

**BIOLOGICAL RESOURCES ASSESSMENT  
FOR THE WAREHOUSE DEVELOPMENT AT 10426 LOCUST AVE.  
BLOOMINGTON, CALIFORNIA**

***Prepared for:***

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BLOOMINGTON, CALIFORNIA**

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**SECTION 1.0 – INTRODUCTION**

Jennings Environmental, LLC (Jennings) was retained by Lilburn Corporation (Lilburn) to conduct a literature review and reconnaissance-level survey for the proposed Warehouse Development Project at 10426 Locust Ave. in Bloomington, California (Project). The survey identified vegetation communities, the potential for the occurrence of special status species, or habitats that could support special status wildlife species, and recorded all plants and animals observed or detected within the Project boundary. This biological resource assessment is designed to address potential effects of the proposed project to designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW) or the California Native Plant Society (CNPS). Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and (CDFW). Additionally, the site as surveyed for any drainage features that would meet the definition of the Waters of the US (WOUS), Waters of the State (WOS), or CDFW jurisdiction.

**1.1 PROJECT LOCATION**

The project is generally located in the southern portion of Section 21, Township 1 South, Range 5 West, and is depicted on the *Fontana* U.S. Geological Survey's (USGS) 7.5-minute topographic map. More specifically the project consists of Assessor Parcel Numbers (APNs) 0252-151-04, 05, 52, & 64 within the unincorporated area of Bloomington, San Bernardino County, California. The Project site is located 0.16 miles north of the intersection of Slover Ave. and Locust Ave. The site is surrounded by residential parcels to the south and north, with commercial facilities to the west and east. There are also additional residences to the southeast. (Figures 1 and 2 in Appendix A).

**1.2 PROJECT DESCRIPTION**

One parcel of the approximately 3-acre Project Site is currently being used as a construction equipment storage lot and two parcels are occupied by residential homes. The proposed Project includes the development of a 52,520 square foot warehouse with a 2,500 square foot office section. There will be 53 parking stalls, 10 for the office and 43 for the warehouse. Additional improvements include 15 percent landscaping and a fire turnaround.

**2.0 – METHODOLOGY**

**2.1 LITERATURE REVIEW**

Prior to performing the field survey, existing documentation relevant to the Project site was reviewed. The most recent records of the California Natural Diversity Database (CNDDDB) managed by CDFW (CDFW 2020), the USFWS Critical Habitat Mapper (USFWS 2022), and the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2022) were reviewed for the following quadrangles containing and surrounding the Project site: *Fontana* and *San Bernardino South*, USGS 7.5-minute quadrangles. The *San Bernardino South* quad was included in the search due to the site's proximity to this quad. These databases contain records of reported occurrences

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of federal- or state-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Project site.

## **2.2 SOILS**

Before conducting the surveys, soil maps for San Bernardino County were referenced online to determine the types of soil found within the Project site. Soils were determined in accordance with categories set forth by the United States Department of Agriculture (USDA) Soil Conservation Service and by referencing the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2022).

## **2.3 BIOLOGICAL RECONNAISSANCE-LEVEL SURVEY**

Jennings biologist, Gene Jennings, conducted the general reconnaissance survey within the Project site to identify the potential for the occurrence of special status species, vegetation communities, or habitats that could support special status wildlife species. The surveys were conducted on foot, throughout the Project site between 0945 and 1015 hours on June 15, 2022. Weather conditions during the survey included temperatures ranging from 73.3 to 75.6 degrees Fahrenheit, with clear skies, no precipitation, and 1.5 to 2.3 mile per hour winds. Photographs of the Project site were taken to document existing conditions (Appendix B).

## **2.4 JURISDICTIONAL FEATURES**

A general assessment of jurisdictional waters regulated by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW was conducted for the proposed Project area. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates the discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter- Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. The assessment was conducted by a desktop survey through the USGS National Hydrography Dataset for hydrological connectivity. Additional discussion of the regulatory framework is provided in Appendix C.

### **2.4.1 VEGETATION**

All plant species observed within the Project site were recorded. Vegetation communities within the Project site were identified, qualitatively described, and mapped onto a high-resolution imagery aerial photograph. Plant communities were determined in accordance with the *Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). Plant nomenclature follows that of *The Jepson Manual, Second Edition* (Baldwin et al. 2012). A comprehensive list of the plant species observed during the survey is provided in Appendix D.

## **2.4.2 WILDLIFE**

All wildlife and wildlife signs observed and detected, including tracks, scat, carcasses, burrows, excavations, and vocalizations, were recorded. Additional survey time was spent in those habitats most likely to be utilized by wildlife (native vegetation, wildlife trails, etc.) or in habitats with the potential to support state- and/or federally listed or otherwise special status species. Notes were made on the general habitat types, species observed, and the conditions of the Project site. A comprehensive list of the wildlife species observed during the survey is provided in Appendix D.

## **SECTION 3.0 – RESULTS**

### **3.1 LITERATURE REVIEW RESULTS**

According to the CNDDDB, CNPSEI, and other relevant literature and databases, 60 sensitive species, 17 of which are listed as threatened or endangered, and 3 sensitive habitats, have been documented in the *Fontana* and *San Bernardino South* quads. This list of sensitive species and habitats includes any State and/or federally listed threatened or endangered species, CDFW designated Species of Special Concern (SSC), and otherwise Special Animals. “Special Animals” is a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of “species at risk” or “special status species.” The CDFW considers the taxa on this list to be those of greatest conservation need.

An analysis of the likelihood for the occurrence of all CNDDDB-sensitive species documented in the *Fontana* and *San Bernardino South* quads is provided in Table 2, in Appendix D. This analysis takes into account species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions. According to the databases, no sensitive habitats, including USFWS designated critical habitat, occurs within or adjacent to the project site.

#### **3.1.1 SOILS**

After a review of the USDA Soil Conservation Service and by referencing the USDA NRCS Web Soil Survey (USDA 2020), it was determined that the Project site is located within the San Bernardino County Southwestern Part, California area CA677. Based on the results of the database search, one (1) soil type was observed in the area:

Tujunga loamy sand, 0 to 5 percent slope (TuB). This soil is somewhat excessively drained with a high to very high capacity to transmit water. This soil consists of alluvium derived from granite, typically ranges in elevation from 650 to 3,110 feet above mean sea level (amsl), and is considered farmland of statewide importance.

#### **3.1.2 WILDLIFE CORRIDORS AND HABITAT CONSERVATION PLAN**

According to the California Essential Habitat Connectivity Project, the Project site is not mapped within a permeable area for wildlife movement. Additionally, the Project site is not within an adopted habitat conservation plan.

### **3.1.3 SPECIAL STATUS SPECIES BACKGROUND**

Of the 60 species found within the *San Bernardino South* and *Fontana* quads, 17 have a special designation of either: federally listed or state listed. Some species are also given the special designation of species of special concern (SSC) under the California Fish and Game Code. The discussion below provides the background information on those species that have the potential to occur within the Project site.

#### *Delhi sands flower-loving fly (Federally Endangered {FE})*

The Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*; Delhi fly) is federally listed as endangered, and is narrowly distributed in portions of Riverside and San Bernardino Counties in areas with Delhi series soils. Delhi Sands flower-loving fly has distinctive biological and habitat requirements and faces a number of threats. The life cycle of the fly includes egg, larval, pupal, and adult stages. Only the adult stage occurs above-ground, when adults emerge to breed during the summer months. The species is restricted to fine, sandy Delhi series soils, usually with wholly- or partly stabilized sand dunes and sparse native vegetation. Areas with suitable fly habitat have been highly affected by anthropogenic activities, including conversion to agriculture, residential and commercial development, surface mining for sand, dumping of trash and cow manure, and damage by off-road vehicles. Invasive exotic plants are also thought to degrade fly habitat by increasing vegetation cover or by altering soil conditions through dune stabilization and changes in soil moisture.

#### *Burrowing Owl (Species of Special Concern (SSC))*

The burrowing owl (BUOW) is a state and federal SSC. This owl is a mottled, brownish and sand-colored, dove-sized raptor, with large, yellow eyes, a rounded head lacking ear tufts, white eyebrows, and long legs compared to other owl species. It is a ground-dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather, and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows.

BUOW spends a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. BUOW frequently hunt by hovering in place above the ground and dropping on their prey from above. They feed primarily on insects such as grasshoppers, June beetles, and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31. Up to 11, but typically 7 to 9, eggs are laid in a burrow, abandoned pipe, or other subterranean hollows where incubation is complete in 28-30 days. Young BUOW fledge in 44 days. The BUOW is considered a migratory species in portions of its range, which includes western North America from Canada to Mexico, and east to Texas and Louisiana. BUOW populations in California are considered to be sedentary or locally migratory.

Throughout its range, the BUOW is vulnerable to habitat loss, predation, vehicular collisions, and destruction of burrow sites and the poisoning of ground squirrels (Grinnell and Miller 1944, Zarn 1974, Remsen 1978). BUOW has disappeared from significant portions of their range in the last 15 years and, overall, nearly 60% of the breeding groups of owls known to have existed in California during the 1980s

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had disappeared by the early 1990s (Burrowing Owl Consortium 1993). The BUOW is not listed under the state or federal Endangered Species Act but is considered both a federal and state Species of Special Concern. The BUOW is a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California Fish and Game Code (CDFG Code #3513 & #3503.5).

*Additional Species*

Of the 17 species with the designation of either: federally listed or state listed, 16 of those species are not expected to occur within the Project site. The Project site is either outside the known range for the species or suitable habitat does not occur within the Project area. Therefore, no further discussion or recommendations are required for the following species:

- Marsh sandwort
- Salt marsh bird’s-beak
- San Bernardino kangaroo rat
- Slender-horned spineflower
- Santa ana river woollystar
- Quino checkerspot butterfly
- Gambel’s water cress
- Steelhead
- Least Bell’s vireo
- Tricolored blackbird
- Swainson’s hawk
- California black rail
- Santa ana sucker
- Western yellow-billed cuckoo
- Stephen’s kangaroo rat
- Coastal California gnatcatcher

**3.1.4 DESIGNATED CRITICAL HABITAT**

The site is not located within or adjacent to any USFWS designated Critical Habitat. No further action is required.

**3.1.5 JURISDICTIONAL WATERS**

Aerial imagery of the site was examined and compared with the surrounding USGS 7.5-minute topographic quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The U.S. Fish and Wildlife Service National Wetland Inventory and Environmental Protection Agency (EPA) Water Program “My Waters” data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the Soil maps from the U.S. Department of Agriculture (USDA) - Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2018) were reviewed to identify the soil series on-site and to check if they have been identified regionally as hydric soils. Upstream and downstream connectivity of waterways (if present) was reviewed in the field, on aerial imagery, and

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topographic maps to determine jurisdictional status. No obvious signs of jurisdictional features were observed during the literature review.

### **3.1.6 HYDROLOGY AND HYDROLOGIC CONNECTIVITY**

Hydrologically, the project site is located within the Chino Split Hydrologic Sub-Area (HSA 801.21), as identified on the Calwater Watershed maps. This Chino Split HSA area comprises a 190,515-acre drainage area within the larger Middle Santa Ana River Watershed Area (Hydrologic Unit Code [HUC10] 1807020308, US Watershed Maps) (CalTrans, 2022). The Middle Santa Ana River watershed in the Bloomington area is bordered to the north by the Lytle Creek watershed, to the east by the Upper Santa Ana River and San Timoteo Wash watersheds, to the south by the Lower San Jacinto River and Temescal Wash watersheds, and to the west by Lower Santa Ana River and Chino Creek watersheds. (Figure 3 in Appendix A).

## **3.2 FIELD STUDY RESULTS**

### **3.2.1 HABITAT**

The habitat on-site consists of bare ground with patchy ruderal vegetation. The site also contains residential developments with ornamental landscaping. Table 1 in Appendix D contains a list of all plants found on-site. The site has been subject to historic human disturbances such as, development for residential uses and storage of large construction equipment and materials. Surrounding land uses include: residential developments and commercial developments.

### **3.2.2 WILDLIFE**

Two birds were seen during the surveys. Species observed or otherwise detected on or in the vicinity of the project site during the surveys included house sparrow (*Passer domesticus*) and northern mockingbird (*Mimus polyglottos*).

The project site is located within a developed area of the unincorporated community of Bloomington that includes railroad yards, freeways, and heavy industrial uses.

### **3.2.3 SOILS**

Although the historical soil mapping shows TuB as the dominant soil type, the site also displayed signs of additional soil disturbance in the form of residential development and a construction storage yard. The soil characteristics on site showed signs of alteration throughout the site from current and past uses.

### **3.2.4 SPECIAL STATUS SPECIES**

No State and/or federally listed threatened or endangered species or other sensitive species were observed on-site during surveys.

#### *Delhi sands flower-loving fly (FE)*

No suitable habitat for the Delhi sands flower-loving fly exists within the project site or surrounding area. The soils on site are not the appropriate soils for this species. Because this species spends the majority of its life underground, the site must contain the appropriate soils in order for it to be deemed suitable.



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***Findings:*** The Project site does not contain suitable habitat for this species as no Delhi sands soils are present. Therefore, there is no impact on this species as a result of the Project. Nothing further is required.

***Burrowing owl (SSC)***

The Project site does not contain suitable habitat for this species. The site is compact with imported materials with no signs of burrow surrogate species, California ground squirrels (*Otospermophilus beecheyi*). The assessment survey was structured, in part, to detect BUOW, which has been observed in the near vicinity of the project site (within 2 miles). The survey consisted of walking transects spaced to provide 100% visual coverage of the project site. The result of the survey was that no evidence of BUOW was found in the survey area. No burrows of appropriate size, aspect, or shape were located and no BUOW pellets, feathers, or whitewash were found. No burrowing owl individuals were observed.

***Findings:*** The Project site does not contain suitable habitat for this species. Therefore, there is no impact on this species as a result of the Project. Nothing further is required.

**3.2.5 NESTING BIRDS**

The Project site and immediate surrounding area do contain habitat suitable for nesting birds. The area does have mature trees and various non-natural refugia in which birds can nest. As such the Project is subject to the following nesting bird regulations. Recommendations for avoidance and minimization are in section 4.

***Migratory Bird Treaty Act***

The Migratory Bird Treaty Act of 1918. This Act implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The Act has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The Act prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service.

***California Fish and Game Code***

The Project site is also subject to Sections 3503 and 3503.5 of the Fish and Game Code. Section 3503 states, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto". And Section 3503.5 states, "It is unlawful to take, possess, or destroy any birds in the orders 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".

**wet3.2.6 JURISDICTIONAL WATERS**

**Waters of the United States and Waters of the State**

The USACE has the authority to permit the discharge of dredged or fill material in Waters of the U.S. under Section 404 CWA. While the Regional Water Quality Board has authority over the discharge of dredged or

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fill material in Waters of the State under Section 401 CWA as well as the Porter-Cologne Water Quality Control Act. The Project area was surveyed with 100 percent visual coverage and no drainage features were present on site. As such, the subject parcel does not contain any wetlands, waters of the U.S., or Waters of the State.

Fish and Game Code Section 1602 - State Lake and/or Streambed

The CDFW asserts jurisdiction over any drainage feature that contains a definable bed and bank or associated riparian vegetation. The Project area was surveyed with 100 percent visual coverage and no definable bed or bank features exist on the project site. As such, the subject parcel does not contain any areas under CDFW jurisdiction.

**Section 4.0 – CONCLUSIONS AND RECOMMENDATIONS**

Based on the literature review and personal observations made on-site and within the immediate vicinity, no State and/or federally listed threatened or endangered species are documented/or expected to occur within the Project site. No other sensitive species were observed within the project area or buffer area.

Jurisdictional Features

There are no streams, channels, washes, or swales that meet the definitions of Section 1600 of the State of California Fish and Game Code (FGC) under the jurisdiction of the CDFW, Section 401 (“Waters of the State” ) of the Clean Water Act (CWA) under the jurisdiction of the Regional Water Quality Control Board (RWQCB), or “Waters of the United States” (WoUS) as defined by Section 404 of the CWA under the jurisdiction of the U.S. Army Corps of Engineers (Corps) within the subject parcel. Therefore, no permit, certification, or agreement is required from the Army Corps, RWQCB, and CDFW, respectively.

Nesting Birds

Since there is some habitat within the project site and adjacent area that is suitable for nesting birds in general, the following mitigation measure should be implemented.

Nesting bird nesting season generally extends from February 1 through September 15 in southern California and specifically, March 15 through August 31 for migratory passerine birds. To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist will conduct pre-construction Nesting Bird Surveys (NBS) prior to project-related disturbance to nestable vegetation to identify any active nests. If no active nests are found, no further action will be required. If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage, and expected types, intensity, and duration of the disturbance. The nests and buffer zones shall be field-checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

Please do not hesitate to contact me at 909-534-4547 should you have any questions or require further information.

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Sincerely,

A handwritten signature in black ink that reads "Gene Jennings". The signature is written in a cursive style with a large initial "G" and a long, sweeping underline.

Gene Jennings  
Principal/Regulatory Specialist

Appendices:

- Appendix A – Figures
- Appendix B – Site Photos
- Appendix C – Regulatory Framework
- Appendix D – Tables

**Section 5.0 – REFERENCES**

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, and T.J. Rosatti, and D.H. Wilken (editors) 2012 *The Jepson Manual: Vascular Plants of California, Second Edition*. University of California Press, Berkeley, CA.
- Barbour, M.G., J.H. Burk, W.D. Pitts, F.S. Gilliam, and M.W. Schwartz. 1999 *Terrestrial Plant Ecology, Third Edition*. Addison Wesley Longman, Inc. Menlo Park, CA.
- Bolster, B.C., editor. 1998. Terrestrial Mammal Species of Special Concern in California. Draft Final Report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Report submitted to California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No. FG3146WM.
- California Department of Fish and Wildlife (CDFW)
- A. 2022 California Natural Diversity Database (CNDDDB). RareFind Version 3.1.0. Database Query. Wildlife and Habitat Data Analysis Branch. [Accessed June 2022]
  - B. California Wildlife Habitats Relationships Life History Accounts and Range Maps. (Accessed online at <https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range>). Accessed June 2022.
- California Department of Fish and Game. 1995. Staff report on burrowing owl mitigation. Memo from C.F. Raysbrook, Interim Director to Biologist, Environmental Services Division, Department of Fish and Game. Sacramento, CA.
- California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency. March 7, 2012
- California Department of Transportation. Water Quality Planning Tool. <http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx> (Accessed June 2022)
- California Native Plant Society (CNPS) 2021 Inventory of Rare and Endangered Plants (online edition, v8-03 0.39). Rare Plant Scientific Advisory Committee, California Native Plant Society, Sacramento, California. Website <http://www.rareplants.cnps.org>; [Accessed June 2022].
- McKernan, R.L. 1997. The status and known distribution of the San Bernardino Kangaroo rat (*Dipodomys merriami parvus*): field surveys conducted between 1987 and 1996. Unpublished report prepared for the Carlsbad Fish and Wildlife Office, Carlsbad, California.
- Sawyer, J.O., Jr., T. Keeler-Wolf, J. Evens 2009 *A Manual of California Vegetation, Second Edition*. California Native Plant Society, Sacramento, CA.
- San Bernardino County Biotic Resources Map. <http://cms.sbcounty.gov/lus/Planning/ZoningOverlayMaps.aspx> (Accessed June 2022)

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U.S. Department of Agriculture (USDA) 2020 Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions [Online Edition]. Website <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx> [Accessed June 2022].

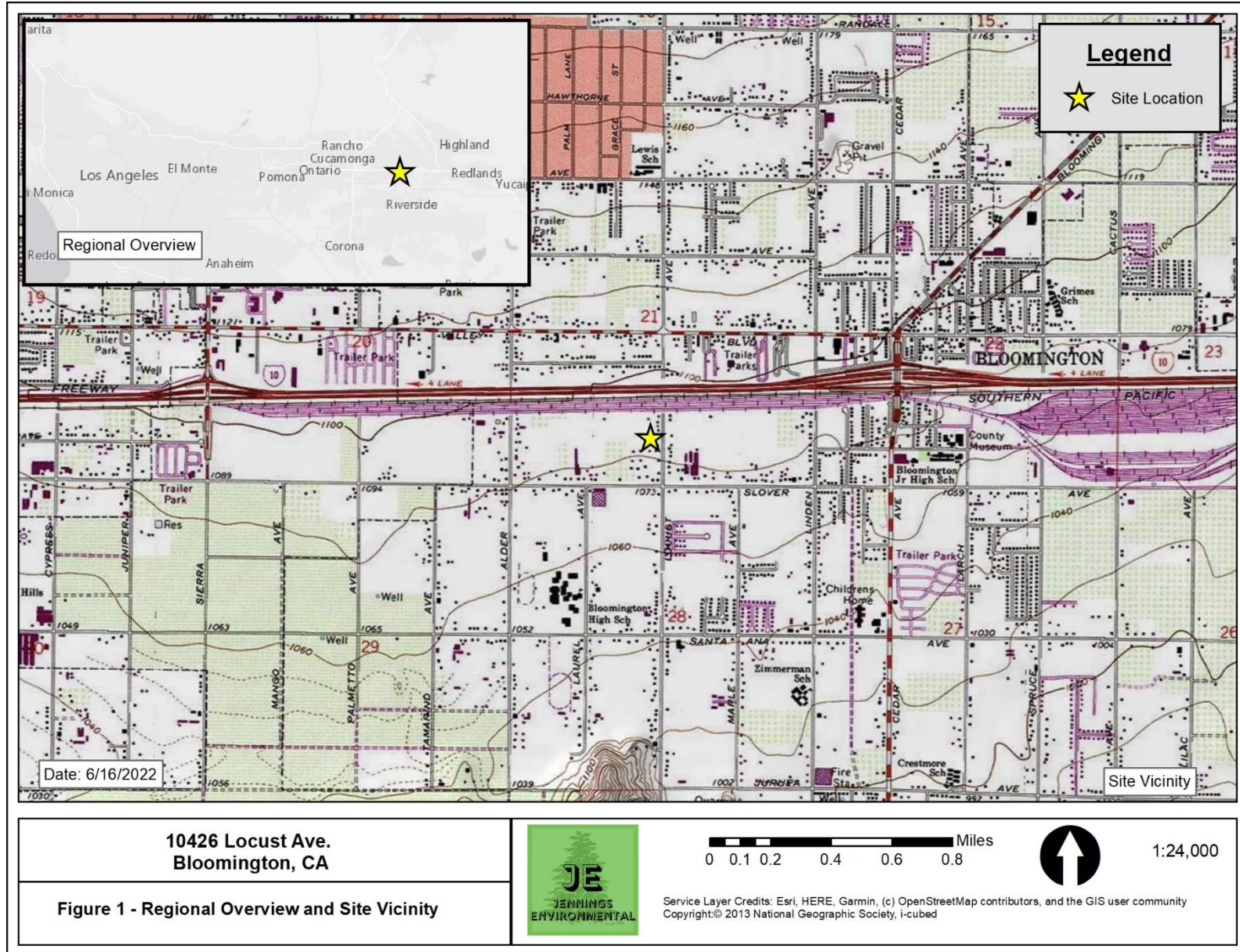
U.S. Fish and Wildlife Service (USFWS). National Wetlands Inventory. Website: <http://wetlands.fws.gov>. (Accessed: May 2022).

U.S. Fish and Wildlife Service (USFWS). 1998. Determination of Endangered Status for the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*). 63 FR 3837.

U.S. Fish and Wildlife Service (USFWS). 2002. Final Determination of Critical Habitat for the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*); Final Rule. 67 FR 198

**Appendix A – Figures**

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**10426 Locust Ave.  
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**Figure 1 - Regional Overview and Site Vicinity**



0 0.1 0.2 0.4 0.6 0.8 Miles

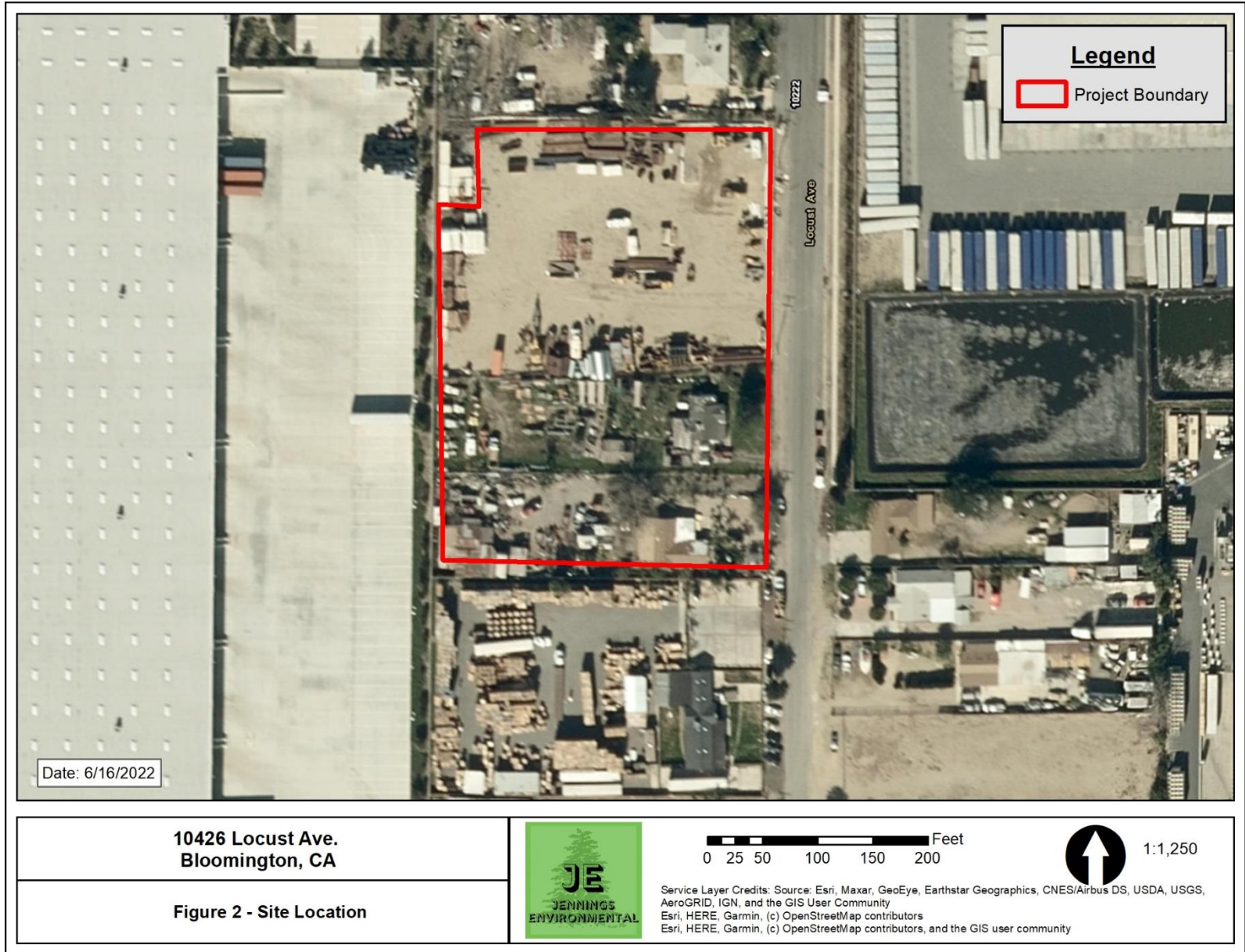


1:24,000

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community  
Copyright: © 2013 National Geographic Society, i-cubed

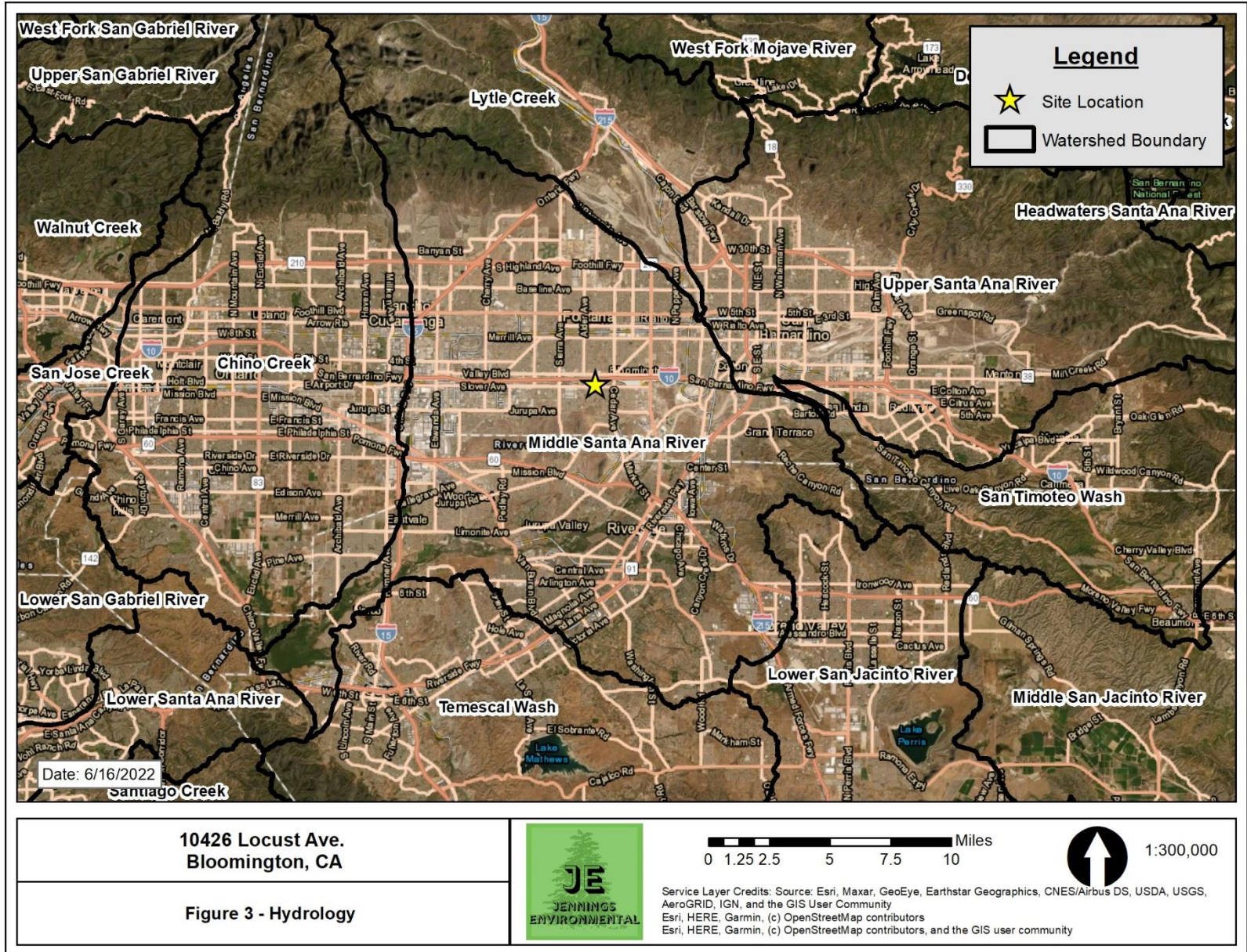


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**Appendix B – Photos**



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Photo 1 – Eastern edge of Project site, facing southwest. Showing ruderal vegetation, mature trees, and bare ground.



Photo 2 – Eastern edge of Project site, facing west. Showing ruderal vegetation and bare ground.

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Photo 3 – Eastern edge of Project site, facing northwest. Showing ruderal vegetation, mature trees, and bare ground.



Photo 4 – Eastern edge of Project site, facing northwest. Showing ruderal vegetation, mature trees, and bare ground.

## **Appendix C – Regulatory Framework**

## **1.1 FEDERAL JURISDICTION**

### **1.1.1 United States Army Corps of Engineers**

Activities within inland streams, wetlands, and riparian areas in California are regulated by agencies at the federal, state, and regional levels. At the federal level, the U.S. Army Corps of Engineers (USACE) Regulatory Program regulates activities within wetlands and waters of the US pursuant to Section 404 of the Federal Clean Water Act (CWA).

At the state level, the California Department of Fish and Wildlife (CDFW) regulates activities within the bed, bank, and associated habitat of a stream under the Fish and Game Code §§ 1600–1616. The California State Water Resources Board (SWRB) delegates authority at the regional level to Regional Water Quality Control Boards (RWQCB) that are responsible for regulating discharge into waters of the US under Section 401 of the federal CWA and waters of the State under the California Porter-Cologne Water Quality Act.

The CWA was implemented to maintain and restore the chemical, physical, and biological integrity of the Waters of the United States (33 Code of Federal Regulations [CFR] Part 328 Section 328.3). “Waters of the US” are defined as follows:

(a) *Jurisdictional waters.* For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term “waters of the United States” means:

- (1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
- (2) Tributaries;
- (3) Lakes and ponds, and impoundments of jurisdictional waters; and
- (4) Adjacent wetlands.

(b) *Non-jurisdictional waters.* The following are not “waters of the United States”:

- (1) Waters or water features that are not identified in paragraph (a)(1), (2), (3), or (4) of this section;
- (2) Groundwater, including groundwater drained through subsurface drainage systems;
- (3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
- (4) Diffuse stormwater run-off and directional sheet flow over upland;
- (5) Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;
- (6) Prior converted cropland;
- (7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease; Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in nonjurisdictional waters, so long as those artificial lakes and ponds

are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;

(8) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in nonjurisdictional waters for the purpose of obtaining fill, sand, or gravel;

(9) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;

(10) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and

(11) Waste treatment systems.

(c) *Definitions.* In this section, the following definitions apply:

(1) *Adjacent wetlands.* The term *adjacent wetlands* means wetlands that:

(i) Abut, meaning to touch at least at one point or side of, a water identified in paragraph (a)(1), (2), or (3) of this section;

(ii) Are inundated by flooding from a water identified in paragraph (a)(1), (2), or (3) of this section in a typical year;

(iii) Are physically separated from a water identified in paragraph (a)(1), (2), or (3) of this section only by a natural berm, bank, dune, or similar natural feature; or

(iv) Are physically separated from a water identified in paragraph (a)(1), (2), or (3) of this section only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection between the wetlands and the water identified in paragraph (a)(1), (2), or (3) of this section in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature. An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

(2) *Ditch.* The term *ditch* means a constructed or excavated channel used to convey water.

(3) *Ephemeral.* The term *ephemeral* means surface water flowing or pooling only in direct response to precipitation (e.g., rain or snow fall).

(4) *High tide line.* The term *high tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of



water against a coast by strong winds, such as those accompanying a hurricane or other intense storm.

(5) *Intermittent*. The term *intermittent* means surface water flowing continuously during certain times of the year and more than in direct response to precipitation (e.g., seasonally when the groundwater table is elevated or when snowpack melts).

(6) *Lakes and ponds, and impoundments of jurisdictional waters*. The term *lakes and ponds, and impoundments of jurisdictional waters* means standing bodies of open water that contribute surface water flow to a water identified in paragraph (a)(1) of this section in a typical year either directly or through one or more waters identified in paragraph (a)(2), (3), or (4) of this section. A lake, pond, or impoundment of a jurisdictional water does not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature, through a culvert, dike, spillway, or similar artificial feature, or through a debris pile, boulder field, or similar natural feature. A lake or pond, or impoundment of a jurisdictional water Start Printed Page 22339 is also jurisdictional if it is inundated by flooding from a water identified in paragraph (a)(1), (2), or (3) of this section in a typical year.

(7) *Ordinary high water mark*. The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(8) *Perennial*. The term *perennial* means surface water flowing continuously year-round.

(9) *Prior converted cropland*. The term *prior converted cropland* means any area that, prior to December 23, 1985, was drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible. EPA and the Corps will recognize designations of prior converted cropland made by the Secretary of Agriculture. An area is no longer considered prior converted cropland for purposes of the Clean Water Act when the area is abandoned and has reverted to wetlands, as defined in paragraph (c)(16) of this section. Abandonment occurs when prior converted cropland is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years. For the purposes of the Clean Water Act, the EPA Administrator shall have the final authority to determine whether prior converted cropland has been abandoned.

(10) *Snowpack*. The term *snowpack* means layers of snow that accumulate over extended periods of time in certain geographic regions or at high elevation (e.g., in northern climes or mountainous regions).

(11) *Tidal waters and waters subject to the ebb and flow of the tide*. The terms *tidal waters and waters subject to the ebb and flow of the tide* mean those



waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters and waters subject to the ebb and flow of the tide end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

(12) *Tributary*. The term *tributary* means a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to a water identified in paragraph (a)(1) of this section in a typical year either directly or through one or more waters identified in paragraph (a)(2), (3), or (4) of this section. A tributary must be perennial or intermittent in a typical year. The alteration or relocation of a tributary does not modify its jurisdictional status as long as it continues to satisfy the flow conditions of this definition. A tributary does not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature, through a subterranean river, through a culvert, dam, tunnel, or similar artificial feature, or through a debris pile, boulder field, or similar natural feature. The term tributary includes a ditch that either relocates a tributary, is constructed in a tributary, or is constructed in an adjacent wetland as long as the ditch satisfies the flow conditions of this definition.

(13) *Typical year*. The term *typical year* means when precipitation and other climatic variables are within the normal periodic range (e.g., seasonally, annually) for the geographic area of the applicable aquatic resource based on a rolling thirty-year period.

(14) *Upland*. The term *upland* means any land area that under normal circumstances does not satisfy all three wetland factors (i.e., hydrology, hydrophytic vegetation, hydric soils) identified in paragraph (c)(16) of this section, and does not lie below the ordinary high water mark or the high tide line of a jurisdictional water.

(15) *Waste treatment system*. The term *waste treatment system* includes all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge).

(16) *Wetlands*. The term *wetlands* means areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Section 404 (b)(1) compliance must be demonstrated before a Section 404 permit can be issued. Guidelines for a Section 404(b)(1) analysis were developed by the EPA in conjunction with USACE (40 CFR Parts 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

## **1.2 STATE JURISDICTION**

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the CWA as well as the California Porter-Cologne Water Quality Control Act (Porter-Cologne; California Water Code, Division 7, §13000 et seq.). Waters of the State are defined by Porter-Cologne as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code Section 13050(e)). Waters of the State broadly includes all waters within the State’s boundaries (public or private), including waters in both natural and artificial channels.

### **1.2.1 Regional Water Quality Control Board**

Under Porter-Cologne, the State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Boards (RWQCB) regulate the discharge of waste into waters of the State. Discharges of waste include “fill, any material resulting from human activity, or any other ‘discharge’ that may directly or indirectly impact ‘waters of the state.’” Porter-Cologne reserves the right for the State to regulate activities that could affect the quantity and/or quality of surface and/or groundwaters, including isolated wetlands, within the State. Wetlands were defined as waters of the State if they demonstrated both wetland hydrology and hydric soils. Waters of the State determined to be jurisdictional for these purposes require, if impacted, waste discharge requirements (WDRs).

When an activity results in fill or discharge directly below the OHWM of jurisdictional waters of the United States (federal jurisdiction), including wetlands, a CWA Section 401 Water Quality Certification is required. If a proposed project is not subject to CWA Section 401 certification but involves activities that may result in a discharge to waters of the State, the project may still be regulated under Porter-Cologne and may be subject to waste discharge requirements. In cases where waters apply to both CWA and Porter-Cologne, RWQCB may consolidate permitting requirements to one permit.

### **1.2.2 California Department of Fish and Wildlife**

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation” (California Code of Regulations, Title 14, Section 1.72). The jurisdiction of CDFW may include areas in or near intermittent streams, ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams that are indicated on USGS maps, watercourses that may contain subsurface flows, or within the flood plain of a water body.

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CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW limits of jurisdiction typically include the maximum extents of the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

In a CDFW guidance of stream processes and forms in dryland watersheds (Vyverberg 2010), streams are identified as having one or more channels that may all be active or receive water only during some high flow event. Subordinate features, such as low flow channels, active channels, banks associated with secondary channels, floodplains, and stream-associated vegetation, may occur within the bounds of a single, larger channel. The water course is defined by the topography or elevations of land that confine a stream to a definite course when its waters rise to their highest level. A watercourse is defined as a stream with boundaries defined by the maximal extent or expression on the landscape even though flow may otherwise be intermittent or ephemeral.

Artificial waterways such as ditches (including roadside ditches), canals, aqueducts, irrigation ditches, and other artificially created water conveyance systems also may be under the jurisdiction of CDFW. CDFW may claim jurisdiction over these features based on the presence of habitat characteristics suitable to support aquatic life, riparian vegetation, and/or stream-dependent terrestrial wildlife. As with natural waterways, the limit of CDFW jurisdiction of artificial waterways includes the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

CDFW does not have jurisdiction over wetlands but has jurisdiction to protect against a net loss of wetlands. CDFW supports the wetland criteria recognized by USFWS; one or more indicators of wetland conditions must exist for wetlands conditions to be considered present. The following is the USFWS accepted definition of a wetland:

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the lands supports hydrophytes, (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year (Cowardin et al. 1979).

In A Clarification of the U.S. Fish and Wildlife Service's Wetland Definition (Tiner 1989), the USFWS definition was further clarified "that in order for any area to be classified as wetland by the Service, the area must be periodically saturated or covered by shallow water, whether wetland vegetation and/or hydric soils are present or not; this hydrologic requirement is addressed in the first sentence of the definition." When considering whether an action would result in a net loss of wetlands, CDFW will extend jurisdiction to USFWS-defined wetland conditions where such conditions exist within the riparian vegetation that is associated with a stream or lake and does not depend on whether those features meet the three-parameter USACE methodology of wetland determination. If impacts to wetlands under the jurisdiction of CDFW

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are unavoidable, a mitigation plan will be implemented in coordination with CDFW to support the CDFW policy of “no net loss” of wetland habitat.

**Appendix D – Tables**

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**Table 1. Species Observed On-Site**

Common Name	Scientific Name
<b><u>Plants</u></b>	
Puncture vine	<i>Tribulus terrestris</i>
Wild tarragon	<i>Artemisia dracunculus</i>
Short-pod mustard	<i>Hirschfeldia incana</i>
Cheeseweed	<i>Malva parviflora</i>
Eucalyptus	<i>Eucalyptus camaldulensis</i>
Tree of heaven	<i>Ailanthus altissima</i>
Golden crownbeard	<i>Verbesina encelioides</i>
<b><u>Birds</u></b>	
house sparrow	<i>Passer domesticus</i>
Northern mockingbird	<i>Mimus polyglottos</i>

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**Table 2 – CNDDDB Potential to Occur for the *San Bernardino South* and *Fontana* USGS 7.5 minute Quadrangle**

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
<i>Agelaius tricolor</i>	tricolored blackbird	None, Threatened	G2G3, S1S2, CDFW-SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	None, None	G5T3, S3, CDFW-WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Anniella stebbinsi</i>	Southern California legless lizard	None, None	G3, S3, CDFW-SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
<i>Arenaria paludicola</i>	marsh sandwort	Endangered, Endangered	G1, S1, 1B.1	Marshes and swamps. Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Arizona elegans occidentalis</i>	California glossy snake	None, None	G5T2, S2, CDFW-SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Artemisospiza belli belli</i>	Bell's sage sparrow	None, None	G5T2T3, S3, CDFW-WL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .



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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	None, None	G5, S2S3, CDFW-WL	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	None, None	G5T5, S3, CDFW-SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Astragalus hornii</i> var. <i>hornii</i>	Horn's milk-vetch	None, None	GUT1, S1, 1B.1	Meadows and seeps, playas. Lake margins, alkaline sites. 75-350 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Athene cunicularia</i>	burrowing owl	None, None	G4, S3, CDFW-SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
<i>Bombus crotchii</i>	Crotch bumble bee	None, Candidate Endangered	G3G4, S1S2	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> .	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Buteo swainsoni</i>	Swainson's hawk	None, Threatened	G5, S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & 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.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	None, None	G4, S4, 4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Carex comosa	bristly sedge	None, None	G5, S2, 2B.1	Marshes and swamps, coastal prairie, valley and foothill grassland. Lake margins, wet places; site below sea level is on a Delta island. -5-1010 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Catostomus santaanae	Santa Ana sucker	Threatened, None	G1, S1	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Centromadia pungens ssp. laevis	smooth tarplant	None, None	G3G4T2, S2, 1B.1	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 5-1170 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None, None	G5T3T4, S3S4, CDFW-SSC	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Endangered, Endangered	G4?T1, S1, 1B.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat. 0-10 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	None, None	G3T2, S2, 1B.1	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Cicindela tranquebarica viridissima</i>	greenest tiger beetle	None, None	G5T1, S1	Inhabits the woodlands adjacent to the Santa Ana River basin. Usually found in open spots between trees.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Threatened, Endangered	G5T2T3, S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Coleonyx variegatus abbotti</i>	San Diego banded gecko	None, None	G5T3T4, S1S2, CDFW-SSC	Coastal & cismontane Southern California. Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
<i>Crotalus ruber</i>	red-diamond rattlesnake	None, None	G4, S3, CDFW-SSC	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	None, None	G5T4?, SH, 2B.2	Marshes and swamps (freshwater). Freshwater marsh. 15-280 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	Endangered, Candidate Endangered	G5T1, S1, CDFW-SSC	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	Endangered, Threatened	G2, S2	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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BLOOMINGTON, CALIFORNIA**

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Dodecahema leptoceras	slender-horned spineflower	Endangered, Endangered	G1, S1, 1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Endangered, Endangered	G4T1, S1, 1B.1	Coastal scrub, chaparral. In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Eumops perotis californicus	western mastiff bat	None, None	G5T4, S3S4, CDFW-SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Euphydryas editha quino	quino checkerspot butterfly	Endangered, None	G5T1T2, S1S2	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties. Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpureus.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Falco columbarius	merlin	None, None	G5, S3S4, CDFW-WL	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches. Clumps of trees or windbreaks are required for roosting in open country.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Galium californicum ssp. primum	Alvin Meadow bedstraw	None, None	G5T2, S2, 1B.2	Chaparral, lower montane coniferous forest. Grows in shade of trees and shrubs at the lower edge of the pine belt, in pine forest-chaparral ecotone. Granitic, sandy soils. 1460-1830 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Gila orcuttii	arroyo chub	None, None	G2, S2, CDFW-SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	None, None	G5TX, SX, 1A	Marshes and swamps (coastal salt and freshwater). 35-1525 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Horkelia cuneata var. puberula	mesa horkelia	None, None	G4T1, S1, 1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 15-1645 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Lasiurus xanthinus	western yellow bat	None, None	G5, S3, CDFW-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.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Laterallus jamaicensis coturniculus	California black rail	None, Threatened	G3G4T1, S1, CDFW-FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	None, None	G5T3, S3, 4.3	Chaparral, coastal scrub. Dry soils, shrubland. 4-1435 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None, None	G5T3T4, S3S4, CDFW-SSC	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .



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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
<i>Lycium parishii</i>	Parish's desert-thorn	None, None	G4, S1, 2B.3	Coastal scrub, Sonoran desert scrub. -3-570 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Malacothamnus parishii</i>	Parish's bush-mallow	None, None	GXQ, SX, 1A	Chaparral, coastal sage scrub. In a wash. 305-455 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Monardella pringlei</i>	Pringle's monardella	None, None	GX, SX, 1A	Coastal scrub. Sandy hills. 300-400 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Nasturtium gambelii</i>	Gambel's water cress	Endangered, Threatened	G1, S1, 1B.1	Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-305 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Neolarra alba</i>	white cuckoo bee	None, None	GH, SH	Known only from localities in Southern California. Cleptoparasitic in the nests of perdita bees.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	None, None	G4, S3, CDFW-SSC	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	Endangered, None	G5T1Q, S1	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Onychomys torridus ramona	southern grasshopper mouse	None, None	G5T3, S3, CDFW-SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None, None	G5T1T2, S1S2, CDFW-SSC	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Phrynosoma blainvillii	coast horned lizard	None, None	G3G4, S3S4, CDFW-SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Polioptila californica californica	coastal California gnatcatcher	Threatened, None	G4G5T2Q, S2, CDFW-SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	Endangered, None	G1T1, S1	Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties. Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. shade.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Ribes divaricatum var. parishii	Parish's gooseberry	None, None	G5TX, SX, 1A	Riparian woodland. Salix swales in riparian habitats. 65-300 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	None, None	G1, S1.1	Coastal scrub	This habitat is <b>not</b> present within the Project area.
Senecio aphanactis	chaparral ragwort	None, None	G3, S2, 2B.2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 20-1020 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Sidalcea neomexicana	salt spring checkerbloom	None, None	G4, S2, 2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 3-2380 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	None, None	G3, S3.2	Riparian forest	This habitat is <b>not</b> present within the Project area.
Southern Riparian Scrub	Southern Riparian Scrub	None, None	G3, S3.2	Riparian scrub	This habitat is <b>not</b> present within the Project area.
Spea hammondii	western spadefoot	None, None	G3, S3, CDFW-SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
Sphenopholis obtusata	prairie wedge grass	None, None	G5, S2, 2B.2	Cismontane woodland, meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 15-2625 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Occurrence Potential
<i>Symphytotrichum defoliatum</i>	San Bernardino aster	None, None	G2, S2, 1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernal mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Taxidea taxus</i>	American badger	None, None	G5, S3, CDFW-SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .
<i>Vireo bellii pusillus</i>	Least Bell's vireo	Endangered, Endangered	G5T2, S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Suitable habitat for this species does not occur on site. As such occurrence potential for this species is <b>low</b> .

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**Coding and Terms**

E = Endangered T = Threatened C = Candidate FP = Fully Protected WL = Watch List SSC = Species of Special Concern R = Rare

**State Species of Special Concern:** An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: "It is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes or to take, possess or destroy the nest or eggs of any such bird."

**State Fully Protected:** The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

**Global Rankings (Species or Natural Community Level):**

G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.

G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.

G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.

G5 = Secure – Common; widespread and abundant.

? = Uncertainty in the exact status of an element (could move up or down one direction from current rank)

**Subspecies Level:** Taxa which are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa*. The T-rank refers only to the global condition of ssp. *phaea*.

**State Ranking:**

S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.

S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.

S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.

S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.

S5 = Secure – Common, widespread, and abundant in the State.

**California Rare Plant Rankings (CNPS List):**

1A = Plants presumed extirpated in California and either rare or extinct elsewhere.

1B = Plants rare, threatened, or endangered in California and elsewhere.

2A = Plants presumed extirpated in California, but common elsewhere.

2B = Plants rare, threatened, or endangered in California, but more common elsewhere.

3 = Plants about which more information is needed; a review list.

4 = Plants of limited distribution; a watch list.

**Threat Ranks:**

.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)