Natural Environment Study

(Minimal Impacts)

San Bernardino County
USGS 7.5-Minute Redlands Quadrangle
08-SBd-210-PM R28.3/R30.3

EA 1C970

October 2014

STATE OF CALIFORNIA
Department of Transportation
and
SAN BERNARDINO ASSOCIATED GOVERNMENTS

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Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

1. Summary

The San Bernardino Associated Governments (SANBAG), in cooperation with the California Department of Transportation (Caltrans) District 8 and the City of Highland, proposes to widen Base Line from Buckeye Street across the State Route 210 (SR-210) to Seine Avenue and widen the existing interchange ramps. The SR-210/Base Line Interchange Project (Project) is located in the City of Highland, County of San Bernardino, California.

This Natural Environment Study-Minimal Impacts [NES(MI)] has been developed in support of the preparation of an Environmental Document in compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). The results presented in this NES(MI) are based on literature searches and biological resource surveys conducted in April 2014. Studies and surveys conducted within the BSA include general biological resources surveys, vegetation mapping, and a jurisdictional delineation for aquatic resources. No natural or sensitive vegetation communities occur within the Biological Study Area (BSA). The BSA is comprised of heavily human influenced altered habitats with no quality native habitats. As a result, no suitable habitat exists for any special-status plant species and only limited suitable foraging and roosting habitat exists for special-status wildlife species. No special-status plant or wildlife species were observed during surveys and no designated Critical Habitat exists within the BSA. A combination of avoidance and minimization measures would reduce the overall adverse effects to biological resources within the BSA.

A jurisdictional delineation of aquatic resources determined there is one drainage feature within the BSA potentially subject to the jurisdiction of the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board (RWQCB). This feature will be avoided as currently designed. No Clean Water Act (CWA) Section 404 and 401 permits or Lake and Streambed Alteration Agreement are anticipated to be required to implement the Project.

2. Introduction

SANBAG, in cooperation with Caltrans, District 8, proposes to widen Base Line from Buckeye Street across the SR-210 to Seine Avenue and widen the existing interchange ramps. The Project is located in the City of Highland, County of San Bernardino, California (Figure 1). It occurs within the United States Geological Survey (USGS) Redlands 7.5-Minute Topographic Quadrangle in Township 1 south, Range 3 west, Section 4; and Township 1 north, Range 3 west, Section 33 (USGS 1988). The Project is located along the intersection of Base Line and SR-210 (Figure 2). The improvements are located between SR-210 post miles (PM) R28.3 to R30.3. The Project proposes to widen Base Line from Buckeye Street to Seine Avenue, including widening of the bridge over SR-210. Additionally, both on-ramps would be widened to accommodate a high-occupancy vehicle (HOV) preferential lane and the installation of ramp meters, and the westbound exit ramp would be widened to create a two-lane off-ramp. Local street improvements would also be made to accommodate the proposed widening and ramp improvements.

3. Study Methods

Biological studies conducted for the Project included general biological resources surveys, vegetation mapping, and a jurisdictional delineation for aquatic resources. A 500-foot buffer from conceptual engineering design was utilized to identify and determine direct and indirect effects to sensitive biological resources within, and adjacent to, the BSA (Figure 3). Prior to conducting field surveys, literature and databases relevant to the BSA were reviewed and included the following: California Natural Diversity Database (CNDDB) (CNDDB 2014) and California Native Plant Society (CNPS) On-Line Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2014).

Database queries were conducted for the Redlands USGS 7.5-Minute topographic quadrangle map containing the BSA, plus the surrounding quadrangles. Quadrangles queried included Redlands, Harrison Mountain, San Bernardino North, San Bernardino South, Riverside East, Sunnymead, El Casco, and Yucaipa. The Keller Peak quadrangle was excluded from the search because it consists of topography, elevational ranges, and vegetation communities that do not exist within the BSA and supports special-status species that do not occur in the Project area due to lack of habitat. A list of proposed, threatened, and endangered species and Critical Habitat within and adjacent to the BSA was obtained from the U.S. Fish and Wildlife Service (USFWS) Carlsbad and Ventura Field Offices (USFWS 2014a, 2014b). The Official Species Lists are provided in Appendix C.

Surveys of the BSA were performed to assess biological resources and determine the potential for occurrence of common and special-status species, their habitats, and aquatic resources. Reconnaissance and pedestrian-based habitat assessment surveys of the BSA were completed to assess general and dominant vegetation types, plant community sizes, habitat types, and species present. The BSA was surveyed on foot where access was available, and where access was not available (i.e., private property, no permission to enter obtained), areas were observed from accessible property boundaries with the aid of binoculars and high-resolution aerial maps (1:200 scale). Vegetation classifications of plant communities were derived from the criteria and definitions of Holland (1986) and Sawyer et al. (2009). Plants were identified to the lowest taxonomic level sufficient to determine whether the plant species observed was non-native, native, or special-status. Plants of uncertain identity were subsequently identified from taxonomic keys (Baldwin et al. 2012). Scientific and common species names were recorded according to Baldwin et al. (2012). The reconnaissance-level survey and vegetation mapping was conducted on April 11, 2014 by URS Corporation (URS) biologist Carol Thompson. Vegetation communities were mapped on aerial photographs at a 1:200 scale. Habitat and land cover areas that were considered too small to map separately were included in nearby habitat types determined to be the most appropriate based on species composition.

Wildlife observations were documented within the BSA during habitat assessments. The presence of a wildlife species was determined through direct observation or wildlife sign (e.g., tracks, burrows, nests, scat, or vocalization). All plant and wildlife species observed during field surveys were noted and are included in Appendices D and E, respectively. The BSA was assessed for its potential to support special-status species based on reported habitat preferences and past occurrences of species within the region (CNDDB 2014; CNPS 2014; USFWS 2014). The following definitions for the potential for occurrence were utilized:

- Absent: No habitat occurs within the BSA and no further surveys are necessary.
- Habitat Present: Habitat is present within the BSA.
- Present: Species or species sign was observed within the BSA.
- Critical Habitat: The BSA is within a designated Critical Habitat unit.

A USGS topographic map was also examined to determine the locations of potential aquatic resources within the BSA. Those portions of the BSA suspected of containing potential aquatic resources (i.e., Waters of the United States, Waters of the State, and wetlands and riparian communities) were assessed in the field. Potential aquatic resources were evaluated by quantitatively determining the presence of definable channels and/or hydrophytic vegetation, riparian habitat, and hydrologic regime. Detailed methodology is described in the SR-210/Base Line Interchange Project Jurisdictional Delineation Report provided in Appendix F.

4. Environmental Setting

4.1. Description of the Existing Biological and Physical Conditions

The BSA is comprised mainly of heavily human influenced habitats associated with roadways, residential developments, and commercial and public infrastructure. Land use within the BSA includes mixed commercial and residential development in all directions and interspersed disturbed open parcels. Due to the presence of heavy vehicular traffic and development, the BSA is consistently exposed to noise, light, dust, emissions, and roadway maintenance activities. As a consequence, no quality native habitats occur within the BSA. Vegetated areas are mainly covered by non-native grasses, weeds, shrubs, and ornamental vegetation.

The BSA is located within the Redlands USGS 7.5-Minute Topographic Quadrangle at an approximate elevation of 1,260 feet. The topography within the BSA is relatively flat and consists of graded developed areas. The regional climate in the vicinity of the BSA consists of hot and dry summer months with relatively cooler winters.

4.2. Regional Species and Habitats of Concern

Seventy-five special-status plant species are reported to occur within the USGS Redlands and surrounding 7.5-Minute Topographic Quadrangles. Nine of these are federal and/or state listed as endangered. All of the special-status plants identified in the literature review were determined to be absent due to a lack of suitable habitat within the BSA. In addition, there are no reported current occurrences of any special-status plant species within the BSA (Figure 4; CNDDB 2014). One occurrence of Parish's gooseberry (*Ribes divaricatum* var. *parishii*) is reported within the BSA; however, it is from 1917 and is now believed to be extirpated due to habitat alterations from substantial development (CNDDB 2014). Special-status plant species and their habitat requirements, regulatory status, and potential for occurrence within the BSA are detailed within Appendix G.

Fifty-seven special-status wildlife species are reported to occur within the USGS Redlands and surrounding 7.5-Minute Topographic Quadrangles. Fifteen of these are federal and/or state listed as endangered or threatened. No special-status wildlife species were observed during biological surveys and there are no reported occurrences of any special-status wildlife species within the BSA (Figure 4; CNDDB 2014). Limited suitable habitat for six special-status

wildlife species occurs outside of the project footprint within the disturbed open fields and large trees present within the BSA: California horned lark (*Eremophila alpestris actia*), Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo regalis*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), and western yellow bat (*Lasiurus xanthinus*). The remaining 51 special-status wildlife species were determined to be absent due to a lack of suitable habitat within the BSA. Special-status wildlife species and their habitat requirements, regulatory status, and potential for occurrence within the BSA are detailed within Appendix H.

The BSA does not occur within any regional habitats of concern or USFWS designated Critical Habitat (Figure 4). Santa Ana sucker and San Bernardino kangaroo rat Critical Habitat occurs approximately 0.1 mile from the BSA, but is separated from the BSA by dense development and infrastructure.

One drainage feature occurs within the BSA. It is an unvegetated, concrete trapezoidal channel that drains from north to south adjacent to westbound SR-210 (Figure 5). It is classified as a modified natural drainage that has been channelized and realigned to drain flows from SR-210 and runoff from adjacent residential and commercial developments. This feature is potentially within the jurisdiction of USACE pursuant to Section 404 of the CWA; RWQCB legal authority in accordance with Section 401 of the CWA and as defined within Section 13050(e) (et seq.) of the California Water Code via the Porter-Cologne Water Quality Control Act; and CDFW jurisdiction pursuant to Section 1600 (et seq.) of the California Fish and Game Code. Potential jurisdiction within the BSA is listed in Table 1, Appendix B.

4.3. Vegetation

Three major vegetation community/land cover types were mapped within the BSA: Developed/Disturbed, Ornamental, and Ruderal. The majority of the BSA consists of the Developed/Disturbed land cover type and no native or sensitive vegetation communities are present. Vegetation communities are described below and illustrated on Figure 5. Table 2, Appendix B, includes approximate vegetation community acreages that occur within the BSA.

The Developed/Disturbed land cover type includes areas that have been subjected to various degrees of anthropogenic impacts. Developed areas have been altered for use as roads, housing, and commercial uses. Disturbed areas are typically unvegetated or sparsely vegetated and often routinely disturbed. Common plant species occurring in this vegetation community type within the BSA include aleppo pine (*Pinus halepensis*), Canary Island date palm (*Phoenix canariensis*), and Mediterranean cypress (*Cupressus sempervirens*). Developed/Disturbed is the dominant cover class throughout the BSA.

Ornamental land cover contains landscaping with mostly non-native trees and shrubs that are regularly maintained. Common plant species occurring in this vegetation community type within the BSA include Peruvian pepper tree (*Schinus molle*), holly leaf cherry (*Prunus ilicifolia*), and oleander (*Nerium oleander*). This vegetation type was found throughout the BSA.

Ruderal land cover consists of fallow agricultural fields or heavily-disturbed areas dominated by non-native vegetation. Common plant species occurring in this vegetation community type

within the BSA include common fiddleneck (*Amsinckia menziesii*), wild radish (*Raphanus sativus*), and cheeseweed (*Malva parviflora*). This vegetation type was found in disturbed open fields throughout the BSA.

4.4. Common Plants and Wildlife

Plant species observed within the BSA included primarily non-native species common to disturbed and landscape habitats. Commonly-occurring species included Peruvian pepper tree, oleander, Canary Island date palm, cheeseweed, and wild radish. All plant species observed during the field survey are listed in Appendix D.

Wildlife species observed within the BSA included species that commonly occur in developed and disturbed habitats, such as house finch (*Carpodacus mexicanus frontalis*), European starling (*Sturnus vulgaris*), and mourning dove (*Zenaida macroura*). All wildlife species observed within the BSA are listed in Appendix E. No wildlife corridors are present within the BSA due to the lack of contiguous native habitat and extensive development.

5. Project Impacts

The Project footprint is anthropogenically disturbed, and as a result, the Project would occur within an existing setting that has been highly degraded and does not contain any native habitats. Common wildlife present in the Project footprint have acclimated and developed tolerance to substantial disturbance that results from the heavily-utilized roadway infrastructure and surrounding land use.

Due to the lack of high-quality native habitats within the BSA, the Project is not expected to adversely impact common or special-status species. No federal or state Endangered Species Act (ESA) protected species were observed within the BSA and none are expected to occur due to a lack of suitable habitat. Implementing the proposed Project will not impact native habitat and/or sensitive native species. Caltrans has determined, in accordance with Section 7 of the ESA, there will be “no effect” to federally listed species as stated in (Appendix C) USFWS Official Species List.

Vegetation communities that will be affected within the Project footprint include Developed/Disturbed, Ornamental, and Ruderal (Table 3, Appendix B). Commonly-occurring plants observed in the Project footprint includes primarily non-native species, with a few native species that occur in disturbed habitats. No special-status plant species were observed within the BSA. It is not anticipated that Project-related activities would result in a loss of habitat availability locally or regionally, or loss of viability for any of these species given that they are common and abundant throughout the region.

Commonly-occurring wildlife species observed in the Project footprint includes native and non-native avian species. No special-status wildlife species were observed within the BSA. Project-related activities would not result in a trend toward state or federal protection, loss of habitat availability locally or regionally, or loss of viability for any of these species given that they are common throughout the region.

Limited suitable foraging and/or roosting habitat for California horned lark, Cooper’s hawk, ferruginous hawk, and western mastiff bat is present within the disturbed open fields and large

trees within the BSA. In addition, common raptors and migratory song birds may nest or roost on existing structures, shrubs, or trees within the Project footprint. Impacts to these species could include potential temporary displacement during construction activities. Project activities may also temporarily deter wildlife from foraging within the Project footprint. However, short-term potential adverse impacts of the Project on foraging in the surrounding lands are considered to be minor given that wildlife that currently forage within the BSA are assumed to be acclimated to a heavily human-influenced environment. If construction occurs during the nesting season, then a qualified biologist shall conduct and submit a pre-construction migratory nesting bird and raptors survey report prior to ground-disturbing activities. The mitigation measures described in Section 6 below will reduce the overall adverse impacts to any nesting birds that may occur within the BSA.

Suitable roosting habitat for bats, including special-status western yellow bat, occurs within the palm trees and other large trees located within the BSA. In addition, limited roosting habitat for bats, including special-status pallid bat, occurs within the weep holes of the SR-210 Base Line overcrossing. However, the SR-210 Base Line overcrossing does not contain any expansion joints or side openings, which are the preferred roosting areas on bridge structures of bats, and no sign of roosting bats (e.g., guano, urine staining on walls) was observed at the SR-210 Base Line overcrossing during biological surveys. During Project construction, the SR-210 Base Line overcrossing will be widened and some palm trees will be removed. As such, a preconstruction bat habitat suitability assessment will be conducted prior to the start of Project construction to determine whether bats are present or absent. The mitigation measures described in Section 6 below will reduce the overall adverse impacts to any bats that may occur within the BSA.

No regional habitats of concern or USFWS designated Critical Habitat are located within the BSA.One potentially jurisdictional aquatic resource occurs within the BSA. As currently designed, the Project will avoid the drainage and no impacts to aquatic resources will occur (Table 4, Appendix B).

6. Mitigation Measures

Based on the results of field surveys and other local, state, and federal requirements, the following Best Management Practices (BMPs) are identified as a means of avoiding and minimizing adverse impacts to biological resources that occur, or have the potential to occur within the Project footprint:

Bio-1 Bird Protection

- In order to comply with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code (e.g., 3503, 3503.4, 3504, 3505, et seq.), any vegetation clearing within the Project footprint should take place outside of the typical avian nesting season (typically February 15 to September 15), to the maximum extent practical. Prior to ground-disturbing activities within the Project footprint during the nesting season, a qualified biologist shall conduct and submit a pre-construction migratory nesting bird and raptors survey report. The survey shall occur prior to initiation of Project activities and any occupied nests occurring within or adjacent to the Project footprint will be delineated. To the maximum extent practicable, a minimum

buffer zone from occupied nests shall be determined by the qualified biologist and maintained during physical ground-disturbing activities. Once nesting has ceased, the buffer may be removed.

Bio-2 Bat Protection

- A qualified bat biologist will survey the BSA prior to construction to assess the potential for maternity roosts, including the SR-210 Base Line overcrossing and any palm or large trees that will be removed. The surveys may include a combination of structure and tree inspection, sampling, exit counts, and acoustic surveys.
- If any work on the SR-210 Base Line overcrossing occurs between April 15 and August 31, then it will be cleared of all bats prior to construction under the guidance and observation of a qualified biologist. Exclusionary devices should be used to exclude bats from directly affected work areas and avoid potential direct impacts. Such exclusion efforts must be continued to keep the structures free of bats until August 31 or completion of construction. All bat exclusion techniques would be coordinated between Caltrans and the resource agencies, as applicable.
- Prior to tree removal, palm trees, large trees, and snags should be examined by a bat biologist prior to removal or trimming to ensure that no roosting bats are present. Palm frond trimming, if necessary, should be conducted outside the maternity season (i.e., April 15 to August 31) to avoid potential mortality to flightless young.
- If maternity sites are identified during the preconstruction bat habitat suitability assessment, then no construction activities within a buffer established by a bat biologist containing the maternity roost will be allowed during the maternity season (i.e., April 15 to August 31), unless a qualified bat biologist has determined that young have been weaned. If present, and it is anticipated that construction activities cannot be completed outside of the maternity season, then bat exclusion at maternity roost sites shall be completed either as soon as allowed by CDFW and the qualified bat biologist after the young have been weaned or outside of the maternity season, prior to initiating construction activities or as otherwise approved by the qualified bat biologist in coordination with CDFW.

Bio-3

- Limits of grading and construction activities within the Project footprint should be clearly delineated.

Bio-4 Water Pollution Control

- Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.

Bio-5 Project Site Management

- To avoid attracting predators and nuisance species, the Project footprint shall be clear of debris, where possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the Project footprint.

A weed abatement plan will be developed to minimize the spread and importation of nonnative plant material during and after construction in compliance with Executive Order 13112. During Project construction, soil and vegetation disturbance will be minimized to the greatest extent

feasible. To avoid the introduction of invasive plant species into the Project area, the construction contractor will inspect and clean construction equipment prior to transporting equipment from one project location to another, any fill material used will be obtained from weed-free sources, and only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Following construction, all revegetated areas will avoid the use of species listed in the California Invasive Plant Council's California Invasive Plant Inventory (Cal-IPC 2006).

7. Permits Required

Because the Project would not impact aquatic resources, no CWA Section 404 or 401 permits or CDFW Lake and Streambed Alteration Agreement are anticipated. Additionally, because no federally or state listed species would be impacted, no Section 7 consultation or Incidental Take Permit is required.

8. References

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

USFWS. 2014. *Carlsbad Field Office List of Proposed, Threatened, and Endangered Species, and Critical Habitats for the SR-210/Base Line Interchange Project*. 08ECAR00-2014-SLI-0294. April 25, 2014. Carlsbad Field Office, Carlsbad, California. U.S. Department of the Interior, USFWS. URL: http://ecos.fws.gov/ipac/wizard/chooseLocation!prepare.action;jsessionid=548D700F92319C44B06DE551C05BF8D0

USGS (U.S. Department of the Interior, U.S. Geographic Survey). 1988. *7.5-Minute Quadrangle Map of Redlands, California*.

9. Appendices

APPENDIX A. Figures

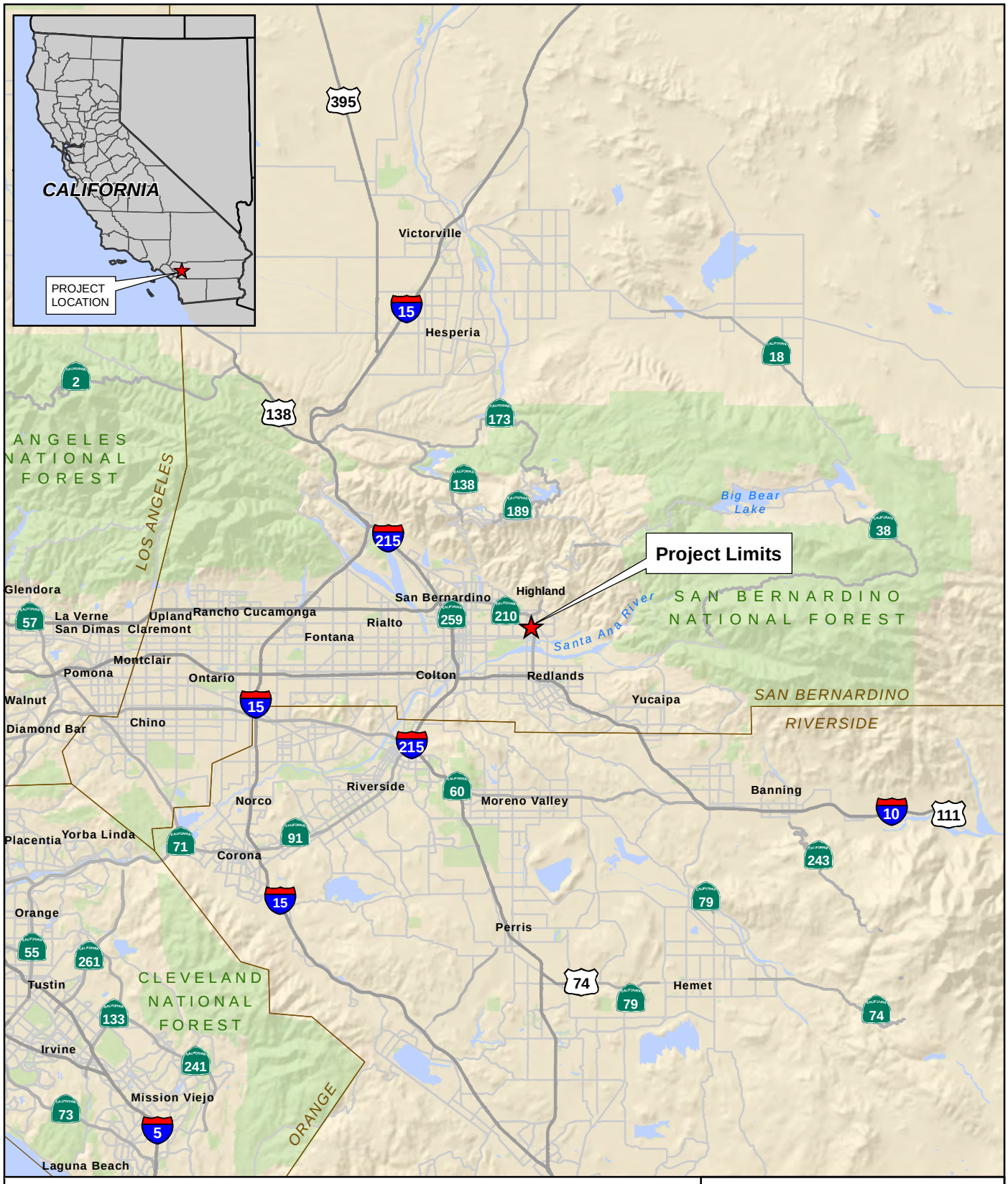

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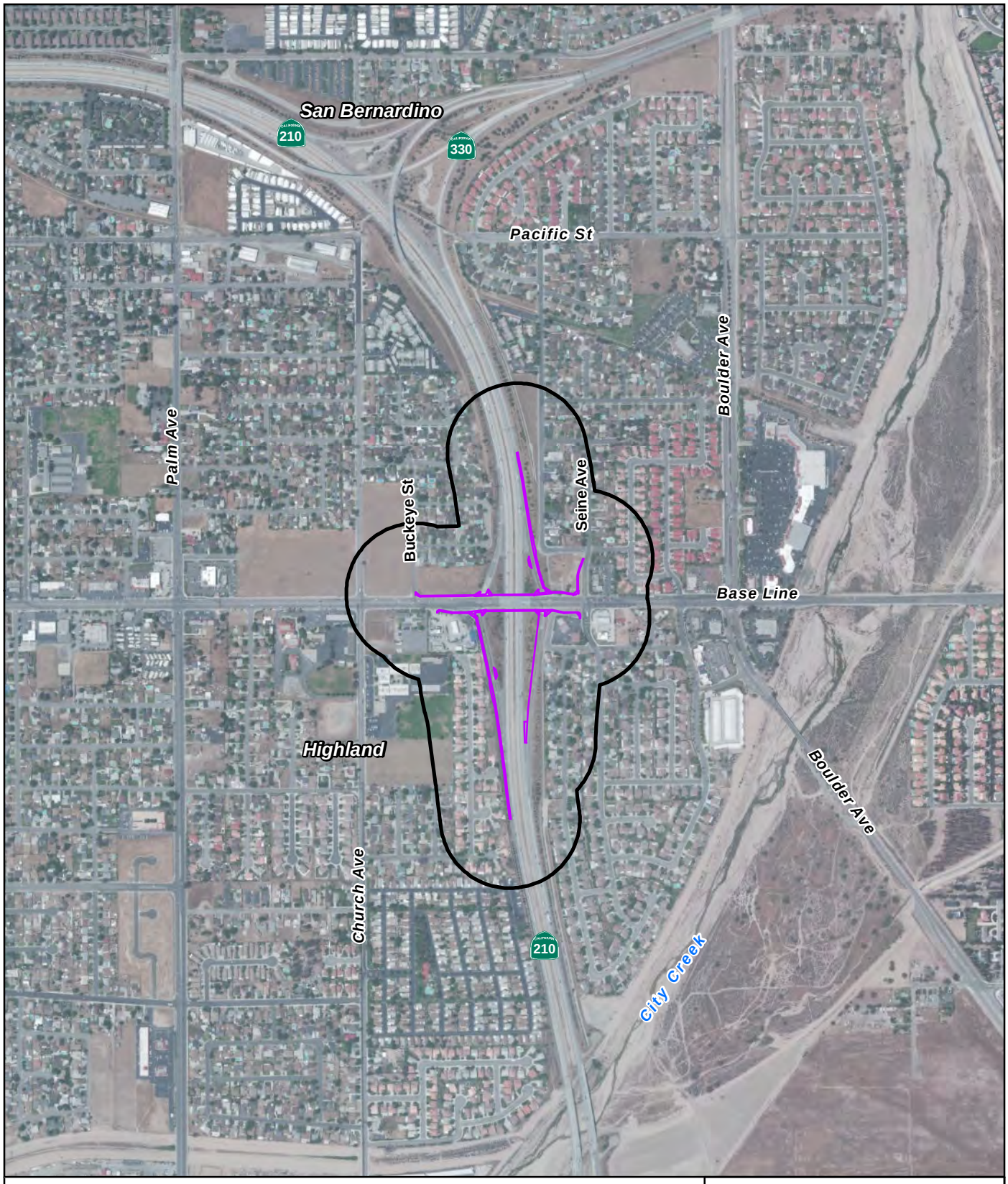
FIGURE 1

Regional Location

SR-210/Base Line Interchange Project



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Project Design

Biological Study Area

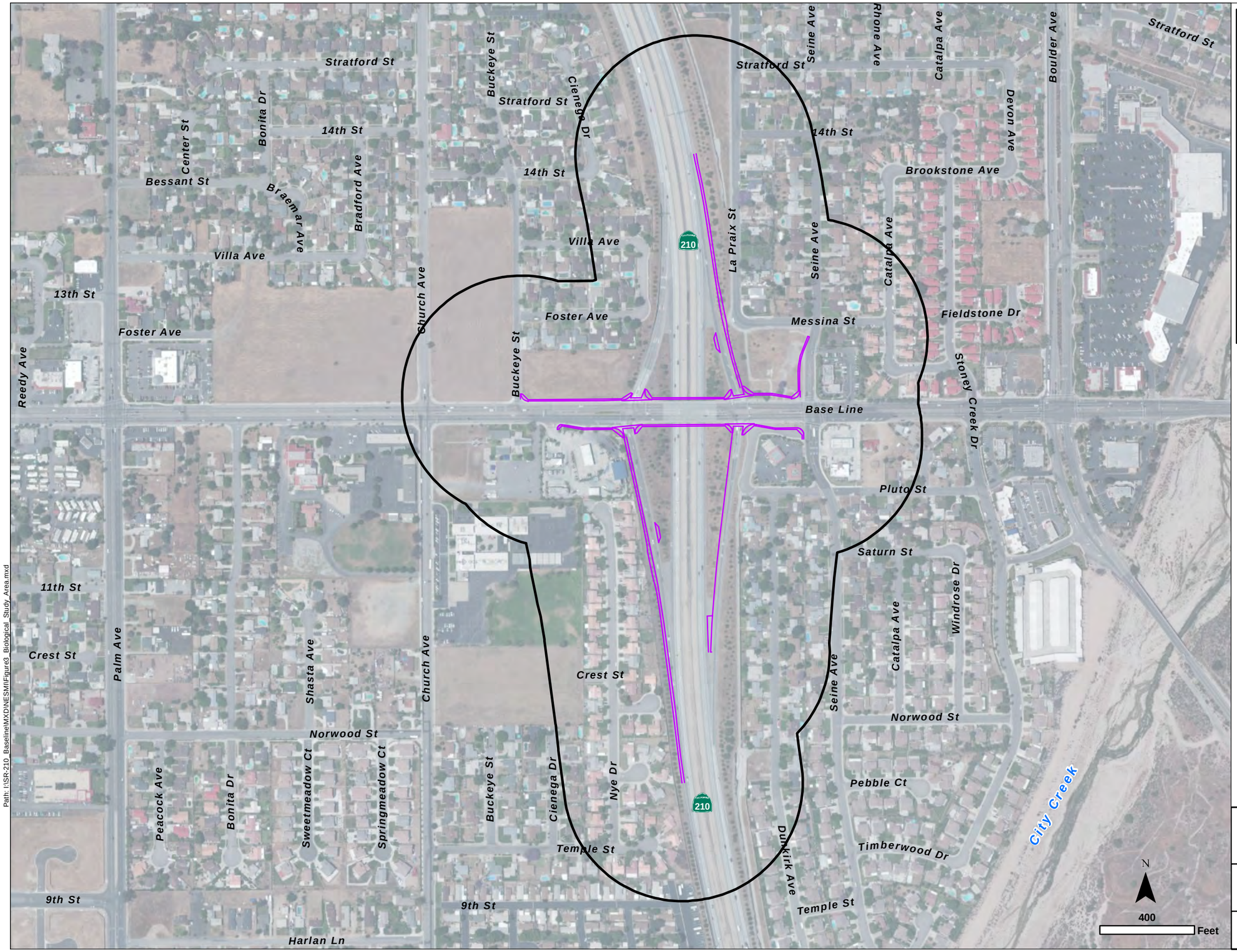
N

0 1,000 Feet

FIGURE 2
Vicinity Map

SR-210/Base Line Interchange Project

Caltrans



Project Design

Biological Study Area

FIGURE 3
Biological Study Area

SR-210/Base Line Interchange Project

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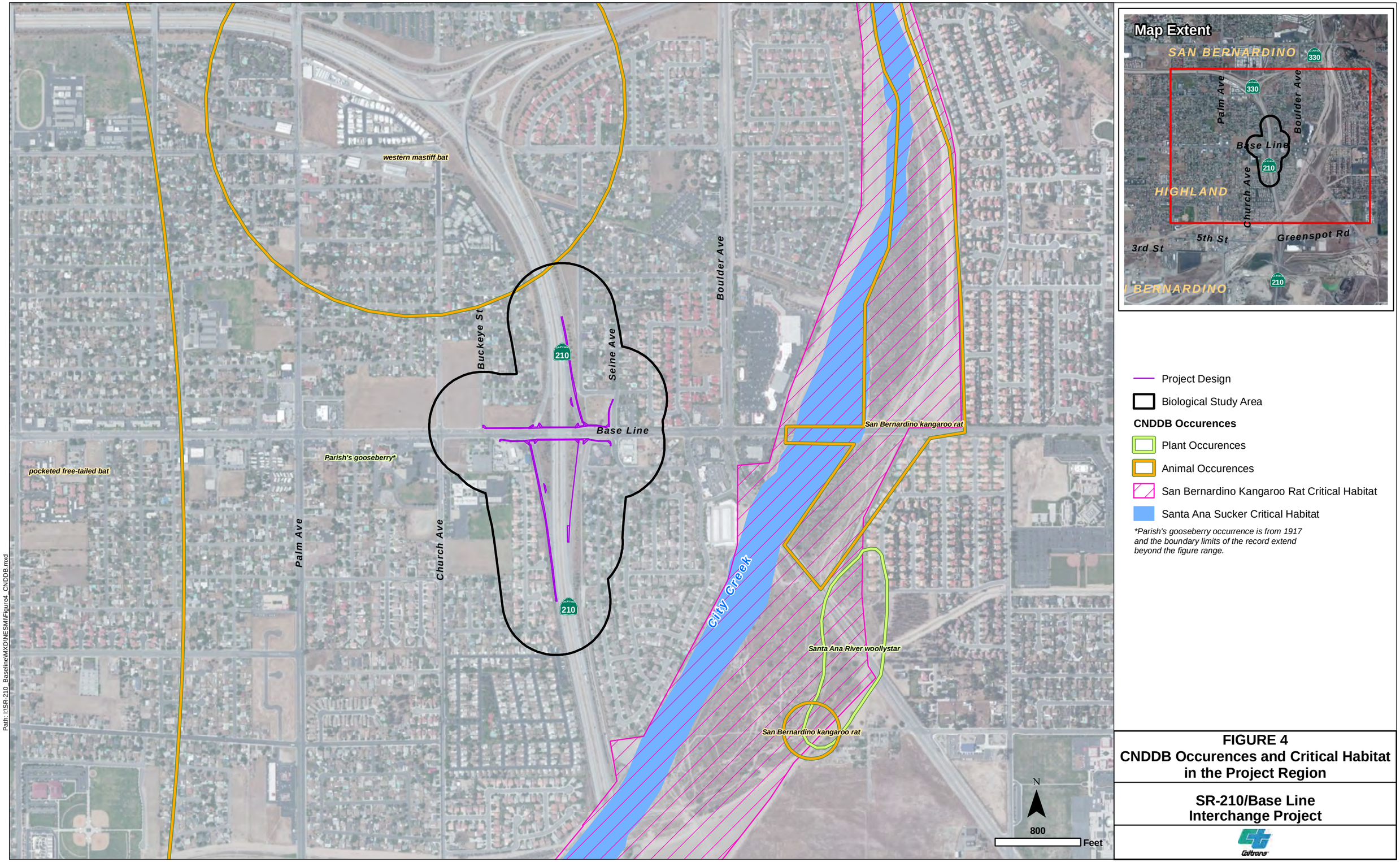

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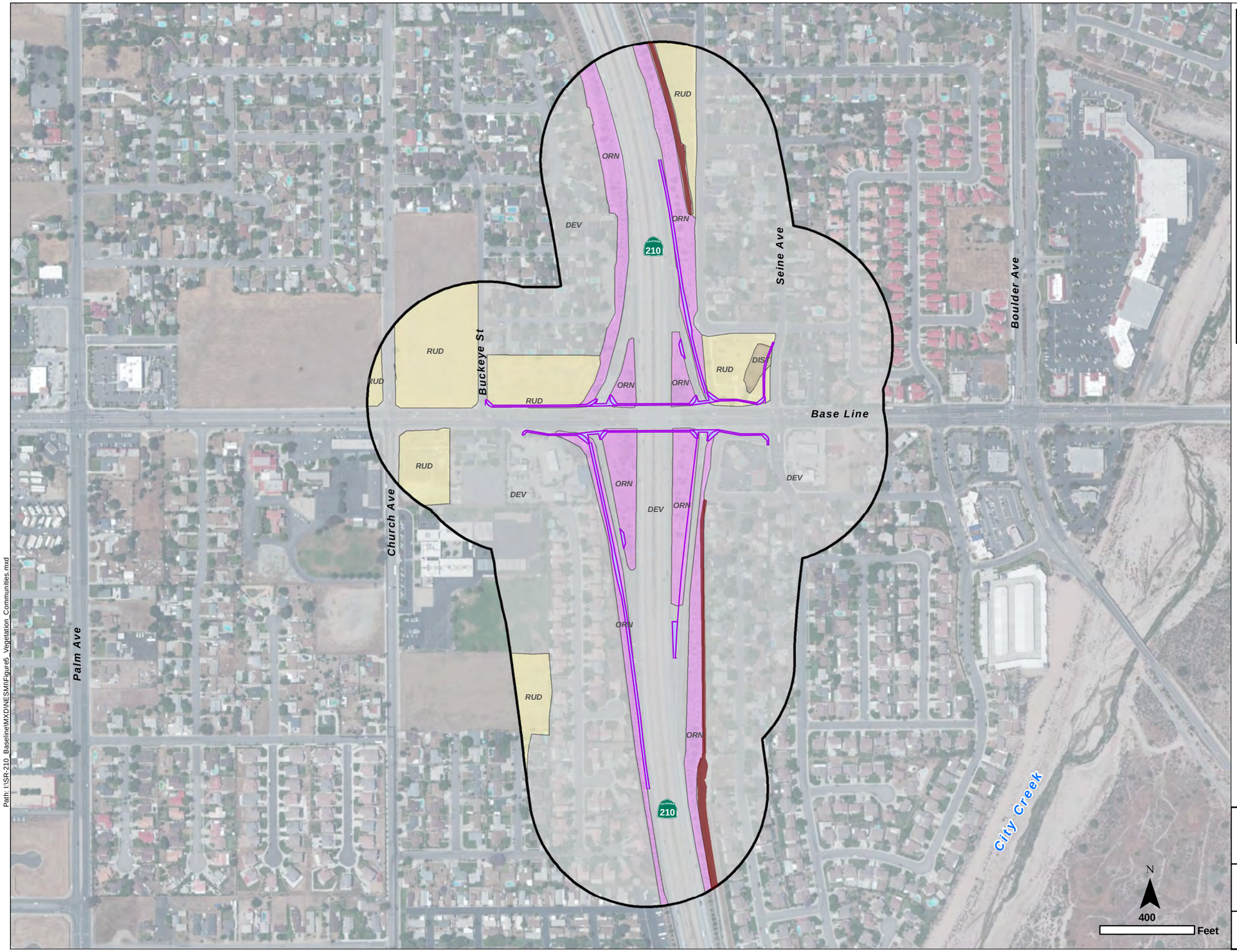
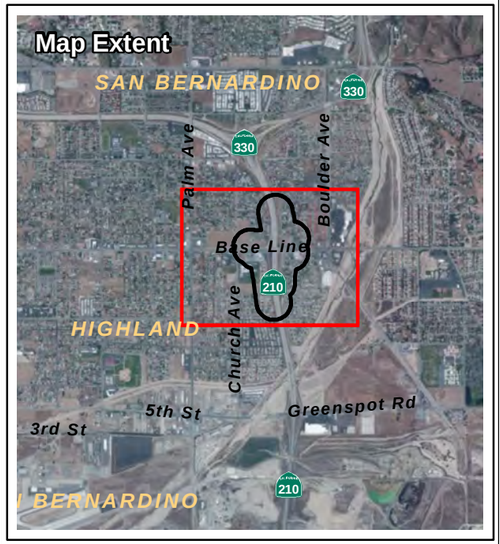
FIGURE 4
CNDDB Occurences and Critical Habitat in the Project Region

SR-210/Base Line Interchange Project





Project Design

Unvegetated Concrete Channel

Biological Study Area

Vegetation Types

RUD - Ruderal

ORN - Ornamental

DIST - Disturbed

DEV - Developed

FIGURE 5
Vegetation Communities

SR-210/Base Line Interchange Project

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APPENDIX B. Tables

Table 1. Potential USACE, RWQCB, and CDFW Jurisdiction within the BSA

Feature ID	Potential USACE Jurisdiction (acres)		Potential RWQCB Jurisdiction (acres)		Potential CDFW Jurisdiction (acres)	
	Wetland	Non-wetland	Wetland	Non-wetland	Riparian	Non-riparian
Feature 1	0.00	0.363	0.00	0.363	0.00	0.984
Total	**0.00**	**0.363**	**0.00**	**0.363**	**0.00**	**0.984**

Table 2. Vegetation Communities Observed Within the BSA

Vegetation Community	Total (Acres)
Developed/Disturbed	87.58
Ornamental	11.73
Ruderal	12.04
Total	111.35

Table 3. Estimated Impacts to Vegetation Communities within the Project Footprint

Vegetation Community	Estimated Impact* (Acres)
Developed/Disturbed	0.41
Ornamental	0.70
Ruderal	0.13
Total	**1.24**

*Estimated impacts based on conceptual engineering design.

Table 4. Estimated Impacts to Potential USACE, RWQCB, and CDFW Jurisdiction within the BSA

Feature ID	Potential USACE Jurisdiction (acres)		Potential RWQCB Jurisdiction (acres)		Potential CDFW Jurisdiction (acres)	
	Wetland	Non-wetland	Wetland	Non-wetland	Riparian	Non-riparian
Feature 1	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

APPENDIX C. USFWS Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
PHONE: (760)431-9440 FAX: (760)431-5901
URL: www.fws.gov/carlsbad/

Consultation Tracking Number: 08ECAR00-2014-SLI-0294 April 25, 2014
Project Name: State Route 210 Base Line Road Interchange Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: State Route 210 Base Line Road Interchange Project

Official Species List

Provided by:

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
(760) 431-9440
http://www.fws.gov/carlsbad/

Expect additional Species list documents from the following office(s):

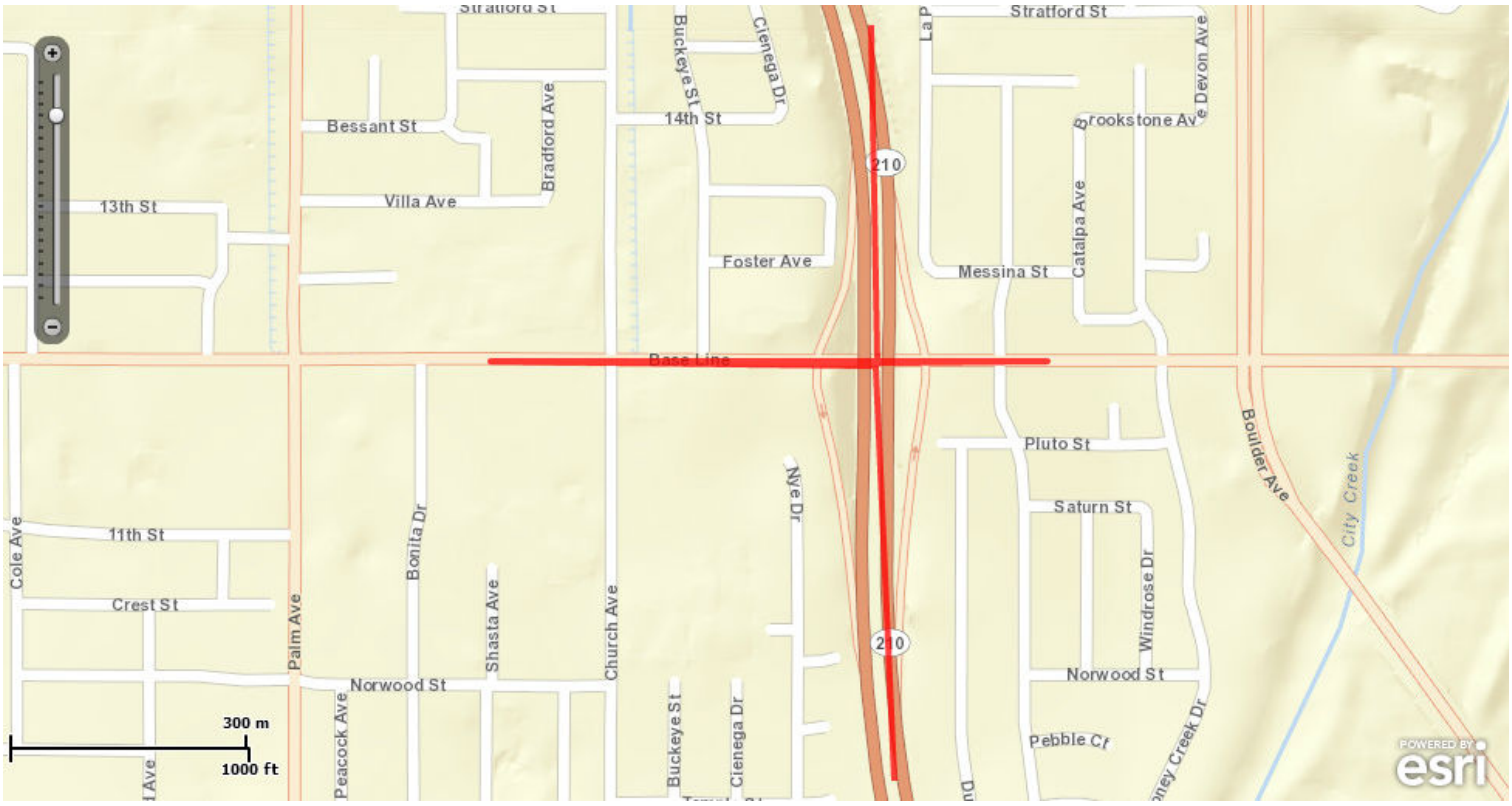
Ventura Fish and Wildlife Office
2493 PORTOLA ROAD, SUITE B
VENTURA, CA 93003
(805) 644-1766

Consultation Tracking Number: 08ECAR00-2014-SLI-0294
Project Type: Transportation
Project Description: The San Bernardino Associated Governments, in cooperation with the California Department of Transportation District 8, proposes to modify the on/off ramps and surface streets at the intersection of Base Line Road and State Route 210 from post miles R28.3 to R30.3 to allow increased traffic flow and decrease congestion at the interchange. The project is located in the City of Highland, County of San Bernardino, California.

United States Department of Interior
Fish and Wildlife Service

Project name: State Route 210 Base Line Road Interchange Project

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-117.200692 34.1212271, -117.2007771 34.1250613, -117.2007757 34.1250689, -117.2007716 34.1250755, -117.2007652 34.12508, -117.2007575 34.1250817, -117.2007499 34.1250803, -117.2007433 34.1250762, -117.2007388 34.1250698, -117.2007371 34.1250621, -117.200652 34.1212271, -117.19831 34.1212271, -117.1983098 34.1212271, -117.1983022 34.1212256, -117.1982957 34.1212213, -117.1982913 34.1212148, -117.1982898 34.1212072, -117.1982913 34.1211995, -117.1982956 34.121193, -117.198302 34.1211887, -117.1983096 34.1211871, -117.200671 34.1211693, -117.2006786 34.1211707, -117.2006851 34.1211749, -117.2006895 34.1211813, -117.2006908 34.1211871, -117.2020258 34.1211871, -117.2006925 34.1211738, -117.2006852 34.1211723, -117.2006789 34.1211682, -117.2006745 34.1211621, -117.2006727 34.1211549, -117.2004163 34.1163949, -117.2004174 34.1163872, -117.2004214 34.1163804, -117.2004277 34.1163758, -117.2004352 34.1163738, -117.2004429 34.1163749, -117.2004497 34.1163789, -117.2004543 34.1163852, -117.2004563 34.1163927, -117.2007117 34.121134, -117.2060359 34.1211871, -117.2060435 34.1211887, -117.2060499 34.1211931, -117.2060542 34.1211996, -117.2060557 34.1212072, -117.2060541

34.1212148, -117.2060498 34.1212213, -117.2060433 34.1212256, -117.2060357 34.1212271, -117.200692 34.1212271)))

Project Counties: San Bernardino, CA

Endangered Species Act Species List

There are a total of 12 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed on the **Has Critical Habitat** lines may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

arroyo toad *(Anaxyrus californicus)*

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

California red-legged frog *(Rana draytonii)*

Population: Entire

Listing Status: Threatened

Has Critical Habitat: Final designated

Coastal California gnatcatcher *(Polioptila californica californica)*

Population: Entire

Listing Status: Threatened

Has Critical Habitat: Final designated, Proposed

Least Bell's vireo *(Vireo bellii pusillus)*

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Mountain Yellow-Legged frog *(Rana muscosa)*

Population: southern California DPS

Listing Status: Endangered

Has Critical Habitat: Final designated

Nevin's barberry *(Berberis nevinii)*

Listing Status: Endangered

Has Critical Habitat: Final designated

San Bernardino Merriam's kangaroo rat *(Dipodomys merriami parvus)*

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Santa Ana River woolly-star *(Eriastrum densifolium ssp. sanctorum)*

Listing Status: Endangered

Santa Ana sucker *(Catostomus santaanae)*

Population: 3 CA river basins

Listing Status: Threatened

Has Critical Habitat: Final designated

Slender-Horned spineflower *(Dodecahema leptoceras)*

Listing Status: Endangered

Southwestern Willow flycatcher *(Empidonax traillii extimus)*

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Stephens' kangaroo rat *(Dipodomys stephensi)*

Population: Entire

Listing Status: Endangered

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX D. Plant Species Observed within the BSA

Scientific Name	Common Name
ANGIOSPERMAE: DICOTYLEDONAE	**DICOT FLOWERING PLANTS**
Anacardiaceae	**Sumac Family**
*Schinus molle**	Peruvian pepper tree
Apocynaceae	**Dogbane Family**
*Nerium oleander**	oleander
Asteraceae (Compositae)	**Sunflower Family**
Gerbera sp.*	African daisy
Helianthus annuus	western sunflower
Heterotheca grandiflora	telegraph weed
Boraginaceae	**Borage Family**
Amsinckia menziesii	common fiddleneck
Brassicaceae (Cruciferae)	**Mustard Family**
*Hirschfeldia incana**	shortpod mustard
*Sisymbrium irio**	London rocket
*Raphanus sativus**	wild radish
Geraniaceae	**Geranium Family**
*Erodium botrys**	long-beaked filaree
Magnoliaceae	**Magnolia Family**
Magnolia sp.*	magnolia
Malvaceae	**Mallow Family**
*Ceiba speciosa**	silk floss tree
*Malva parviflora**	cheeseweed
Moraceae	**Mulberry Family**
Morus sp. *	mulberry tree
Myrtaceae	**Myrtle Family**
Eucalyptus spp.*	gum
*Lophostemon confertus**	brisbane box
Oleaceae	**Ash Family**
Fraxinus americana	white ash
Platanaceae	**Sycamore Family**
Platanus sp.*	London plane
Rosaceae	**Rose Family**
Prunus ilicifolia	holly leaf cherry
*Pyracantha coccinea**	scarlet firethorn
Sapindaceae	**Soapberry Family**
*Cupaniopsis anacardioides**	carrotwood tree
Solanaceae	**Nightshade Family**
Datura wrightii	jimson weed
ANGIOSPERMAE: MONOCOTYLEDONAE	**MONOCOT FLOWERING PLANTS**
Arecaceae (Palmae)	**Palm Family**
*Syagrus romanzoffiana**	queen palm
*Phoenix canariensis**	Canary Island date palm
*Washingtonia robusta**	Mexican fan palm
Cyperaceae	**Sedge Family**

Scientific Name	Common Name
Cyperus eragrostis	tall umbrella-sedge
Poaceae (Gramineae)	**Grass Family**
*Avena barbata**	slender wild oat
*Bromus diandrus**	ripgut grass
Bromus madritensis ssp. *rubens**	foxtail chess
GYMNOSPERMAE	**NON-FLOWERING PLANTS**
Cupressaceae	**Cypress Family**
*Cupressus sempervirens**	Mediterranean cypress
Pineaceae	**Pine Family**
*Pinus halepensis**	aleppo pine

* non-native species

APPENDIX E. Wildlife Species Observed within the BSA

Scientific Name	Common Name
BIRDS	
Accipitridae	**Hawks and Eagles**
Buteo jamaicensis	red-tailed hawk
Columbidae	**Pigeons and Doves**
Zenaida macroura	mourning dove
Corvidae	**Jays and Crows**
Corvus brachyrhynchos	American crow
Fringillidae	**Finches**
Carpodacus mexicanus frontalis	house finch
Sturnidae	**Starlings**
Sturnus vulgaris	European starling
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Tyrannidae	**Flycatchers**
Sayornis saya	Say's phoebe

APPENDIX F. Jurisdictional Delineation Report

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APPENDIX G. Special-Status Plant Species Potential for Occurrence within the BSA

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Alvin Meadow bedstraw	***Galium californicum* ssp. *primum***	CRPR 1B.2	Perennial herb; California endemic. Occurs in granitic soils in chaparral and lower montane coniferous forest from 4,400-5,600 feet elevation. Known from only four occurrences in Riverside and San Bernardino counties. Blooms from May – July.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Bear Valley checkerbloom	***Sidalcea malviflora* ssp. *dolosa***	CRPR 1B.2	Perennial herb; California endemic. Occurs in meadows and seeps, riparian woodlands, and lower and upper montane coniferous forest (in meadows and seeps) from 4,900-8,810 feet elevation. Known only from San Bernardino County. Blooms from May – August.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
black bog-rush	***Schoenus nigricans***	CRPR 2.2	Perennial herb. Occurs in marshes and swamps (often in alkali soils) at elevations from 500-7,000 feet. In California, known from Inyo and San Bernardino counties. Also occurs in Nevada, Texas, and South America. Blooms from August – September.	A	There is no suitable habitat in the BSA for this species.
bristly sedge	***Carex comosa***	CRPR 2.1	Perennial rhizomatous herb. Occurs in bogs and fens, coastal prairie, valley and foothill grassland, freshwater marshes and swamps, and lake margins below 1,400 feet. Known from Contra Costa, Lake, Mendocino, Sacramento, Santa Cruz, San Francisco,	A	There is no suitable habitat for this species within the BSA. This species is considered extirpated from San Bernardino County.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			Shasta, San Joaquin, and Sonoma counties, as well as Idaho, Oregon, Texas, and Washington. Believed extirpated from San Bernardino County (last known occurrence was in 1882). Blooms from May – September.		
California muhly	***Muhlenbergia californica***	CRPR 4.3	Perennial rhizomatous herb; California endemic. Occurs in mesic areas, seeps, and streambanks in chaparral, coastal scrub, lower montane coniferous forest, and meadow habitats from 330-6,560 feet elevation. Known from Los Angeles, Riverside, and San Bernardino counties. Blooms from June – September.	A	There is no suitable habitat in the BSA for this species.
California satintail	***Imperata brevifolia***	CRPR 2.1	Perennial rhizomatous herb. Occurs in mesic areas in chaparral, coastal scrub, Mojave desert scrub, meadows and seeps (often alkali), and riparian scrub habitats. Up to 3,990 feet elevation. Occurs in Butte, Fresno, Imperial, Inyo, Kern, Los Angeles, Orange, Riverside, San Bernardino, Tehama, Tulare, and Ventura counties. Presumed extirpated in Lake County. Blooms from September – May.	A	There is no suitable habitat in the BSA for this species.
Catalina mariposa lily	***Calochortus catalinae***	CRPR 4.2	Perennial bulbiferous herb; California endemic. Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats from 50 – 2,300 feet in elevation. Known from Los	A	There is no suitable habitat in the BSA for this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			Angeles, Orange, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura counties, as well as Santa Catalina, Santa Rosa, and Santa Cruz islands. Blooms from February – June.		
chaparral sand-verbena	***Abronia villosa* var. *aurita***	CRPR 1B.1	Annual herb. Occurs in sandy floodplains in inland, arid areas of coastal sage scrub, open chaparral, and desert dunes. Elevation 300-5,300 feet. In California, occurs in Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Also occurs in Arizona and Baja California. Blooms from January – September.	A	There is no suitable habitat in the BSA for this species.
chickweed oxytheca	***Sidotheca caryophylloides***	CRPR 4.3	Annual herb; California endemic. Occurs in sandy areas in lower montane coniferous forest from 3,655-8,530 feet elevation. Known from Los Angeles, Riverside, San Bernardino, Tulare, and Ventura counties. Blooms from July – September.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Coulter's goldfields	***Lasthenia glabrata* ssp. *coulteri***	CRPR 1B.1	Annual herb. Usually occurs in alkaline soils in marshes, playas, vernal pools, and valley and foothill grassland below 4,600 feet elevation. Known from Colusa, Merced, Tulare(?), Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, Tehama, Yolo, and Ventura counties. Believed extirpated from Kern, Los Angeles, and San Bernardino counties.	A	This species is presumed to be extirpated in San Bernardino County. There is no suitable habitat in the BSA for this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			Also occurs in Mexico. Blooms from February – June.		
Coulter's matilija poppy	***Romneya coulteri***	CRPR 4.2	Perennial rhizomatous herb; California endemic. Occurs in chaparral and coastal scrub habitats, often in burned areas, in Los Angeles, Orange, Riverside, and San Diego counties from 66 – 3,940 feet in elevation. Blooms from March – July.	A	This species does not occur in San Bernardino County and no suitable habitat is present within the BSA.
crowned muilla	***Muilla coronata***	CRPR 4.2	Perennial bulbiferous herb. Occurs in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats from 2,510-6,430 feet elevation. Known from Inyo, Kern, Los Angeles, San Bernardino, and Tulare counties. Also occurs in Nevada. Blooms from March – May.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Davidson's saltscale	***Atriplex serenana* var. *davidsonii***	CRPR 1B.2	Annual herb. Occurs in coastal bluff scrub and coastal scrub habitats in alkaline areas from 33-656 feet in elevation. Blooms from April – October.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Duran's rush	***Juncus duranii***	CRPR 4.3	Perennial rhizomatous herb; California endemic. Occurs in mesic areas in meadows and seeps and lower and upper montane coniferous forest habitats from 5,800-9,200 feet elevation. Known from Los Angeles, Riverside, and San Bernardino counties. Blooms from July – August.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
Gambel's water cress	***Nasturtium gambelii***	FE ST CRPR 1B.1	Perennial rhizomatous herb. Found in freshwater marshes and swamps from 20-1,100 feet elevation. Currently believed to occur in California only in Santa Barbara and San Luis Obispo counties. There are historical records from Los Angeles, Orange, San Diego, and San Bernardino counties, although the San Diego County records may be based on misidentification. Also occurs in Baja California. Blooms from April – October.	A	The Project site is outside the elevation range for this species and it is presumed to be extirpated from San Bernardino County. No suitable habitat is present within the BSA.
Hall's monardella	***Monardella macrantha* ssp. *hallii***	CRPR 1B.3	Perennial rhizomatous herb; California endemic. Occurs in openings on dry slopes and ridges in broad-leaved upland forests, chaparral, cismontane woodland, lower montane coniferous forests, and valley and foothill grasslands. Known from Los Angeles, San Diego, Orange, Riverside, and San Bernardino counties from 2,395-7,200 feet elevation. Blooms from June – October.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Horn's milk-vetch	***Astragalus hornii* var. *hornii***	CRPR 1B.1	Annual herb. Occurs in alkaline playas, meadows and seeps and lake margins from 200-2,800 feet elevation. In California, known only from Inyo and Kern counties. Presumed extirpated from San Bernardino County. Also occurs in Nevada. Blooms from May – October.	A	There is no suitable habitat for this species within the BSA. This species is considered extirpated from San Bernardino County.
hot springs	***Fimbristylis thermalis***	CRPR 2.2	Perennial rhizomatous herb. Occurs in	A	There is no suitable habitat

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
fimbristylis			meadows and seeps (alkaline, near hot springs) at elevations from 400-4,400 feet. In California, known from Inyo, Kern, Los Angeles, Mono, and San Bernardino counties. Also occurs in Arizona and Nevada. Blooms from July – September.		in the BSA for this species.
Laguna Mountains jewel-flower	***Streptanthus bernardinus***	CRPR 4.3	Perennial herb. Found in chaparral and lower montane coniferous forest from 2,200-8,200 feet elevation. Transverse and Peninsular ranges of Southern California in Riverside, San Bernardino and San Diego counties; possibly in Baja California. Blooms from May – August.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
little mousetail	***Myosurus minimus* ssp. *apus***	CRPR 3.1	Annual herb. Occurs in association with vernal pools and within the alkali vernal pools and alkali annual grassland components of alkali vernal plains. Found in areas that have semiregular inundation from 65-2,100 feet elevation. Known in Alameda, Contra Costa, Colusa, Lake, Merced, Riverside, San Bernardino, San Diego, Solano, Tulare, and Yolo counties. Also occurs in Oregon and Mexico. Blooms from March – June.	A	There is no suitable habitat in the BSA for this species.
Los Angeles sunflower	***Helianthus nuttallii* ssp. *parishii***	CRPR 1A	Perennial rhizomatous herb; California endemic. Occurs in marshes and swamps (coastal salt and freshwater) at 30-1,600 feet elevation. This species is historically known from Los Angeles, Orange, and San	A	This species is presumed extinct. There is no suitable habitat for this species within the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			Bernardino counties. Last seen in 1937. Presumed extinct. Blooms from August – October.		
marsh sandwort	***Arenaria paludicola***	FE SE CRPR 1B.1	Stoloniferous, perennial herb. Occurs in freshwater or brackish marshes or swamps where it grows up through dense mats of *Typha*, *Juncus*, and *Scirpus*. From 10-560 feet elevation. Known to presently occur only in San Luis Obispo County. Presumed extirpated from Los Angeles, San Francisco, Santa Cruz, and San Bernardino counties and the state of Washington. The last known record of this species in San Bernardino or Los Angeles counties is from 1900. Blooms from May – August.	A	This species is presumed extirpated from San Bernardino County. The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
mesa horkelia	***Horkelia cuneata* var. *puberula***	CRPR 1B.1	Perennial herb; California endemic. Found in sandy or gravelly soils in chaparral, or rarely in cismontane woodland or coastal scrub at 200-2,700 feet elevation. Occurs in San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Bernardino counties. Believed extirpated from Riverside and San Diego counties. Blooms from February – September.	A	There is no suitable habitat in the BSA for this species.
Mojave phacelia	***Phacelia mohavensis***	CRPR 4.3	Annual herb; California endemic. Occurs in sandy or gravelly areas in cismontane woodland, lower montane coniferous forest, meadows and seeps, and pinyon and juniper woodland habitats from 4,590-	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			8,200 feet in elevation in Los Angeles, San Bernardino, Tulare, and Ventura counties. Blooms from April – August.		
mud nama	***Nama stenocarpum***	CRPR 2.2	Annual/perennial herb. Occurs along marshes and swamps, such as at lake margins and riverbanks, and grows at elevations from 16-1,640 feet. Known from Kings, Orange, Riverside, and San Diego counties. Historical occurrences in Imperial and Los Angeles counties. Blooms from January – July.	A	There is no suitable for this species within the BSA. There are no current records of this species occurring in San Bernardino County.
narrow-petaled rein orchid	***Piperia leptopetala***	CRPR 4.3	Perennial herb; California endemic. Occurs in cismontane woodland and lower and upper montane coniferous forest habitats from 1,250-7,300 feet elevation. Known from El Dorado, Fresno, Lake, Los Angeles, Monterey, Mariposa, Nevada, Orange, Plumas, Riverside, San Bernardino, San Benito, Santa Clara, San Diego, Shasta, Siskiyou, San Luis Obispo, Sonoma, and Tulare counties. Blooms from May – July.	A	There is no suitable habitat in the BSA for this species.
Nevin's barberry	***Berberis nevinii***	FE SE CRPR 1B.1	Perennial evergreen shrub; California endemic. Occurs in sandy or gravelly soils in chaparral, cismontane woodland, coastal and riparian scrub habitats. From 900-2,700 feet elevation. Occurs in Los Angeles, San Bernardino, Riverside, and San Diego counties. Blooms from March –	A	There is no suitable habitat for this species within the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			June.		
ocellated Humboldt lily	***Lilium humboldtii* ssp. *ocellatum***	CRPR 4.2	Perennial bulbiferous herb; California endemic. Occurs in openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats from 100-5,900 feet elevation. Known from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura counties. Blooms from March – August.	A	There is no suitable habitat in the BSA for this species.
Palmer's mariposa-lily	***Calochortus palmeri* var. *palmeri***	CRPR 1B.2	Perennial bulbiferous herb; California endemic. Occurs in mesic areas in chaparral, lower montane coniferous forest, and meadow and seep habitats from 3,280-7,840 feet elevation. Occurs in Kern, Los Angeles, Riverside, Santa Barbara, San Bernardino, San Luis Obispo, and Ventura counties. Blooms from April – July.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
paniculate tarplant	***Deinandra paniculata***	CRPR 4.2	Annual herb. Common in open grasslands, coastal scrub, and vernally mesic pools. Tolerant of disturbed sites. Occurs in Orange, Riverside, San Bernardino, and San Diego counties at elevations between 82-3,084 feet. Also occurs in Baja California. Blooms from April – November.	A	There is no suitable habitat in the BSA for this species.
Parish's alumroot	***Heuchera parishii***	CRPR	Perennial rhizomatous herb; California endemic. Occurs in rocky areas (sometimes	A	The Project site is outside the elevation range for this

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
		1B.3	carbonate) in alpine boulder and rock field, subalpine coniferous forest, and lower and upper montane coniferous forest from 4,920-12,470 feet elevation. Known from Riverside, San Bernardino, and Siskiyou counties. Blooms from June – August.		species. No suitable habitat is present within the BSA.
Parish's bush-mallow	***Malacothamnus parishii***	CRPR 1A	Perennial deciduous shrub; California endemic. Occurs in chaparral and coastal scrub from 1,000-1,490 feet elevation. Known from only one occurrence in 1895 in vicinity of San Bernardino. Presumed extinct. Blooms from June – July.	A	This species is presumed extinct. There is no suitable habitat for this species within the BSA.
Parish's checkerbloom	***Sidalcea hickmanii* ssp. *parishii***	SR CRPR 1B.2	Perennial herb; California endemic. Occurs in chaparral, cismontane woodland, and lower montane coniferous forest habitats from 3,280-8,200 feet elevation. Known from Santa Barbara, San Bernardino, and San Luis Obispo counties. Blooms from June – August.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Parish's desert-thorn	***Lycium parishii***	CRPR 2.3	Perennial shrub. Occurs in coastal scrub and Sonoran desert scrub at 1,000-3,300 feet elevation. In California, known from Imperial and San Diego counties. Report from Riverside County is based on a misidentification. Known historically from San Bernardino County (benches and/or foothills north of San Bernardino); presumed to be extirpated. Also occurs in Arizona and Mexico. Blooms from March	A	There is no suitable habitat in the BSA for this species. This species is presumed extirpated in San Bernardino County.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			– April.		
Parish's gooseberry	***Ribes divaricatum* var. *parishii***	CRPR 1A	Perennial deciduous shrub; California endemic. Occurs in riparian woodland in willow swales. From 210-980 feet elevation. Historical collections from Los Angeles and San Bernardino counties. Presumed extinct. Blooms from February – April.	A	This species is presumed extinct. There is no suitable habitat for this species within the BSA.
Parish's oxytheca	***Acanthoscyphus parishii* var. *parishii***	CRPR 4.2	Annual herb; California endemic. Occurs in sandy or gravelly soils in chaparral and lower montane coniferous forest habitats. Elevation 4,000-8,530 feet. Known from Los Angeles, San Bernardino, and Ventura counties. Blooms from June – September.	A	The Project site is below the minimum elevation range for this species.
Parish's rupertia	***Rupertia rigida***	CRPR 4.3	Perennial herb. Occurs in chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, pebble (pavement) plain, and valley and foothill grassland habitats from 2,295-8,200 feet elevation. Known from Los Angeles, Riverside, San Bernardino, and San Diego counties. Also occurs in Baja California. Blooms from June – August.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Parish's yampah	***Perideridia parishii* ssp. *parishii***	CRPR 2.2	Perennial herb. Occurs in wetlands, meadows and seeps, and margins of streambeds of lodgepole forest, red fir forest, yellow pine forest, and wetland-riparian. In California, known only from San Bernardino County from 4,800-9,810	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			feet elevation. Also occurs in Arizona, New Mexico, and Nevada. Blooms from June – August.		
Parry's spineflower	***Chorizanthe parryi* var. *parryi***	CRPR 1B.1	Annual herb; California endemic. Occurs within coastal scrub and chaparral on dry slopes and flats; sometimes at the interface of two vegetation types, such as chaparral and oak woodland. Found on dry sandy or rocky soils in openings. From 130-5,590 feet elevation. Known only from Riverside and San Bernardino counties and possibly extending into Los Angeles County. Blooms from April – June.	A	There is no suitable habitat in the BSA for this species.
Parry's sunflower	***Hulsea vestita* ssp. *parryi***	CRPR 4.3	Perennial herb; California endemic. Occurs in granitic or carbonate rocky openings in pinyon and juniper and lower and upper montane coniferous forest habitats from 4,490-9,500 feet elevation. Known from Kern, Los Angeles, Mono, San Bernardino, and Ventura counties. Blooms from April – August.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Payson's jewel-flower	***Caulanthus simulans***	CRPR 4.2	Annual herb; California endemic. Occurs in sandy and granitic areas in chaparral and coastal scrub habitats from 295-7,220 feet in elevation in Riverside and San Diego counties. Blooms from February – June.	A	This species does not occur in San Bernardino County and no suitable habitat is present within the BSA.
peninsular spineflower	***Chorizanthe leptotheca***	CRPR 4.2	Annual herb. Occurs in alluvial fan and granitic areas in chaparral, coastal scrub, and lower montane coniferous forest	A	There is no suitable habitat in the BSA for this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			habitats from 980-6,230 feet in elevation. In California, occurs in Riverside, San Bernardino, and San Diego counties. Blooms from May – August.		
Peruvian dodder	***Cuscuta obtusiflora* var. *glandulosa***	CRPR 2.2	Annual herb/vine. Occurs in freshwater marshes and swamps from 50-920 feet elevation. Known from Butte, Los Angeles, Merced, Sacramento, San Bernardino, Sonoma, and Sutter counties. Also occurs in Texas and Mexico. Blooms from July – October.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
pine green-gentian	***Frasera neglecta***	CRPR 4.3	Perennial herb; California endemic. Occurs in lower and montane coniferous forest and pinyon and juniper woodland habitats from 4,590-8,200 feet elevation. Known from Kern, Los Angeles, Santa Barbara, San Bernardino, and Ventura counties. Blooms from May – July.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Plummer's mariposa-lily	***Calochortus plummerae***	CRPR 4.2	Perennial bulbiferous herb; California endemic. Occurs in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forests, and valley and foothill grasslands in sandy or rocky areas of granitic or alluvial material. Known from the Santa Monica Mountains to San Jacinto Mountains in Riverside, San Bernardino, Orange, Los Angeles, and Ventura counties at 328-5,580 feet elevation. Blooms from May – July.	A	There is no suitable habitat in the BSA for this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
prairie wedge grass	***Sphenopholis obtusata***	CRPR 2.2	Perennial herb. Occurs in mesic areas in cismontane woodland and meadow and seep habitats from 984-6,560 feet elevation. Known from Amador, Fresno, Inyo, Mono, Riverside, San Bernardino, San Diego (?), Stanislaus, and Tulare counties. Also occurs in Arizona, Colorado, Idaho, New Mexico, Nevada, Oregon, Texas, Utah, Washington, Wyoming, and Mexico. Blooms from April – July.	A	There is no suitable habitat in the BSA for this species.
Pringle's monardella	***Monardella pringlei***	CRPR 1A	Annual herb; California endemic. Occurs on sandy hills in coastal sage scrub at 980-1,300 feet elevation. Known only from two occurrences west of Colton; last seen in 1941. Historically occurred in Riverside and San Bernardino counties. Presumed extinct. Blooms from May – June.	A	This species is presumed extinct. There is no suitable habitat for this species within the BSA.
Robinson's pepper-grass	***Lepidium virginicum* var. *robinsonii***	CRPR 4.3	Annual herb. Occurs in chaparral and coastal scrub from sea level to 2,900 feet elevation. Known from Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Presumed extirpated from Santa Barbara County. Also occurs in Baja California. Blooms from January – July.	A	There is no suitable habitat in the BSA for this species.
round-leaved filaree	***California macrophylla***	CRPR 1B.1	Annual herb. Restricted to open cismontane woodland and valley and foothill grassland habitats on very friable	A	There is no suitable habitat for this species within the BSA. There are no current

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			deep clay soils at elevations between 50-6,560 feet. Occurs in 29 counties in California, including Los Angeles and Riverside. No occurrences are reported for San Bernardino County. Blooms from March – May.		records of this species occurring in San Bernardino County.
salt marsh bird's-beak	***Chloropyron maritimum* ssp. *maritimum***	FE SE CRPR 1B.2	Annual herb. Occurs in coastal dunes and coastal salt marshes and swamps from sea level to 100 feet elevation. Known from Los Angeles, Orange, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura counties. Also occurs in Baja California. Blooms from May – October.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Salt Spring checkerbloom	***Sidalcea neomexicana***	CRPR 2.2	Perennial herb. Occurs in alkaline springs and brackish marshes below 5,000 feet elevation. In California, known only from Kern, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Believed extirpated from Los Angeles County. Also known from Arizona, Colorado, Idaho, New Mexico, Nevada, Oregon, Texas, Utah, Wyoming, and Mexico. Blooms from March – June.	A	There is no suitable habitat in the BSA for this species.
San Bernardino aster	***Symphyotrichum defoliatum***	CRPR 1B.2	Perennial rhizomatous herb; California endemic. Occurs in vernally wet sites (such as ditches, streams, and springs) in many plant communities below 6,700 feet elevation. Known from Imperial, Kern, San Bernardino, Los Angeles, Orange,	A	There is no suitable habitat in the BSA for this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			Riverside, and San Diego counties. May also occur in San Luis Obispo County. Blooms from July – November.		
San Bernardino Mountains owl's-clover	***Castilleja lasiorhyncha***	CRPR 1B.2	Annual herb; California endemic. Occurs in mesic to drying soils in open areas of stream and meadow margins or margins of vernally wet areas in meadows, chaparral, pebble plains, and upper montane coniferous forest at 4,300-7,900 feet elevation. Known from San Bernardino and San Diego counties, and historically from Riverside County. Blooms from May – August.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
San Diego ambrosia	***Ambrosia pumila***	FE CRPR 1B.1	Perennial rhizomatous herb. Occurs in open habitats in coarse substrates near drainages and in upland areas on clay slopes or on the dry margins of vernal pools. This species occurs in a variety of associations dominated by sparse grasslands or marginal wetland habitats such as river terraces, pools, and alkali playas. Known from western San Diego County, southwestern Riverside County, and Baja California from 70-1,400 feet elevation. Blooms from April – October.	A	This species has not been documented to occur in San Bernardino County. There is only marginal habitat for this species within the BSA.
San Diego sagewort	***Artemisia palmeri***	CRPR 4.2	Perennial deciduous shrub. Occurs in sandy, mesic areas in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland habitats from 50-3,000	A	This species has not been documented to occur in San Bernardino County and no suitable habitat occurs

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			feet in elevation. In California, occurs in San Diego County. Blooms from February – September.		within the BSA.
San Gabriel ragwort	***Senecio astephanus***	CRPR 4.3	Perennial herb; California endemic. Occurs on rocky slopes in coastal bluff scrub and chaparral habitats from 1,310-4,920 feet elevation. Known from Kern, Los Angeles, Monterey, Santa Barbara, San Bernardino, San Diego, and San Luis Obispo counties. Blooms from May – July.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
San Jacinto Valley crownscale	***Atriplex coronata* var. *notatior***	FE CRPR 1B.1	Annual herb; California endemic. Occurs primarily in floodplains (seasonal wetlands) dominated by alkali scrub, alkali playas, vernal pools, and to a lesser extent alkali grasslands. Restricted to highly alkaline, silty-clay soils in association with the Traver- Domino-Willows soil association; the majority (approximately 80%) of the populations are associated with the Willows soil series. Occurs in Kern and Riverside counties from 456-1,640 feet elevation. Blooms from April – August.	A	There is no suitable alkali habitat for this species within the BSA. There are no current records of this species occurring in San Bernardino County.
Santa Ana River woollystar	***Eriastrum densifolium* ssp. *sanctorum***	FE SE CRPR 1B.1	Perennial herb; California endemic. Occurs in chaparral and coastal scrub in sandy soils of floodplains and terraced fluvial deposits of the Santa Ana River and larger tributaries (Lytle and Cajon Creeks, lower portions of City and Mill Creeks) in San Bernardino and Riverside counties.	A	There is no suitable habitat in the BSA for this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			Historically occurred in Orange County. From 299-2,001 feet elevation. Blooms from April – September.		
silver-haired ivesia	***Ivesia argyrocoma* var. *argyrocoma***	CRPR 1B.2	Perennial herb. Occurs in pebble-plain, alkaline meadows and seeps, and upper montane coniferous forest from 4,800-9,710 feet elevation. Occurs in San Bernardino County and Baja California. Blooms from June – August.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
singlewhorl burrobrush	***Ambrosia monogyra***	CRPR 2.2	Perennial shrub. Sandy soils in washes and ravines in chaparral and desert scrub below 1,640 feet elevation. In California, known from Riverside, San Bernardino, and San Diego counties. Also occurs in Arizona, New Mexico, Nevada, Texas, and Mexico. Blooms from August – November.	A	No suitable chaparral or desert scrub habitat is present within the BSA.
slender-horned spineflower	***Dodecahema leptoceras***	FE SE CRPR 1B.1	Annual herb; California endemic. Occurs within chaparral and coastal scrub (alluvial fan sage scrub) in sandy, cobbly riverbed alluvium. Found on flood-deposited terraces and washes; associates include *Encelia*, *Dalea*, *Lepidospartum*, and other native annual species and is often associated with cryptogamic soil crusts composed of bryophytes, algae and/or lichens. Known only from Los Angeles, Riverside, and San Bernardino counties at 656-2,490 feet elevation. Blooms from April – June.	A	There is no suitable habitat in the BSA for this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
small-flowered morning-glory	***Convolvulus simulans***	CRPR 4.2	Annual herb. Occurs in openings in chaparral, coastal scrub, and valley and foothill grassland habitats in clay and serpentine seep areas from 98-2,300 feet in elevation. Blooms from March – July.	A	There is no suitable habitat in the BSA for this species.
smooth tarplant	***Centromadia pungens* ssp. *laevis***	CRPR 1B.1	Annual herb; California endemic. Occurs in alkaline areas in chenopod scrub, meadows, playas, riparian woodland, and valley and foothill grassland below 1,600 feet elevation. Known from Riverside, San Bernardino, and San Diego counties. Blooms from April – September.	A	There is no suitable habitat for this species within the BSA.
snake cholla	***Cylindropuntia californica* var. *californica***	CRPR 1B.1	Perennial stem succulent. Occurs in chaparral and coastal scrub habitats from 100-490 feet in elevation. Blooms from April – May.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Sonoran maiden fern	***Thelypteris puberula* var. *sonorensis***	CRPR 2.2	Perennial rhizomatous herb. Found in meadows and seeps and wetland-riparian from 170-2,000 feet elevation. Known from San Jacinto Mountains and San Gabriel Mountains west in Riverside, San Bernardino, and Los Angeles counties. Also occurs in Santa Barbara County, Arizona, and Mexico. Blooms from January – September.	A	There is no suitable habitat in the BSA for this species.
Southern California black walnut	***Juglans californica***	CRPR 4.2	Perennial deciduous tree; California endemic. Locally common below 4,500 feet elevation on slopes and in canyons in	A	There is no suitable habitat in the BSA for this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			chaparral, cismontane woodlands, and coastal scrub habitats. Occurs in Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura counties. Blooms from March – August.		
southern jewel-flower	***Streptanthus campestris***	CRPR 1B.3	Perennial herb. Open rocky areas in chaparral, lower montane coniferous forest, and pinyon-juniper woodland at 2,950-7,545 feet elevation. In California, known from Imperial, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura counties. Also occurs in Mexico. Blooms from April – July.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
Southern Sierra woolly sunflower	***Eriophyllum lanatum* var. *obovatum***	CRPR 4.3	Perennial herb; California endemic. Occurs in sandy loam soils in lower and upper montane coniferous forest habitats from 3,655-8,200 feet elevation. Known from Fresno, Kern, San Bernardino, and Tulare counties. Blooms from June – July.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
thread-leaved brodiaea	***Brodiaea filifolia***	FT SE CRPR 1B.1	Perennial bulbiferous herb; California endemic. Usually occurs on clay or is associated with vernal pools or alkaline flats; occasionally occurs in vernally moist sites in fine soils (clay loam, silt loam, fine sandy loam, loam, loamy fine sand). Typically associated with needlegrass or alkali grassland or vernal pools. Also occurs in chaparral openings, cismontane woodlands, coastal scrub, playas, and	A	There is no suitable habitat or soils for this species within the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
			valley and foothill grasslands. Known from Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties below 2,800 feet elevation. Blooms from March – June.		
urn-flowered alumroot	***Heuchera caespitosa***	CRPR 4.3	Perennial rhizomatous herb; California endemic. Occurs in rocky areas in cismontane woodland, montane riparian forest, and lower and upper montane coniferous forest habitats from 3,790-8,690 feet elevation. Known from Kern, Los Angeles, San Bernardino, and Ventura counties. Blooms from May – August.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.
western spleenwort	***Asplenium vespertinum***	CRPR 4.2	Perennial rhizomatous herb. Occurs in rocky areas in chaparral, coastal scrub, and cismontane woodlands habitats. Known from Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties from 590-3,280 feet elevation. Also occurs in Baja California. Blooms from February – June.	A	There is no suitable habitat for this species within the BSA. Rocky areas within the BSA consist mostly of riverwash rock, which does not provide suitable attachment points.
white-bracted spineflower	***Chorizanthe xanti* var. *leucotheca***	CRPR 1B.2	Annual herb; California endemic. Occurs in sandy or gravelly soils in Mojave desert scrub, pinyon and juniper woodland, and coastal scrub habitats from 900-4,000 feet elevation. Reported from Los Angeles, Riverside, San Bernardino, and San Diego counties. Blooms from April – June.	A	There is no suitable habitat in the BSA for this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale
woolly chaparral-pea	***Pickeringia montana* var. *tomentosa***	CRPR 4.3	Evergreen shrub. Occurs in gabbroic, granitic, and clay soils in chaparral habitats from sea level to 5,580 feet elevation. Known from Los Angeles, Orange, Riverside (?), San Bernardino, and San Diego counties. Also occurs in Baja California. Blooms from May – August.	A	There is no suitable habitat in the BSA for this species.
Wright's trichocoronis	***Trichocoronis wrightii* var. *wrightii***	CRPR 2.1	Annual herb. Found in alkaline vernal pools, meadows and seeps, marshes and swamps, and riparian forest habitats from 16-1,430 feet elevation. Known from Merced and Riverside counties. Historical occurrences from Colusa, San Joaquin, and Sutter counties. Also occurs in Texas and Mexico. Blooms from May – September.	A	There is no suitable habitat in the BSA for this species.
Yucaipa onion	***Allium marvinii***	CRPR 1B.1	Perennial bulbiferous herb; California endemic. Occurs in openings and clay soils in chaparral habitats from 2,490-3,490 feet in elevation in Riverside and San Bernardino counties. Blooms from April – May.	A	The Project site is outside the elevation range for this species. No suitable habitat is present within the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Rationale

<u>Notes:</u>

Potential for Occurrence:

A: Absent

HP: Habitat Present

P: Present

Federal Designations: (Federal Endangered Species Act, USFWS)

FE: Federal listed, endangered

FT: Federal listed, threatened

State Designations: (California Endangered Species Act, CDFW)

SE: State listed, endangered

ST: State listed, threatened

SR: State Rare

California Rare Plant Rank (CRPR) Lists:

CRPR 1A: Are presumed extinct because they have not been seen or collected in the wild in California for many years.

CRPR 1B: Rare throughout their range with the majority of them endemic to California.

CRPR 2: Rare within California but common outside of the state.

CRPR 3: Insufficient information to assign plant to one of the other ranks or reject them.

CRPR 4: Limited distribution or infrequent throughout a broader area of California.

CRPR THREAT CODE

.1- Seriously threatened in California

.2- Fairly threatened in California

.3- Not very threatened in California

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APPENDIX H. Special-Status Wildlife Species Potential for Occurrence within the BSA

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
INSECTS					
Andrew's marble butterfly	***Euchloe hyantis andrewsi***	SA	Occurs in yellow pine forest near Lake Arrowhead and Big Bear Lake in the San Bernardino Mountains at 5,000-6,000 feet elevation. Host plants are *Streptanthus bernardinus* and *Arabis holboelii* var. *pinetorum*. Larval foodplant is *Descurainia richardsonii*.	A	Suitable yellow pine forest and host plants are absent from the BSA.
Busck's gallmoth	***Carolella busckana***	SA	Species habitat information is limited. Native to California. Occurs in riparian habitat with oaks, sycamores, ferns and coastal scrub sand dunes from San Bernardino to Los Angeles county.	A	Suitable habitat is absent from the BSA.
Delhi Sands flower-loving fly	***Rhaphiomidas terminatus abdominalis***	FE	Restricted to Delhi series sands in western Riverside and San Bernardino counties.	A	Suitable Delhi sands are absent from the BSA.
desert cuckoo wasp	***Ceratochrysis longimala***	SA	Found in juniper habitats. California endemic species that occurs in the South Coast and Central Coast Regions.	A	Suitable juniper habitat is absent from the BSA.
FISHES					
arroyo chub	***Gila orcuttii***	SSC	Occurs in perennial streams or intermittent streams with permanent pools and slow water sections of streams with mud or sand substrates. Spawning occurs in pools. Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita river systems; introduced in Santa Ynez, Santa Maria, Cuyama, and Mojave river systems and smaller coastal streams.	A	Suitable habitat is absent from the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
Santa Ana speckled dace	***Rhinichthys osculus* ssp. *3***	SSC	Found in the headwaters of the Santa Ana and San Gabriel river drainages. Occurs in riffles in small streams and shore areas with abundant gravel and rock. Speckled dace occupy many isolated western drainages and have diversified into numerous subspecies, with those in swift water taking on streamlined forms, while those in slower water are relatively chubby and small finned.	A	Suitable habitat is absent from the BSA.
Santa Ana sucker	***Catostomus santaanae***	FT SSC	Occurs in stream channels with a mosaic of loose sand, gravel, cobble, and boulder substrates in riffles, runs, pools, and shallow sandy stream margins with cool, running water. Historical range included the Los Angeles, San Gabriel, and Santa Ana river drainage systems in southern California. An introduced population also occurs in the Santa Clara River drainage system.	A	Suitable habitat is absent from the BSA.
AMPHIBIANS AND REPTILES					
Arroyo toad	***Anaxyrus californicus***	FE	Found in freshwater washes, streams, arroyos, and adjacent uplands in riparian woodlands with shallow gravelly pools with sandy terraces.	A	Suitable habitat is absent from the BSA.
California mountain kingsnake (San Bernardino population)	***Lampropeltis zonata (parvirubra)***	SSC	Inhabits a wide range of habitats, including coastal sage scrub, chaparral, coniferous forest, oak-pine woodlands, riparian woodland, and manzanita. Often found in wooded areas near a stream with rock outcrops, talus or rotting logs that have sun exposure. Found in mountain ranges from northern Baja California to southern Washington from near sea level to 9,000 feet	A	Suitable habitat is absent from the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
			elevation. In southern California, occurs in the San Gabriel, San Bernardino, San Jacinto, Santa Monica, and Santa Ana mountains.		
California red-legged frog	***Rana draytonii***	FT SSC	Inhabits streams with slow-moving water and deep pools, with dense, shrubby riparian vegetation at pool edges. Occurs in foothills surrounding the Sacramento Valley and coastal streams from Marin County to northwestern Baja California. Believed to be extirpated between Los Angeles County and the Mexican border.	A	Suitable habitat is absent from the BSA.
coast horned lizard	***Phrynosoma blainvillii***	SSC	Occurs in coastal sage scrub, open chaparral, riparian woodland, and annual grassland habitats that support adequate prey species, primarily harvester ants (*Pogonomyrmex* spp.). Prefers open country, especially with sandy areas, washes, and floodplains. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs in Siskiyou County, in the Central Valley and adjacent foothills below 4,000 feet elevation, in coastal areas of central California, and in non-desert areas of southern California below 6,000 feet elevation, and throughout the Baja California Peninsula.	A	Suitable habitat is absent from the BSA.
coastal whiptail	***Aspidoscelis tigris stejnegeri***	SA	Occurs in a wide variety of habitats in coastal and inland valleys and foothills, including coastal sage scrub, sparse grassland, and riparian woodland. Found from Ventura County to Baja California.	A	Suitable habitat is absent from the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
orange-throated whiptail	***Aspidoscelis hyperythra***	SSC	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food source, termites. Occurs in Riverside, Orange, and San Diego counties west of the crest of the Peninsular Ranges, in extreme southern San Bernardino County near Colton, and in Baja California.	A	Suitable habitat is absent from the BSA.
red-diamond rattlesnake	***Crotalus ruber***	SSC	Inhabits desert scrub, thornscrub, open chaparral, and woodland; occasionally found in grassland and cultivated areas. Prefers rocky areas and dense vegetation. Occurs in Morongo Valley in San Bernardino and Riverside counties to the west and south into Mexico.	A	Suitable habitat is absent from the BSA. Rocky densely vegetated areas are not present within the BSA.
rosy boa	***Lichanura trivirgata***	SA	Occurs in rocky areas in chaparral or scrub habitats or immediately adjacent to oak woodlands; also found in rocky riparian areas. Occurs in Los Angeles County, southwestern San Bernardino County, south through western Riverside County, and San Diego County into Baja California.	A	Suitable habitat is absent from the BSA.
San Bernardino ringneck snake	***Diadophis punctatus modestus***	SA	Found along drainage courses, in mesic chaparral and oak and walnut woodland communities. Occurs in moist habitats of southwestern California from approximately Ventura to Orange counties.	A	Suitable habitat is absent from the BSA. Oak or walnut woodlands are not present within the BSA.
San Gabriel slender salamander	***Batrachoseps gabrieli***	SA	Found under rocks, wood, fern fronds and on soil at the base of talus slopes. This salamander is most active on the surface in	A	Suitable habitat for this species is absent within the BSA. The BSA is below

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
			winter and early spring. Known only from the San Gabriel Mountains at elevations from 2,800-7,800 feet.		the elevation range of this species.
southern mountain yellow-legged frog	***Rana muscosa***	FE SE	Endemic to California. Inhabits lakes, meadow streams, isolated pools, and sunny riverbanks in the Sierra Nevada Mountains and Transverse Ranges from 1,210-12,010 feet elevation. Occurs in open stream and lake edges; a gentle slope up to a depth of 2-3inches seems to be preferred. Rarely occurs where predatory fishes have been introduced.	A	Suitable habitat is absent from the BSA.
silvery legless lizard	***Anniella pulchra pulchra***	SSC	Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces. Soil moisture is essential; prefers sandy or loose loamy soils with a high moisture content.	A	Suitable habitat is absent from the BSA. Friable soils with a high moisture content are not present within the BSA.
southern rubber boa	***Charina umbratica***	ST	Occurs near rock outcrops and woody debris in montane coniferous forest. Found in the San Bernardino and San Jacinto mountains from 5,000-8,000 feet elevation.	A	Suitable habitat for this species is absent within the BSA. The Project site is below the elevation range of this species.
two-striped garter snake	***Thamnophis hammondii***	SSC	Highly aquatic. Found in or near permanent freshwater, often along streams with rocky beds and riparian growth. Occurs from Coastal California from the vicinity of Salinas to northwest Baja California from sea-level to about 7,000 feet elevation.	A	Suitable habitat is absent from the BSA.
western spadefoot	***Spea hammondii***	SSC	Occurs in grasslands and occasionally hardwood woodlands. This species is largely terrestrial but requires rain pools or other ponded water persisting at least three weeks for breeding. Burrows in loose soils during	A	Suitable habitat is absent from the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
			the dry season. Occurs in the Central Valley and adjacent foothills, the non-desert areas of southern California, and Baja California.		
BIRDS					
bald eagle	***Haliaeetus leucocephalus***	FD SE *(Nesting and wintering)*	Occurs in areas with large isolated trees (free from human disturbances) near open water bodies that support an adequate food supply, such as fish, birds, or small mammals.	A	Suitable habitat is absent from the BSA.
Bell's sage sparrow	***Amphispiza belli belli***	WL	Occupies chaparral and coastal sage scrub from west central California to northwestern Baja California.	A	Suitable habitat is absent from the BSA. Coastal sage scrub and open chaparral habitat is not found in the BSA.
burrowing owl	***Athene cunicularia***	SSC *(Burrow sites and some wintering sites)*	Occurs in open annual grasslands or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation in open country in much of North and South America. Also found in agricultural and range lands, railroad rights-of-way, and margins of highways, golf courses, and airports. Usually occupies ground squirrel burrows but will also utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles.	A	Suitable habitat is absent from the BSA.
California horned lark	***Eremophila alpestris actia***	WL	Occurs in open grasslands and fields, agricultural areas, and open montane grasslands. This subspecies is resident from northern Baja California northward throughout non-desert areas to Humboldt County, including the San Joaquin Valley and	HP	Limited suitable habitat is present within the open fields located in the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
			the western foothills of the Sierra Nevada (north to Calaveras County). Prefers bare ground such as plowed or fall-planted fields for nesting, but may also nest in marshy soil. During the breeding season, this is the only subspecies in non-desert southern California; however, from September through April or early May, other subspecies visit the area.		
coastal California gnatcatcher	***Polioptila californica californica***	FT SSC	Inhabits coastal sage scrub vegetation on mesas, arid hillsides, and in washes. Nests almost exclusively in California sagebrush. Occurs in low-lying foothills and valleys in cismontane southwestern California and Baja California.	A	Suitable habitat is absent from the BSA.
Cooper's hawk	***Accipiter cooperii***	WL *(Nesting)*	Occurs in woodland habitats, chiefly in areas that are open, interrupted or marginal, including natural areas as well as human-created habitats such as plantations and ornamental trees in urban landscapes. Nest primarily in riparian growths of tall (20-60 feet), deciduous trees in extensive forested areas, generally woodlots of 10-20 acres with canopy closure of greater than 60%. Occasionally nests in isolated trees in more open areas. Forages in a wide range of habitats, but primarily in forests and woodlands.	HP	Suitable habitat is present within the large trees dispersed throughout the BSA.
ferruginous hawk	***Buteo regalis***	WL *(Wintering)*	Forages in open fields, grasslands and agricultural areas, sagebrush flats, desert scrub, fringes of pinyon-juniper habitats, and other open country in western North America.	HP	Limited suitable foraging habitat is present within the open fields within the BSA.
golden eagle	***Aquila chrysaetos***	FP	Occurs in open deserts, grasslands, or oak	A	Suitable habitat is absent

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
		WL *(Nesting and wintering)*	savannas found within mountainous regions and canyons, and to a lesser extent oak woodlands and open shrublands.		from the BSA.
Lawrence's goldfinch	***Spinus lawrencei***	SA *(Nesting)*	Usually inhabits oak woodlands, but also uses chaparral, riparian woodlands, coastal scrub, forests, pinyon-juniper woodlands, plantings of cypress, cedars, or junipers, tall weedy and adjacent rural residential areas. A water source such as a stream, small lake, or farm pond within 0.3 mile is probably required. Nests throughout much of the non-desert portion of California and Baja California.	A	Suitable habitat is absent from the BSA.
Least Bell's vireo	***Vireo bellii pusillus***	FE SE	Resides in low riparian areas close to water or dry river beds. Nests are usually constructed in bushes or within the branches of willows, mule fat, and mesquite (*Prosopis* spp.). The most critical structural component of this species habitat in California is a dense shrub layer 2-10 feet above ground. Generally occurs below an elevation of 2,000 feet. Nests from central California to northern Baja California. Winters in southern Baja California.	A	Suitable habitat is absent from the BSA.
loggerhead shrike	***Lanius ludovicianus***	SSC *(Nesting)*	Occurs in broken woodlands, savannah, pinyon-juniper, Joshua tree and riparian woodlands, and desert oasis scrub and washes. Prefers open country with short vegetation for hunting, with perches for scanning and fairly dense shrubs and brush for nesting. Will also inhabit human-created habitats, including pastures, old orchards,	A	Suitable habitat is absent from the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
			cemeteries, and golf courses.		
southern California rufous-crowned sparrow	***Aimophila ruficeps canescens***	WL	Inhabits steep, rocky coastal sage scrub and open chaparral habitats, particularly scrubby areas mixed with grasslands. Occurs from Santa Barbara County to northwestern Baja California.	A	Suitable habitat is absent from the BSA. Rocky coastal sage scrub and open chaparral habitat is not found in the BSA.
southwestern willow flycatcher	***Empidonax traillii extimus***	FE SE	Occurs in riparian woodlands along streams and rivers with mature, dense stands of willows, cottonwoods or smaller spring fed or boggy areas with willows or alders. Breeds in relatively dense riparian habitats from near sea level to over 8,530 feet elevation in the southwestern U.S. and (formerly?) northwestern Mexico. Winters in Central and South America.	A	Suitable habitat and structure are absent with the BSA.
Swainson's hawk	***Buteo swainsoni***	ST *(Nesting)*	Preferred habitats include riparian, cropland/hedgerow, desert, grassland/herbaceous, savanna, and mixed woodland. Often nests within one mile of riparian zones.	A	Suitable habitat is absent from the BSA.
tricolored blackbird	***Agelaius tricolor***	SSC *(Nesting Colony)*	Occurs in open country in western Oregon, California, and northwestern Baja California. Breeds near freshwater, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow (*Salix* spp.), blackberry (*Rubus* spp.), wild rose (*Rosa* spp.), tall herbs and forages in grassland and cropland habitats. Seeks cover for roosting in emergent wetland vegetation, especially cattails (*Typha* spp.) and tules (*Scirpus* spp.), and also in trees and shrubs.	A	Suitable habitat is absent from the BSA.
western yellow-billed	***Coccyzus americanus***	FC	Breeds and nests in extensive stands of dense	A	Suitable habitat is absent

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cuckoo	***occidentalis***	SE	cottonwood/willow riparian forest along broad, lower flood bottoms of larger river systems at scattered locales in western North America. Winters in South America.		from the BSA.
white-faced ibis	***Plegadis chihi***	WL *(Nesting/ Rookery Site)*	Occurs in freshwater wetlands in temperate and tropical North and South America. Usually nests in emergent vegetation or low trees and shrubs over shallow water.	A	Suitable habitat is not present within the BSA. No perennial freshwater wetlands occur within the BSA.
white-tailed kite	***Elanus leucurus***	FP	A strongly lowland species that is rare at elevations above 2,000 feet in California. Forages in open country and nests in trees and large shrubs near foraging areas in savannahs and at edges between open habitat and woodland or forest areas.	A	Suitable habitat is absent from the BSA.
yellow-breasted chat	***Icteria virens***	SSC *(Nesting)*	Inhabits riparian thickets of willow in brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America.	A	Suitable habitat is absent from the BSA.
yellow warbler	***Setophaga petechia brewsteri***	SSC *(Nesting)*	Occurs in wetlands and mature riparian woodlands dominated by cottonwoods (*Populus* spp.), alders (*Alnus* spp.), and willows while nesting in the western U.S. and northwestern Baja California. More widespread in brushy areas and woodlands during migration and winter, when occurring from western Mexico to northern South America. Migrants belonging to other subspecies are widespread and common.	A	Suitable habitat is absent from the BSA.
MAMMALS					
American badger	***Taxidea taxus***	SSC	Primary habitat requirements are believed to	A	Suitable habitat is absent

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
			be sufficient food (burrowing mammals) and friable soils in relatively open uncultivated ground in grasslands, woodlands, and desert habitats. Most abundant in drier open stages of habitats. Widely distributed in North America.		from the BSA.
lesser long-nosed bat	***Leptonycteris yerbabuenae***	FE	Occurs in southwestern desert habitats. Diet consists entirely of fruit and nectar from night-blooming cacti.	A	Suitable desert habitat and food source are absent from the BSA.
Los Angeles pocket mouse	***Perognathus longimembris brevinasus***	SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in the Los Angeles basin. Prefers open ground with fine sandy soil for burrowing, but has been found on gravel washes and stony soils. May not dig extensive burrows but rather hide under weeds and dead leaves instead. Found in Los Angeles, Riverside, and San Bernardino counties.	A	Suitable habitat is absent from the BSA.
northwestern San Diego pocket mouse	***Chaetodipus fallax fallax***	SSC	Inhabits coastal scrub, chaparral, grassland, and sagebrush habitats in sandy, herbaceous areas, usually in association with rocks or coarse gravel. Occurs from Los Angeles County through southwestern San Bernardino, western Riverside, and San Diego counties to northern Baja California.	A	Suitable habitat is absent from the BSA.
pallid bat	***Antrozous pallidus***	SSC	Occurs in deserts, grasslands, shrublands, woodlands, and forests in western North America. Most common in open dry habitats with rocky areas for roosting. Roost sites must be protected from high temperatures. Day roosts include caves, crevices, mines and occasionally hollow trees and buildings.	HP	Suitable habitat is present within the BSA, primarily within the crevices and weep holes of the SR-210 Base Line overcrossing.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
			Night roosts can include more open sites, such as porches and open buildings. Hibernation sites are probably rock crevices.		
pocketed free-tailed bat	***Nyctinomops femorosaccus***	SSC	Occurs in a variety of arid areas in southern California, including pine-juniper woodlands, desert oasis, desert wash, and desert riparian. Roosts in high rock cliffs, crevices, and rock outcrops. Forages primarily on large moths, especially over water. Found from the southwestern United States to central Mexico.	A	Suitable habitat is absent within the BSA.
San Bernardino flying squirrel	***Glaucomys sabrinus californicus***	SSC	Inhabits a wide variety of woodland habitats primarily consisting of conifers, mixed coniferous-deciduous forest and occasionally broadleaf- deciduous forest. Commonly found in white fir (*Abies concolor*), Coulter pine (*Pinus coulteri*), Jeffrey pine (*Pinus jeffreyi*), sugar pine (*Pinus lambertiana*), lodgepole pine forests, and ponderosa pine forest. May occur in hardwoods where old or dead trees have numerous woodpecker-type nesting holes. Requires nearby water. Occurs at elevations between 4,000-8,400 feet in the San Bernardino and San Jacinto mountains.	A	Suitable habitat is absent from the BSA. Coniferous-deciduous forest and broadleaf- deciduous forest are not found within the BSA and the Project site is below the elevation range of this species.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
San Bernardino kangaroo rat	***Dipodomys merriami parvus***	FE SSC	Typically occurs in Riversidean alluvial fan sage scrub, alluvial fans and floodplains, braided river channels, active channels and terraces, and along washes with nearby sage scrub. Inhabits areas with gravelly and sandy loam soils. Soil texture is a primary factor in this subspecies occurrence. Sandy loam substrates allow for the necessary digging of simple, shallow burrows. Occurs in San Bernardino Valley (San Bernardino County) and San Jacinto Valley (Riverside County). In San Bernardino County, this species occurs primarily in the Santa Ana River and its tributaries north of I-10, with small remnant populations in the Etiwanda alluvial fan, the northern portion of the Jurupa Mountains in the south Bloomington area, and in Reche Canyon.	A	Suitable habitat is absent from the BSA and the Project site is not located within USFWS designated Critical Habitat.
San Diego black-tailed jackrabbit	***Lepus californicus bennettii***	SSC	Inhabits a variety of habitats including herbaceous and desert scrub areas, early stages of open forest, and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino, and Santa Rosa mountain ranges.	A	Suitable habitat is absent from the BSA.
San Diego desert woodrat	***Neotoma lepida intermedia***	SSC	Found in desert scrub and coastal sage scrub habitat, especially in association with cactus patches. Builds stick nests around cacti or on rocky crevices. Occurs along the Pacific slope from San Luis Obispo County to northwest Baja California.	A	Suitable habitat is absent from the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
southern grasshopper mouse	***Onychomys torridus ramona***	SSC	Inhabits arid habitats, particularly with friable soils, and includes coastal scrub, mixed chaparral, sagebrush, low sage, bitterbrush, and grassland habitats. Occurs in arid portions of southwestern California and northwestern Baja California.	A	Suitable habitat is absent from the BSA.
Stephen's kangaroo rat	***Dipodomys stephensi***	FE ST	Found almost exclusively in open grasslands or sparse shrublands with cover of less than 50% during the summer. Avoids dense grasses and is more likely to inhabit areas where the annual forbs disarticulate in the summer and leave more open areas. Typically found in sandy and sandy loam soils with low clay to gravel content for burrowing; will sometimes utilize the burrows of other mammals. Tends to avoid rocky soils. In general, the highest abundances of species occur on gentle slopes less than 15%.	A	Suitable habitat is absent from the BSA. Open grasslands or sparse shrublands with cover of less than 50% are not present within BSA.
western mastiff bat	***Eumops perotis californicus***	SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in the crevices in vertical cliff faces, high buildings, and tunnels and travels widely when foraging.	HP	Limited suitable foraging habitat is present in the BSA. No suitable roosting habitat is present within the BSA.
western yellow bat	***Lasiurus xanthinus***	SSC	Occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats in southern California. Roosts in trees, particularly the dead fronds of palm trees. Forages over water and among trees.	HP	Suitable roosting habitat is present within the palm trees dispersed throughout the BSA.
white-eared pocket mouse	***Perognathus alticolus alticolus***	SSC	Found in ponderosa pine habitats and mixed chaparral and sagebrush habitats in the San Bernardino Mountains from 3,500-5,900 feet	A	Suitable habitat is absent from the BSA. The Project site is outside the elevation

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
			elevation. Burrows are constructed in loose sandy soils. The last reported collection of this species was in 1938 in the San Bernardino Mountains.		range of this species.

Notes:

Federal Designations: (Federal Endangered Species Act, USFWS)
FE: Federal listed, endangered
FT: Federal listed, threatened
FD: Federal delisted
CH: Critical habitat

State Designations: (California Endangered Species Act, CDFW)
SE: State listed, endangered
ST: State listed, threatened
SSC: Species of special concern
SCE: State Candidate Endangered
WL: Watch list
FP: Fully protected
SA: State special animal

Potential for Occurrence:
A: Absent
HP: Habitat present
P: Present
CH: Critical habitat

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