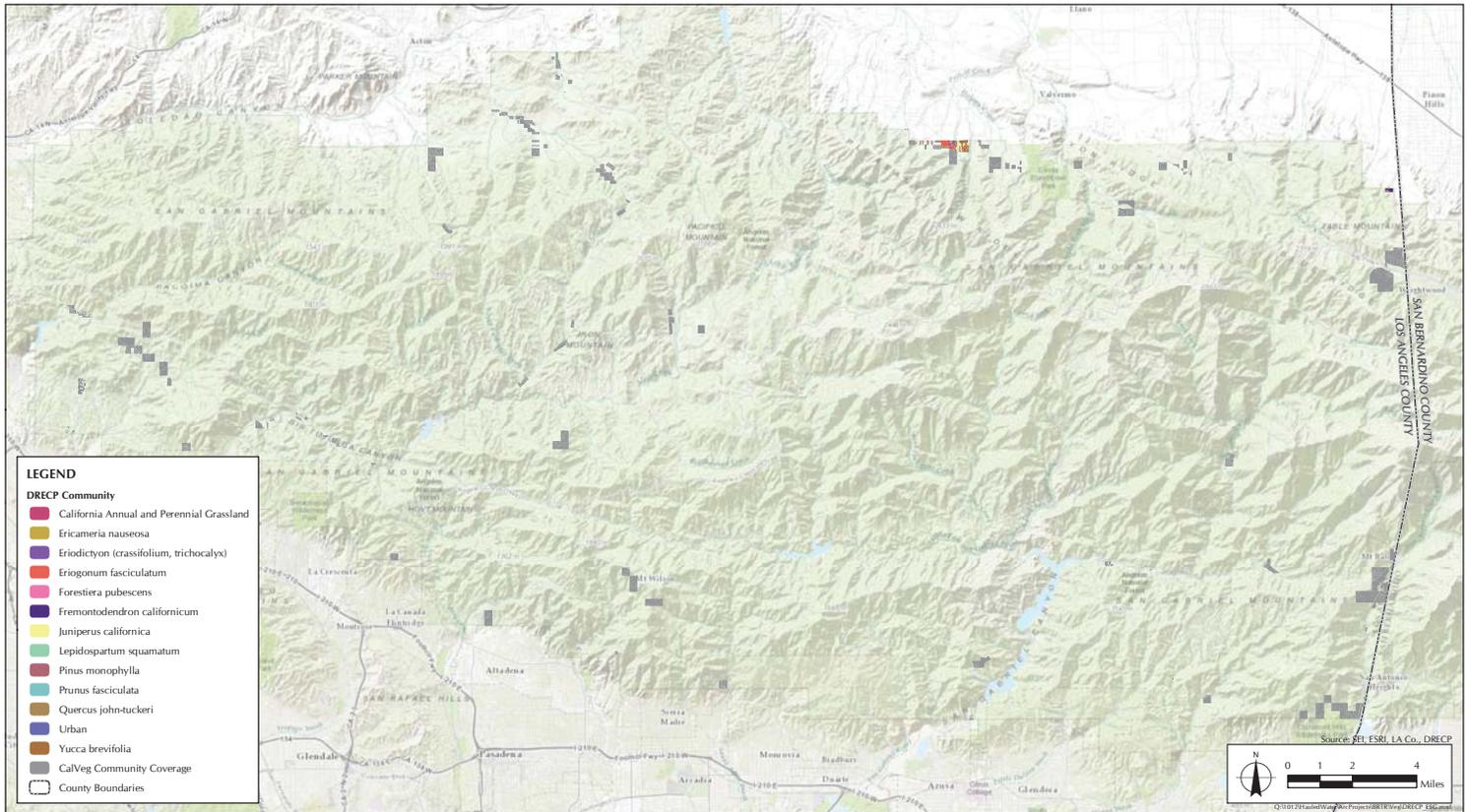


FIGURE 5.1.2-2G
 DRECP Plant Communities Present Within the Proposed Initiative Subareas
 East San Gabriel Mountains Subarea

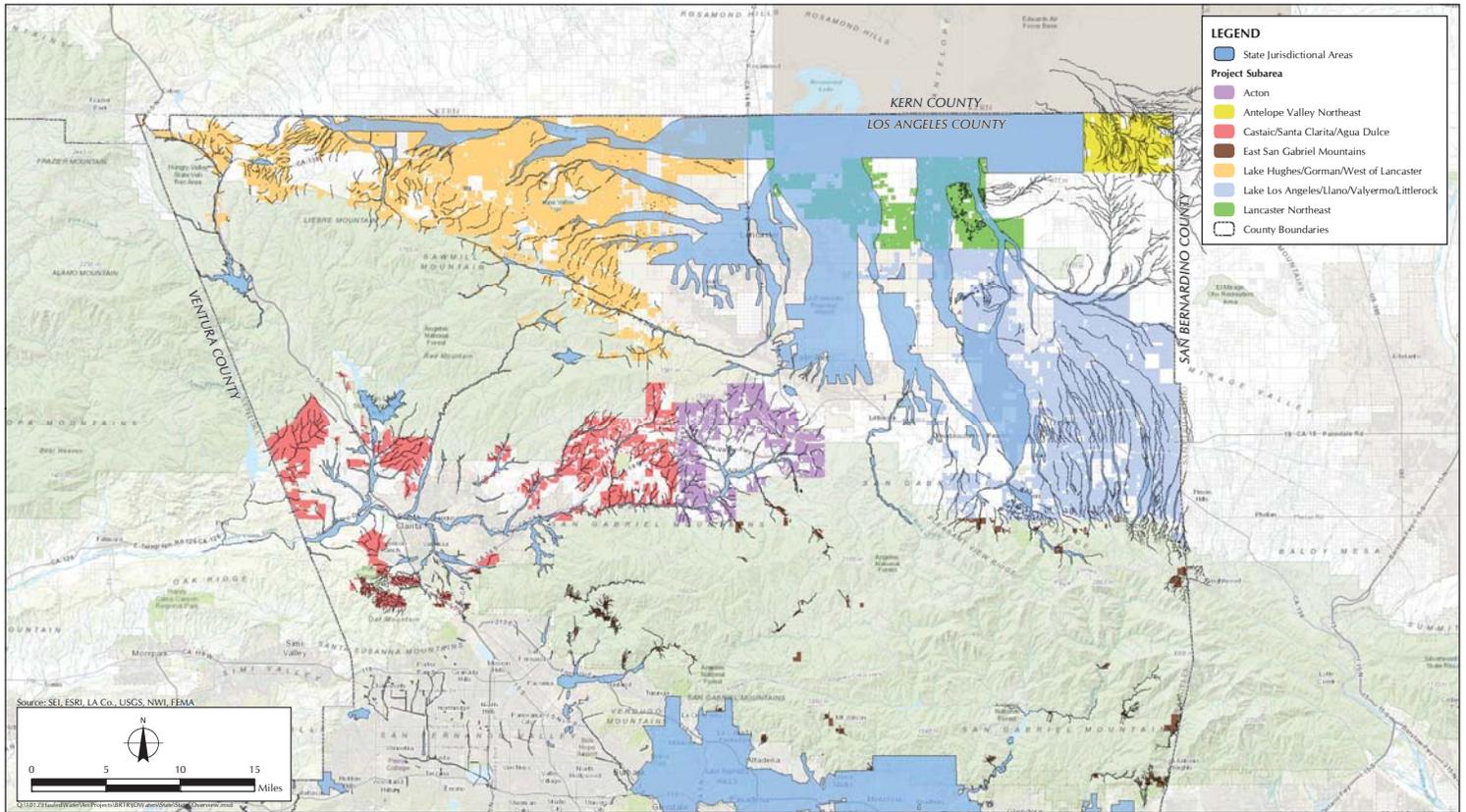


FIGURE 5.1.2-3
State Jurisdictional Areas Potentially Present Within the Proposed Initiative Subareas

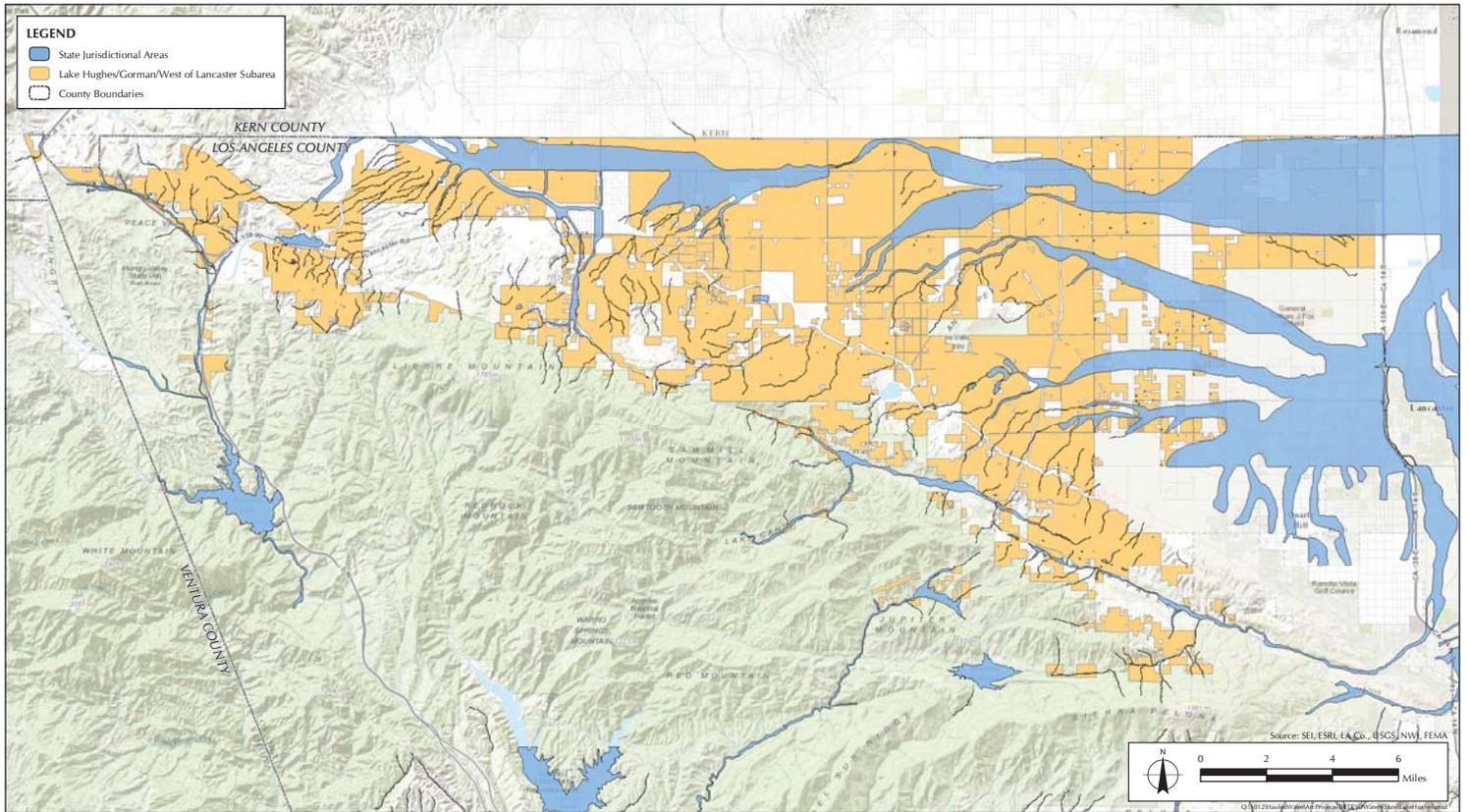


FIGURE 5.1.2-3A
State Jurisdictional Areas Potentially Present Within the Proposed Initiative Subareas
Lake Hughes/Gorman/West of Lancaster Subarea

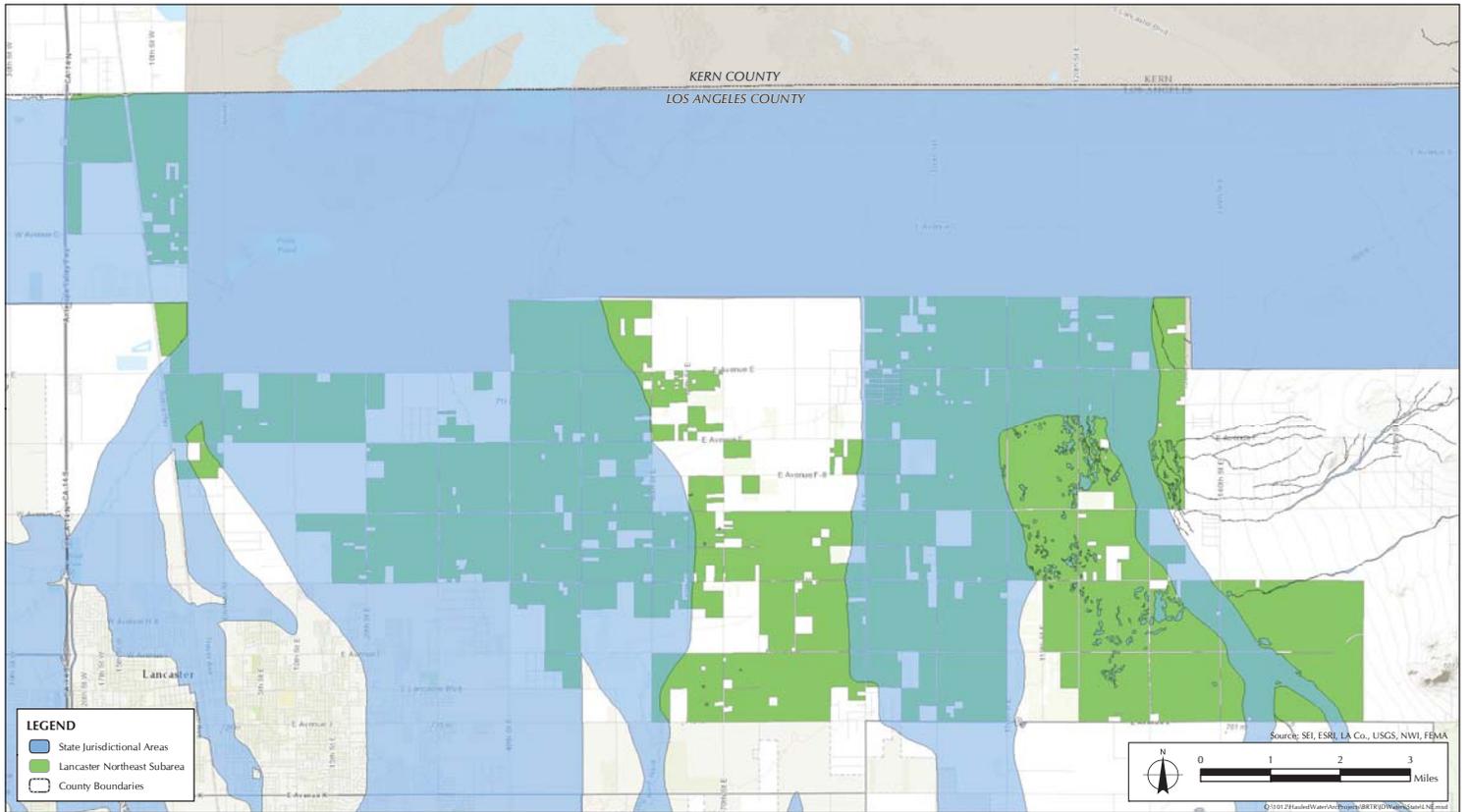


FIGURE 5.1.2-3B
 State Jurisdictional Areas Potentially Present Within the Proposed Initiative Subareas
 Lancaster Northeast Subarea

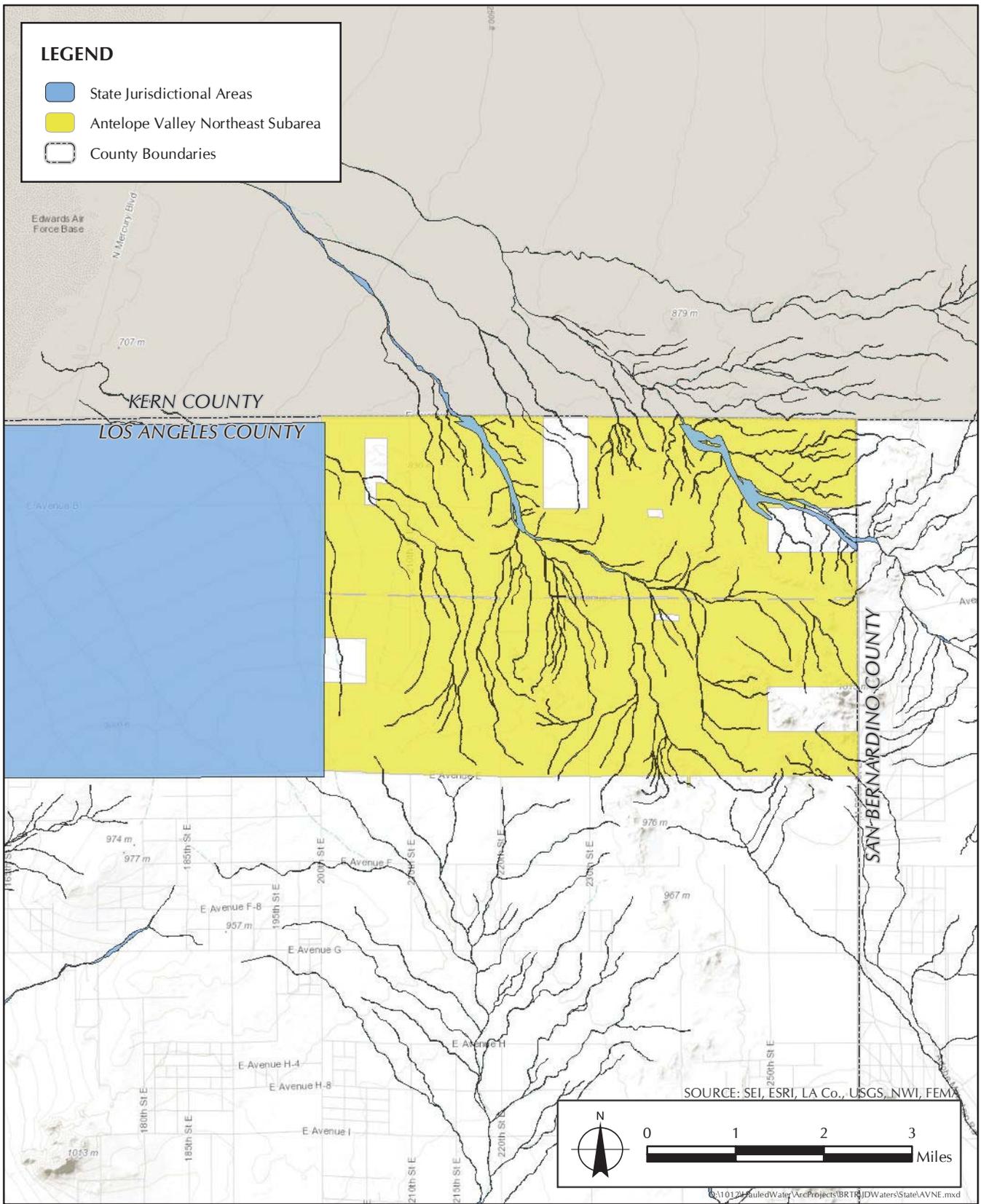


FIGURE 5.1.2-3C
State Jurisdictional Areas Potentially Present Within the Proposed Initiative Subareas
Antelope Valley Northeast Subarea

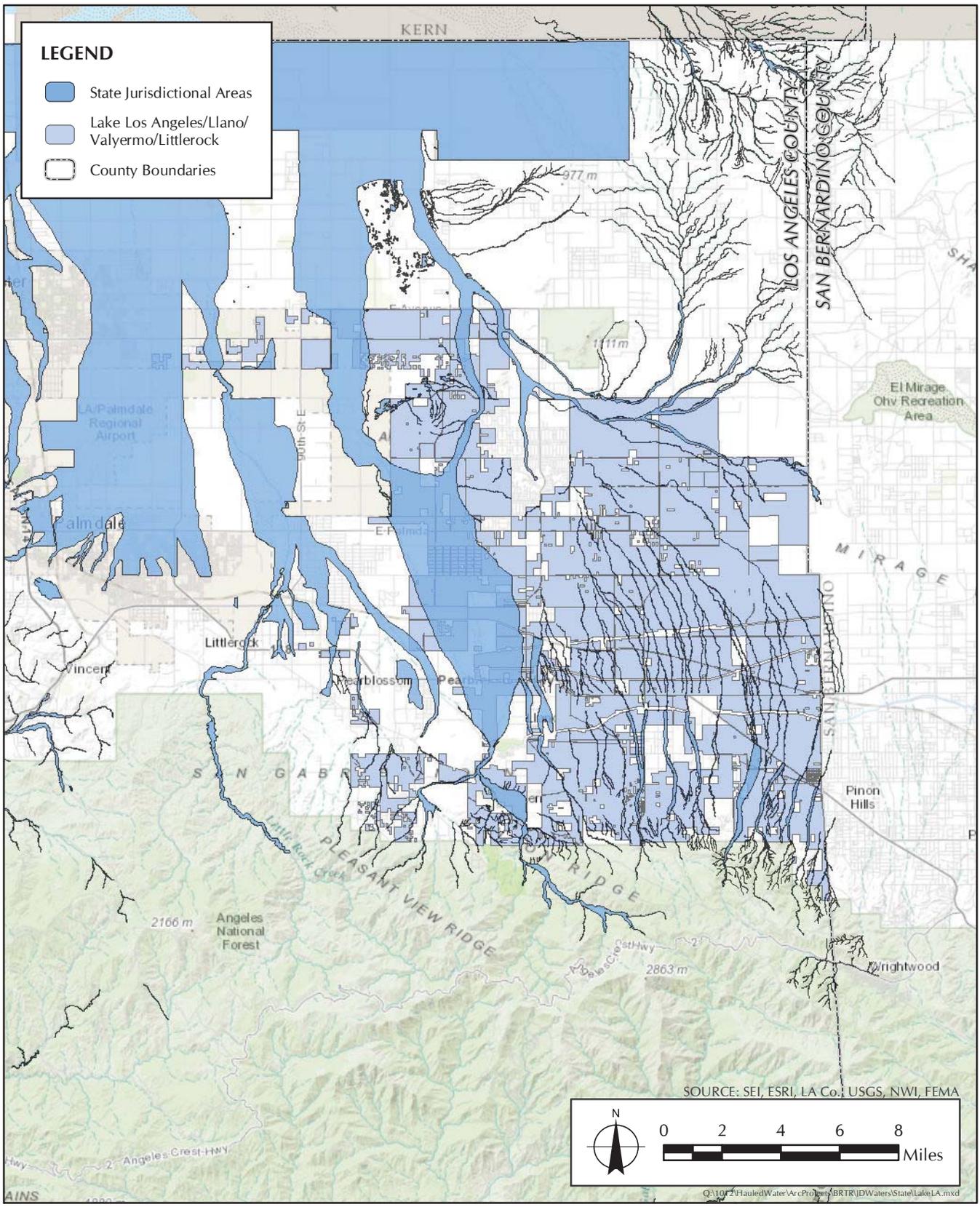


FIGURE 5.1.2-3D

State Jurisdictional Areas Potentially Present Within the Proposed Initiative Subareas
Lake Los Angeles/Llano/Valyermo/Littlerock Subarea

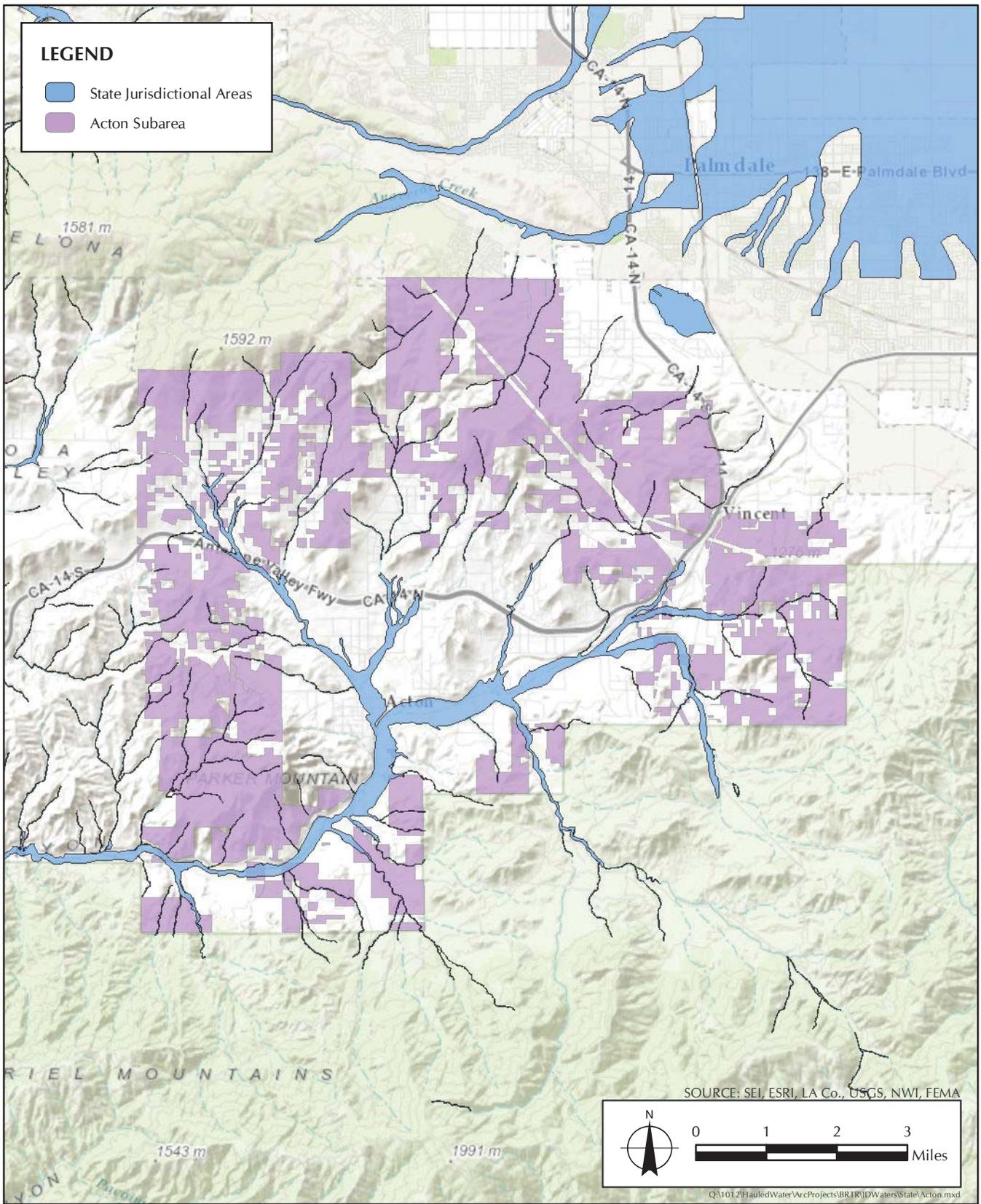


FIGURE 5.1.2-3E
 State Jurisdictional Areas Potentially Present Within the Proposed Initiative Subareas
 Acton Subarea

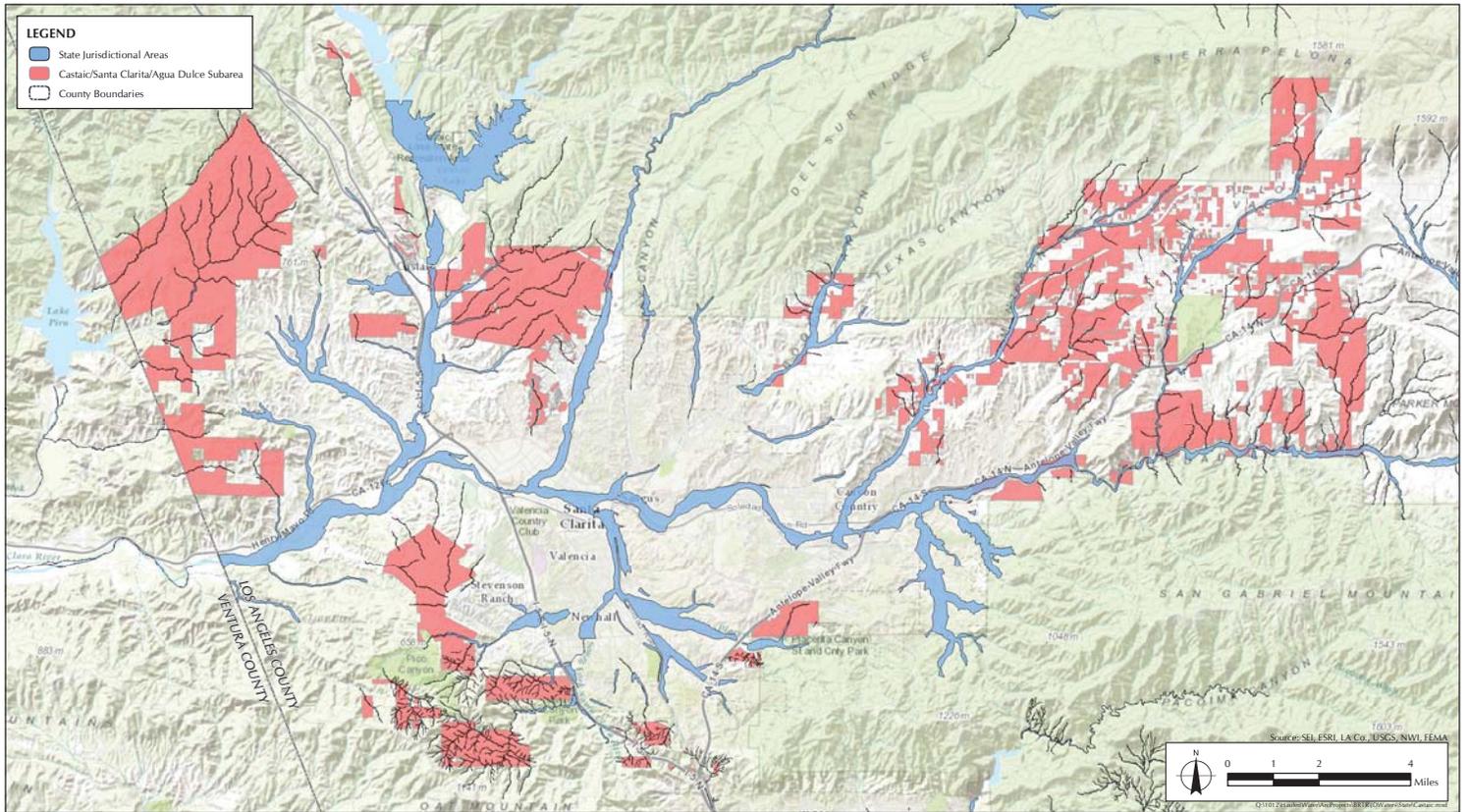


FIGURE 5.1.2-3F
 State Jurisdictional Areas Potentially Present Within the Proposed Initiative Subareas
 Castaic/Santa Clarita/Agua Dulce Subarea

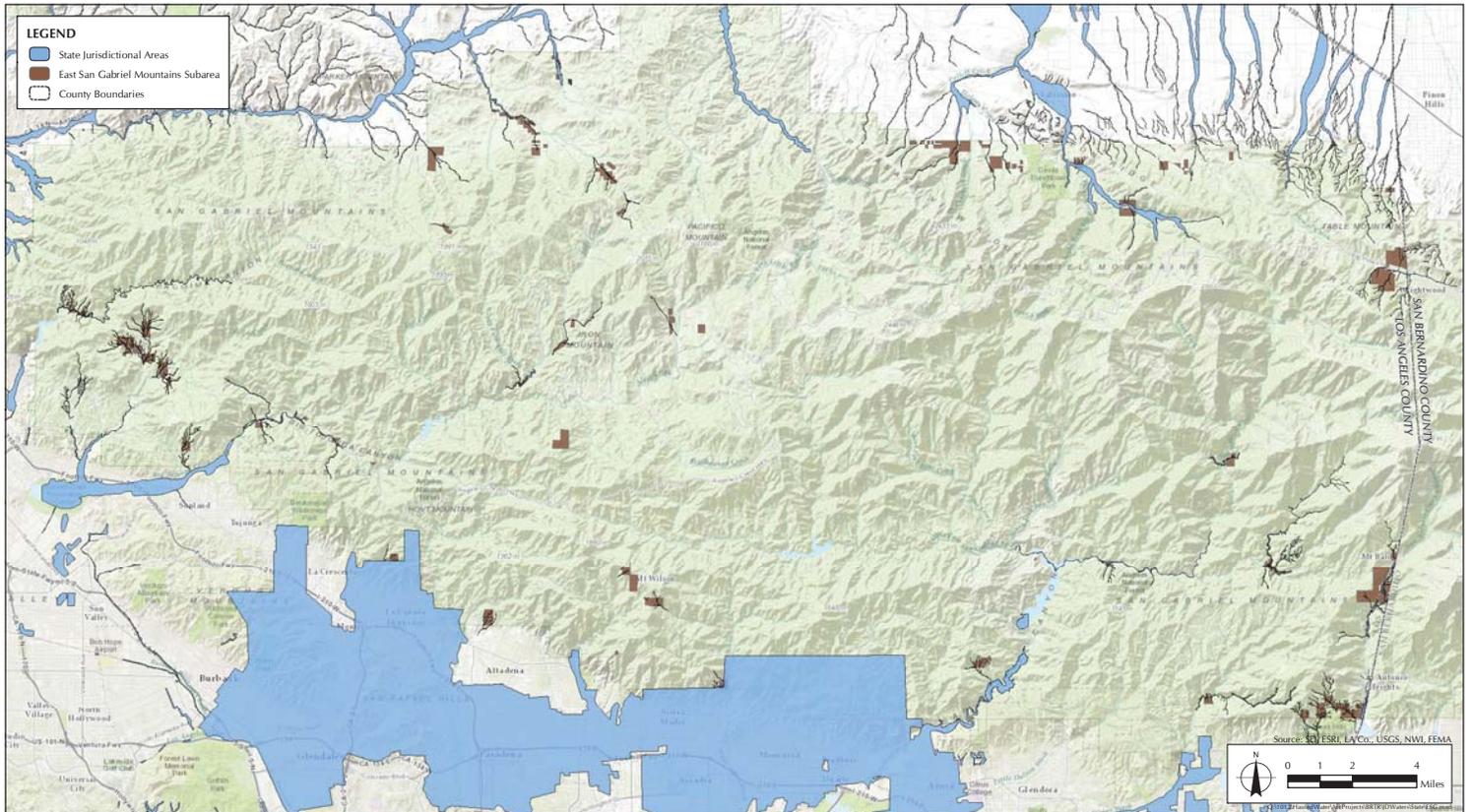


FIGURE 5.1.2-3G
 State Jurisdictional Areas Potentially Present Within the Proposed Initiative Subareas
 East San Gabriel Mountains Subarea

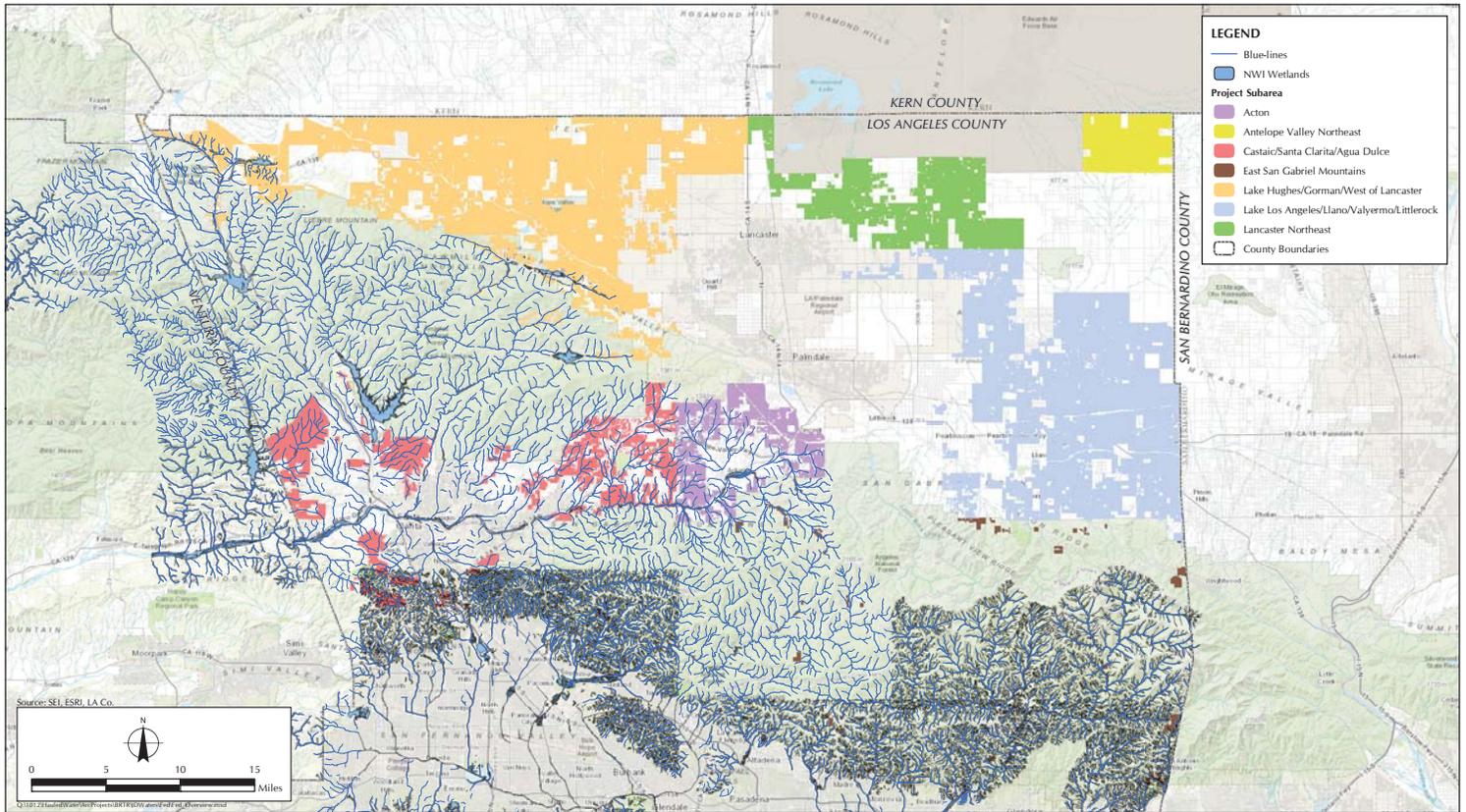


FIGURE 5.1.3-1
Federal Waters of the United States Potentially Present Within the Proposed Initiative Subareas

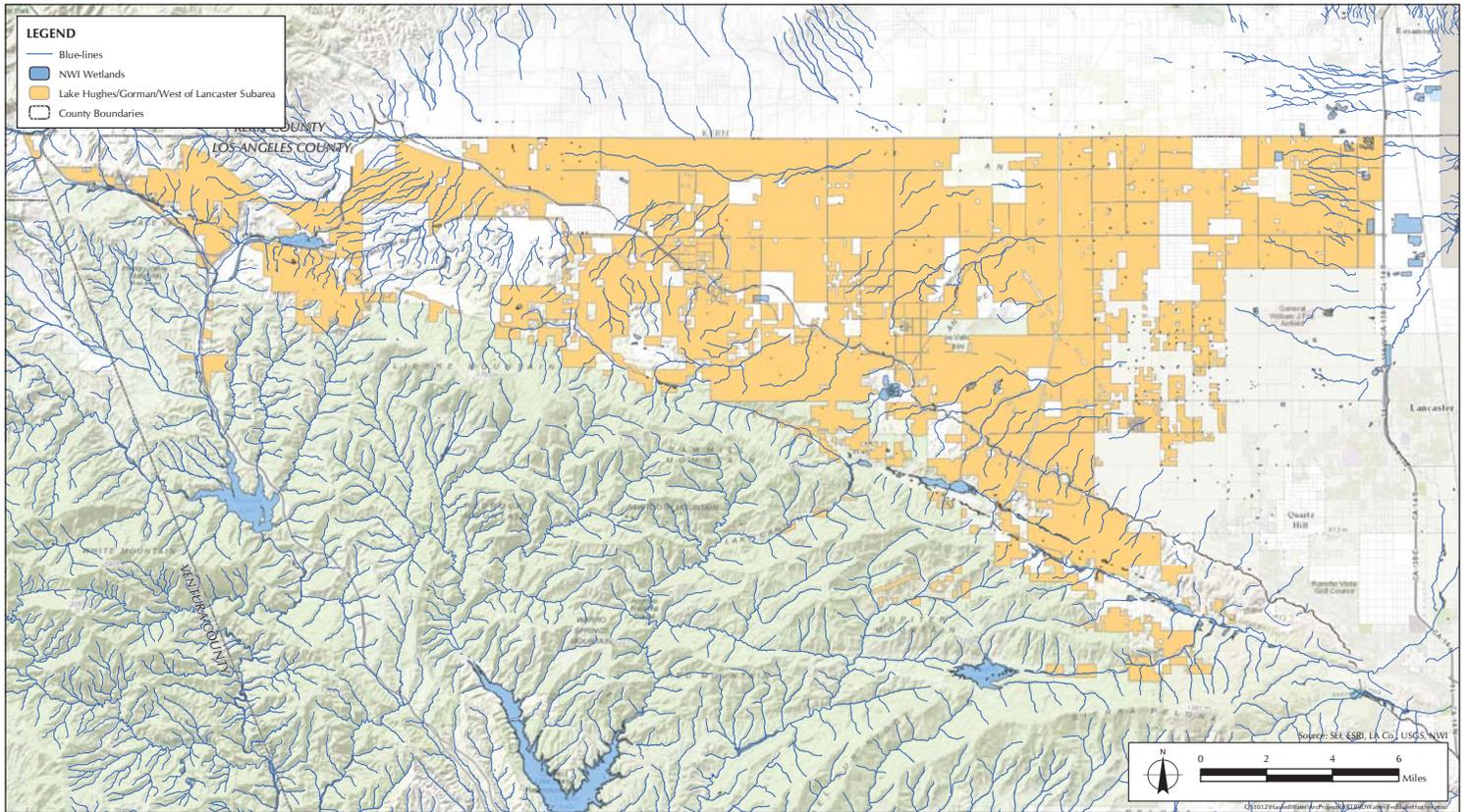


FIGURE 5.1.3-1A
 Federal Waters of the United States Potentially Present Within the Proposed Initiative Subareas
 Lake Hughes/Gorman/West of Lancaster Subarea

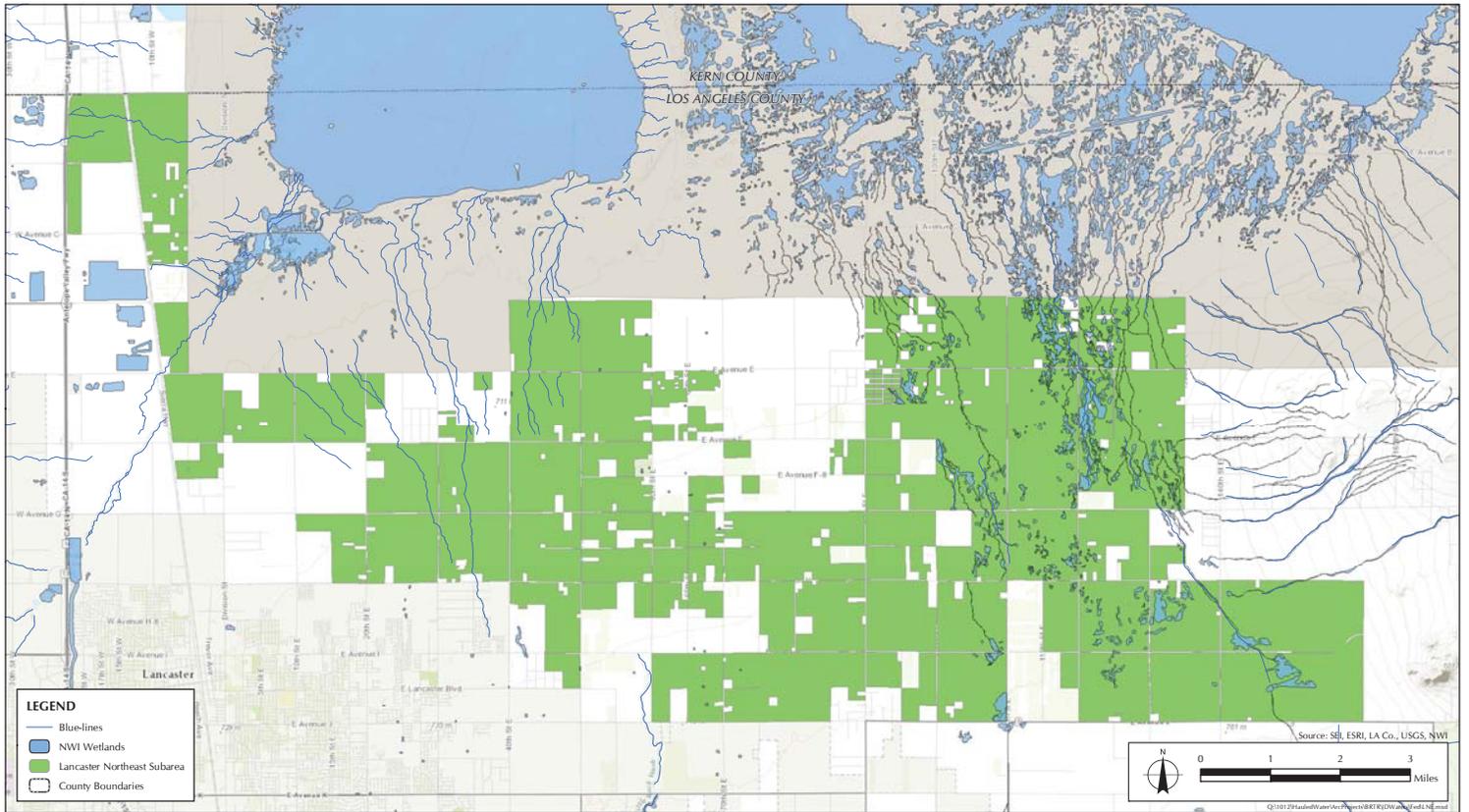


FIGURE 5.1.3-1B
Federal Waters of the United States Potentially Present Within the Proposed Initiative Subareas
Lancaster Northeast Subarea

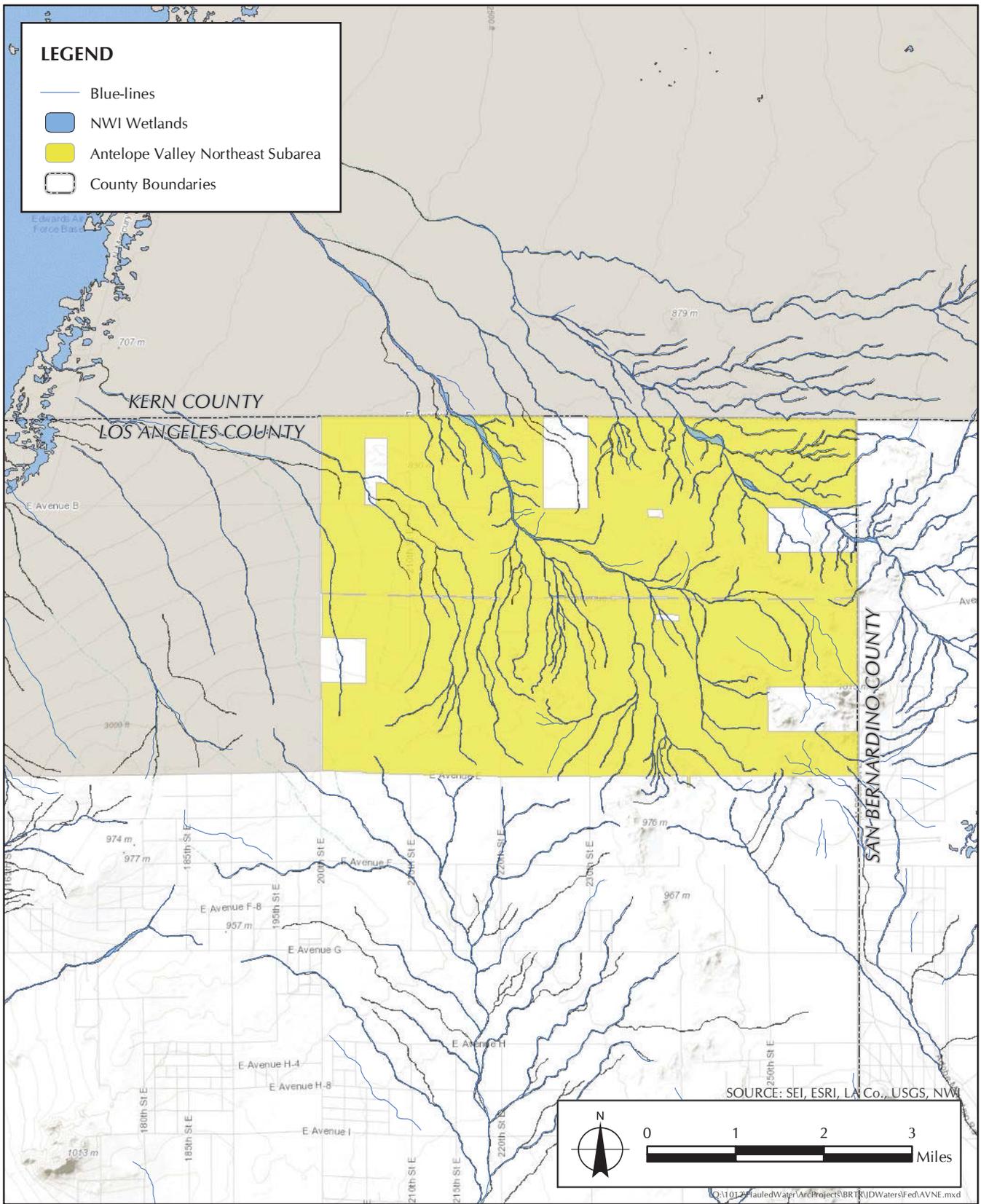


FIGURE 5.1.3-1C
 Federal Waters of the United States Potentially Present Within the Proposed Initiative Subareas
 Antelope Valley Northeast Subarea

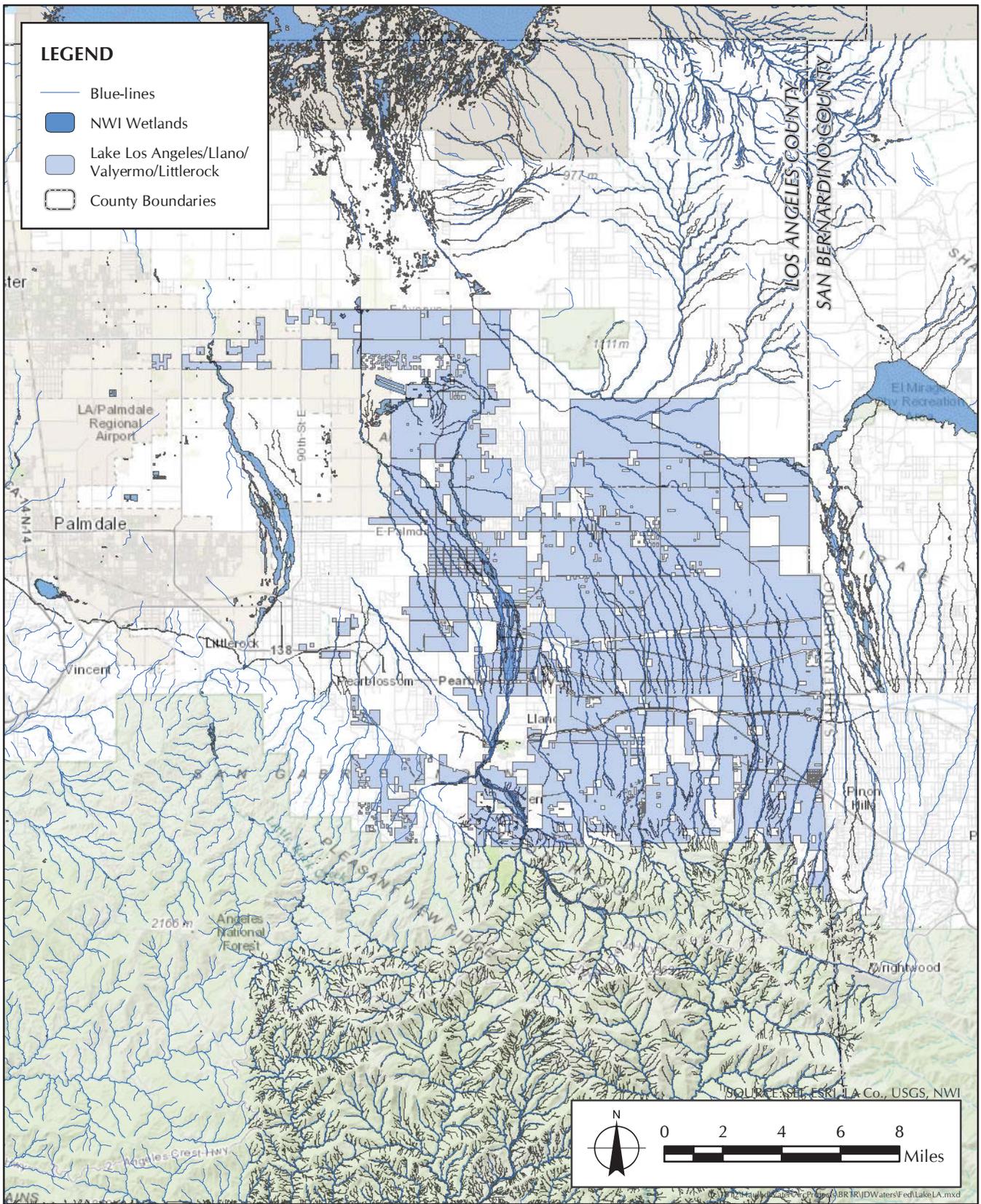


FIGURE 5.1.3-1D
 Federal Waters of the United States Potentially Present Within the Proposed Initiative Subareas
 Lake Los Angeles/Llano/Valyermo/Littlerock Subarea

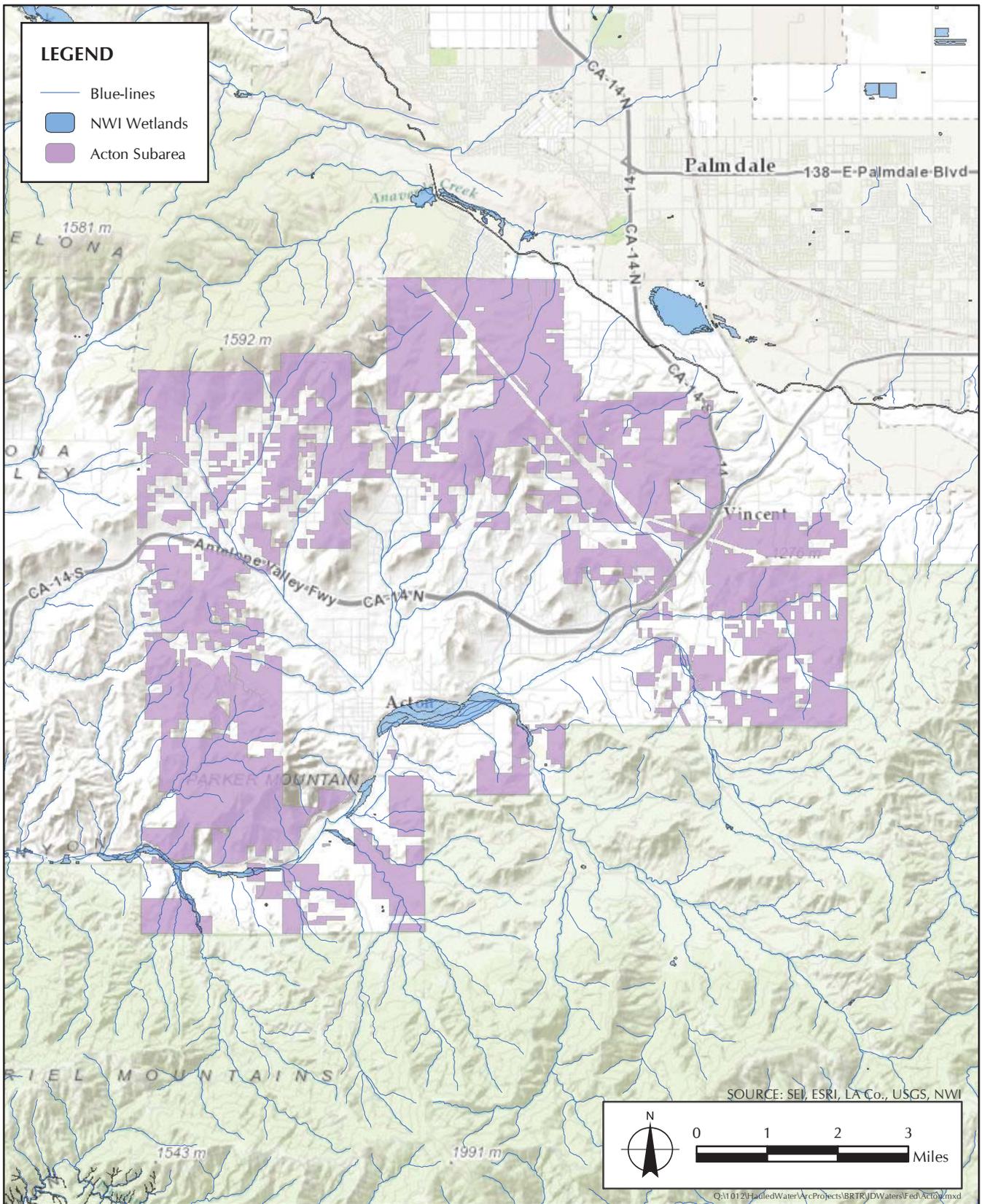


FIGURE 5.1.3-1E
Federal Waters of the United States Potentially Present Within the Proposed Initiative Subareas
Acton Subarea

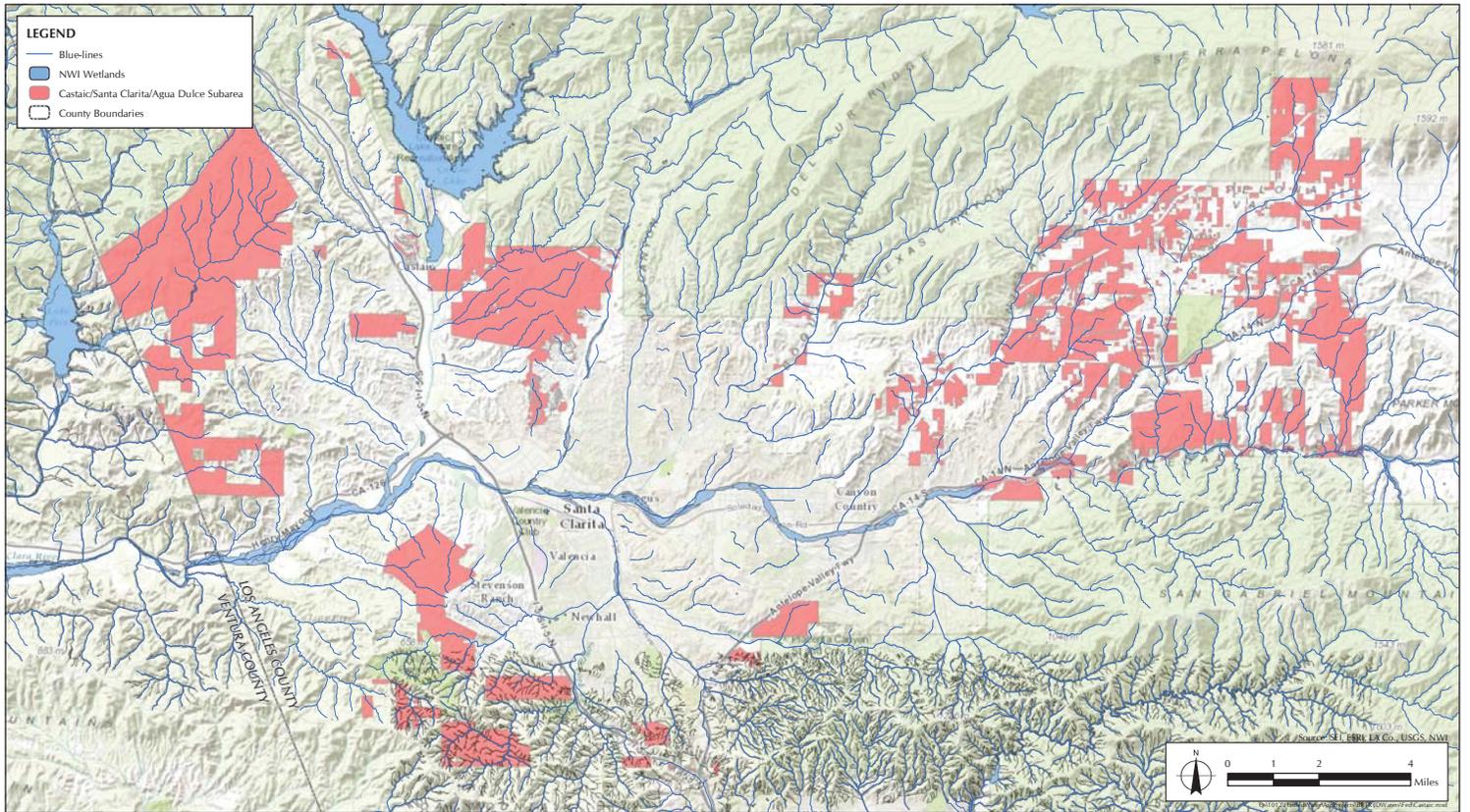


FIGURE 5.1.3-1F
 Federal Waters of the United States Potentially Present Within the Proposed Initiative Subareas
 Castaic/Santa Clarita/Agua Dulce Subarea

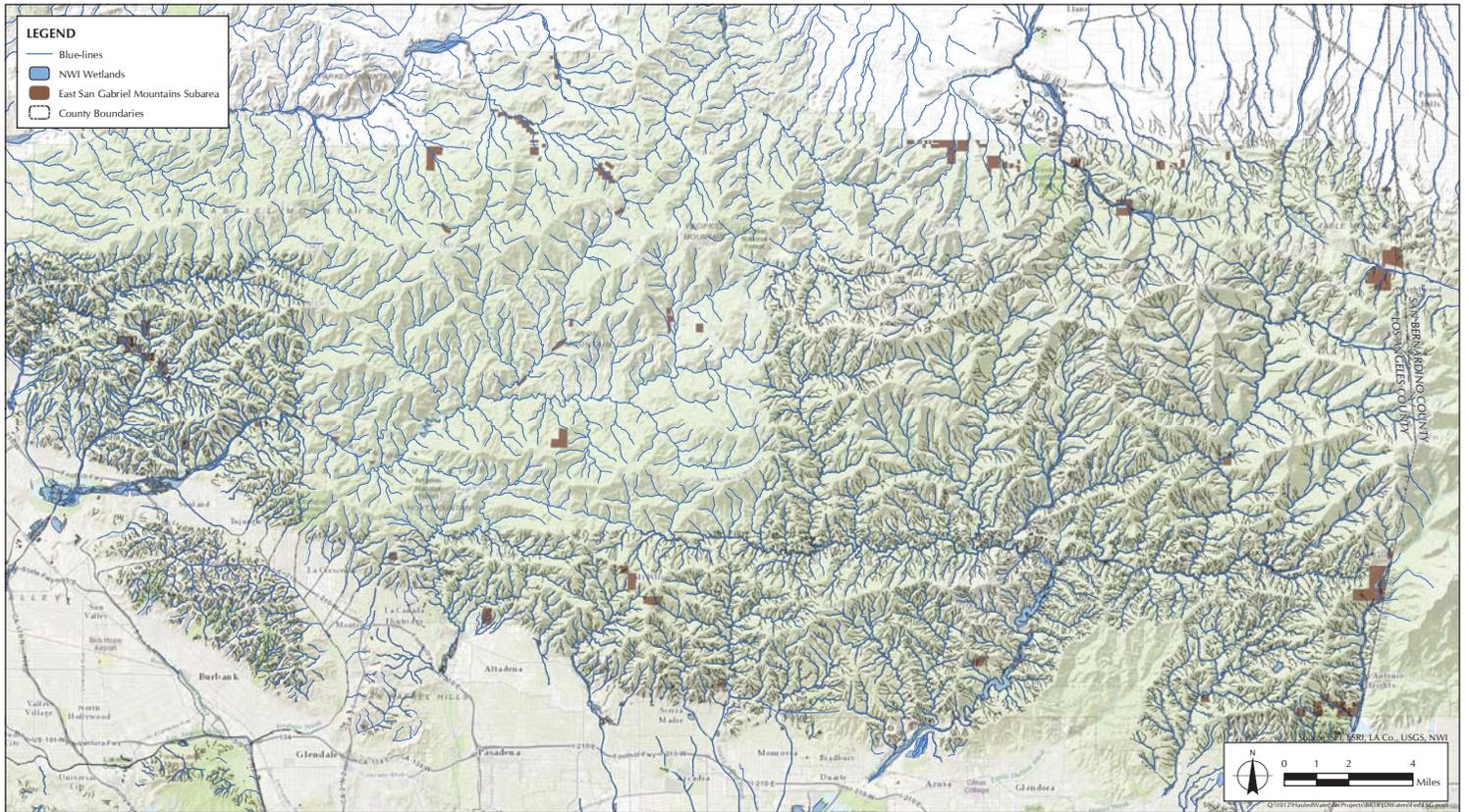


FIGURE 5.1.3-1G
 Federal Waters of the United States Potentially Present Within the Proposed Initiative Subareas
 East San Gabriel Mountains Subarea

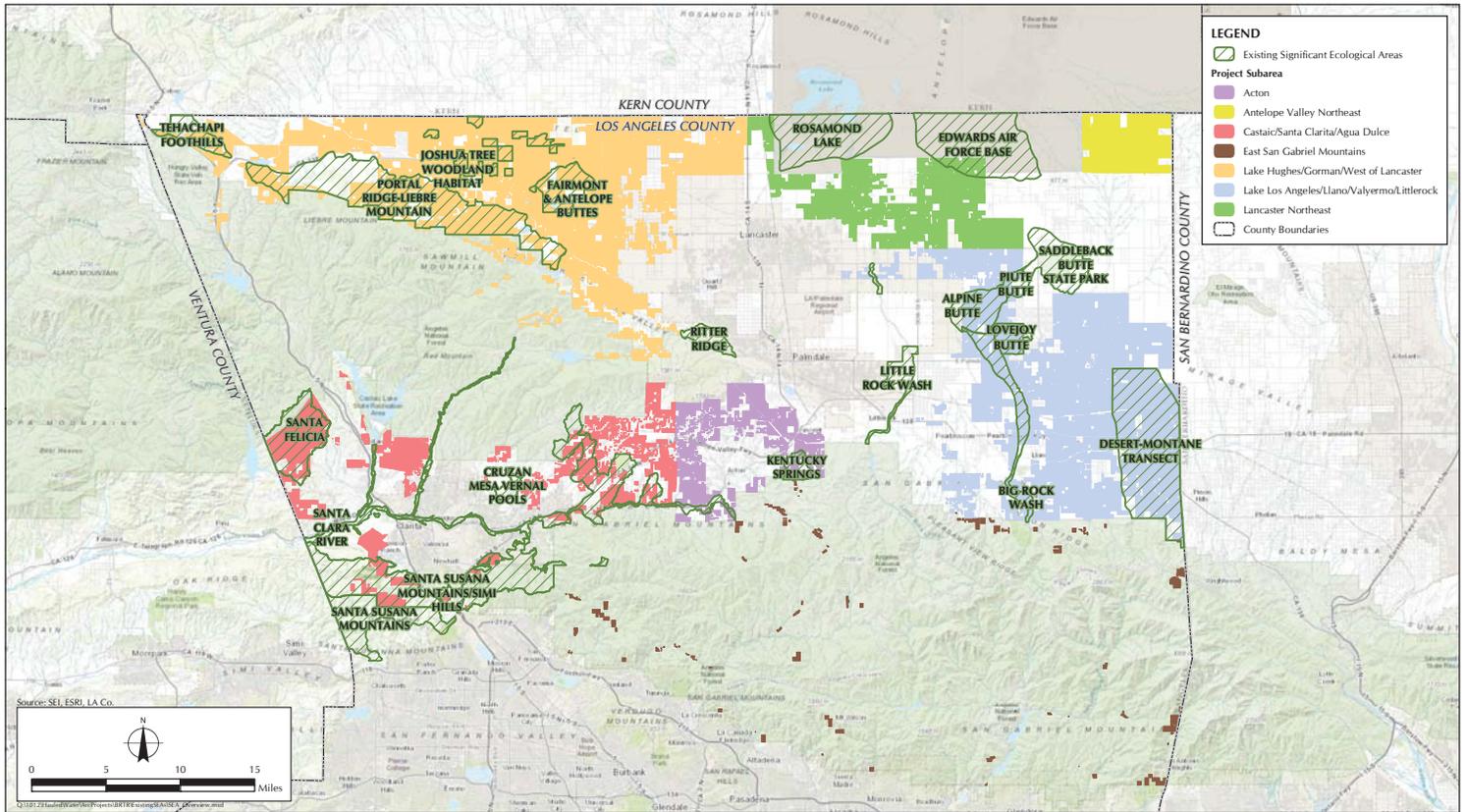


FIGURE 5.1.4-1
Proposed Initiative Subareas Located Within Existing SEAs

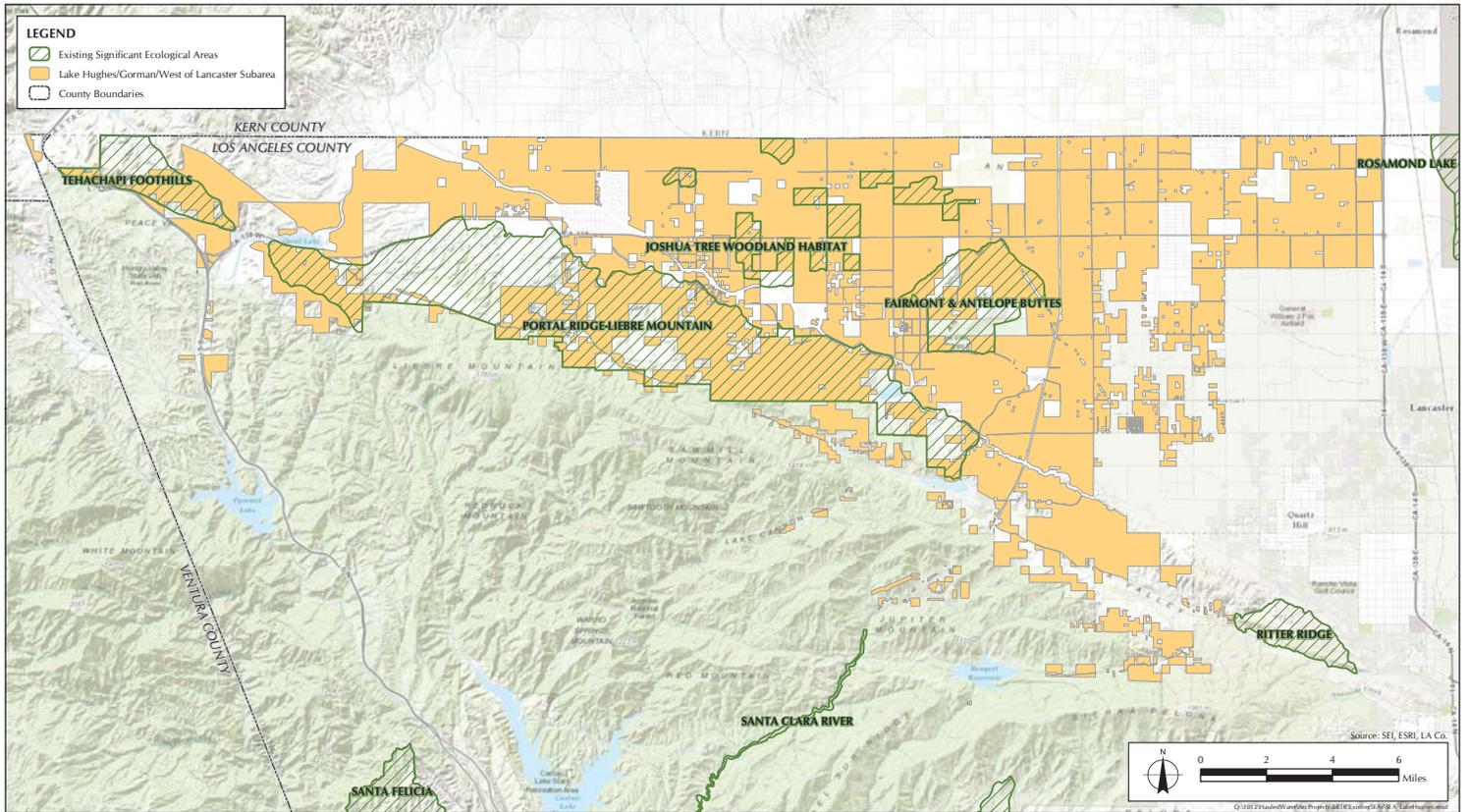


FIGURE 5.1.4-1A
 Proposed Initiative Subareas Located Within Existing SEAs
 Lake Hughes/Gorman/West of Lancaster Subarea

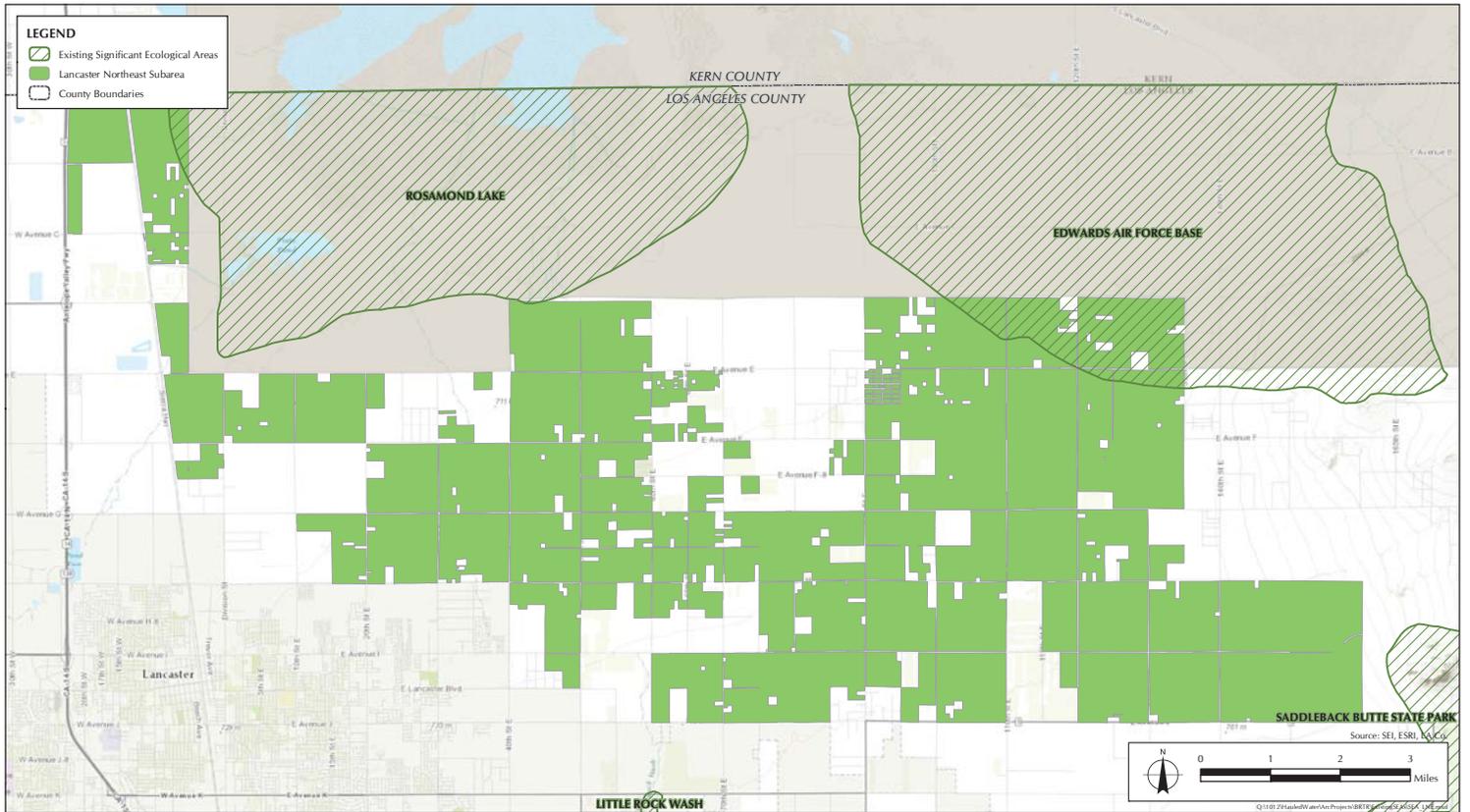


FIGURE 5.1.4-1B
Proposed Initiative Subareas Located Within Existing SEAs
Lancaster Northeast Subarea

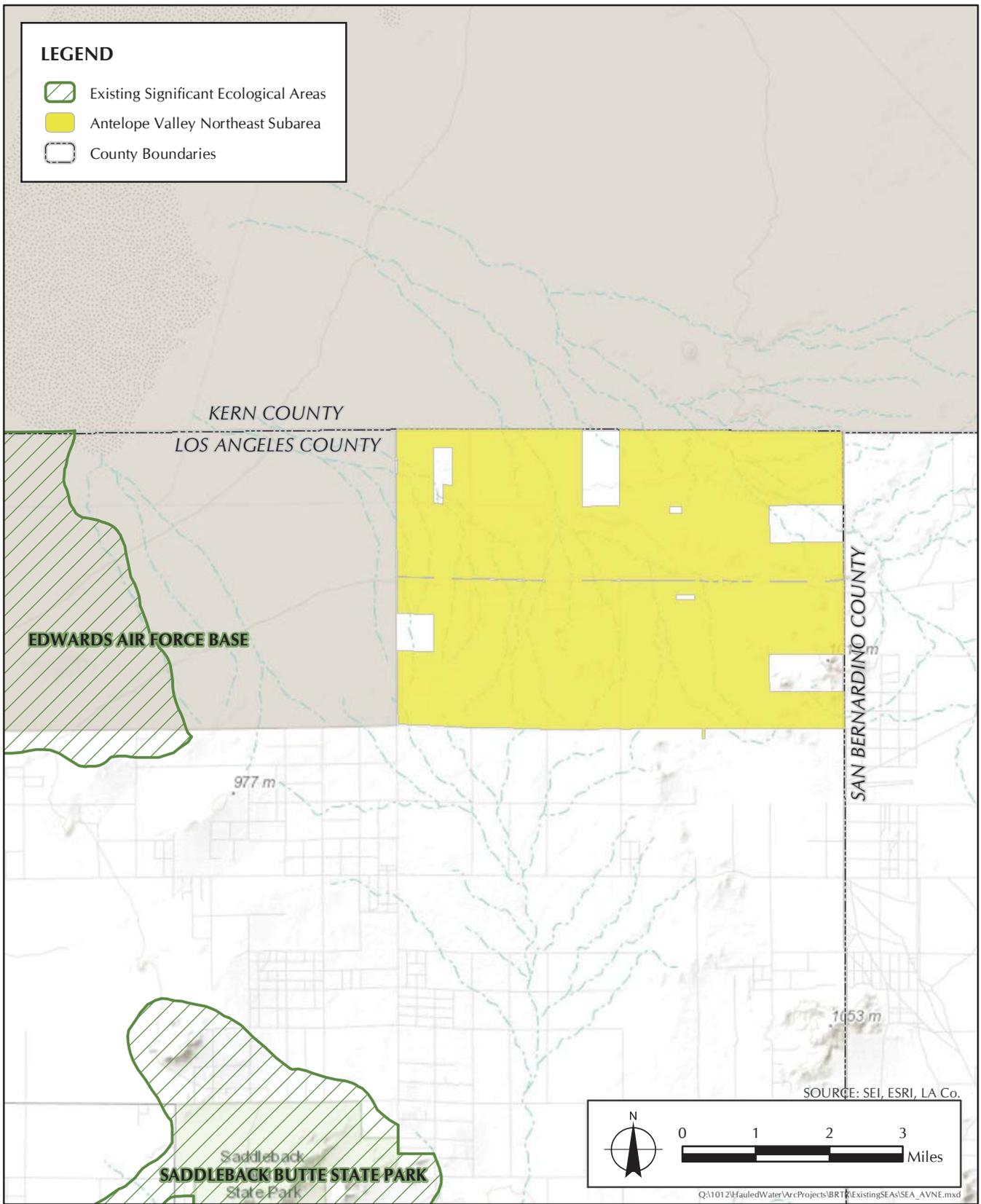


FIGURE 5.1.4-1C

Proposed Initiative Subareas Located Within Existing SEAs
Antelope Valley Northeast Subarea

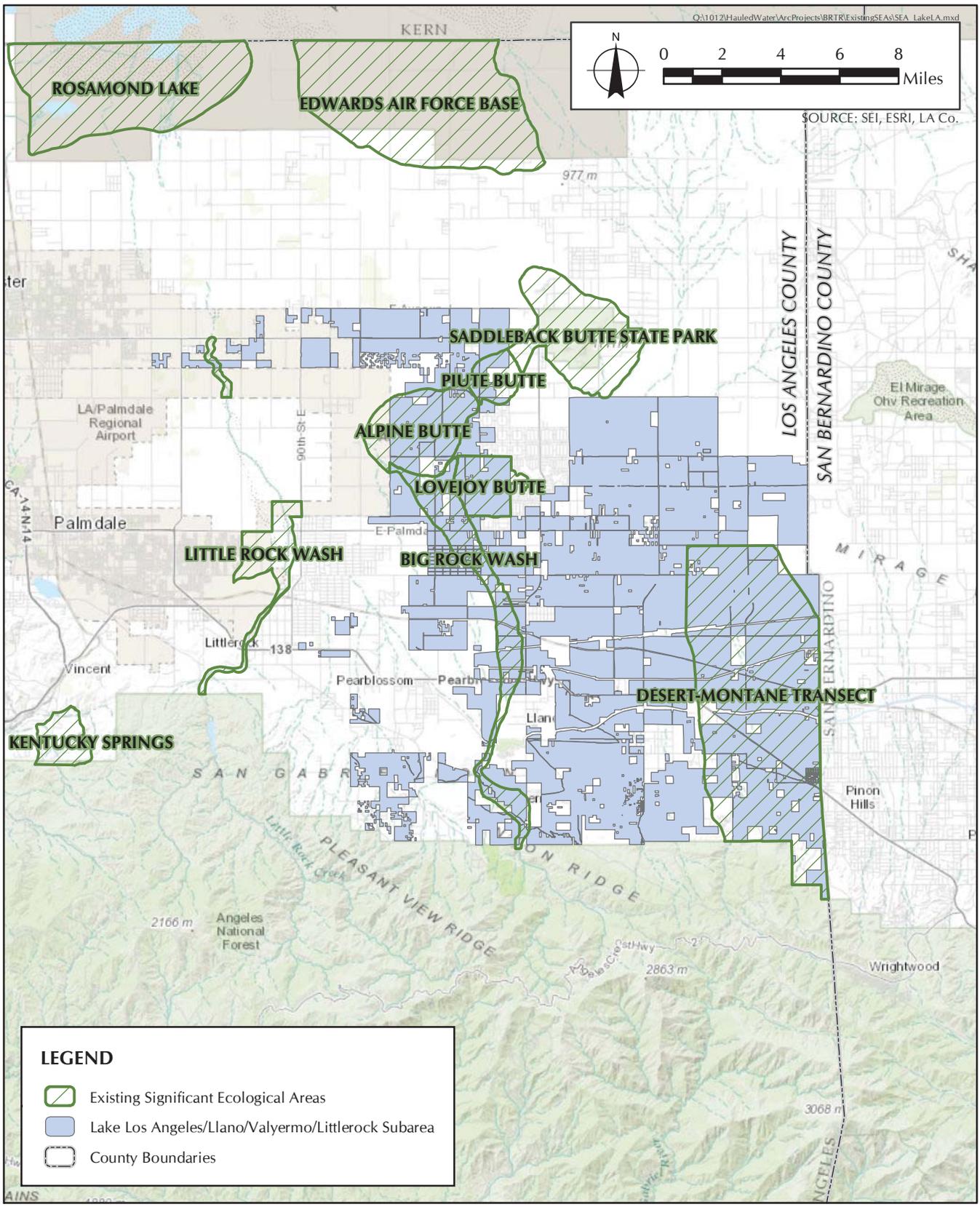


FIGURE 5.1.4-1D
 Proposed Initiative Subareas Located Within Existing SEAs
 Lake Los Angeles/Llano/Valyermo/Littlerock Subarea

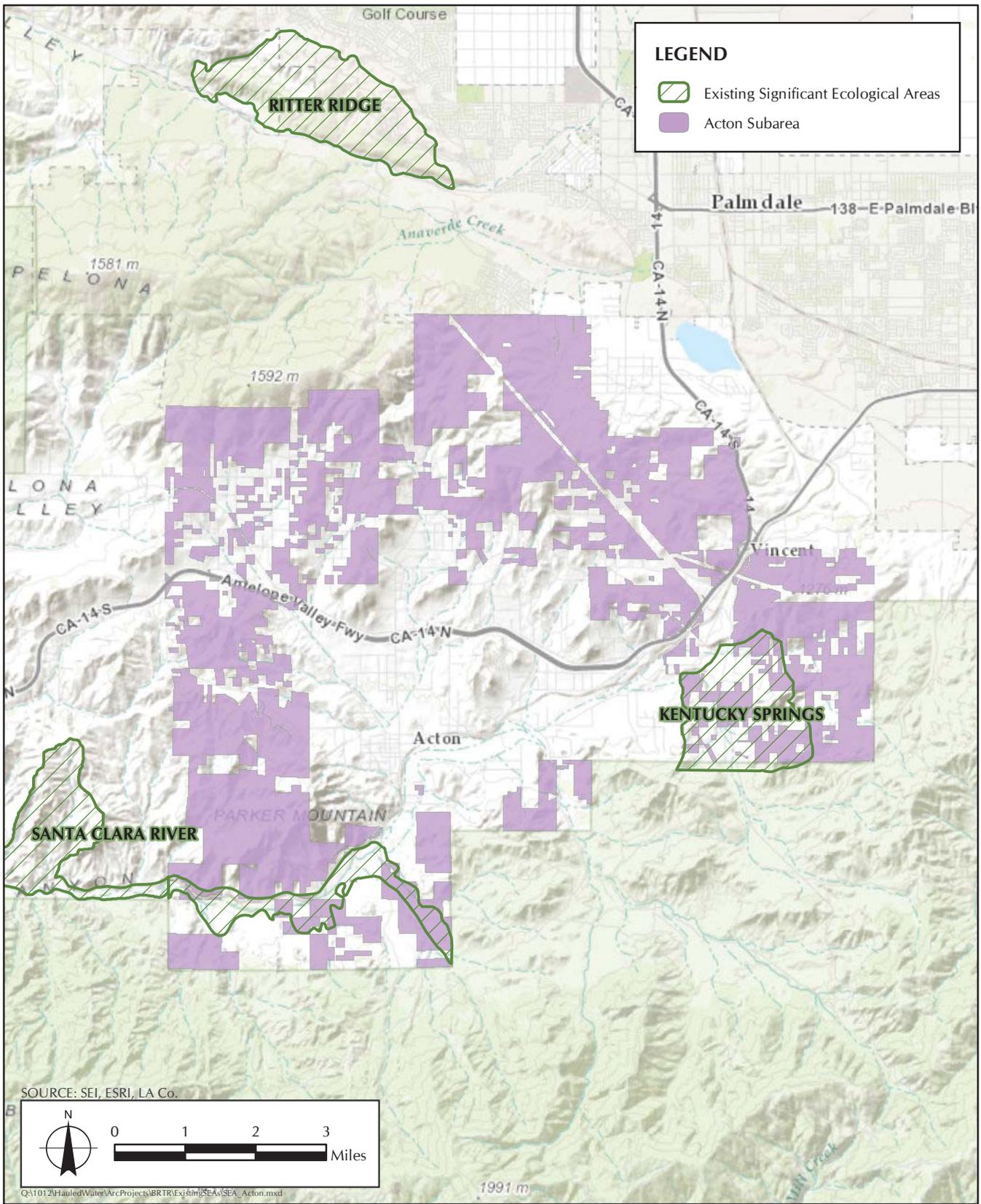


FIGURE 5.1.4-1E
 Proposed Initiative Subareas Located Within Existing SEAs
 Acton Subarea

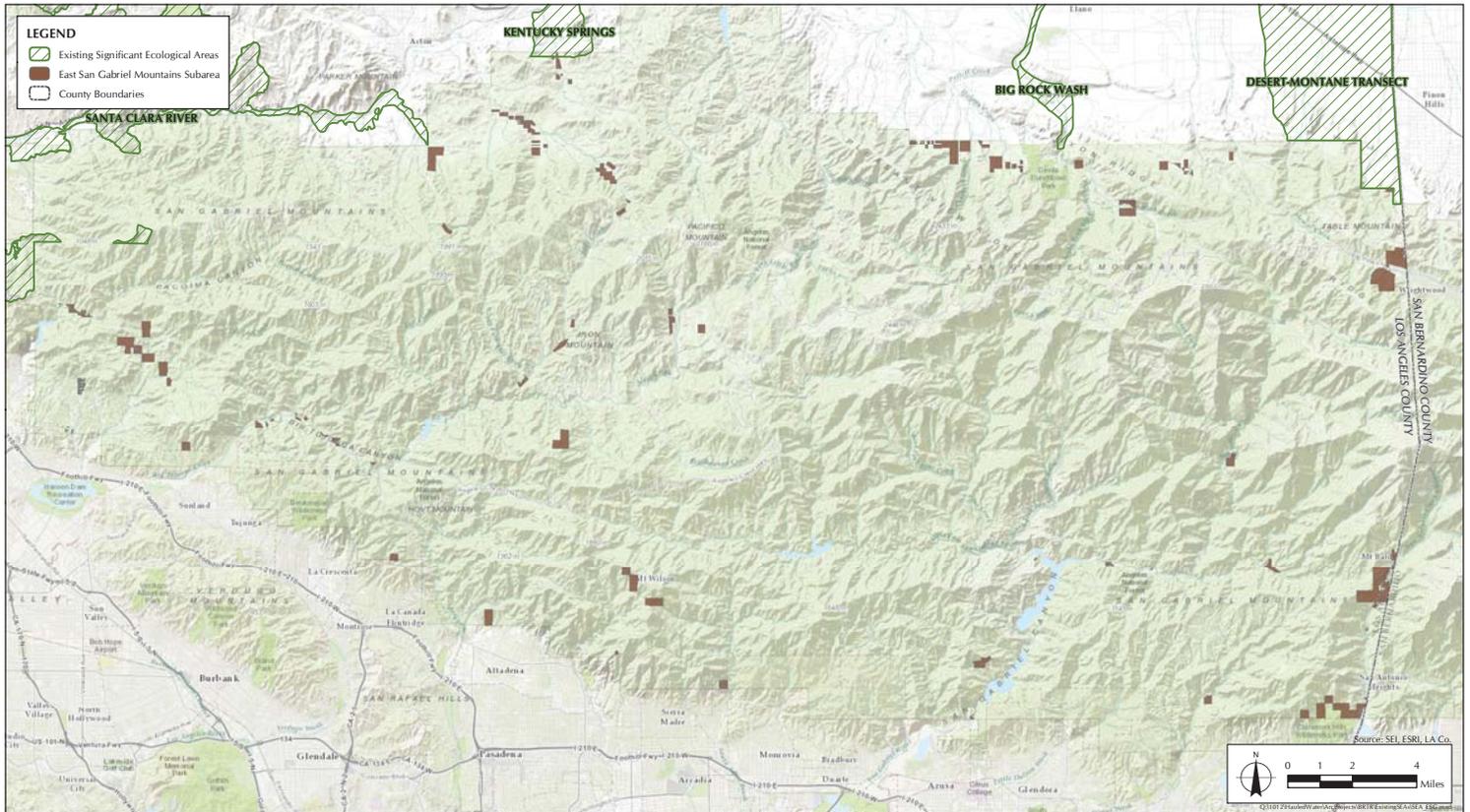


FIGURE 5.1.4-1G
 Proposed Initiative Subareas Located Within Existing SEAs
 East San Gabriel Mountains Subarea

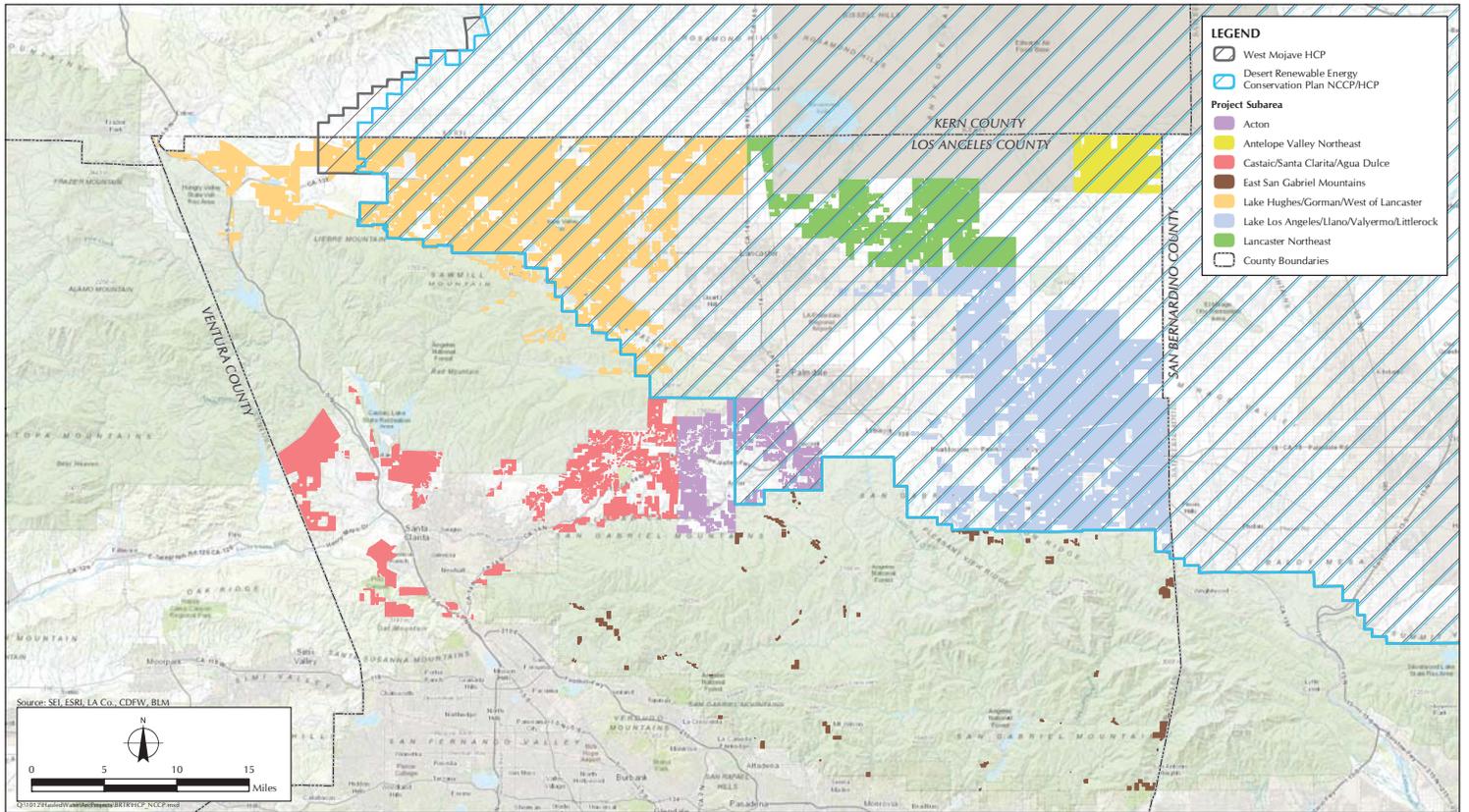


FIGURE 5.1.6-1
HCPs and NCCPs Present Within the Proposed Initiative Subareas

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