

**Appendix B:
Biological Resources Assessment**

Biological Resources Assessment Report 270 E. Central Avenue Project City of San Bernardino, San Bernardino County, California

Prepared for:

Xebec Realty Partners

3010 Old Ranch Parkway, Suite 470

Seal Beach, California 90013

562.546.0251

Contact: Jason Chen

Prepared by:

FirstCarbon Solutions

250 Commerce Suite 250

Irvine, CA 92602

714.508.4100

Contact: Charles Holcombe, Project Manager

Author: Christine Renfrew, Project Biologist

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ACRONYMS AND ABBREVIATIONS

CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
EO	Executive Order
EPA	United States Environmental Protection Agency
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
MBTA	Migratory Bird Treaty Act
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
RWQCB	Regional Water Quality Control Board
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

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SECTION 1: INTRODUCTION AND BACKGROUND

Xebec Realty Partners (client) requested FirstCarbon Solutions (FCS) conduct a biological resources due-diligence analysis for the approximate 5.24-acre site located at 270 E. Central Avenue. The purpose of this Biological Resources Due-Diligence Report is to describe on-site vegetation communities, identify potentially jurisdictional waters of the U.S., and to assess the potential for occurrence of special-status plant and wildlife species within the project.

1.1 - Project Location

The project is located on an approximate 5.24-acre site located in the City of San Bernardino, San Bernardino County, California (Exhibit 1). The project is mapped within the San Bernardino South, California United States Geological Survey (USGS) 7.5-minute topographic map (Exhibit 2) (USGS 2015). The project is generally located south and west of State Route 210, east of Interstate 215 (I-215), and north of I-10. The project is specifically located within Assessor's Parcel Number 0136-401-11-0 at the address 270 E. Central Avenue, City of San Bernardino, San Bernardino County, California (Exhibit 3).

1.2 - Project Description

The project proposes to build a 228,387-square-foot industrial distribution center within a light industrial zoning designation. The proposed design includes 122 automotive parking stalls, two potential offices, and a 126,995-square-foot open facility.

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Source: Census 2000 Data, The CaSIL, FCS GIS 2013.

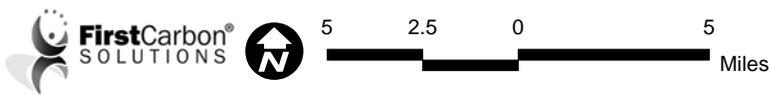
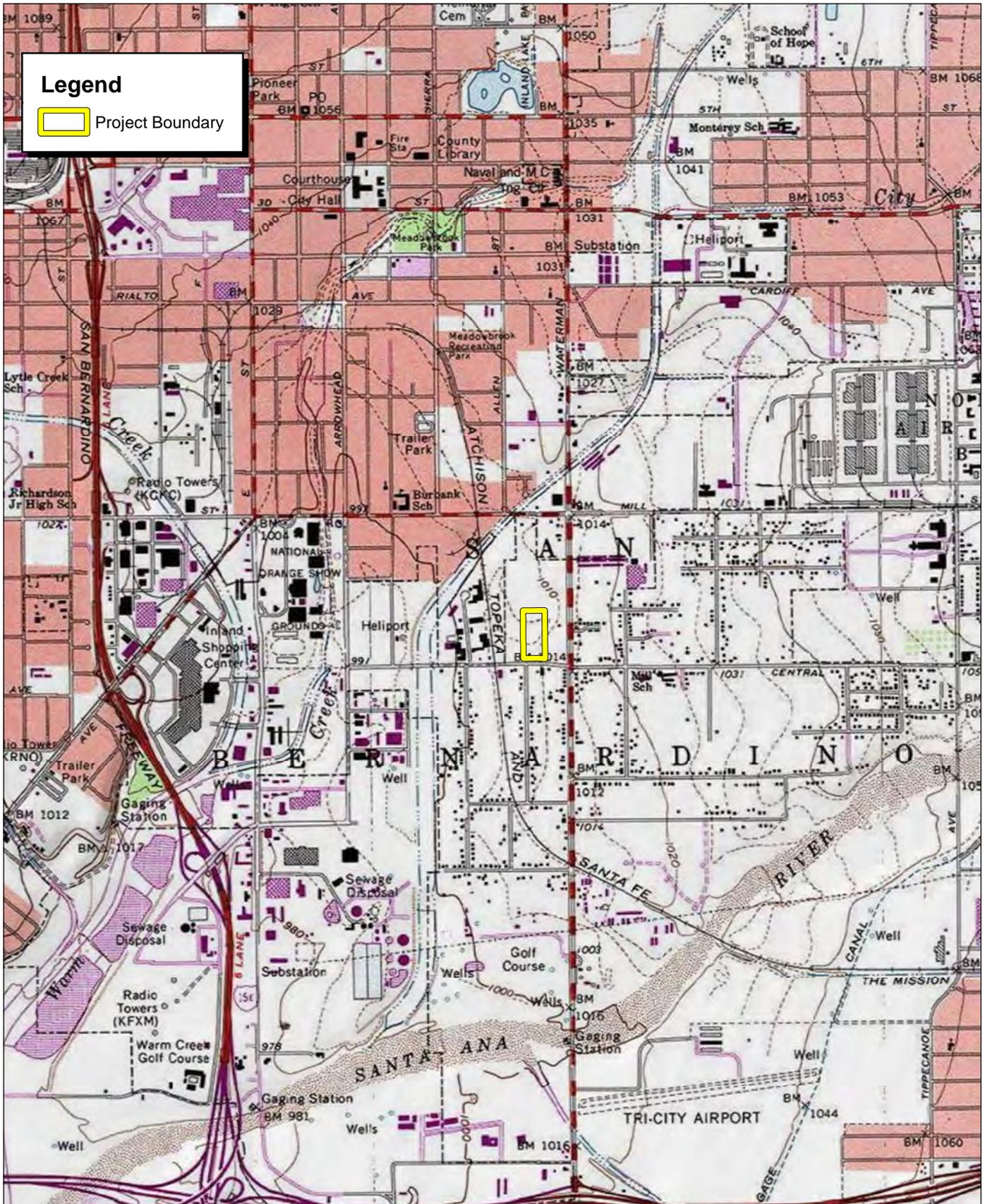


Exhibit 1 Regional Location Map

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Source: USGS San Bernardino South (1980) 7.5' Quadrangle

Exhibit 2

Local Vicinity Map
Topographic Base



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Source: ESRI Imagery, 2014



Exhibit 3
Local Vicinity Map
Aerial Base

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SECTION 2: METHODS

2.1 - Literature Search

Special-status species are commonly characterized as species at potential risk or actual risk to their persistence in a given area or across their native habitat (locally, regionally, or nationally), and are identified by a state and/or federal resource agency as such. These include governmental agencies such as California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS) or private organizations such as the California Native Plant Society (CNPS). The degree to which a species is at risk of extinction is the limiting factor on a species status designation. Risk factors to a species' or population's persistence include habitat loss, increased mortality factors (take, electrocution, roadway hazards, etc.), invasive species, and environmental toxins.

In context of environmental review, special-status species are defined by the following codes:

- Species that are listed, proposed, or candidates for listing under the Federal Endangered Species Act (FESA) (50 CFR 17.11 - listed; 61 FR 7591)
- Species that are listed or proposed for listing under the California Endangered Species Act (CESA) (Fish and Game Code [FCG] 1992 Section 2050, et seq.; 14 California Code of Regulations [CCR] Section 670.1, et seq.)
- Species that are designated as Species of Special Concern by CDFW
- Species that are designated as Fully Protected by CDFW (FCG Section 3511, Section 4700, Section 5050, Section 5515)
- Species that meet the definition of rare or endangered under California Environmental Quality Act (CEQA) (14 CCR Section 15380)

Special-status species also includes:

- Species designated as sensitive by city, county, or other regional planning documents
- Species given a status of 1A, 1B, or 2 by CNPS

The designated sensitive species listed by CNPS have no direct legal protection, but require an analysis of the significance of potential impacts under CEQA guidelines.

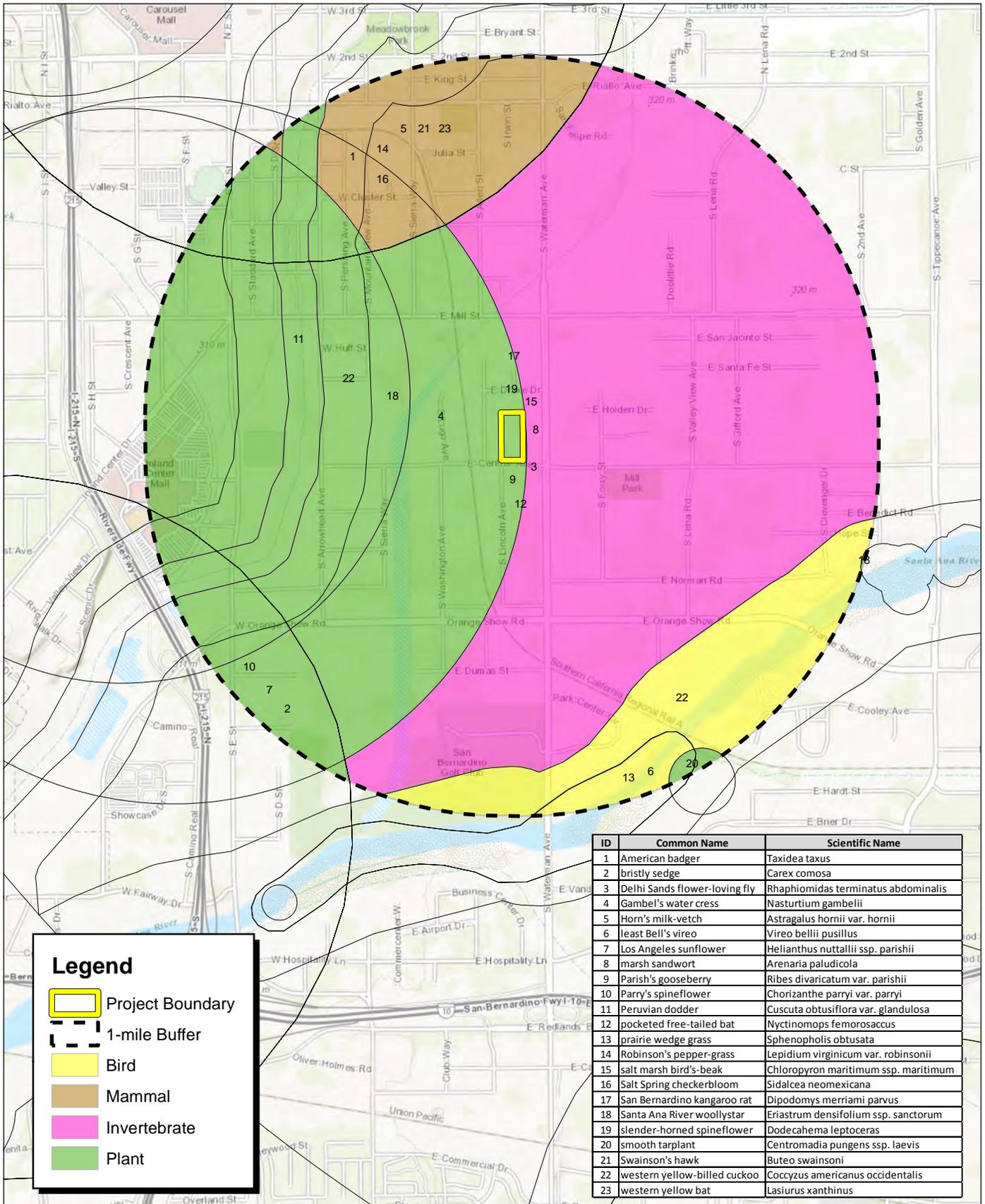
Special-status plant and wildlife species were determined from a nine-USGS quadrangle search of CDFW (2015) California Natural Diversity Database (CNDDDB), CNPS electronic inventory (CNPS 2014), and the USFWS's Information, Planning, and Conservation System (USFWS 2011) list of special-status species that are known to occur in the vicinity of the project. The results of the database searches are included in Appendix A. Each special-status species identified within the database search has been addressed individually in Table 1 and Table 2. Sensitive habitats identified in the database search are addressed individually in Table 3. The potential for each special-status species to occur within the project was assessed by known occurrences of the species within a 1-mile radius of the

project (Exhibit 4) utilizing the CDFW Biogeographic Information and Observation System online program (CDFG 2005), suitability of habitat within the project, and professional expertise.

When the USFWS lists a species as threatened or endangered under FESA, areas of habitat considered essential to its conservation and survival may be designated as critical habitat. These areas may require special consideration and/or protection because of their ecological importance. Potential critical habitat designations within the general vicinity of the project were checked using the USFWS Critical Habitat Portal (USFWS 2011).

2.2 - Field Survey

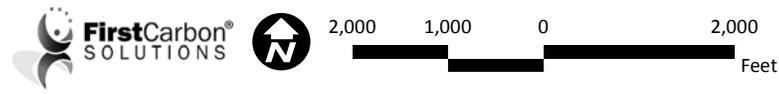
A pedestrian reconnaissance-level survey was conducted by FCS biologist Christine Renfrew on December 23, 2015 from 0945 to 1250 hours to evaluate the project for biological resources, including on-site vegetation communities, determine potentially jurisdictional waters of the U.S., and assess the potential for occurrence of special-status plant and wildlife species within the project. Vegetation communities and other biological resources were noted on an aerial photograph of the project. Photographs were taken within the project during the reconnaissance-level survey (Appendix B). All species observed within and adjacent to the project were noted in a field notebook and are included in Appendix C. Special attention was directed to portions of the survey area that may contain native vegetation, suitable habitat for sensitive plant and wildlife species, and potential waters and wetlands subject to regulatory agency jurisdiction. The undeveloped land surrounding the project was surveyed in order to confirm adjacent vegetation community/land cover types, and account for any potential indirect impacts associated with the project.



Source: ESRI

Exhibit 4

CNDDB-Recorded Occurrences of Special-status Species within 1 Mile



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Table 1: Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Ambrosia monogyra</i> singlewhorl burrobrush	—	—	2B.2	Dicot shrub found in chaparral and Sonoran desert scrub. Prefers sandy soils. Blooming period: August–November 10–500 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Ambrosia pumila</i> San Diego ambrosia	FE	—	1B.1	Dicot perennial (rhizomatous) herb found in chaparral, coastal scrub, valley and foothill grassland. Prefers sandy loam or clay soil. Persists where disturbance has been superficial. Sometimes found on margins or near vernal pools. Blooming period: April–October 20–415m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Arenaria paludicola</i> marsh sandwort	FE	SE	1B.1	Dicot perennial herb found in freshwater marsh, marsh and swamp, and wetland habitat. Prefers growing up through dense mats of <i>Typha</i> , <i>Juncus</i> , <i>Scirpus</i> , etc. in freshwater marsh. Sandy soil. Blooming period: May–August 3–170 m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Astragalus hornii</i> var. <i>hornii</i> Horn’s milk-vetch	—	—	1B.1	Dicot annual herb found in meadows and seeps, playas. Prefers lake margins and alkali sites. Blooming period: May–October 60–850m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Berberis nevinii</i> Nevin’s barberry	FE	SE	1B.1	Dicot shrub found in chaparral, cismontane woodland, coastal scrub, and riparian scrub. Prefers steep, north-facing slopes or low-grade sandy washes. Blooming period: March–June 290–1,575m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Brodiaea filifolia</i> thread-leaved brodiaea	FT	FE	1B.1	Monocot perennial herb (bulb) found in chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. Blooming period: March–June 15–1,020 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>California macrophylla</i> round-leaved filaree	—	—	1B.2	Dicot annual herb found in cismontane woodland, and valley and foothill grassland. Prefers clay soils. Blooming period: March–May 15–1,200m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Calochortus plummerae</i> Palmer’s mariposa-lily	—	—	1B.2	Dicot perennial herb (bulb) meadows and seeps, chaparral, lower montane coniferous forest. Vernal moist places in yellow-pine forest, chaparral. Blooming period: April–July 1000–2,390 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Calochortus plummerae</i> var. <i>palmeri</i> Plummer’s mariposa-lily	—	—	4.2	Monocot perennial herb found in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic alluvial material. Can be very common after fire. Blooming period: May–July 100–1,700m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Carex comosa</i> bristly sedge	—	—	2B.1	Monocot perennial grasslike (rhizomatous) herb found in marshes and swamps. Prefers lake margins and wet places. Blooming period: May–September -5–1,005m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Castilleja lasiorhyncha</i> San Bernardino Mountains owl's-clover	—	—	1B.2	Dicot annual herb (hemiparasitic) found in meadows and seeps, pebble plain, upper montane coniferous forest, chaparral, riparian woodland. Mesic to drying soils in open areas of stream and meadow margins or of vernal wet areas. Blooming period: May–August 1,300–2,390m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Centromadia pungens</i> ssp. <i>laevis</i> smooth tarplant	—	—	1B.1	Dicot in valley and foothill grassland, chenopod scrub, meadows, playas, and riparian woodland. Prefers alkali meadow, alkali scrub; also in disturbed places. Blooming period: April–September 0–640m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> salt marsh bird's beak	FE	SE	1B.2	Dicot annual herb found in coastal dunes, marsh and swamp, salt marsh, and wetlands habitats. Limited to the higher zones of the salt marsh habitat. Blooming period: May–October 0–30m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	—	—	1B.1	Dicot annual herb found in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland habitat. Prefers dry slopes and flats; sometimes at interface of two vegetation types, such as chaparral and oak woodland; dry, sandy soils. Blooming period: April–June 225–1,220m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> white-bracted spineflower	—	—	1B.2	Dicot annual herb found in Mojavean desert scrub, pinyon-juniper woodland, coastal scrub (alluvial fans). Prefers sandy or gravelly places. Blooming period: April–June 300–1,200 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	—	—	2B.2	Dicot parasitic annual herb or vine found in freshwater marshes or swamps. Blooming period: July–October 15–280m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Dodecahema leptoceras</i> slender-horned spineflower	FE	SE	1B.1	Dicot annual herb found in chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Prefers flood deposited terraces and washes, sandy soils; associates include <i>Encelia</i> , <i>Dalea</i> , <i>Lepidospartum</i> , etc. Blooming period: April–June 200–760m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	FE	SE	1B.1	Dicot perennial herb found in chaparral and coastal scrub habitat. Prefers sandy soils on river floodplains or terraced fluvial deposits. Blooming period: May–September 180–700m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Fimbristylis thermalis</i> hot springs fimbristylis	—	—	2B.2	Monocot perennial grasslike herb (rhizomatous) found in meadows (alkaline), near hot springs. Blooming period: July–September 110–1,340 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Galium californicum</i> ssp. <i>primum</i> Alvin Meadow bedstraw	—	—	1B.2	Dicot perennial herb found in chaparral, and lower montane coniferous forest. Grows in the shade of trees and shrubs at the lower edge of the pine belt in pine forest–chaparral margins. Prefers granitic, sandy soils. Blooming period: May–July 1,350–1,700m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower	—	—	1A	Dicot perennial (rhizomatous) herb found in marshes and swamps, including coastal salt and freshwater. Blooming period: August–October 10–1,675m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Heuchera parishii</i> Parish’s alumroot	—	—	1B.3	Dicot perennial herb (rhizomatous) found in lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest, alpine boulder and rock field. Prefers rocky places. Sometimes on	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
				carbonate. Blooming period: June–August 1,500–3,800 m.		
<i>Horkelia cuneate</i> var. <i>puberula</i> mesa horkelia	—	—	1B.1	Dicot perennial herb found in chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Blooming period: February–July 70–810m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Imperata brevifolia</i> California satintail	—	—	2B.2	Monocot perennial grass found in coastal scrub, chaparral, riparian scrub, Mojavean scrub, meadows and seeps (alkali). Prefers mesic sites, alkali seeps, in riparian areas. Blooming period: September–May 0–1,215m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Ivesia argyrocoma</i> var. <i>argyrocoma</i> silver-haired ivesia	—	—	1B.2	Dicot perennial herb found in meadows, pebble plains, upper montane coniferous forest. Prefers pebble plains and meadows with other rare plants. Blooming period: June–August 1,460–2,960 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter’s goldfields	—	—	1B.1	Dicot annual herb found in coastal salt marshes, playas, and vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. Blooming period: February–July 1–1,200m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Lepidium virginicum</i> var.	—	—	4.3	Dicot annual herb found in chaparral,	Low Potential to occur: One recorded	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>robinsonii</i> Robinson's pepper-grass				coastal scrub. Prefers dry soils and shrubland. Blooming period: January–July 1–855m.	occurrence within 1 mile of the project. No suitable habitat is present within the project.	
<i>Lilium parryi</i> lemon lily	—	—	1B.2	Monocot perennial herb (bulb) found in lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows and seeps. Blooming period: July–August 1,220–2,745 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Lycium parishii</i> Parish's desert-thorn	—	—	2B.3	Dicot shrub found in in coastal scrub and sonoran desert scrub habitat. Blooming period: March–April 135–1,000m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Malacothamnus parishii</i> Parish's bush-mallow	—	—	1A	Dicot shrub found in chaparral, coastal sage scrub, in a wash. Blooming period: April–July 305–455 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Monardella macrantha</i> ssp. <i>hallii</i> Hall's monardella	—	—	1B.3	Dicot perennial herb (rhizomatous) found in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland. Prefers dry slopes and ridges in openings within the above communities. Blooming period: June–October 730–2,195 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Monardella pringlei</i> Pringle's monardella	—	—	1A	Dicot annual herb found in coastal scrub habitat. Prefers sandy hills. Blooming period: May–June 300–400m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Nasturtium gambelii</i> Gambel's water cress	FE	ST	1B.1	Dicot perennial herb found in marshes and swamps. Prefers freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Blooming period: April–October 5–330m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Opuntia basilaris</i> var. <i>brachyclada</i> short-joint beavertail	—	—	1B.2	Dicot shrub (stem succulent) found in chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon-juniper woodland. Prefers sandy soil or coarse, granitic loam. Blooming period: April–June 425–1,800 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Perideridia parishii</i> ssp. <i>parishii</i> Parish's yampah	—	—	2B.2	Dicot perennial herb found in lower montane coniferous forest, meadows, upper montane coniferous forest. Prefers damp meadows or along streambeds—prefers an open pine canopy. Blooming period: June–August 1,465–3,000 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Phacelia stellaris</i> Brand's star phacelia	—	—	1B.1	Dicot annual herb found in coastal scrub and coastal dunes. Blooming period: March–June 1–400m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Ribes divaricatum</i> var. <i>parishii</i> Parish's gooseberry	—	—	1A	Dicot shrub found in riparian woodland. Blooming period: February–April 65–300m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Schoenus nigricans</i> black bog-rush	—	—	2B.2	Monocot perennial grasslike herb found in marshes and swamps. Often in alkaline marshes. Blooming period: August–September 150–2,000 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Senecio aphanactis</i> chaparral ragwort	—	—	2B.2	Dicot annual herb found in chaparral, cismontane woodland, and coastal scrub habitat. Prefers drying alkaline flats. Blooming period: January–April 15–800m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Sidalcea malviflora</i> ssp. <i>dolosa</i> Bear Valley checkerbloom	—	—	1B.2	Dicot perennial herb (rhizomatous) found in meadows and seeps, riparian woodland, lower montane coniferous forest, upper montane coniferous forest. Known from wet areas within forested habitats. Affected by hydrological changes. Blooming period: May–August 1,495–2,685 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Sidalcea neomexicana</i> Salt Spring checkerbloom	—	—	2B.2	Dicot perennial herb found in playas, chaparral, coastal scrub, lower montane coniferous forest, Mojave desert scrub. Alkali springs and marshes. Blooming period: March–June 0–1,530m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Sphenopholis obtusata</i> prairie wedge grass	—	—	2B.2	Monocot perennial grass found in cismontane woodland, meadow and seep, and wetland habitat. Prefers open moist sites, along rivers and springs, alkaline desert seeps. Blooming period: April–July 300–2,000m.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Streptanthus bernardinus</i> Laguna Mountains jewelflower	—	—	4.3	Dicot perennial herb found in chaparral, lower montane coniferous forest. Prefers clay or decomposed granite soils; sometimes in disturbed areas such as streambanks or roadcuts. Bloom period: May–August 1,440–2,500 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Streptanthus campestris</i> southern jewelflower	—	—	1B.3	Chaparral, lower montane coniferous forest, pinyon-juniper woodland. Open, rocky areas. Blooming period: May–August 900–2,300 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Symphotrichum defoliatum</i> San Bernardino aster	—	—	1B.2	Dicot perennial herb found in meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, grassland. Prefers vernal mesic grassland or near ditches, streams, and springs; especially disturbed areas. Blooming period: July–November 2–2,040m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 1 (cont.): Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Thelypteris puberula</i> var. <i>sonorensis</i> Sonoran maiden fern	—	—	2B.2	Pteridophyte fern (rhizomatous) found in meadows and seeps. Prefers along streams, seepage areas. Blooming period: January September 50-610 m.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
Code Designations						
¹ Federal Status: 2015 USFWS Listing		² State Status: 2015 CDFW Listing			³ CNPS: 2015 CNPS Listing	
FE = Listed as endangered under the Endangered Species Act FT = Listed as threatened under the Endangered Species Act FC = Candidate for listing (threatened or endangered) under Endangered Species Act FD = Delisted in accordance with the Endangered Species Act — = Not federally listed		SE = Listed as endangered under the California Endangered Species Act ST = Listed as threatened under the California Endangered Species Act SSC = Species of Special Concern as identified by CDFW CFP = Listed as fully protected under FGC CR = Species identified as rare by CDFW — = Not state listed			1A = Plants species that presumed extinct in California. 1B = Plant species that are rare, threatened, or endangered in California and elsewhere. List 2 = Plant species that are rare, threatened, or endangered in California, but more common elsewhere. Blooming period: Months in parentheses are uncommon.	
⁴ Habitat description: Habitat description adapted from CNDDDB (CDFW 2015), CNPS online inventory (CNPS 2015), and Holland (1986) and Oberbauer (1996)						

Table 2: Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
Invertebrates					
<i>Bombus crotchii</i> Crotch bumble bee	—	—	Found in coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Bombus morrisoni</i> Morrison bumble bee	—	—	Found from the Sierra-Cascades ranges eastward across the intermountain west.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Carolella busckana</i> Busck's gallmoth	—	—	Coastal sand dunes and coastal scrub habitat.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Ceratochrysis longimala</i> Desert cuckoo wasp	—	—	No habitat requirement information is listed for this species	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Cicindela tranquebarica viridissima</i> greenest tiger beetle	—	—	Found in woodlands adjacent to the Santa Ana River, usually found in open spots between trees.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Euchloe hyantis andrewsi</i> Andrew's marble butterfly	—	—	Inhabits yellow pine forest near Lake Arrowhead and Big Bear Lake, San Bernardino Mtns, San Bernardino Co, 5,000-6,000 ft. Hostplants are <i>Streptanthus bernardinus</i> and <i>Arabis holboellii</i> var <i>pinetorum</i> ; larval foodplant is <i>Descurainia richardsonii</i> .	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Rhaphiomidas terminatus abdominalis</i> Delhi Sands flower-loving fly	FE	—	Found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties. Requires fine, sandy soils, often with wholly or partially consolidated dunes and sparse vegetation. Oviposition requires shade.	Low Potential to occur: One recorded occurrence within 1 mile of the Project. No suitable habitat is present within the Project.	No
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	FE	—	Endemic to W. Riverside, Orange, and San Diego Counties in areas of tectonic swales/earth slump basins in grasslands and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	Unlikely to occur: no recorded occurrences within 1 mile of the Project. No suitable habitat is present within the project.	No
Fish					
<i>Catostomus santaanae</i> Santa Ana sucker	—	—	Endemic to Los Angeles basin south coastal streams. Are habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project. Critical Habitat within 0.5 miles, but will not be impacted by project activities.	No
<i>Gila orcuttii</i> arroyo chub	—	—	Found in streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave, and San Diego river basins. Requires slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Rhinichthys osculus</i> ssp. 3 <i>Santa Ana speckled dace</i>	—	SSC	Found in headwaters of the Santa Ana and San Gabriel Rivers. May be extirpated from the Los Angeles system. Requires permanent flowing streams with summer	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
			water temperatures of 17-20°C. Usually inhabit shallow cobble and gravel riffles.		
Amphibians					
<i>Batrachoseps gabrieli</i> San Gabriel slender salamander	—	—	Known only from the San Gabriel Mtns. Found under rocks, wood, fern fronds and on soil at the base of talus slopes. Most active on the surface in winter and early spring.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Rana draytonii</i> California Red-legged frog	FT	—	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Breeding habitat is in permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Rana muscosa</i> southern mountain yellow-legged frog	FE	SE SSC	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino Mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, Apr 2014, effective Jun 30, 2014. Always encountered within a few feet of water. Tadpoles may require 2–4 yrs. to complete their aquatic development.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Spea hammondi</i> western spadefoot	—	SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
Reptiles					

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Anniella pulchra pulchra</i> silvery legless lizard	—	SSC	Occurs in sandy or loose loamy soils under sparse vegetation. Soil moisture is essential.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Aspidoscelis hyperythra</i> orangethroat whiptail	—	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 primary food: termites.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	—	—	Found in deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Charina trivirgata</i> rosy boa	—	—	Desert and chaparral from the coast to the Mojave and Colorado deserts. Prefers moderate-to-dense vegetation and rocky cover. Found in habitats with a mix of brushy cover and rocky soil, such as coastal canyons and hillsides, desert canyons, washes, and mountains.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Charina umbratica</i> southern rubber boa		ST	Known from the San Bernardino and San Jacinto mtns; found in a variety of montane forest habitats. Snakes resembling <i>C. umbratica</i> reported from Mt. Pinos and Tehachapi mtns group with <i>C. bottae</i> . Found in vicinity of streams or wet meadows; requires loose, moist soil for burrowing; seeks cover in rotting logs, rock outcrops, and under surface litter.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Crotalus ruber</i> red-diamond rattlesnake	—	SSC	Found in chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas with dense vegetation. Requires rodent burrows, cracks in rocks, or surface cover objects. Often found in disturbed areas.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	—	—	Most commonly found in open, relatively rocky area—often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting to areas with surface litter or herbaceous cover.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Phrynosoma blainvillii</i> coast horned lizard	—	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Thamnophis hammondi</i> two-striped garter snake	—	SSC	Inhabits coastal California from the vicinity of Salinas to northwest Baja California. Species is highly aquatic, found in or near permanent fresh water. Often found along streams with rocky beds and riparian growth.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
Birds					
<i>Accipiter cooperii</i> Cooper's hawk	— MBTA	— FGC	Found in woodlands, chiefly of the open, interrupted, or marginal types. Nest sites are mainly in riparian growths of deciduous trees, such as in canyon bottoms on river plains; also, in live oaks.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Agelaius tricolor</i> tricolored blackbird	— MBTA	SSC	Highly colonial species, most numerous in Central Valley and its vicinity. Requires open water, protected nesting substrate, and foraging area with insect prey in the vicinity of the colony.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow	— MBTA	—	Resident in southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Artemisiospiza belli belli</i> Bell's sage sparrow	— MBTA	—	Found in coastal sage scrub in southern areas of its range. Nests in chaparral dominated by fairly dense stands of chamise. Nest located on the ground beneath a shrub, or in a shrub 6-18 inches above ground. Territories are about 50 yards apart.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Athene cunicularia</i> burrowing owl	— MBTA	SSC FGC	Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Buteo regalis</i> ferruginous hawk	— MBTA	— FGC	Found in open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and	Unlikely to occur: no recorded occurrences within 1 mile of the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
			juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	No suitable habitat is present within the project.	
<i>Buteo swainsoni</i> Swainson's hawk	— MBTA	ST FGC	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT MBTA	SE	Nests in riparian forest along the broad lower flood-bottoms of larger river systems. Found in riparian jungles of willow, often mixed with cottonwoods; understory consists of blackberry, nettles, and wild grape.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FE MBTA	SE	Occurs in riparian woodlands in Southern California.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project. Critical habitat within 0.5 miles, but will not be impacted by project activities.	No
<i>Eremophila alpestris actia</i> California horned lark	— MBTA	—	Occurs in coastal regions, primarily from Sonoma County to San Diego County, as well as the main part of the San Joaquin Valley and eastward to the foothills. Found in short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Haliaeetus leucocephalus</i> bald eagle	FD MBTA	SE FP FGC	Occurs along ocean shoreline, lake margins, and rivers for nesting and wintering. Most nests are within one mile of water. Nest in large, old-growth or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Unlikely to occur: no recorded occurrences within 10 miles of the project. No suitable habitat is present within the project.	No
<i>Icteria virens</i> yellow-breasted chat	—	SSC	A summer resident; inhabits riparian thickets of willow and other bushy tangles near watercourses. Nests in low, dense riparian habitat consisting of willow, blackberry, and wild grape. Forages and nests within 10 feet of ground level.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Lanius ludovicianus</i> loggerhead shrike	—	SSC	Found in broken woodlands, savannah, piñon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Poliottila californica californica</i> coastal California gnatcatcher	FT	SSC	An obligate, permanent resident of coastal sage scrub below 2500 ft. in southern California. Requires low, coastal sage scrub in arid washes, on mesas, and slopes. Not all areas classified as coastal sage scrub are occupied.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Setophaga petechial</i> yellow warbler	—	SSC	Occurs in riparian habitat associated with close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevadas. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants such as cottonwoods, sycamores, ash, and alders.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Spinus lawrencei</i> Lawrence's goldfinch	—	—	Nests in open oak or other arid woodland and chaparral near water. Nearby herbaceous habitats used for feeding. Closely associated with oaks.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Vireo bellii pusillus</i> least Bell's vireo	FE	SE	A summer resident of Southern California in low riparian habitat in the vicinity of water or in dry river bottoms. Nests placed along margins of bushes or in twigs projecting into pathways, usually willows, coyote bush, mule fat, or mesquite. Occurs below 2,000 feet.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
Mammals					
<i>Antrozous pallidus</i> pallid bat	—	SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Species is very sensitive to disturbance of roosting sites.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	—	SSC	Found in coastal sage scrub, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Chaetodipus fallax pallidus</i> pallid San Diego pocket mouse	—	SSC	Desert border areas in eastern San Diego Co. in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Sandy herbaceous areas, usually in association with rocks or coarse gravel.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	FE	SSC	Found in alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project. Critical habitat within 0.5 miles, but will not be impacted by project activities.	No
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	FE	ST	Found primarily in annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass, and filaree. Will burrow into firm soil.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Eumops perotis californicus</i> western mastiff bat	—	SSC	Found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Glaucomys sabrinus californicus</i> San Bernardino flying squirrel	—	SSC	Known from black oak or white fir dominated woodlands between 5,200 and 8,500 ft. in the San Bernardino and San Jacinto ranges. May be extirpated from San Jacinto range. Needs cavities in trees/snags for nests and cover. Needs nearby water.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Lasiurus xanthinus</i> western yellow bat	—	SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	—	SSC	Found in coastal sage scrub habitats in southern California. Found in intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	—	SSC	Found in coastal scrub of southern California from San Diego County to San Luis Obispo County. Prefer moderate to dense canopies. They are particularly abundant in rock outcrops and rocky cliffs and slopes.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	—	SSC	Found in a variety of arid areas in southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, or desert riparian habitat. Prefers rocky areas with high cliffs.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Onychomys torridus ramona</i> southern grasshopper mouse	—	SSC	Occurs in desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, particularly scorpions and orthopteran insects.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Perognathus alticolus alticolus</i> white-eared pocket mouse	—	SSC	Ponderosa and Jeffrey pine habitats; also in mixed chaparral and sagebrush habitats in the San Bernardino Mtns. Burrows are constructed in loose soil.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	—	SSC	Found in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles basin. Prefer open ground with fine sandy soils. May not dig extensive burrows, hiding under weeds or dead leaves instead.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 2 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Taxidea taxus</i> American badger	—	SSC	Found in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows.	Low Potential to occur: One recorded occurrence within 1 mile of the project. No suitable habitat is present within the project.	No
Code Designations					
¹Federal Status: 2015 USFWS Listing			²State Status: 2015 CDFW Listing		
<p>ESU = Evolutionary Significant Unit is a distinctive population. FE = Listed as endangered under the FESA. FT = Listed as threatened under the FESA. FC = Candidate for listing (threatened or endangered) under FESA. FD = Delisted in accordance with the FESA. FPD = Federally Proposed to be Delisted. MBTA= protected under the MBTA. — = Not federally listed</p>			<p>SE = Listed as endangered under the CESA. ST = Listed as threatened under the CESA. SSC = Species of Special Concern as identified by the CDFW. CFP = Listed as fully protected under FGC. CR = Rare in California. FGC= Protected under CA FGC 3503.5. — = Not state listed</p>		
³Habitat description: Habitat description adapted from CNDDDB (CDFW 2015a).					

Table 3: Sensitive Habitats Potentially Occurring within the Project

Sensitive Habitat Type	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
Riversidean Alluvial Fan Sage Scrub	—	—	—	A community similar to Riversidean Sage Scrub, but with the addition of some riparian species. Typically found in arid locations with severely drained or clay soils that release stored moisture slowly. Dominated by California sagebrush (<i>Artemisia californica</i>), California buckwheat (<i>Eriogonum fasciculatum</i>), and California broomsage (<i>Lepidospartum squamatum</i>). Found along the coastal base of the Transverse and Peninsular Ranges from central Los Angeles County south to Baja California.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
Southern California Arroyo Chub/Santa Ana Sucker Stream	—	—	—	Occurs within the Santa Ana River and tributaries within San Bernardino, Riverside, and Orange Counties from Mount Rubidoux downstream to northeastern Anaheim, including tributaries Chino, Aliso, and Sunnyslope Creeks. Best habitat is found below Riverside Narrows where ground water is forced to the surface and flows become more perennial and stable. Santa Ana suckers and arroyo chub are the last remaining native fish species.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 3 (cont.): Sensitive Habitats Potentially Occurring within the Project

Sensitive Habitat Type	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
Southern Coast Live Oak Riparian Forest	—	—	—	Open to locally dense evergreen sclerophyllous riparian woodlands dominated by California live oak (<i>Quercus agrifolia</i>). Likely to be richer in herbs and poorer in understory shrubs than other riparian communities. Similar to Central Coast Live Oak Riparian Forest, but regionally distinct. Found in bottomlands and outer floodplains along larger streams on fine-grained, rich alluvium throughout canyons and valleys of coastal Southern California.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
Southern Cottonwood Willow Riparian Forest	—	—	—	Tall, open, broad-leaved winter-deciduous riparian forest dominated by cottonwoods (<i>Populus</i> spp.), and several tree willows. Understory is typically shrubby willows. Similar to Central Coast Cottonwood Sycamore Riparian Forest, but with a lower California live oak and white alder (<i>Alnus rhombifolia</i>) composition. Found in sub-irrigated and frequently overflowed lands along rivers and streams of the Transverse and Peninsular ranges, from Santa Barbara County south to Baja California Norte and east to the deserts. Requires moist, bare mineral soil.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 3 (cont.): Sensitive Habitats Potentially Occurring within the Project

Sensitive Habitat Type	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
Southern Mixed Riparian Forest	—	—	—	Tall, dense, winter-deciduous broadleaved riparian forest. The tree canopy is usually fairly well closed and moderately to densely stocked with a mix of riparian species. Found in relatively fine-textured alluvium somewhat setback from active channels. Experience overbank flooding but not too severe battering or erosion.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
Southern Riparian Forest	—	—	—	Tall, dense, winter-deciduous broadleaved riparian forest. The tree canopy is usually fairly well closed and moderately to densely stocked with a mix of riparian species. Found in relatively fine-textured alluvium somewhat setback from active channels. Experience overbank flooding but not too severe battering or erosion.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
Southern Riparian Scrub	—	—	—	Riparian zones dominated by shrubs and smaller trees, lacking taller riparian trees found in riparian forests that form a streamside scrubby thicket. Habitat is found primarily in major river systems where flood scour occurs or locations of urban and agricultural runoff.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
Southern Sycamore Alder Riparian Woodland	—	—	—	Tall, open, broad-leaved winter-deciduous streamside woodland dominated by California sycamore (<i>Platanus racemosa</i>) and often also white alder (<i>Alnus rhombifolia</i>). Stands seldom form closed canopy forests, and may appear as trees	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No

Table 3 (cont.): Sensitive Habitats Potentially Occurring within the Project

Sensitive Habitat Type	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
				scattered in a dense shrubby thicket of sclerophyllous and deciduous species. Found along very rocky streambeds subject to seasonal high-intensity flooding.		
Southern Willow Scrub	—	—	—	Dense broadleaved winter-deciduous riparian thickets dominated by several willow species, with scattered emergent cottonwood and sycamore species. Most stands are too thick to allow for significant understory growth. Found near stream channels on loose, sandy or fine gravelly alluvium deposited during flood flows. Repeated flooding prevents succession to Southern Cottonwood-Sycamore Riparian Forest. Historically occurs along major river systems of southern California, but now reduced by urban expansion and flood control measures.	Unlikely to occur: no recorded occurrences within 1 mile of the project. No suitable habitat is present within the project.	No
Code Designations						
Federal Status¹: 2015 USFWS Listing		State Status²: 2015 CDFW Listing			CNPS³: 2015 CNPS Listing	
FE = Listed as endangered under the Endangered Species Act FT = Listed as threatened under the Endangered Species Act FC = Candidate for listing (threatened or endangered) under Endangered Species Act FD = Delisted in accordance with the Endangered Species Act — = Not federally listed		SE = Listed as endangered under the California Endangered Species Act ST = Listed as threatened under the California Endangered Species Act SSC = Species of Special Concern as identified by CDFW CFP = Listed as fully protected under FGC CR = Species identified as rare by CDFW — = Not state listed			1A = Plants species that presumed extinct in California. 1B = Plant species that are rare, threatened, or endangered in California and elsewhere. List 2 = Plant species that are rare, threatened, or endangered in California, but more common elsewhere. Blooming period: Months in parentheses are uncommon.	
Habitat description⁴: Habitat description adapted from CNDDB (CDFW 2015), CNPS online inventory (CNPS 2015), and Holland (1986) and Oberbauer (1996)						

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SECTION 3: REGULATORY CONSIDERATIONS

This section provides an overview of the laws and regulations that influence biological resources. Many of these regulations will not apply to the project if sensitive biological resources are avoided.

As of January 1, 2013, the agency formerly known as the California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW). Some publications written prior to the change refer to the CDFG; therefore, this document refers to CDFG and the CDFW, as appropriate, referring to the same state agency.

3.1 - Federal Endangered Species Act

The USFWS has jurisdiction over species listed as threatened or endangered under the FESA. Section 9 of FESA protects listed species from “take,” which is broadly defined as actions taken to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” FESA protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process. Procedures for addressing impacts to federally listed species follow two principal pathways, both of which require consultation with the USFWS, which administers the FESA for all terrestrial species. The first pathway, Section 10(a) incidental take permit, applies to situations where a non-federal government entity must resolve potential adverse impacts to species protected under the FESA. The second pathway, Section 7 consultation, applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval.

3.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the Fish and Game Code (FGC).

All raptors and their nests are protected from take or disturbance under the MBTA (16 United States Code [USC], Section 703, et seq.) and California statute (FGC Section 3503.5). The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are also afforded additional protection under the Eagle Protection Act, amended in 1973 (16USC, Section 669, et seq.).

3.3 - Bald and Golden Eagle Protection Act

With few exceptions, this act (16 USC 668–668d) prohibits take of bald eagles and golden eagles. Unlike the MBTA, which defines “take” to mean only direct killing or taking of birds or their body parts, eggs, and nests, the Bald and Golden Eagle Protection Act defines take in a manner similar to FESA as including “pursuing, shooting, shooting at, poisoning, wounding, killing, capturing, trapping, collecting, molesting, and disturbing,” with “disturb” further defined (50 CFR 22.3) as “to agitate or

bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” Therefore, the requirements for guarding against impacts to eagles generally are far more stringent than those required by the MBTA alone.

3.4 - Executive Order 13112 – Invasive Species

Executive Order (EO) 13112 directs all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. The order further directs federal agencies to prevent the introduction of invasive species, control and monitor existing invasive species populations, restore native species to invaded ecosystems, research and develop prevention and control methods for invasive species, and promote public education on invasive species. As part of the proposed action, the USFWS and United States Army Corps of Engineers (USACE) would issue permits and therefore would be responsible for ensuring that the proposed action complies with EO 13112 and does not contribute to the spread of invasive species.

3.5 - Clean Water Act Section 404

The USACE and the United States Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the U.S., including wetlands, under Section 404 of the Clean Water Act (CWA). Waters of the U.S. include wetlands, lakes, and rivers, streams, and their tributaries. Wetlands that fall under the jurisdiction of the USACE (referred to as jurisdictional wetlands) are defined as areas “inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Areas not considered jurisdictional waters include, for example, non-tidal drainage and irrigation ditches excavated on dry land; artificially irrigated or created bodies such as small ponds, lakes or swimming pools; and water-filled depressions (33 CFR 328.3; 40 CFR 230.3).

Project proponents must obtain a permit from USACE for all discharges of fill material into waters of the U.S., including jurisdictional wetlands, before proceeding with a proposed action. If wetlands are jurisdictional and could be filled as part of the project, USACE may issue either an individual permit or a general permit. Individual permits are prepared on a project-specific basis for projects that are expected to have adverse effects on the aquatic environment. General permits are pre-authorized permits issued to cover similar activities that are expected to cause only minimal individual and cumulative adverse environmental effects.

A Section 404 permit may not be required if the project avoids the discharge of any fill material into waters of the U.S., including wetlands. If the project cannot be designed to avoid the discharge of fill or excavating in waters of the U.S., including wetlands, a Section 404 permit must be obtained.

3.6 - Clean Water Act Section 401

The CWA requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. The appropriate Regional Water Quality Control Board (RWQCB) regulates Section 401 requirements.

3.7 - California Fish and Game Code

Under the CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC 2070). Sections 2050 through 2098 of the FGC outline the protection provided to California's rare, endangered, and threatened species. Section 2080 of the FGC prohibits the taking of plants and animals listed under the CESA. Section 2081 established an incidental take permit program for state-listed species. CDFW maintains a list of "candidate species," which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (FGC Section 1900, et seq.) prohibits the taking, possessing, or sale within the State of any plants with a state designation of rare, threatened, or endangered (as defined by CDFW). An exception to this prohibition in the Native Plant Protection Act allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify CDFW and give that state agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. (FGC Section 1913 exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way.") Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

CDFW also maintains lists of "Species of Special Concern" that serve as species "watch lists." The CDFW has identified many Species of Special Concern. Species with this status have limited distribution or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and thereby warrant specific protection measures.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the CNPS's Lists 1A, 1B, and 2 would typically be considered under CEQA.

Sections 3500 to 5500 of the FGC outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any

fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Section 3503.5 of the FGC, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of the CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under FGC Section 206.591. Authorization from CDFW would be in the form of an Incidental Take Permit.

Section 1602 of the FGC requires any entity to notify CDFW before beginning any activity that "may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake" or "deposit debris, waste, or other materials that could pass into any river, stream, or lake." "River, stream, or lake" includes waters that are episodic and perennial; and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water.

3.8 - California Porter-Cologne Water Quality Control Act

The RWQCB has regulatory authority over wetlands and waterways under both the CWA and the State of California's Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the RWQCB has regulatory authority over actions in waters of the U.S., through the issuance of water quality certifications under Section 401 of the CWA in conjunction with permits issued by the USACE under Section 404 of the CWA. When the RWQCB issues Section 401 certifications, it simultaneously issues general Waste Discharge Requirements for the project under the Porter-Cologne Water Quality Control Act. Activities in areas that are outside of the jurisdiction of the USACE (e.g., isolated wetlands, vernal pools, seasonal streams, intermittent streams, channels that lack a nexus to navigable waters, or stream banks above the ordinary high water mark) are regulated by the RWQCB under the authority of the Porter-Cologne Water Quality Control Act. Activities that lie outside of USACE jurisdiction may require the issuance of either individual or general waste discharge requirements.

3.9 - City of San Bernardino/County of San Bernardino

The City of San Bernardino Municipal Code and Development Code do not have any ordinances that may provide project-related constraints. Under the San Bernardino County Development Code

Section 88.01.050: Regulated Desert Native Plants, desert native plants or any part of them shall not be removed except under a Tree or Plant Removal Permit. These include smoke trees (*Dalea spinosa*) with stems 2 inches in diameter or 6 feet or greater in height, mesquites (*Prosopis spp.*) with stems 2 inches in diameter or 6 feet or greater in height, all species of the family *Agavaceae*, Creosote rings 10 feet or greater in diameter, and all Joshua trees (*Yucca brevifolia*); it also includes the removal of any part (alive or dead) of: desert ironwood (*Olneya tesota*), mesquites, and palos verdes (*Cercidium spp.*).

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SECTION 4: ENVIRONMENTAL SETTING

4.1 - Vegetation Communities and Land Cover Types

A search of the USFWS Critical Habitat Portal revealed that the project does not contain identified critical habitat for any federally listed species (USFWS 2011). The project does not occur within any Refuges.

Sensitive habitats were determined as described in Section 3. Each sensitive habitat identified within the database search has been addressed individually in Table 3 of this report. Assessment of the potential for each sensitive habitat to occur within the project was based on known occurrences of the habitat type within a 1-mile radius of the project (CDFG 2005), suitability of habitat within the project, and professional expertise. As shown in Table 3 and the discussion of present vegetation communities below, the project is highly disturbed, and does not contain any sensitive habitat types.

The project occurs within portions of two vegetation community and land cover types: non-native grassland, and urban/developed land (Exhibit 5). A complete description of the community or land cover type is based on Holland (1986), and the extent to which it occurs on and within the project is provided below. The respective Holland code for the community or land cover type is provided in parenthesis below following the community section name.

4.1.1 - Non-Native Grassland (42210) 5.20 Acres

Non-native grassland habitat is classified as areas of dense to sparse cover of annual grasses with flowering culms 0.2 to 0.5 meter high. Often associated with numerous species of showy-flowered, native annual forbs (“wildflowers”), especially in years of favorable rainfall. In some areas, depending on past disturbance and annual rainfall, annual forbs may be the dominant species; however, it is presumed that grasses will soon dominate. Germination occurs with the onset of the late fall rains; growth, flowering, and seed-set occur from winter through spring. With a few exceptions, the plants are dead through the summer-fall dry season, persisting as seeds. Remnant native species are variable. This can include grazed and even dry-farmed (i.e., disked) areas where irrigation is not present.

The majority of the project contains non-native grassland sparsely vegetated with non-native grass and ruderal species. The project shows some evidence of past weed control and illegal dumping activities that have significantly disturbed the project site.

4.1.2 - Urban/Developed (12000) 0.04 Acre

Urban/Developed habitat is classified as areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported and retains no soil substrate. Developed land is characterized by permanent or semi-permanent structures, pavement, or hardscape, and landscaped areas that often require irrigation. Areas where no natural land is evident because a large amount of debris or other materials have been placed upon it may also be

considered urban/developed (e.g., car recycling plant, quarry). Characteristic vegetation includes unvegetated or landscaped with a variety of ornamental (usually non-native) plants.

The project contains a few ornamental landscape trees along project boundaries to the west and the southwest corner; a single unidentifiable ornamental tree was observed within the center of the project.

4.2 - Soils

The project is mapped as containing one soil series (Exhibit 6). A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources. The soil map unit present within the project includes Grangeville fine sandy loam.

Grangeville fine sandy loam: This soil series consists of very deep, somewhat poorly drained soils found on alluvial fans and floodplains with slopes ranging from 0 to 2 percent. It is typically grayish brown fine sandy loam near the surface, and stratified fine sandy loam in increasing depths. The parent material is alluvium dominantly from granitic rock sources (Soil Staff 2015).

4.3 - Potential Jurisdictional Features

The project was evaluated for the presence of potential wetland features under both state and federal jurisdiction. A search of the USFWS National Wetlands Inventory revealed no features present within the project.

4.4 - Special-status Species

Special-status plant and wildlife species were determined as described in Section 3. Each special-status species identified within the database search has been addressed individually in Table 1 and Table 2 of this report. Assessment of the potential for each special-status species to occur within the project was based on known occurrences of the species within a 1-mile radius of the project (CDFG 2005), suitability of habitat within the project, and professional expertise. As shown in Table 1 and Table 2, the project contains highly disturbed non-native grassland and is unlikely to support any special-status plant or wildlife species. However, the removal of vegetation during construction activities could impact birds protected by the MBTA.

4.4.1 - Special-status Plants

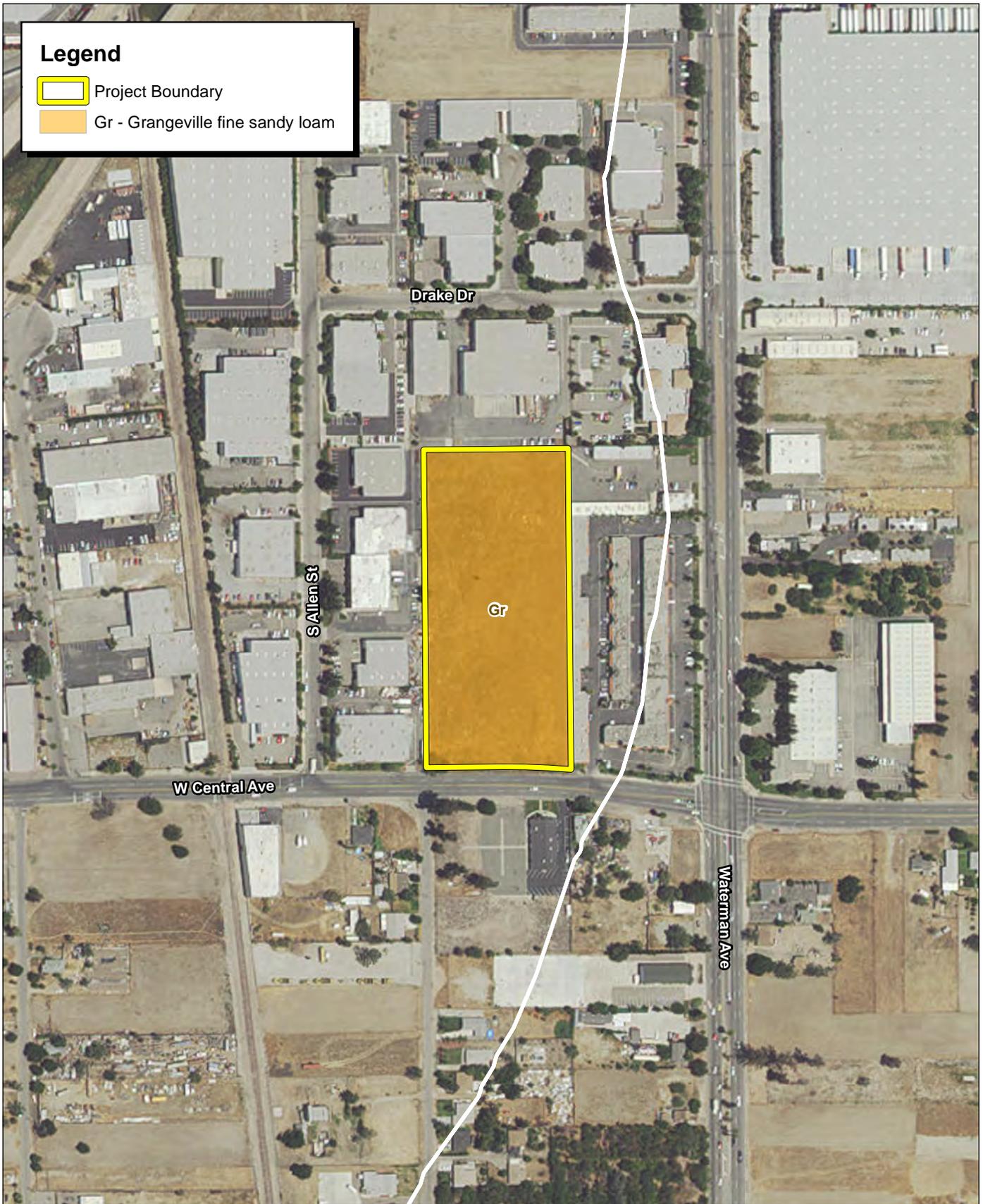
The project is unlikely to support any special-status plant species. Table 1 summarizes the potential for occurrence and rationale for each special-status plant species occurring in the vicinity of the project, based on the database search (Appendix A). The project supports two habitat types: non-native grassland and urban/developed land. Neither habitat type present is likely to support special-status plant species.



Source: ESRI Imagery, 2014



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Source: ESRI Imagery, 2014



Exhibit 6 Soils Map

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4.4.2 - Special-status Wildlife

The project is unlikely to support any special-status wildlife species. Table 2 summarizes the potential for occurrence and rationale for each special-status wildlife species occurring in the vicinity of the project, based on the database search (Appendix A). The project generally lacks vegetation or prey opportunities for special-status wildlife species, due to the non-native vegetation present and evidence of continued disturbance. However, the removal of vegetation during construction activities could impact birds protected by the MBTA.

Nesting Raptors and Migratory Birds

Trees located within the project may provide suitable nesting habitat for birds protected under the MBTA and other special-status birds, including raptors protected by the FGC. Additionally, several species of birds may nest in suitable habitat adjacent to the project.

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SECTION 5: POTENTIAL CONSTRAINTS TO FUTURE SITE DEVELOPMENT AND RECOMMENDATIONS

Complete avoidance of special-status plant and animal species and their associated habitats is the ecologically preferred method for preservation of these resources. However, to meet project goals avoidance is not always feasible. Therefore, to reduce impacts to natural resources, minimization and compensation measures must often be employed. The following discussion looks at the potential constraints and offers recommendations on avoidance, minimization, and compensation measures in compliance with the various laws that regulate natural resources and land use. This information is offered to help the applicant design a development that meets both financial and ecological objectives to the extent possible.

5.1 - Potential Constraints to Development from the Presence (or Possible Presence) of Special-status Species

As noted in the discussion above, the project is unlikely to support any special-status wildlife species. However, the project does have the potential to support nesting of birds and raptors protected under the MBTA. The project does not have the potential to support any special-status plant species.

5.1.1 - Special-status Plants

The discussions below detail the extent of suitable habitat within the project, potential impacts to these species from the development of the proposed project, and recommended measures to avoid, minimize, and mitigate for project-related impacts.

The project does not have the potential to support any special-status plant species; therefore, no measures to avoid, minimize, and mitigate for project-related impacts are required.

5.1.2 - Special-status Wildlife

The discussions below detail the extent of suitable habitat within the project, potential impacts to these species from the development of the proposed project, and recommended measures to avoid, minimize, and mitigate for project-related impacts.

Nesting Raptors and other Birds

Suitable habitat for raptors and other birds protected by the MBTA occurs within and adjacent to the project. Most native, breeding birds are protected under Section 3503 of the FGC, and raptors specifically are protected under Section 3503.5 of the FGC. Additionally, both Section 3513 of the FGC and the federal MBTA prohibit the killing, possession, or trading of migratory birds. Section 3800 of the FGC prohibits the taking of nongame birds and fully protected species. Most raptors nest in mature, large coniferous or deciduous trees and use twigs and branches as nesting material. Smaller raptors may nest in cavities in anthropogenic structures and trees. The nesting period for raptors generally occurs between February 15 and August 31.

Potential impacts could occur to resident and migratory species during project construction, which would render the project temporarily unsuitable for birds due to the noise, vibrations, and increased activity levels associated with various construction activities. These activities could potentially subject birds to risk of death or injury, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual birds by displacing them into adjacent territories belonging to other individuals.

Construction activities that occur during the nesting season (generally March 1 to August 31) would disturb nesting sites for birds protected by the MBTA and FGC. No action is necessary if construction occurs during the non-breeding season (generally September 1 through February 14).

Implementation of the following avoidance and minimization measures would reduce impacts to raptors and other nesting birds.

- To prevent impacts to MBTA-protected birds and their nests removal of trees will be limited to only those necessary to construct the proposed project.
- If any tree removal is necessary, then it will occur outside the nesting season between September 1 and February 14. If trees cannot be removed outside the nesting season, pre-construction surveys will be conducted three days prior to tree removal to verify the absence of active nests a maximum of 14 days prior to construction.
- If an active nest is located during pre-construction surveys, USFWS and/or CDFW (as appropriate) shall be notified regarding the status of the nest. Construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or the agencies deem disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an active raptor nest and a 50-foot radius around an active migratory bird nest) or alteration of the construction schedule.
- A qualified biologist will delineate the buffer using Environmentally Sensitive Area fencing, pin flags, and or yellow caution tape. The buffer zone will be maintained around the active nest site(s) until the young have fledged and are foraging independently.

Potential Constraints to Development from the Presence of Jurisdictional Waters

A search of the USFWS National Wetlands Inventory revealed that no marked wetlands or waters occur within the project. No evidence of unmarked existing drainages was observed during the field survey.

5.1.3 - Potential Constraints to Development due to Local Ordinances

There are no Regulated Desert Native Plant species present within the project. No permits are required for removal of vegetation within the project.

SECTION 6: REFERENCES

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Appendix A: Database Search Results

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CNPS *California Native Plant Society* Rare and Endangered Plant Inventory

Plant List

71 matches found. *Click on scientific name for details*

Search Criteria

Found in 9 Quads around 34117A3

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Abronia villosa var. aurita	chaparral sand-verbena	Nyctaginaceae	annual herb	1B.1	S2	G5T2T3
Acanthoscyphus parishii var. parishii	Parish's oxytheca	Polygonaceae	annual herb	4.2	S3S4	G4?T3T4
Ambrosia monogyra	singlewhorl burrobrush	Asteraceae	perennial shrub	2B.2	S2	G5
Ambrosia pumila	San Diego ambrosia	Asteraceae	perennial rhizomatous herb	1B.1	S1	G1
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	1B.1	S1	G1
Artemisia palmeri	San Diego sagewort	Asteraceae	perennial deciduous shrub	4.2	S3?	G3G4
Asplenium vespertinum	western spleenwort	Aspleniaceae	perennial rhizomatous herb	4.2	S4	G4
Astragalus hornii var. hornii	Horn's milk-vetch	Fabaceae	annual herb	1B.1	S1	G4G5T2T3
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	1B.1	S1	G1
Brodiaea filifolia	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	1B.1	S2	G2
California macrophylla	round-leaved filaree	Geraniaceae	annual herb	1B.2	S3?	G3?
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	S4	G4
Calochortus palmeri var. palmeri	Palmer's mariposa lily	Liliaceae	perennial bulbiferous herb	1B.2	S3?	G3T3?
Calochortus plummerae	Plummer's mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	S4	G4
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	2B.1	S2	G5
Castilleja lasiorhyncha	San Bernardino Mountains owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	1B.2	S2	G2
Caulanthus simulans	Payson's jewelflower	Brassicaceae	annual herb	4.2	S4	G4
Centromadia pungens ssp. laevis	smooth tarplant	Asteraceae	annual herb	1B.1	S2	G3G4T2
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.2	S1	G4?T1

<u>Chorizanthe leptotheca</u>	Peninsular spineflower	Polygonaceae	annual herb	4.2	S3	G3
<u>Chorizanthe parryi var. parryi</u>	Parry's spineflower	Polygonaceae	annual herb	1B.1	S3	G3T3
<u>Chorizanthe xanti var. leucotheca</u>	white-bracted spineflower	Polygonaceae	annual herb	1B.2	S3	G4T3
<u>Convolvulus simulans</u>	small-flowered morning-glory	Convolvulaceae	annual herb	4.2	S4	G4
<u>Cuscuta obtusiflora var. glandulosa</u>	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	2B.2	SH	G5T4T5
<u>Cylindropuntia californica var. californica</u>	snake cholla	Cactaceae	perennial stem succulent	1B.1	S1	G3T2
<u>Deinandra paniculata</u>	paniculate tarplant	Asteraceae	annual herb	4.2	S4	G4
<u>Dodecahema leptoceras</u>	slender-horned spineflower	Polygonaceae	annual herb	1B.1	S1	G1
<u>Eriastrum densifolium ssp. sanctorum</u>	Santa Ana River woollystar	Polemoniaceae	perennial herb	1B.1	S1	G4T1
<u>Eriophyllum lanatum var. obovatum</u>	southern Sierra woolly sunflower	Asteraceae	perennial herb	4.3	S4	G5T4
<u>Fimbristylis thermalis</u>	hot springs fimbristylis	Cyperaceae	perennial rhizomatous herb	2B.2	S2	G4
<u>Frasera neglecta</u>	pine green-gentian	Gentianaceae	perennial herb	4.3	S4	G4
<u>Galium californicum ssp. primum</u>	Alvin Meadow bedstraw	Rubiaceae	perennial herb	1B.2	S1	G5T1
<u>Galium johnstonii</u>	Johnston's bedstraw	Rubiaceae	perennial herb	4.3	S4	G4
<u>Helianthus nuttallii ssp. parishii</u>	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	1A	SH	G5TH
<u>Heuchera caespitosa</u>	urn-flowered alumroot	Saxifragaceae	perennial rhizomatous herb	4.3	S3	G3
<u>Horkelia cuneata var. puberula</u>	mesa horkelia	Rosaceae	perennial herb	1B.1	S1	G4T1
<u>Hulsea vestita ssp. parryi</u>	Parry's sunflower	Asteraceae	perennial herb	4.3	S4	G5T4
<u>Imperata brevifolia</u>	California satintail	Poaceae	perennial rhizomatous herb	2B.1	S3	G3
<u>Juglans californica</u>	Southern California black walnut	Juglandaceae	perennial deciduous tree	4.2	S3	G3
<u>Juncus duranii</u>	Duran's rush	Juncaceae	perennial rhizomatous herb	4.3	S3	G3
<u>Lasthenia glabrata ssp. coulteri</u>	Coulter's goldfields	Asteraceae	annual herb	1B.1	S2	G4T2
<u>Lepidium virginicum var. robinsonii</u>	Robinson's pepper-grass	Brassicaceae	annual herb	4.3	S3	G5T3
<u>Lilium humboldtii ssp. ocellatum</u>	ocellated Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2	S3	G4T3
<u>Lilium parryi</u>	lemon lily	Liliaceae	perennial bulbiferous herb	1B.2	S3	G3
<u>Lycium parishii</u>	Parish's desert-thorn	Solanaceae	perennial shrub	2B.3	S1	G3?
<u>Malacothamnus parishii</u>	Parish's bush-mallow	Malvaceae	perennial deciduous shrub	1A	SX	GXQ
<u>Monardella macrantha ssp. hallii</u>	Hall's monardella	Lamiaceae	perennial rhizomatous herb	1B.3	S3	G5T3

Monardella pringlei	Pringle's monardella	Lamiaceae	annual herb	1A	SX	GX
Monardella saxicola	rock monardella	Lamiaceae	perennial rhizomatous herb	4.2	S3	G3
Muhlenbergia californica	California muhly	Poaceae	perennial rhizomatous herb	4.3	S4	G4
Myosurus minimus ssp. apus	little mousetail	Ranunculaceae	annual herb	3.1	S2	G5T2Q
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	1B.1	S1	G1
Opuntia basilaris var. brachyclada	short-joint beavertail	Cactaceae	perennial stem succulent	1B.2	S3	G5T3
Perideridia parishii ssp. parishii	Parish's yampah	Apiaceae	perennial herb	2B.2	S2	G4T3T4
Phacelia mohavensis	Mojave phacelia	Boraginaceae	annual herb	4.3	S4	G4Q
Phacelia stellaris	Brand's star phacelia	Boraginaceae	annual herb	1B.1	S1	G1
Pickeringia montana var. tomentosa	woolly chaparral-pea	Fabaceae	evergreen shrub	4.3	S3S4	G5T3T4
Piperia leptopetala	narrow-petaled rein orchid	Orchidaceae	perennial herb	4.3	S4	G4
Ribes divaricatum var. parishii	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	1A	SH	G4TH
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	4.2	S4	G4
Schoenus nigricans	black bog-rush	Cyperaceae	perennial herb	2B.2	S2	G4
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	2B.2	S2	G3?
Senecio astephanus	San Gabriel ragwort	Asteraceae	perennial herb	4.3	S3	G3
Sidalcea malviflora ssp. dolosa	Bear Valley checkerbloom	Malvaceae	perennial herb	1B.2	S2S3	G5T2T3
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	2B.2	S2	G4
Sidotheca caryophylloides	chickweed oxytheca	Polygonaceae	annual herb	4.3	S4	G4
Sphenopholis obtusata	prairie wedge grass	Poaceae	perennial herb	2B.2	S2	G5
Streptanthus bernardinus	Laguna Mountains jewelflower	Brassicaceae	perennial herb	4.3	S3S4	G3G4
Streptanthus campestris	southern jewelflower	Brassicaceae	perennial herb	1B.3	S3	G3
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	1B.2	S2	G2
Thelypteris puberula var. sonorensis	Sonoran maiden fern	Thelypteridaceae	perennial rhizomatous herb	2B.2	S2	G5T3

Suggested Citation

CNPS, Rare Plant Program. 2015. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 15 December 2015].

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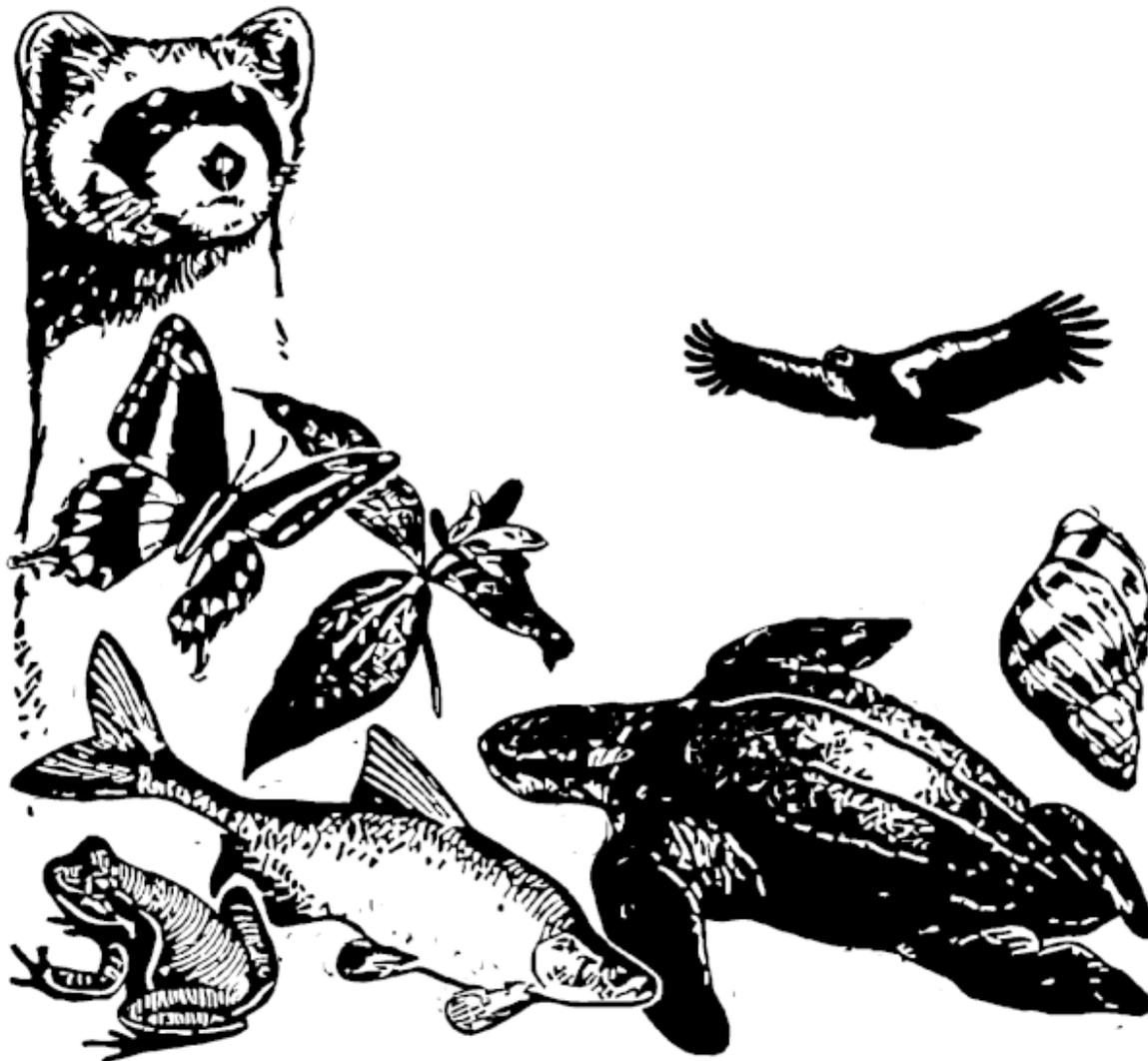
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270 E. Central Avenue Project

IPaC Trust Resource Report

Generated December 15, 2015 01:31 PM MST, IPaC v2.3.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



US Fish & Wildlife Service

IPaC Trust Resource Report



NAME

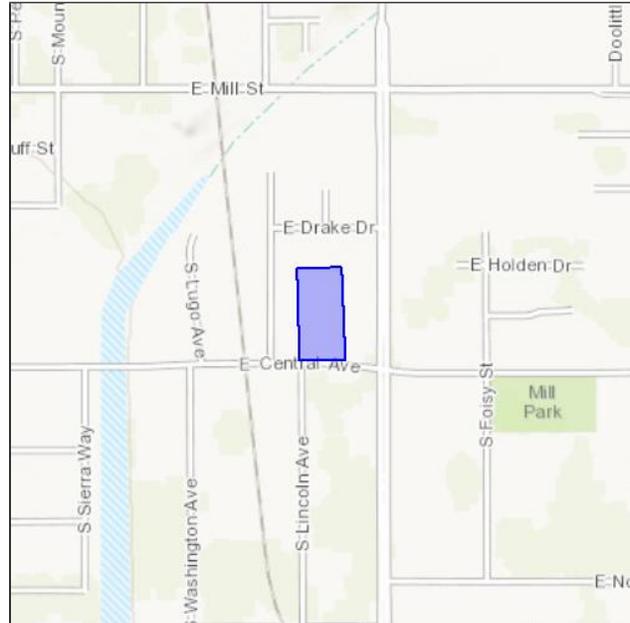
270 E. Central Avenue Project

LOCATION

San Bernardino County, California

IPAC LINK

<http://ecos.fws.gov/ipac/project/W7XPS-O5HLB-CDXPC-AGAU7-LFKIVE>



U.S. Fish & Wildlife Contact Information

Trust resources in this location are managed by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require FWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

[Section 7](#) of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from the Regulatory Documents section in IPaC.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Birds

Coastal California Gnatcatcher *Poliptila californica californica* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B08X

Least Bell's Vireo *Vireo bellii pusillus* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B067

Southwestern Willow Flycatcher *Empidonax traillii extimus* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B094

Fishes

Santa Ana Sucker *Catostomus santaanae* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E07W

Flowering Plants

Gambel's Watercress *Rorippa gambellii* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q38L

San Diego Ambrosia *Ambrosia pumila* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q01H

Santa Ana River Woolly-star *Eriastrum densifolium* ssp. *sanctorum* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q29A

Slender-horned Spineflower *Dodecahema leptoceras* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q2T6

Insects

Delhi Sands Flower-loving Fly *Rhaphiomidas terminatus abdominalis* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=I0MG

Mammals

San Bernardino Merriam's Kangaroo Rat *Dipodomys merriami parvus* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A0G8

Stephens' Kangaroo Rat *Dipodomys stephensi* (incl. *D. cascus*) Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A08Q

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

Additional information can be found using the following links:

- Birds of Conservation Concern
<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php>

The following species of migratory birds could potentially be affected by activities in this location:

Bald Eagle <i>Haliaeetus leucocephalus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B008	Bird of conservation concern
Bell's Vireo <i>Vireo bellii</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0JX	Bird of conservation concern
Black-chinned Sparrow <i>Spizella atrogularis</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0IR	Bird of conservation concern
Brewer's Sparrow <i>Spizella breweri</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HA	Bird of conservation concern
Burrowing Owl <i>Athene cunicularia</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0NC	Bird of conservation concern
Cactus Wren <i>Campylorhynchus brunneicapillus</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0FZ	Bird of conservation concern

California Spotted Owl <i>Strix occidentalis occidentalis</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B08L	
Costa's Hummingbird <i>Calypte costae</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JE	
Flammulated Owl <i>Otus flammeolus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0DK	
Fox Sparrow <i>Passerella iliaca</i>	Bird of conservation concern
Year-round	
Lawrence's Goldfinch <i>Carduelis lawrencei</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0J8	
Le Conte's Thrasher <i>toxostoma lecontei</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0GE	
Least Bittern <i>Ixobrychus exilis</i>	Bird of conservation concern
Year-round	
Lesser Yellowlegs <i>Tringa flavipes</i>	Bird of conservation concern
Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MD	
Lewis's Woodpecker <i>Melanerpes lewis</i>	Bird of conservation concern
Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HQ	
Loggerhead Shrike <i>Lanius ludovicianus</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FY	
Long-billed Curlew <i>Numenius americanus</i>	Bird of conservation concern
Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S	
Mountain Plover <i>Charadrius montanus</i>	Bird of conservation concern
Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B078	
Nuttall's Woodpecker <i>Picoides nuttallii</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HT	
Oak Titmouse <i>Baeolophus inornatus</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ	
Olive-sided Flycatcher <i>Contopus cooperi</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN	

Peregrine Falcon *Falco peregrinus*

Season: Wintering

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU

Bird of conservation concern

Pinyon Jay *Gymnorhinus cyanocephalus*

Year-round

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0I0

Bird of conservation concern

Rufous-crowned Sparrow *Aimophila ruficeps*

Year-round

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MX

Bird of conservation concern

Short-eared Owl *Asio flammeus*

Season: Wintering

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD

Bird of conservation concern

Western Grebe *aechmophorus occidentalis*

Season: Wintering

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA

Bird of conservation concern

Williamson's Sapsucker *Sphyrapicus thyroideus*

Season: Wintering

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FX

Bird of conservation concern

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuges in this location

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

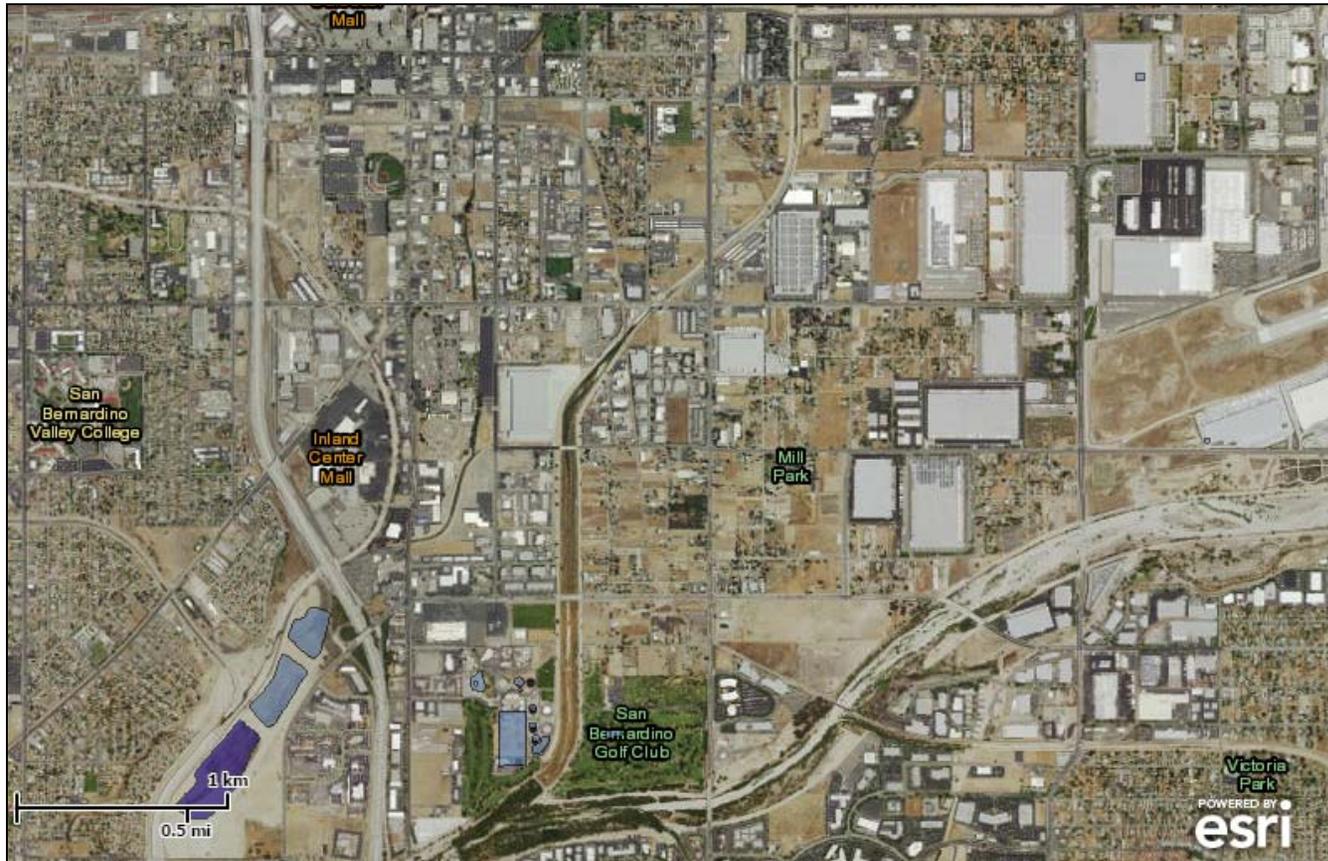
Wetland data is unavailable at this time.



U.S. Fish and Wildlife Service National Wetlands Inventory

4455.0011

Dec 15, 2015



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

Riparian

- Herbaceous
- Forested/Shrub

Riparian Status

- Digital Data

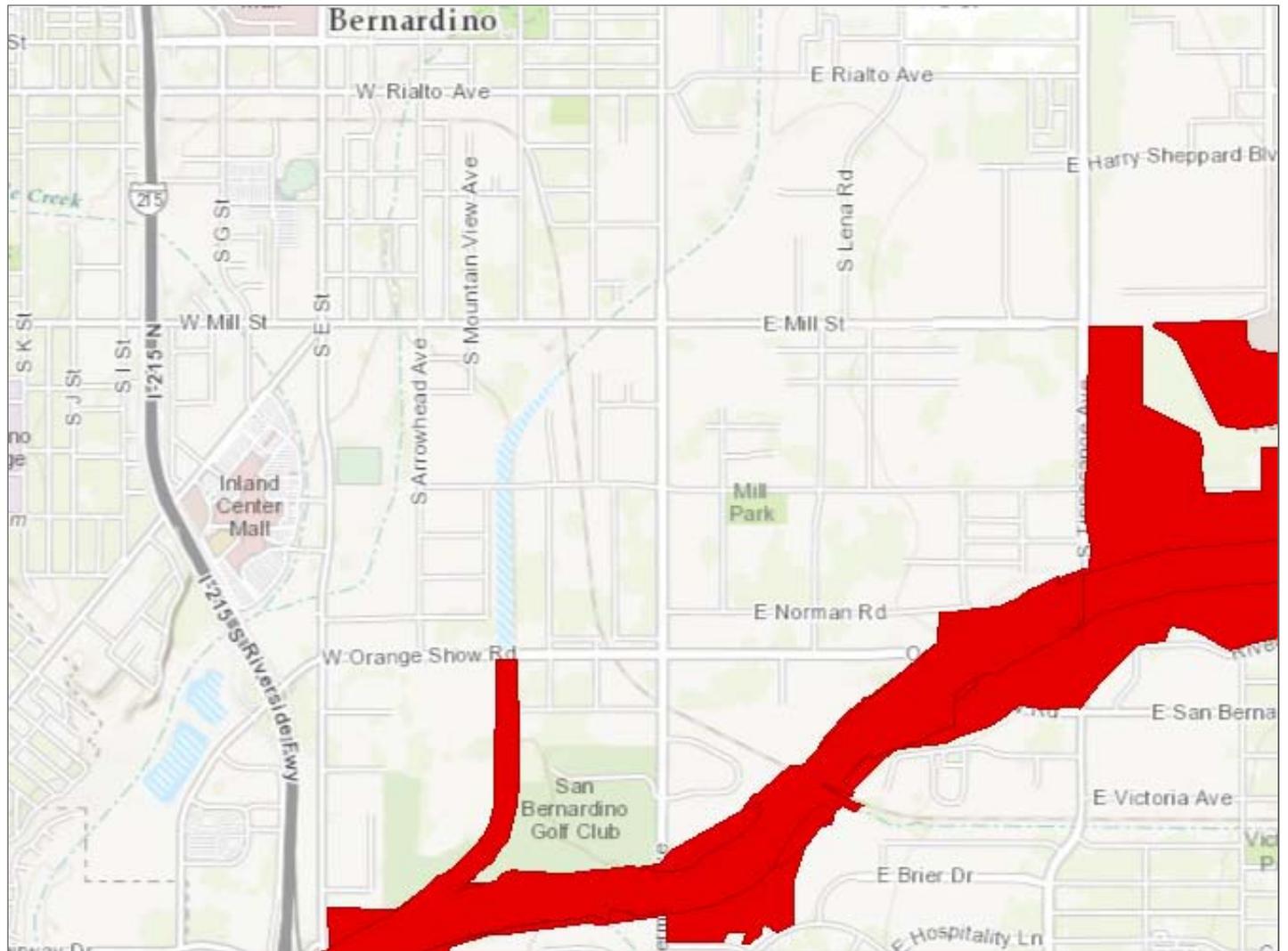
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

270 E. Central Ave San Bernardino CA

USFWS Critical Habitat Map

USFWS Critical Habitat for Threatened & Endangered Species



Bureau of Land Management, Esri, HERE, DeLorme, INCREMENT P, Intermap, USGS, METI/NASA, USDA, EPA

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**Appendix B:
Project Site Photographs**

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Photograph 1: Looking into the project site from the southern project boundary near E. Central Avenue.



Photograph 2: Looking east from the southern project boundary. The project is bordered by commercial business developments to the east.



Photograph 3: Looking south from the southern project boundary. The project is bordered by Central Avenue to the south.



Photograph 4: Looking west from the southern project boundary. The project is bordered by commercial developments to the west.



Photograph 5: Looking south from the western project boundary. The project contains evidence of illegal dumping and past weed control that have significantly disturbed the project site.



Photograph 6: Looking east from the western project boundary. The majority of the project contains non-native grassland vegetation.



Photograph 7: Looking north from the western project boundary. The project is bordered by commercial developments to the north.



Photograph 8: Looking south from the northeastern project boundary. The project contains an undeveloped property with primarily non-native grassland vegetation.

**Appendix C:
Species Observed**

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Species Observed

Fauna Observed	
Birds	
Accipitridae <i>Buteo jamaicensis</i>	Hawks red-tailed hawk
Cathartidae <i>Cathartes aura</i>	New World Vultures turkey vulture
Columbidae <i>Streptopelia deacaecto</i>	Pigeons and Doves Eurasian collared dove
Corvidae <i>Corvus corax</i>	Corvids common raven
Passeridae <i>Passer domesticus</i>	Old World Sparrows house sparrow
Tyrannidae <i>Sayornis nigricans</i>	Tyrant Flycatchers black phoebe

Flora Observed	
Amaranthaceae <i>Kali tragus</i>	Amaranth Family Russian thistle
Anacardiaceae <i>Schinus molle</i>	Sumac Family Peruvian pepper tree
Apocynaceae <i>Nerium oleander</i>	Dogbane family oleander
Araliaceae <i>Hedera helix</i>	Aralia Family common ivy
Arecaceae <i>Washingtonia filifera</i>	Palm Family California fan palm
Asteraceae <i>Heterotheca grandiflora</i>	Sunflower Family telegraph weed
Brassicaceae <i>Hirschfeldia incana</i>	Cabbage Family short-podded mustard
Eucalypteae <i>Eucalyptus camaldulensis</i>	Eucalyptus Family red gum eucalyptus
Euphorbiaceae <i>Ricinus communis</i>	Spurge Family castor bean
Solanaceae <i>Nicotiana glauca</i>	Nightshade Family tree tobacco