

# **CEDAR AVENUE AND ORANGE STREET INDUSTRIAL-DISTRIBUTION BUILDINGS**

CITY OF BLOOMINGTON, SAN BERNARDINO COUNTY, CALIFORNIA

## **Habitat Assessment and Delhi Sands Flower-Loving Fly Suitability Assessment**

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December 2014  
JN 144263

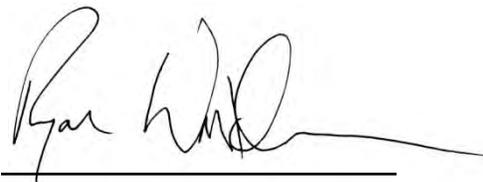
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The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.



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Ryan S. Winkleman  
Biologist  
Natural Resources



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Thomas J. McGill, Ph.D.  
Vice President  
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December 2014

# Executive Summary

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The Cedar Avenue and Orange Street Industrial-Distribution Buildings are located in the City of Bloomington, San Bernardino County, California. The 28.9-acre project site consists of two open fields separated by Cedar Avenue. According to the U.S. Geological Survey's topographic map, the site was formerly used for housing, and some building foundations and paved roads are still present on-site. According to project plans, two warehouses would be built on the project site, one in each parcel, with associated offices, parking lots, and detention basins.

RBF Consulting, a Michael Baker International Company, conducted a general habitat assessment and Delhi Sands flower-loving fly (DSF, *Rhaphiomidas terminatus abdominalis*) suitability assessment in December 2014. The project site is located within two recovery units for the federal endangered DSF: the Jurupa Recovery Unit in the western parcel and the Colton Recovery Unit in the eastern parcel (USFWS 1997). Although there are no Delhi Sand soils on-site, Delhi Sand soils are located approximately 0.33 mile south of the site. Delhi Sands are subject to Aeolian (i.e. wind) processes and can be carried to downwind locations. The project site was assessed to determine if Delhi Sands were present and, if present, their suitability to support DSF. No Delhi Sand soils were found on-site and all on-site habitat was classified as unsuitable for DSF. No focused surveys are required to determine the presence or absence of this species.

Project site conditions are also poor for other sensitive species. On-site vegetation is almost entirely non-native grassland, with two isolated stands of riparian vegetation in the eastern parcel. No natural communities remain on-site except for these two isolated stands. As such, based on habitat requirements for specific species as well as the availability and quality of habitats needed by sensitive species, it was determined that the project site has a low potential to support burrowing owl (*Athene cunicularia*) and yellow warbler (*Setophaga petechia*), but does not provide suitable habitat for other sensitive species. Because there are no discernible surface water sources for the isolated riparian vegetation and because they are located linear to each other along one of the existing paved roads, it is possible that they have grown as a result of an underground leak of a water pipeline. Therefore it is not expected that these features are jurisdictional or that they would be subject to the regulatory authority of State or federal agencies including the U.S. Army Corps of Engineers, Regional Water Quality Control Board, or California Department of Fish and Wildlife.

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**LIST OF ACRONYMS**

|                |                                                       |
|----------------|-------------------------------------------------------|
| CDFW           | California Department of Fish and Wildlife            |
| CNDDB          | California Natural Diversity Database                 |
| CNPS           | California Native Plant Society                       |
| Corps          | United States Army Corps of Engineers                 |
| CWA            | Clean Water Act                                       |
| DSF            | Delhi Sands Flower-loving Fly                         |
| F              | Fahrenheit                                            |
| GIS            | Geographic Information System                         |
| I              | Interstate                                            |
| MBTA           | Migratory Bird Treaty Act                             |
| NRCS           | Natural Resource Conservation Service                 |
| RBF            | RBF Consulting, a Michael Baker International Company |
| Regional Board | Regional Water Quality Control Board                  |
| USDA           | United States Department of Agriculture               |
| USFWS          | United States Fish and Wildlife Service               |
| USGS           | United States Geological Survey                       |

# Section 1 Introduction

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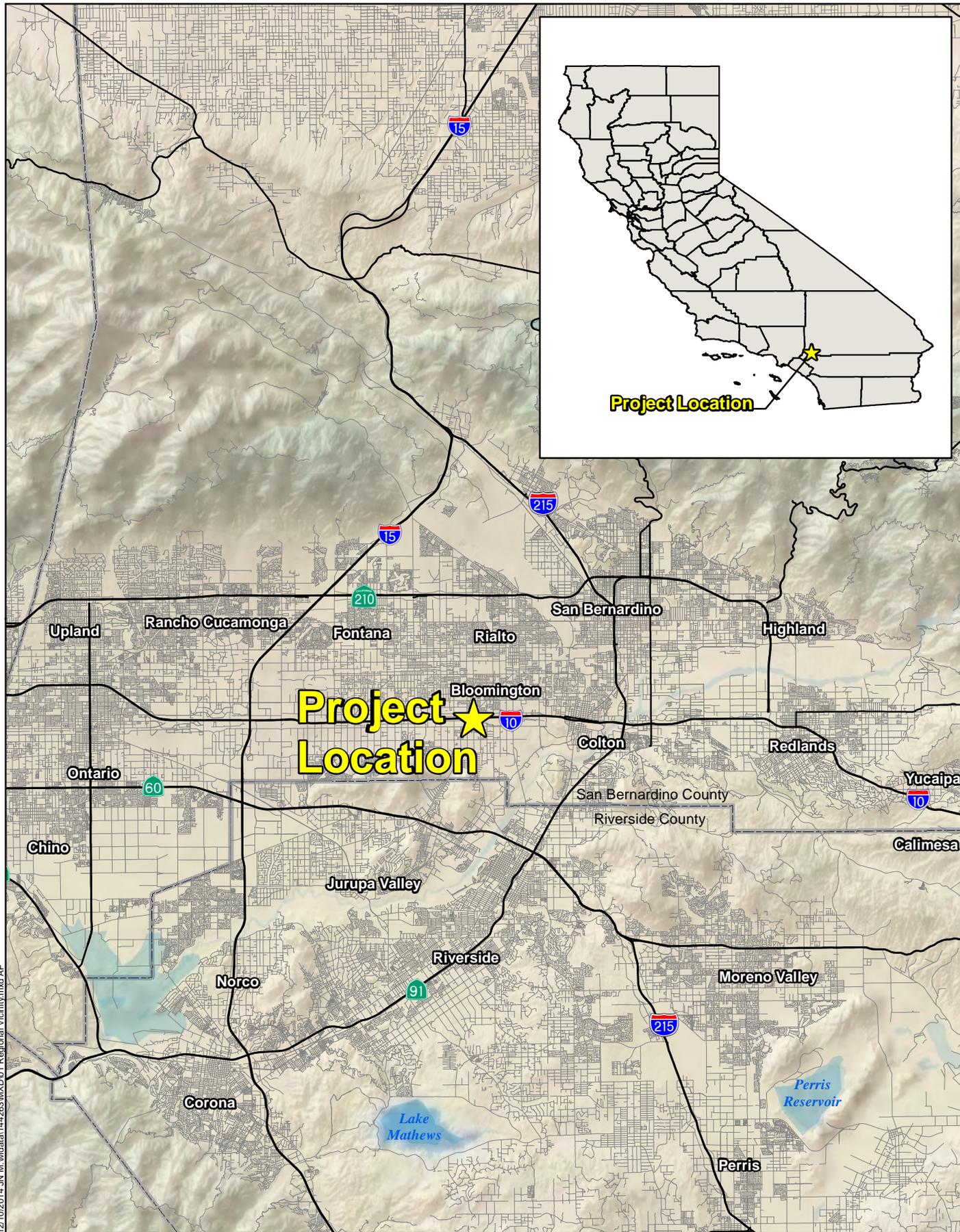
This report contains the findings of RBF Consulting's (RBF) Habitat Assessment and Delhi sands flower-loving fly (DSF, *Rhaphiomidas terminatus abdominalis*) suitability assessment for the Cedar Avenue and Orange Street Industrial-Distribution Buildings located in the City of Bloomington, San Bernardino County, California (project site or site). A habitat assessment was conducted by RBF biologists Travis J. McGill and Ryan S. Winkleman on December 5, 2014 to characterize existing site conditions and assess the probability of occurrence for sensitive flora and fauna, including DSF, that could pose a constraint to development of the proposed project site. A delineation of state and federal jurisdictional waters report was not prepared for this assessment.

## 1.1 PROJECT LOCATION

The project site is generally located north of State Route 60, east of Interstate 15 (I-15), south of I-10, and west of I-215 in the City of Bloomington, San Bernardino County, California (Exhibit 1, *Regional Vicinity*). The site is depicted on the Fontana quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series, in Section 22, Township 1 south, Range 5 west (Exhibit 2, *Site Vicinity*). Specifically, the project site is located north of Orange Street, east of Linden Avenue, west of Vine Street, and south of I-10 and the railroad on both sides of Cedar Avenue (Exhibit 3, *Project Site*).

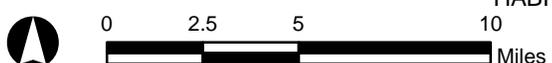
## 1.2 PROJECT DESCRIPTION

Thrifty Oil Company is proposing the development of two speculative industrial buildings totaling 551,922 square feet (12.67 acres) at the northeast corner and northwest corner of Cedar Avenue and Orange Street (Exhibit 4, *Conceptual Site Plan*). Building #1 is located at the northwest corner of Cedar Avenue and Orange Street and will be an approximately 372,000 +/- square feet (8.52 acres) facility. Building #2 is located at the northeast corner of Cedar Avenue and Orange Street and will be an approximately 181,000 +/- square feet (4.15 acres) facility. Each will be a state-of-the-art industrial building designed to accommodate a variety of users. The buildings are designed for single or dual tenants with office areas situated near the street intersection to present a polished image for travelers along the Cedar Avenue/I-10 Freeway overpass. Further, the landscape and elevation aesthetics shall exceed county design standards to provide a visually appealing view for local residents.



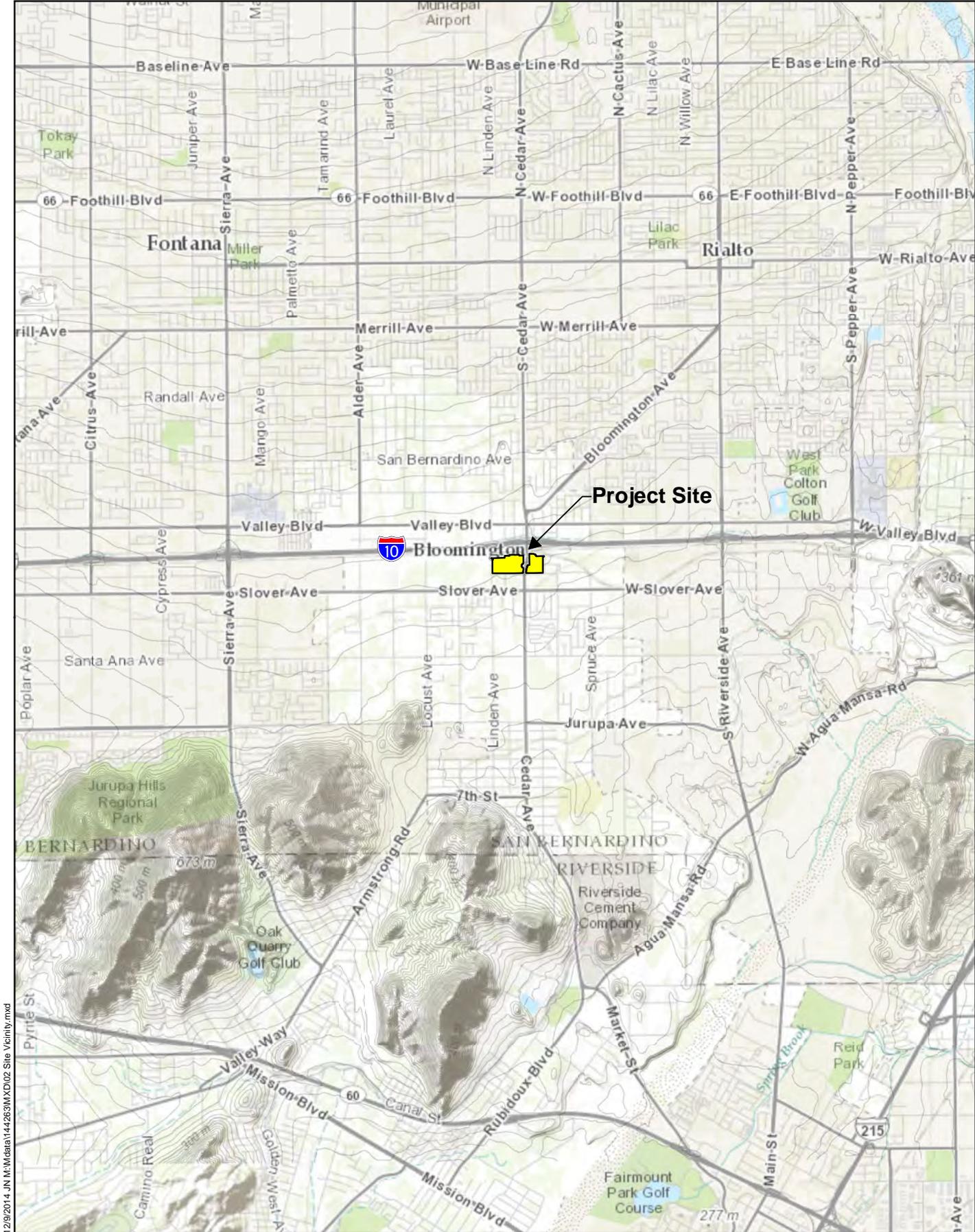
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CEDAR AVENUE AND ORANGE STREET INDUSTRIAL-DISTRIBUTION BUILDINGS  
HABITAT ASSESSMENT AND DSF SUITABILITY ASSESSMENT



Source: ESRI Relief Map, National Highway Planning Network

**Regional Vicinity**



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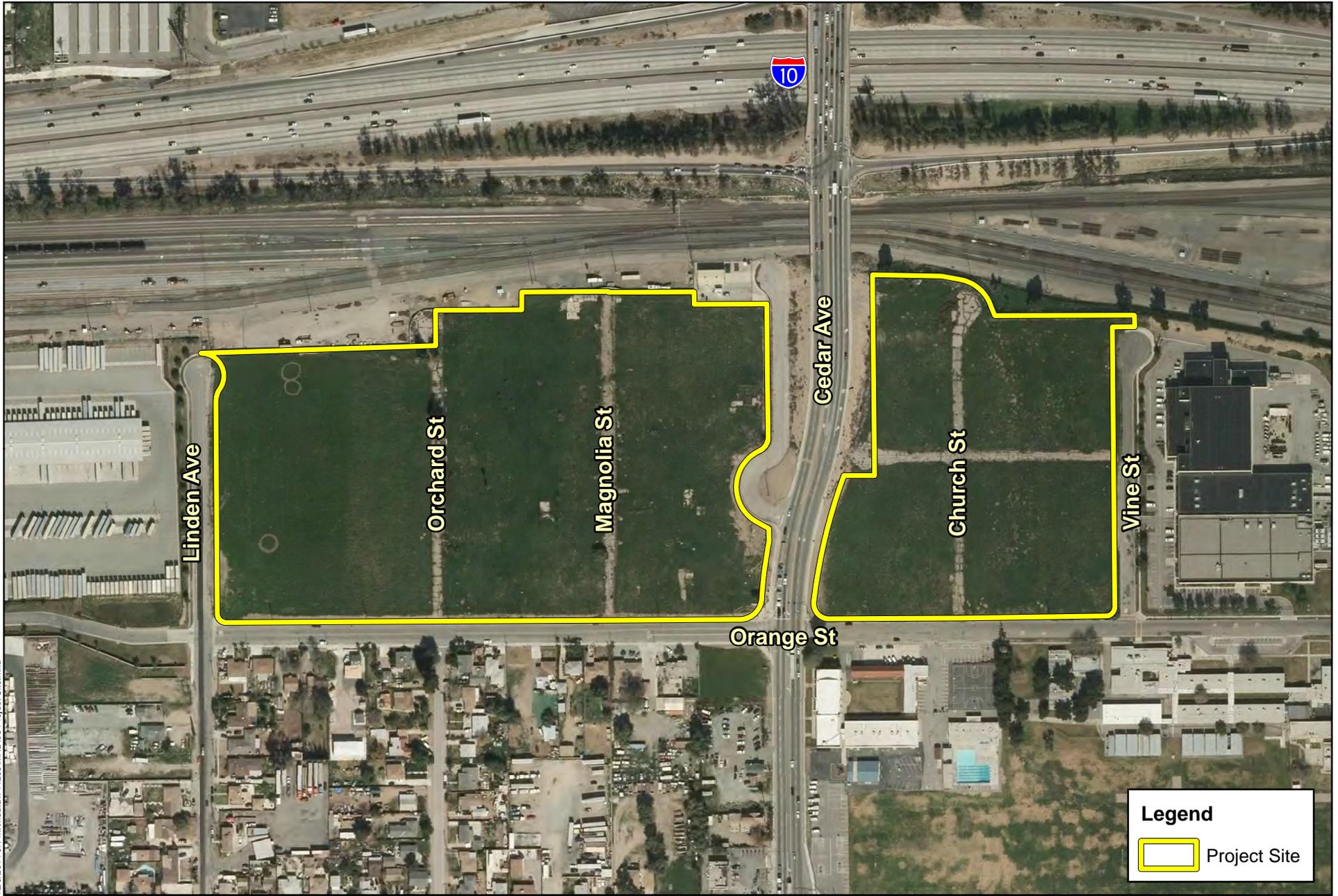
**CEDAR AVENUE AND ORANGE STREET INDUSTRIAL-DISTRIBUTION BUILDINGS  
HABITAT ASSESSMENT AND DSF SUITABILITY ASSESSMENT**



Source: San Bernardino County, USGS, ESRI World Topographic Map

**Site Vicinity**

12/9/2014, J:\M:\data\144263\MXD\03 Project Site.mxd

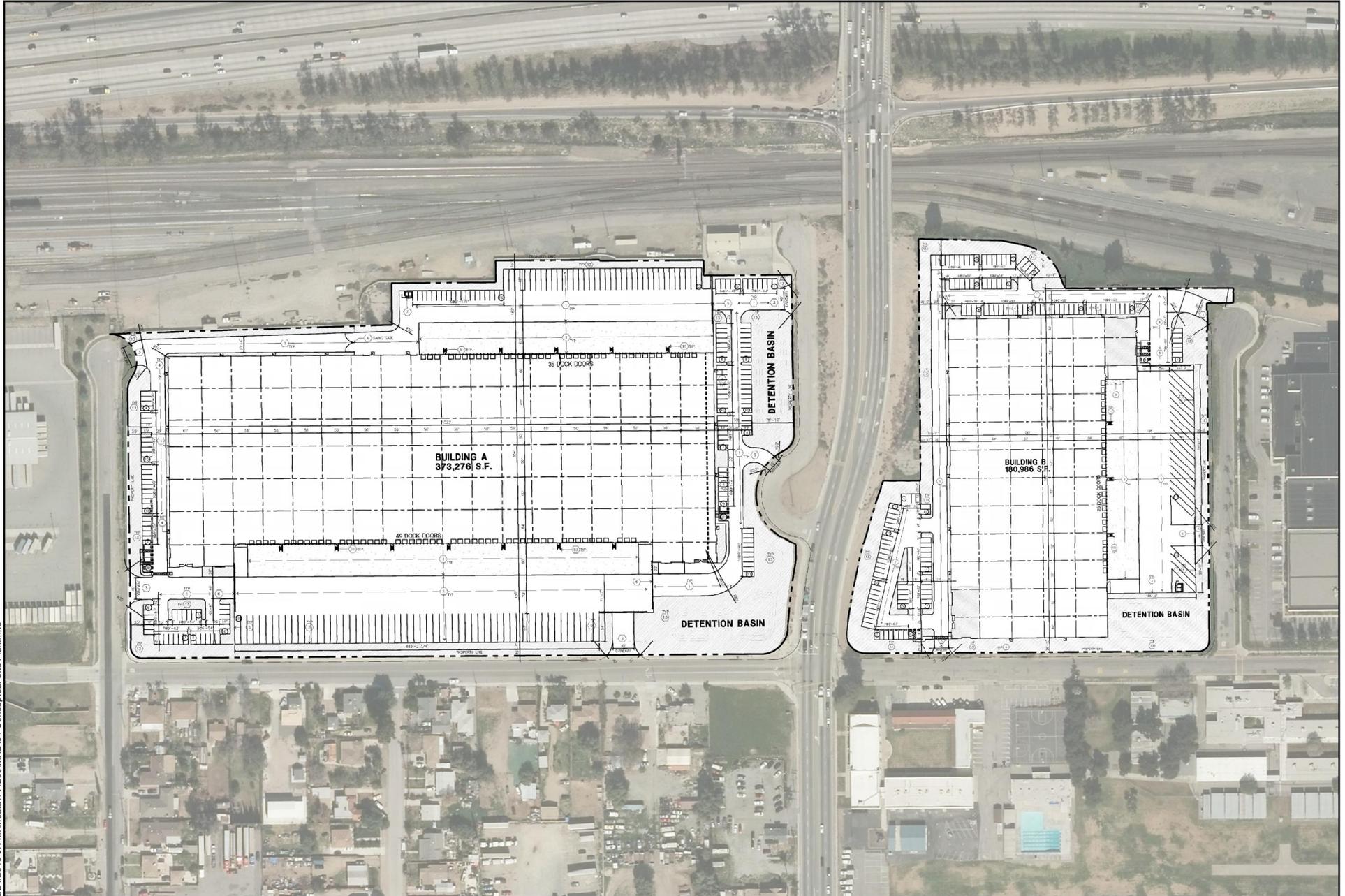


CEDAR AVENUE AND ORANGE STREET INDUSTRIAL-DISTRIBUTION BUILDINGS  
HABITAT ASSESSMENT AND DSF SUITABILITY ASSESSMENT

**Project Site**



2/24/2015 JN M:\Mdata\1442631\MXD\04 Conceptual Site Plan.mxd



CEDAR AVENUE AND ORANGE STREET INDUSTRIAL-DISTRIBUTION BUILDINGS  
HABITAT ASSESSMENT AND DSF SUITABILITY ASSESSMENT

# Conceptual Site Plan



## Section 2 Methodology

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RBF conducted a thorough literature review and records search to determine which sensitive biological resources have the potential to occur on or within the general vicinity of the project site, including DSF. In addition, a general habitat assessment and DSF habitat suitability assessment of the proposed project site was conducted. The field survey provided information about the existing conditions on the site and potential for sensitive biological resources to occur.

### 2.1 LITERATURE REVIEW

Prior to conducting the field visit, a literature review and records search was conducted to identify any current and historical occurrences of DSF or any other sensitive biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB) Rarefind 5, CDFW's CNDDDB QuickView Tool in BIOS, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and United States Fish and Wildlife Service (USFWS) species listings.

Previously prepared reports, survey results, and literature prepared for the project site and surrounding areas were reviewed to understand existing conditions and note the extent of any disturbances that have occurred to the habitats on-site that would otherwise limit the presence of sensitive biological resources, including DSF, throughout the project site. Standard field guides and texts on sensitive and non-sensitive biological resources were reviewed for habitat requirements, as well as the following resources:

- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profile and Primary Constituent Elements for DSF.

The literature review provided a baseline from which to document and analyze those areas on and within the immediate vicinity of the project site that provide suitable habitat for DSF and other sensitive species. Additional recorded occurrences of these species found on or near the project site were derived from database queries. The CNDDDB ArcGIS database was used, in conjunction with ArcGIS software, to locate the nearest DSF occurrences within the region and determine the distance from the project site.

## **2.2 HABITAT ASSESSMENT AND FIELD INVESTIGATION**

The habitat assessment was conducted for the proposed project by Travis J. McGill and Ryan S. Winkleman on December 5, 2014. Plant communities identified on aerial photographs during the literature review were ground-truthed by walking and observing the plant communities from the existing trail. The plant communities were evaluated for their potential to support sensitive plant and wildlife species. In addition, the biologists identified any jurisdictional features as well as natural corridors that may support the movement of wildlife through the area.

Special attention was paid to sensitive habitats and/or undeveloped areas, which have higher potentials to support sensitive flora and fauna species. Areas providing suitable habitat for DSF were closely surveyed during the habitat assessment. All plant and wildlife species observed during the habitat assessment, as well as dominant plant species within each plant community, were recorded. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, presence of indicator species, condition of the plant communities, hydrology, and evidence of human use of the site were noted. The plant communities were classified in accordance with CDFW (2003) and Holland (1986), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

## **2.3 SOIL SERIES ASSESSMENT**

On-site and adjoining soils were researched prior to the field visit using the USDA NRCS Soil Survey for San Bernardino County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes the project site has undergone.

## **2.4 PLANT COMMUNITIES**

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities within the project site were classified according to CDFW's List of Terrestrial Natural Communities (2003) and cross-referenced to descriptions provided in Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986). The plant communities were delineated on aerial photography and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

## **2.5 PLANTS**

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field, and recorded in a field notebook. Unusual and less familiar plants were identified in the laboratory using taxonomical guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual. In this report, scientific names are provided immediately following common names of plant species (first reference only).

## **2.6 WILDLIFE**

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of species during surveys included *The Sibley Field Guide to the Birds of Western North America* (Sibley 2003) and *The Sibley Guide to Birds* (Sibley 2014) for birds, *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003) for herpetofauna, and *A Field Guide to Mammals of North America* (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

## **2.7 JURISDICTIONAL AREAS**

Aerial photography was reviewed prior to conducting the habitat assessment. The aerials were used to locate and inspect any potential natural drainage features and water bodies that may be considered riparian/riverine habitat and/or fall under the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory authorities.

## **2.8 DELHI SANDS FLOWER-LOVING FLY SUITABILITY ASSESSMENT**

The habitat suitability assessment consisted of a visual and tactile inspection of all areas on the project site that contain Delhi Sand soils. Areas identified as containing Delhi Sand soils were evaluated for their quality or purity and for their potential to support DSF. Areas were assigned one or more ratings ranging between 1 and 5, with 5 being the best quality and most suitable habitat:

1. Soils dominated by heavy deposits of alluvial material including coarse sands and gravels with little or no Delhi sands and evidence of soil compaction. *Unsuitable Quality*
2. Delhi Sand soils are present but the soil characteristics include a predominance of alluvial materials (Tujunganga Soils and Hilmar loamy sand). *Very Low Quality*
3. Although not clean, sufficient Delhi Sand soils are present to prevent soil compaction. Some sandy soils exposed on the surface due to fossorial animal activity. *Low Quality*
4. Abundant clean Delhi Sand soils with little or no alluvial material (Tujunganga soils or Hilmar loamy sand) present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. *Moderate Quality*
5. Sand dune habitat with clean Delhi Sand soils. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. *High Quality*

## Section 3 Existing Conditions

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### 3.1 LOCAL CLIMATE

The region has a year-round Mediterranean climate or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Average annual precipitation ranges from 12 inches per year in the coastal plain to 18 inches per year in the inland alluvial valleys, reaching 40 inches or more in the San Bernardino Mountains. Most of the precipitation occurs between November and March in the form of rain with variable amounts of snow in the higher elevations. The climatological cycle of the region results in higher surface water flows in the spring and early summer and lower flows during the dry season. Winter and spring floods generated by storms are not uncommon in wet years. Similarly, during the dry season, infrequent summer storms can cause torrential floods in local streams. Weather conditions during the surveys included temperatures in the mid- to high 60s (degrees Fahrenheit [F]) with minimal wind and thin cloud cover.

### 3.2 TOPOGRAPHY AND SOILS

The project site slopes downward from roughly north to south and west to east. Surface elevations range from approximately 1,071 to 1,093 feet above mean sea level on the project site. According to the USDA NRCS Soil Survey, surface soils on the project site are underlain by Tujunga loamy sand (0 to 5 percent) (Exhibit 5, *Soils Map*). Although Delhi Sand soils are not present on the project site, there are large areas mapped by the USDA NRCS Soil Survey as Delhi fine sand in the general vicinity, as close as 0.33 mile south of the project site. Because Delhi Sand soils are subject to Aeolian (i.e. wind) dispersion processes, the boundaries established by USDA are not exact and change over time, and nearby patches of sands could be windblown onto the project site.

#### ***Tujunga Loamy Sand, 0 to 5% (TuB)***

This soil type is somewhat excessively drained and is developed in alluvium derived from granite. In San Bernardino County it is found in alluvial fans at an elevation of 10 to 2,500 feet. The mean annual precipitation for where this soil type occurs in San Bernardino County is 10 to 25 inches, with a mean annual air temperature of 59 to 64°F and a frost-free period of 250 to 350 days. The typical profile of this soil for San Bernardino County includes loamy sand from 0 to 60 inches. The depth to a restrictive feature is more than 80 inches, the depth to the water table is more than 80 inches, and the available water capacity is low at approximately 4.2 inches. This soil type is classified as farmland of statewide importance.

12/10/2014 JN M:\Midat\144263MKD\05 Soils Map.mxd



**Legend**

- Project Site
- TuB Tujunga Loamy Sand, 0 To 5 Percent Slopes

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HABITAT ASSESSMENT AND DSF SUITABILITY ASSESSMENT

# Soils Map



### **3.3 SURROUNDING LAND USES**

The project site is located in a developed area that does not contain any remaining natural habitats. I-10 is located approximately 400 feet to the north, with residential, industrial, truck storage, and educational developments located to the south. Union Pacific Railroad tracks are located immediately north between the project site and I-10.

## Section 4 Results

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### 4.1 SITE CONDITIONS

The project site is located in a developed area in San Bernardino County. According to the USGS topographic map, the site was historically used for housing, and paved streets and some building foundations still remain on-site. The site is divided into two parcels split by Cedar Avenue, with remnant vegetation remaining.

### 4.2 VEGETATION

Two (2) plant communities were observed within the boundaries of the project site during the habitat assessment (Exhibit 6, *Vegetation Map*): isolated riparian stand and non-native grassland. In addition, the project site contains areas that would be considered as disturbed and developed. These communities are described in further detail below.

#### 4.2.1 Isolated Riparian Stand (0.1 acre)

On the east side of the project site are two small isolated stands of riparian vegetation. These two patches include cattails (*Typha* sp.), black willow (*Salix gooddingii*), mulefat (*Baccharis salicifolia*), cottonwood (*Populus fremontii*), and China berry (*Melia azedarach*). According to aerial imagery, this vegetation was not present within the site until after summer 2012, and because both stands of vegetation are on top of a linear paved road, it is likely that there is a subsurface waterline that began leaking in 2012 and has not yet been repaired.

#### 4.2.2 Non-native Grassland (26.0 acres)

This vegetation community encompasses the entire site on both sides of Cedar Avenue. Based on regional vegetation, this site was likely historically dominated by Riversidean sage scrub. However, this vegetation was cleared when the area was developed for residential housing. After the housing was removed, the site was type-converted over several decades into non-native grassland that now consists primarily of exotic, weedy species and/or non-native grasses. The vegetation within this on-site community is dominated by oats (*Avena* sp.), ripgut brome (*Bromus diandrus*), shortpodded mustard (*Hirschfeldia incana*), cheeseweed (*Malva parviflora*), London rocket (*Sisymbrium irio*), telegraph weed (*Heterotheca grandiflora*), puncture vine (*Tribulus terrestris*), filaree (*Erodium* sp.), ragweed (*Ambrosia* sp.), common sunflower (*Helianthus annuus*), and Russian thistle (*Salsola tragus*). In addition, there is scattered ornamental vegetation throughout the site including eucalyptus (*Eucalyptus* sp.), Mexican fan palm (*Washingtonia robusta*), and black elderberry (*Sambucus nigra*).

12/10/2014 JN M:\Mdata\144263\MKD\06 Vegetation.mxd



**Legend**

- Project Site
- Developed (2.0 Acres)
- Disturbed (0.8 Acre)
- Isolated Riparian Stand (0.1 Acre)
- Non-Native Grassland (26.0 Acres)
- Eucalyptus

CEDAR AVENUE AND ORANGE STREET INDUSTRIAL-DISTRIBUTION BUILDINGS  
HABITAT ASSESSMENT AND DSF SUITABILITY ASSESSMENT

# Vegetation Map



#### **4.2.3 Disturbed (0.8 acre)**

Disturbed areas within the site boundaries refer to unpaved areas routinely cleared of vegetation, predominantly those areas that are located adjacent to active city streets.

#### **4.2.4 Developed (2.0 acres)**

The developed areas within the site boundaries refer to abandoned paved roads and remnants of building foundations left on-site. The roads encompass historical neighborhood streets, including curbs and cul-de-sacs. The pavement is cracked and non-native, landscaped grasses are growing out of the cracks. The remaining building foundations contain additional weedy vegetation, particularly Russian thistle, shortpodded mustard, and various non-native grasses.

### **4.3 WILDLIFE**

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species observed, expected, or not expected to occur on-site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the survey was conducted. Wildlife observations were based on calls, songs, scat, tracks, burrows, and actual sightings of animals.

#### **4.3.1 Amphibians**

No amphibian species were observed during the survey. No water was observed within the study area during the site assessment and based on the site characteristics, amphibian species are not expected to occur on-site.

#### **4.3.2 Reptiles**

No reptile species were observed during the survey, which followed two days of heavy rainfall throughout southern California. As such, the ground was still wet and provided suboptimal conditions for viewing any reptiles that would be expected at this site. The surrounding area is highly disturbed and the site is an isolated piece of undeveloped, though similarly disturbed, habitat. As such the site only has the potential to support reptile species that are well acclimated to disturbance and to urban environments. Given the isolation of this site amongst surrounding development, the project site has limited potential to support additional reptilian species, particularly western fence lizard (*Sceloporus occidentalis*), common side-blotched lizard (*Uta stansburiana*), and southern alligator lizard (*Elgaria multicaudata*).

### 4.3.3 Avian

The project site provides suitable foraging and cover habitat for a limited variety of avian species, particularly those acclimated to disturbed/urban areas and/or disturbed fields. Numerous large flocks of birds were observed on-site, primarily on the western half of the site. The avian species that were most abundant during the survey included killdeer (*Charadrius vociferus*), rock pigeon (*Columba livia*), mourning dove (*Zenaida macroura*), European starling (*Sturnus vulgaris*), and western meadowlark (*Sturnella neglecta*). All five of these species were present in large flocks during the survey. The two fields encompassing the site have limited potential to support a large variety of birds.

### 4.3.4 Mammals

The only mammalian species directly observed or detected via sign included Botta's pocket gopher (*Thomomys bottae*). The project site provides suitable habitat for mammalian species adapted to disturbed, urban environments. However, most mammal species are nocturnal and are difficult to observe during a diurnal field visit. The proximity of the site to the railroad tracks may result in occasional larger mammals occurring in the area such as coyote (*Canis latrans*). Additional mammals that could occur include California ground squirrel (*Otospermophilus beecheyi*) and desert cottontail (*Sylvilagus audubonii*).

## 4.4 NESTING BIRDS

No nesting birds were detected during the survey, which was conducted in December after the avian nesting season. On-site vegetation and trees provide limited nesting opportunities for avian species. However, based on the presence of an estimated 50-60 killdeer during the biological survey, it is likely that ground-nesting species nest on-site.

## 4.5 MIGRATORY CORRIDORS AND LINKAGES

The isolated, empty project site is surrounded by a high degree of urban development and is unlikely to support any migratory corridors or linkages. There may be occasional large mammals on-site such as coyote due to the railroad tracks directly to the north.

## 4.6 JURISDICTIONAL AREAS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Federal Clean Water Act. Of the State agencies, the CDFW regulates alterations to streambeds and banks under Fish and Game Code Section 1602, and the Regional Board regulates discharges into

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surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act. There are no jurisdictional features on-site.

## **4.7 SENSITIVE BIOLOGICAL RESOURCES**

The CNDDDB and BIOS were queried for reported locations of listed and sensitive plant and wildlife species as well as sensitive natural plant communities on the Fontana USGS 7.5-minute quadrangle. A search of published records of these species was conducted within this quadrangle using the CNDDDB Rarefind 5 online software and the CNDDDB QuickView Tool in BIOS, which also provides access to CNDDDB submittals that have not yet been processed in the database. The CNPS Inventory of Rare and Endangered Vascular Plants of California supplied additional information regarding the distribution and habitats of vascular plants in the vicinity of the project site. The habitat assessment was used to assess the ability of the plant communities found on-site to provide suitable habitat for relevant special-status plant and wildlife species.

The literature search identified fourteen (14) sensitive plant species, thirty-two (32) sensitive wildlife species, and one (1) sensitive habitat as having the potential to occur within the Fontana quadrangle. Sensitive plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in Appendix B, *Sensitive Habitats and Potentially Occurring Sensitive Plant and Wildlife Species*. Appendix B summarizes conclusions from analysis and field surveys regarding the potential occurrence of listed and sensitive plant and wildlife species within the project site.

### **4.7.1 Sensitive Plants**

According to the CNDDDB and CNPS, fourteen (14) special-status plant species have been recorded in the Fontana quadrangle (refer to Appendix B). Based on habitat requirements for specific species and the availability and quality of habitats needed by each sensitive plant species, it was determined that the site does not provide suitable habitat to support any sensitive plant species.

### **4.7.2 Sensitive Wildlife**

According to the CNDDDB and BIOS, thirty-two (32) special-status wildlife species have been reported in the Fontana quadrangle (refer to Appendix B). Based on habitat requirements for specific species as well as the availability and quality of habitats needed by the sensitive wildlife species, it was determined that the project site has a low potential to support burrowing owl (*Athene cunicularia*) and yellow warbler (*Setophaga petechia*) but otherwise does not provide suitable habitat to support sensitive wildlife species.

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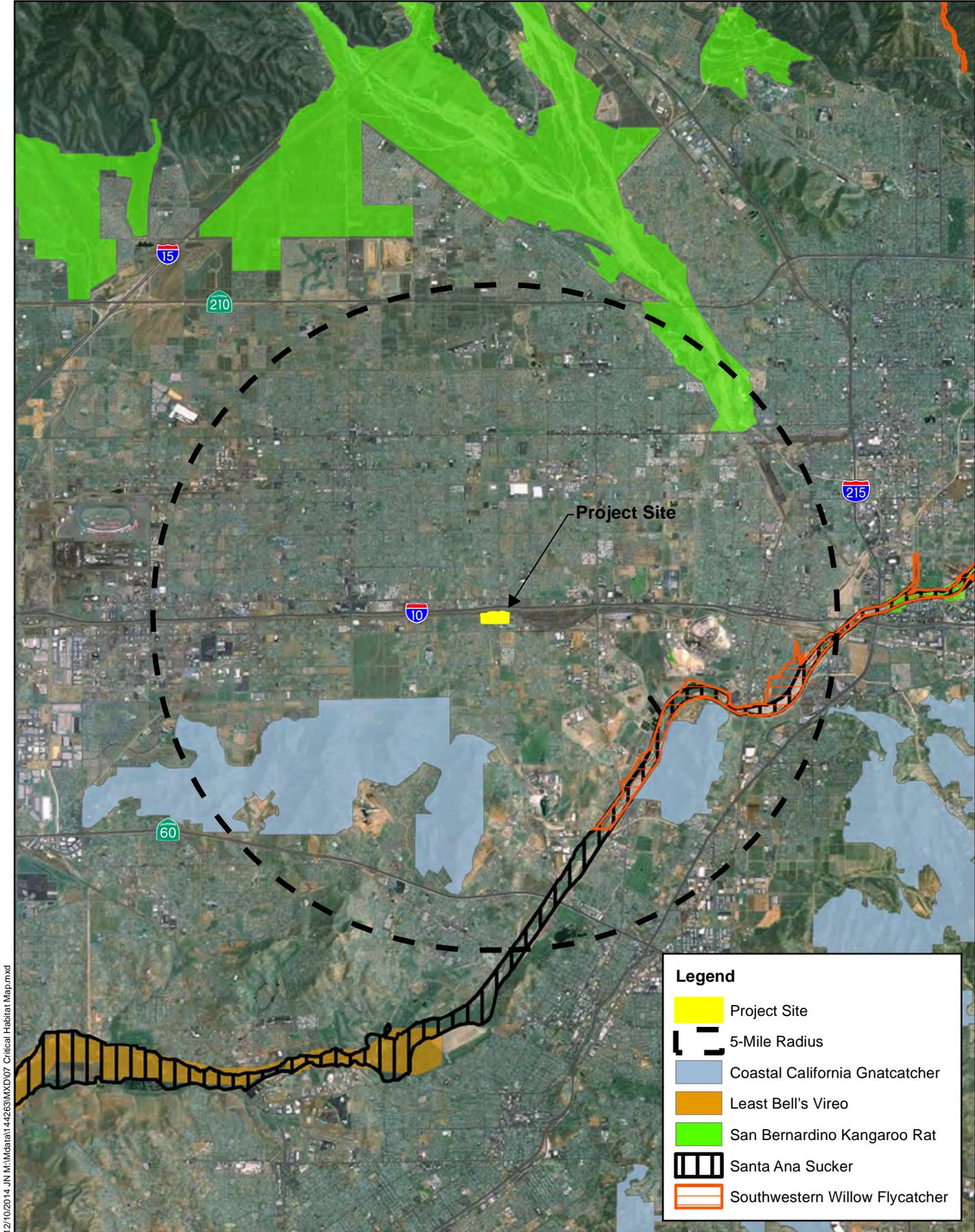
### 4.7.3 Sensitive Communities

According to the CNDDDB and BIOS, one (1) sensitive community has been reported in the Fontana quadrangle (refer to Appendix B): Riversidean alluvial fan sage scrub. This vegetation community is not present on-site.

### 4.7.4 Critical Habitat

Under the federal Endangered Species Act, “Critical Habitat” is designated at the time of listing of a species or within one year of listing. “Critical Habitat” refers to habitat or a specific geographic area that contains the elements and features that are essential for the survival and recovery of the species. In the event that a project may result in take or in adverse effects to a species’ designated Critical Habitat, the project proponent may be required to engage in suitable mitigation. However, consultation for impacts to Critical Habitat is only required when a project has a federal nexus (i.e. occurs on federal land, is issued federal permits [e.g. a U.S. Army Corps of Engineers Section 404 Clean Water Act permit], or receives any other federal oversight or funding). If a project does not have a federal nexus, Critical Habitat consultations are not required.

The project site is not located within federally designated Critical Habitat. Designated Critical Habitat for three (3) species is located within a five-mile radius (Exhibit 7, *Critical Habitat Map*). Coastal California gnatcatcher designated Critical Habitat Unit 10, San Bernardino and Riverside Counties, is located as close as 1.25 miles to the south of the project site (65 FR 63680 63743). In addition, southwestern willow flycatcher (*Empidonax traillii extimus*) Santa Ana Management Unit (78 FR 343 534) and Santa Ana sucker Critical Habitat Subunit 1B, Santa Ana River (75 FR 77962 78027), are both located approximately 2.75 miles southeast of the project site.



**Legend**

- Project Site
- 5-Mile Radius
- Coastal California Gnatcatcher
- Least Bell's Vireo
- San Bernardino Kangaroo Rat
- Santa Ana Sucker
- Southwestern Willow Flycatcher

12/10/2014, J:\M\Wdata\144263\MXD\07 Critical Habitat Map.mxd

**CEDAR AVENUE AND ORANGE STREET INDUSTRIAL-DISTRIBUTION BUILDINGS  
HABITAT ASSESSMENT AND DSF SUITABILITY ASSESSMENT**



# Critical Habitat Map

Source: San Bernardino County, USFWS Critical Habitat, ESRI World Imagery

## Section 5      Delhi Sands Flower-Loving Fly Suitability Assessment

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The project site is located within two DSF Recovery Units: the western parcel is in the Jurupa Recovery Unit and the eastern parcel is in the Colton Recovery Unit (USFWS 1997) (Exhibit 8, *DSF Recovery Units*). Per USDA NRCS Soil Survey results, Delhi Sand soils are not located on the project site (refer to Exhibit 5, *Soils Map*). However, due to the proximity of Delhi Sand soils (0.33 mile) and based on the fact that this soil is continually transported and deposited during wind events, this downwind site was searched for pockets of Delhi Sand soils.

Based on the results of the suitability assessment, surface soils present on-site were determined not to be Delhi Sand soils. In addition, the soils within the boundaries of the project site have been mechanically disturbed by existing development in the general vicinity and past residential use on the project site. These activities have mixed surface clay soils and any Delhi Sand soils that may have been deposited on-site. As a result, the clean and unmixed Delhi Sand soils required by DSF do not occur on-site. The project site was determined not to have the potential to provide suitable habitat for DSF and it is assumed that DSF is absent from the project site. The undeveloped areas within the project site were rated as unsuitable with a habitat quality rating of 1 for DSF (Exhibit 9, *DSF Habitat Suitability*). There were no areas identified on the project site that provide suitable Delhi Sand soils. Further, the project site is surrounded by existing development and no longer has connectivity to areas containing clean Delhi Sands soils or areas subject to Aeolian processes. Formal focused surveys are not recommended. Development of this property will not impact DSF or impede their recovery as defined by the DSF Recovery Plan (USFWS 1997)



12/10/2014 JN M:\data\144263MKD\09 DSF Habitat Suitability.mxd



CEDAR AVENUE AND ORANGE STREET INDUSTRIAL-DISTRIBUTION BUILDINGS  
HABITAT ASSESSMENT AND DSF SUITABILITY ASSESSMENT



## **Section 6 Conclusion and Recommendations**

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The project site is heavily disturbed and consists of two bare fields that were formerly used for housing. No sensitive species were observed during the habitat assessment and based on habitat requirements for specific species as well as the availability and quality of habitats needed by sensitive species, it was determined that the project site has a low potential to support burrowing owl throughout the site and yellow warbler in two isolated stands of riparian vegetation in the eastern parcel. Otherwise, the site no longer supports native vegetation and therefore the presence of sensitive plant or wildlife species is unlikely.

### **6.1 DSF HABITAT SUITABILITY**

The undeveloped areas on the project site were determined to contain disturbed, compacted clay soils. No clean Delhi Sand soils were present. The project site was determined to not have the potential to provide suitable habitat for DSF. Further, the project site is surrounded by existing development and no longer has connectivity to areas containing clean Delhi Sands soils or areas subject to Aeolian processes. Based on the results of the DSF suitability assessment, it is assumed that DSF is absent from the project site and focused surveys for DSF are not recommended.

### **6.2 MIGRATORY BIRD TREATY ACT/FISH AND GAME CODE**

Pursuant to the MBTA and Fish and Game Code, removal of any trees, shrubs, or any other potential nesting habitat should be conducted outside the avian nesting season. The nesting season generally extends from early February through August, but can vary slightly from year to year based upon seasonal weather conditions. If ground disturbance and vegetation removal cannot occur outside of the nesting season, a pre-construction clearance survey for nesting birds should be conducted within three days of the start of any ground disturbing activities to ensure that no nesting birds will be disturbed during construction.

The survey should focus on all bird species. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active bird nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 300-foot buffer around the active nest. For raptors and listed species, this buffer is expanded to 500 feet. It is recommended that a biological monitor be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, normal construction activities can occur. As part of the nesting bird clearance survey, a pre-construction burrowing owl

clearance survey shall be conducted to ensure that burrowing owls remain absent from the project site.

Pursuant to Fish and Game Code Section 3503, it is unlawful to destroy any bird's nest or any bird's eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks and owls) are protected under Fish and Game Code Section 3503.5 which makes it unlawful to take, possess, or destroy their nest or eggs. Consultation with CDFW will be required prior to the removal of any raptor nest on the project site, if found.

## Section 7      References

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## **Appendix A      Site Photographs**

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**Photograph 1:** Facing east from the western end of the western parcel. Much of the project site is covered in a ruderal plant community.



**Photograph 2:** Facing northwest from the western end of the western parcel. The soils on-site are rocky and are not composed of the clean Delhi sand soils needed for Delhi Sands flower-loving fly (DSF, *Rhaphiomidas terminatus abdominalis*)



**Photograph 3:** Facing south within the western parcel. The project site is a former housing complex and still contains deteriorated paved streets and curbs.



**Photograph 4:** Facing north within the western parcel. There are still some foundations remaining on-site from the former housing complex.



**Photograph 5:** Facing northwest from within the western parcel. Many areas on the project site are used for illegal dumping.



**Photograph 6:** Most of the soils on-site are too compact and not suitable for DSF.



**Photograph 7:** Facing east from within the eastern parcel. Isolated stand of riparian vegetation, including cattails (*Typha* sp.) and black willow (*Salix gooddingii*) on the northern portion of the eastern parcel.



**Photograph 8:** Facing southwest from within the eastern parcel. Isolated stand of riparian vegetation, including cattails, black willow, mulefat (*Baccharis salicifolia*), and cottonwood (*Populus fremontii*) in the center portion of the eastern parcel.



**Photograph 9:** Facing northeast from the southwest corner of the eastern parcel. Vegetation throughout this parcel is generally composed of grasses interspersed bare patches.



**Photograph 10:** Facing south from the northeast corner of the eastern parcel.

**Appendix B      Sensitive Habitats and Potentially  
Occurring Sensitive Plant and Wildlife  
Species**

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**Suitable Habitats and Potentially Occurring Sensitive Plant and Wildlife Species**

| Scientific Name<br>Common Name                                          | Status                     | Habitat                                                                                                                                                                                                                                                                                                                                                                                      | Observed<br>On-site | Potential to<br>Occur                                            |
|-------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------|
| <b>Wildlife Species</b>                                                 |                            |                                                                                                                                                                                                                                                                                                                                                                                              |                     |                                                                  |
| <i>Accipiter cooperii</i><br>Cooper's hawk                              | Fed: None<br>CA: WL        | Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.                                                                                                              | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Accipiter striatus</i><br>sharp-shinned hawk                         | Fed: None<br>CA: WL        | Found in pine, fir and aspen forests. They can be found hunting in forest interior and edges from sea level to near alpine areas. Can also be found in rural, suburban and agricultural areas, where they often hunt at bird feeders. Typically found in southern California in the winter months.                                                                                           | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Aquila chrysaetos</i><br>golden eagle                                | Fed: None<br>CA: FP; WL    | Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat. | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Artemisospiza belli belli</i><br>Bell's sage sparrow                 | Fed: None<br>CA: WL        | Resident on the coastal side of Southern California Mountains. Breeds in coastal sage scrub and chaparral habitats from February to August. They require semi-open habitats with evenly spaced shrubs 1-2 meters high. Occurs in chaparral dominated by fairly dense stands of chamise.                                                                                                      | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Aspidoscelis hyperythra</i><br>orangethroat whiptail                 | Fed: None<br>CA: CSC       | Semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral. They are typically found in hot, dry, flat open spaces. Typically, they are seen on the ground running in open spots from bush to bush, but rarely climbing on rocks or vegetation.                                                                      | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Aspidoscelis tigris stejnegeri</i><br>coastal whiptail               | Fed: None<br>CA: None      | Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.                                                                                                                                                                                                                                                            | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Athene cunicularia</i><br>burrowing owl                              | Fed: None<br>CA: CSC       | Prefers habitat with short, sparse vegetation with few shrubs and well-drained soils in grassland, shrub steppe, and desert habitats. Also occurs in agricultural areas, ruderal fields, vacant lots, and pastures. Requires underground burrows, cavities, debris piles, culverts, and pipes for nesting, roosting, and cover.                                                              | No                  | <b>Low.</b> There is marginal habitat on-site.                   |
| <i>Catostomus santaanae</i><br>Santa Ana sucker                         | Fed: <b>THR</b><br>CA: CSC | Occur in the watersheds draining the San Gabriel and San Bernardino Mountains of southern California. Steams that Santa Ana Sucker inhabits are generally perennial streams with water ranging in depth from a few inches to several feet and with currents ranging from slight to swift.                                                                                                    | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Chaetodipus fallax fallax</i><br>northwestern San Diego pocket mouse | Fed: None<br>CA: CSC       | Found terrestrially in a wide variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Open habitat on the Pacific slope from southwestern San Bernardino County to northwestern Baja California. Major habitat requirement is the presence of low growing vegetation or rocky outcroppings, as well as sandy soil to dig burrows.                  | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |

| Scientific Name<br>Common Name                                       | Status                     | Habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Observed<br>On-site | Potential to<br>Occur                                            |
|----------------------------------------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------|
| <i>Charina trivirgata</i><br>rosy boa                                | Fed: None<br>CA: None      | Occurs in habitats with a mix of dense, brushy cover and rocky soils. Generally associated with desert and chaparral habitats, including coastal and desert canyons, washes, oak and pine woodlands, pinyon-juniper woodlands, and mountains.                                                                                                                                                                                                                                                                                                                                                                                                                 | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Cicindela tranquebarica viridissima</i><br>greenest tiger beetle  | Fed: None<br>CA: None      | Occurs in a few small colonies within the Santa Ana River watershed. Usually found near running water where there is fine sand and can also be found in habitats containing mud flats and alkali areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Coleonyx variegatus abbotti</i><br>San Diego banded gecko         | Fed: None<br>CA: None      | Is found in coastal and cismontane southern California from interior Ventura County south, although it is absent from the extreme outer coast. Is uncommon in coastal scrub and chaparral. Prefers granite or rocky outcrops in coastal scrub and chaparral.                                                                                                                                                                                                                                                                                                                                                                                                  | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Contopus cooperi</i><br>olive-sided flycatcher                    | Fed: None<br>CA: CSC       | Primarily found in montane and northern coniferous forests, usually at mid- to high- elevations. Typically found near forest edges near openings on snags or perches. Breed in coniferous woods across Canada, Alaska and the northeastern and western United States. Typically abundant in early post fire landscapes.                                                                                                                                                                                                                                                                                                                                       | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Crotalus ruber</i><br>red-diamond rattlesnake                     | Fed: None<br>CA: CSC       | It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats. | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Danaus plexippus</i><br>monarch butterfly                         | Fed: None<br>CA: None      | Occurs in open fields and meadows dominated by milkweed. In winter, species can be found on the coast of southern California in Eucalyptus groves and at high altitudes in central Mexico.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Diadophis punctatus modestus</i><br>San Bernardino ringneck snake | Fed: None<br>CA: None      | Common in open, relatively rocky areas within valley-foothill, mixed chaparral and annual grass habitats. Prefers moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodland.                                                                                                                                                                                                                                                                                                                                                                                                    | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Dipodomys merriami parvus</i><br>San Bernardino kangaroo rat      | Fed: <b>END</b><br>CA: CSC | Primarily found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidean upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidean alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.                                                                                                                                                                                                                         | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |

Appendix B Suitable Habitats and Potentially Occurring Sensitive Plant and Wildlife Species

| Scientific Name<br>Common Name                                           | Status                                     | Habitat                                                                                                                                                                                                                                                                                                                                                                                                                                               | Observed<br>On-site | Potential to<br>Occur                                            |
|--------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------|
| <i>Eumops perotis californicus</i><br>western mastiff bat                | Fed: None<br>CA: CSC                       | Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas. | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Gila orcuttii</i><br>arroyo chub                                      | Fed: None<br>CA: CSC (THR in native Range) | Warm streams of the Los Angeles Plain, which is typically muddy torrents during the winter, and clear quiet brooks in the summer, possibly drying up in places. They are found both in slow-moving and fast-moving sections, but generally deeper than 40 cm.                                                                                                                                                                                         | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Icteria virens</i><br>yellow-breasted chat                            | Fed: None<br>CA: CSC                       | Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting area is associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.                                                                                            | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Lanius ludovicianus</i><br>loggerhead shrike                          | Fed: None<br>CA: CSC                       | Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover including open-canopied valley foothill hardwood, riparian, pinyon-juniper desert riparian, creosote bush scrub, and Joshua tree woodland. Requires suitable perches including trees, posts, fences, utility lines, or other perches.                                                                                                         | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Lasiurus xanthinus</i><br>western yellow bat                          | Fed: None<br>CA: CSC                       | Roosts in palm trees in foothill riparian, desert wash and palm oasis habitats with access to water for foraging. Known to roost in dead palm frond skirts of fan palms. Western yellow bats are thought to be noncolonial.                                                                                                                                                                                                                           | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Lepus californicus bennettii</i><br>San Diego black-tailed jackrabbit | Fed: None<br>CA: CSC                       | Occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats, agricultural fields, or sparse coastal scrub.                                                                                                                                                                                                                                                                                                 | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Nyctinomops femorosaccus</i><br>pocketed free-tailed bat              | Fed: None<br>CA: CSC                       | Roosts primarily in crevices of rugged cliffs, high rocky outcrops and slopes. It has been found in a variety of plant associations, including desert shrub and pine-oak forests. The species may also roost in buildings, caves, and under roof tiles.                                                                                                                                                                                               | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Perognathus longimembris pacificus</i><br>Pacific pocket mouse        | Fed: END<br>CA: CSC                        | Require sandy soils for burrowing and have adapted to several similar coastal habitats with shrubby vegetation, including coastal strand, coastal dunes, coastal sage scrub, and weedy vegetation on river-bed sands. Habitat destruction and fragmentation and predation by domestic and feral cats and other animals continue to threaten this animal's existence.                                                                                  | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Phrynosoma blainvillii</i><br>coast horned lizard                     | Fed: None<br>CA: CSC                       | Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.                                                     | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |

| Scientific Name<br>Common Name                                              | Status                                                 | Habitat                                                                                                                                                                                                                                                                                                                                                                                                     | Observed<br>On-site | Potential to<br>Occur                                            |
|-----------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------|
| <i>Polioptila californica californica</i><br>coastal California gnatcatcher | Fed: <b>THR</b><br>CA: <b>CSC</b>                      | Obligate resident of sage scrub habitats that are dominated by California sagebrush ( <i>Artemisia californica</i> ). This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It prefers habitat with more low-growing vegetation.                                                                                                                           | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Rhaphiomidas terminatus abdominalis</i><br>Delhi Sands flower-loving fly | Fed: <b>END</b><br>CA: <b>None</b>                     | DSF habitat is limited to areas that include Delhi fine sand, an Aeolian (wind-deposited) soil type. The highest density of DSF have been found in habitat that includes a variety of plants including California buckwheat, California croton, deerweed, and telegraph weed.                                                                                                                               | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Setophaga petechial</i><br>yellow warbler                                | Fed: <b>None</b><br>CA: <b>CSC</b>                     | Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses. | No                  | <b>Low.</b> There is marginal habitat on-site.                   |
| <i>Spea hammondii</i><br>western spadefoot                                  | Fed: <b>None</b><br>CA: <b>CSC</b>                     | Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.                                                           | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Spizella atrogularis</i><br>black-chinned sparrow                        | Fed: <b>None</b><br>CA: <b>None</b>                    | Breeds locally and uncommonly in foothills bordering Central Valley and commonly on arid mountain sloped of southern CA. Occurs mostly on sloping ground in mixed chaparral, chamise-redshank chaparral, sagebrush, and similar brushy habitats.                                                                                                                                                            | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Vireo bellii pusillus</i><br>least Bell's vireo                          | Fed: <b>END</b><br>CA: <b>END</b>                      | Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities.                               | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <b>Plant Species</b>                                                        |                                                        |                                                                                                                                                                                                                                                                                                                                                                                                             |                     |                                                                  |
| <i>Arenaria paludicola</i><br>marsh sandwort                                | Fed: <b>END</b><br>CA: <b>END</b><br>CNPS: <b>1B.1</b> | Grows mainly in wetlands and freshwater marshes in arid climates. The plant can grow in saturated acidic bog soils and soils that are sandy with a high organic content. From 23 to 820 feet in elevation. Blooming period is from May to August.                                                                                                                                                           | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Berberis nevini</i><br>Nevin's barberry                                  | Fed: <b>END</b><br>CA: <b>END</b><br>CNPS: <b>1B.1</b> | Occurs on steep, north-facing slopes or in low-grade sandy washes in chaparral, cismontane woodland, coastal scrub, and riparian scrub. From 197 to 3,904 feet in elevation. Blooming period is from March to June.                                                                                                                                                                                         | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |

Appendix B Suitable Habitats and Potentially Occurring Sensitive Plant and Wildlife Species

| Scientific Name<br>Common Name                                            | Status                                          | Habitat                                                                                                                                                                                                                                                                                                                                                                                                                                            | Observed<br>On-site | Potential to<br>Occur                                            |
|---------------------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------|
| <i>Calochortus plummerae</i><br>Plummer's mariposa-lily                   | Fed: None<br>CA: None<br>CNPS: 4.2              | Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley and foothill grasslands, cismontane woodland, lower montane coniferous forest and yellow pine forest. Often found on dry, rocky slopes and soils and brushy areas. Within the MSHCP Plan Area this species is restricted to the San Jacinto and San Bernardino Mountains. Can be very common after a fire. From 450 to 6,299 feet in elevation. Blooms from May-July. | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Chloropyron maritimum ssp. maritimum</i><br>salt marsh bird's-beak     | Fed: <b>END</b><br>CA: <b>END</b><br>CNPS: 1B.2 | Upper terraces and higher edges of coastal salt marshes where tidal inundation is periodic. From 0 to 3,543 feet in elevation. Bloom period is from May-October.                                                                                                                                                                                                                                                                                   | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Chorizanthe parryi var. parryi</i><br>Parry's spineflower              | Fed: None<br>CA: None<br>CNPS: 1B.1             | Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. From 951 to 3,773 feet in elevation. Bloom period is from April-June.                                                                                                                                                                                                                                                  | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Deinandra paniculata</i><br>paniculate tarplant                        | Fed: None<br>CA: None<br>CNPS: 4.2              | Typically found in vernal mesic, sometimes sandy soils in coastal scrub, valley and foothill grasslands, and vernal pools. Elevation ranges from 56- 4,068 feet. Blooming period is from April to November.                                                                                                                                                                                                                                        | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Dodecahema leptoceras</i><br>slender-horned spineflower                | Fed: <b>END</b><br>CA: <b>END</b><br>CNPS: 1B.1 | Found in sandy soil in association with mature alluvial scrub. Ideal habitat appears to be a terrace or bench that receives over bank deposits every 50 to 100 years. Cryptogamic crusts are frequently present in occupied areas. From 1,181 to 2,690 feet in elevation. Blooming period is from April to June.                                                                                                                                   | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Eriastrum densifolium ssp. sanctorum</i><br>Santa Ana River woollystar | Fed: <b>END</b><br>CA: <b>END</b><br>CNPS: 1B.1 | Found only within open washes and early successional alluvial fan scrub on open slopes above main watercourses on fluvial deposits where flooding and scouring occur at a frequency that allows the persistence of open shrublands. Suitable habitat is comprised of patchy distribution of gravelly soils, sandy soils, rock mounds and boulder fields. From 853 to 2,264 feet in elevation. Blooming period is from May to September.            | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Horkelia cuneata var. puberula</i><br>mesa horkelia                    | Fed: None<br>CA: None<br>CNPS: 1B.1             | Occurs on sandy or gravelly soils in chaparral, woodlands, and coastal scrub plant communities. Most often on alluvial fans. From 131 to 3,642 feet in elevation. Blooming period is from February to July.                                                                                                                                                                                                                                        | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Lepidium virginicum var. robinsonii</i><br>Robinson's pepper-grass     | Fed: None<br>CA: None<br>CNPS: 4.3              | Dry soils on chaparral and coastal sage scrub from 66 to 4,396 feet in elevation. Blooming period ranges from January- July.                                                                                                                                                                                                                                                                                                                       | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Lycium parishii</i><br>Parish's desert-thorn                           | Fed: None<br>CA: None<br>CNPS: 2B.3             | Coastal scrub, Sonoran Desert Scrub with sandy plains and desert washes. From 525 to 3,379 feet in elevation. Blooming period is from March to April.                                                                                                                                                                                                                                                                                              | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |

| Scientific Name<br>Common Name                      | Status                              | Habitat                                                                                                                                                                                                                                                                                                                                                                                                                                   | Observed<br>On-site | Potential to<br>Occur                                            |
|-----------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------|
| <i>Monardella pringlei</i><br>Pringle's monardella  | Fed: None<br>CA: None<br>CNPS: 1A   | Sandy hills covered in coastal sage scrub from 919 to 1,148 feet in elevation. Bloom period is from May to June.                                                                                                                                                                                                                                                                                                                          | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Senecio aphanactis</i><br>chaparral ragwort      | Fed: None<br>CA: None<br>CNPS: 2B.2 | Cismontane woodland, coastal scrub; drying alkaline flats. From 49 to 3,904 feet in elevation. Bloom period is from January to April.                                                                                                                                                                                                                                                                                                     | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <i>Sphenopholis obtusata</i><br>prairie wedge grass | Fed: None<br>CA: None<br>CNPS: 2B.2 | Brackish or salt marshes and flats, in lakes or ponds, in rivers or streams, man-made or disturbed habitats, marshes, ridges or ledges, shores or rivers or lakes, woodlands. From 787 to 9,416 feet in elevation. Bloom period is from April to July.                                                                                                                                                                                    | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |
| <b>Sensitive Habitats</b>                           |                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                                                  |
| Riversidean Alluvial Fan Sage Scrub                 | CDFW Sensitive Habitat              | Occurs within broad washes of sandy alluvial drainages that carry rainfall runoff sporadically in winter and spring, but remain relatively dry through the remainder of the year. Is restricted to drainages and floodplains with very sandy substrates that have a dearth of decomposed plant material. These areas do not develop into riparian woodland or scrub due to the limited water resources and scouring by occasional floods. | No                  | <b>Presumed absent.</b><br>There is no suitable habitat on-site. |

**U.S. Fish and Wildlife Service - Federal**

END- Federal Endangered  
THR- Federal Threatened

**California Department of Fish and Wildlife - California**

END- California Endangered  
THR- California Threatened  
CSC- California Species of Concern  
FP- California Fully Protected  
WL- California Watch List

**California Native Plant Society (CNPS)**

**California Rare Plant Rank**

1A Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere  
1B Plants Rare, Threatened, or Endangered in California and Elsewhere  
2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere  
4 Plants of Limited Distribution- A Watch List

**Threat Ranks**

0.1- Seriously threatened in California  
0.2- Fairly threatened in California  
0.3- Not very threatened in California

## **Appendix C      Flora and Fauna Compendium**

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## Flora Compendium

| Scientific Name                              | Common Name          |
|----------------------------------------------|----------------------|
| <i>Ailanthus altissima</i>                   | tree of heaven       |
| <i>Ambrosia acanthicarpa</i>                 | annual bur ragweed   |
| <i>Ambrosia</i> sp.                          | ragweed              |
| <i>Amsinckia</i> sp.                         | fiddleneck           |
| <i>Baccharis salicifolia</i>                 | mulefat              |
| <i>Bromus diandrus</i>                       | ripgut brome         |
| <i>Bromus madritensis</i> ssp. <i>rubens</i> | red brome            |
| <i>Chenopodium album</i>                     | lambs quarters       |
| <i>Conyza canadensis</i>                     | horseweed            |
| <i>Croton californicus</i>                   | California croton    |
| <i>Cryptantha</i> sp.                        | popcornflower        |
| <i>Datura wrightii</i>                       | jimsonweed           |
| <i>Erodium</i> sp.                           | filaree              |
| <i>Helianthus annuus</i>                     | common sunflower     |
| <i>Heterotheca grandiflora</i>               | telegraph weed       |
| <i>Hirschfeldia incana</i>                   | shortpodded mustard  |
| <i>Malva parviflora</i>                      | cheeseweed           |
| <i>Melia azedarach</i>                       | China berry          |
| <i>Populus fremontii</i>                     | Fremont's cottonwood |
| <i>Ricinus communis</i>                      | castor bean          |
| <i>Robinia pseudoacacia</i>                  | black locust         |
| <i>Salix gooddingii</i>                      | black willow         |
| <i>Salsola tragus</i>                        | Russian thistle      |
| <i>Sambucus nigra</i>                        | black elderberry     |
| <i>Schinus molle</i>                         | Peruvian pepper      |
| <i>Schinus terebinthifolius</i>              | Brazilian pepper     |
| <i>Sisymbrium irio</i>                       | London rocket        |
| <i>Solanum douglasii</i>                     | Douglas' nightshade  |
| <i>Sonchus oleraceus</i>                     | common sow-thistle   |
| <i>Tribulus terrestris</i>                   | puncture vine        |
| <i>Typha</i> sp.                             | cattail              |
| <i>Washingtonia robusta</i>                  | Mexican fan palm     |

## Fauna Compendium

| Scientific Name               | Common Name            |
|-------------------------------|------------------------|
| <b>Birds</b>                  |                        |
| <i>Aeronautes saxatalis</i>   | white-throated swift   |
| <i>Anthus rubescens</i>       | American pipit         |
| <i>Buteo jamaicensis</i>      | red-tailed hawk        |
| <i>Calypte anna</i>           | Anna's hummingbird     |
| <i>Charadrius vociferus</i>   | killdeer               |
| <i>Chondestes grammacus</i>   | lark sparrow           |
| <i>Columba livia</i>          | rock pigeon            |
| <i>Corvus brachyrhynchos</i>  | American crow          |
| <i>Corvus corax</i>           | common raven           |
| <i>Haemorhous mexicanus</i>   | house finch            |
| <i>Larus</i> sp.              | gull                   |
| <i>Mimus polyglottos</i>      | northern mockingbird   |
| <i>Setophaga coronata</i>     | yellow-rumped warbler  |
| <i>Streptopelia decaocto</i>  | Eurasian collared-dove |
| <i>Sturnella neglecta</i>     | western meadowlark     |
| <i>Sturnus vulgaris</i>       | European starling      |
| <i>Thryomanes bewickii</i>    | Bewick's wren          |
| <i>Tyrannus vociferans</i>    | Cassin's kingbird      |
| <i>Zenaida macroura</i>       | mourning dove          |
| <i>Zonotrichia leucophrys</i> | white-crowned sparrow  |
| <b>Mammals</b>                |                        |
| <i>Thomomys bottae</i>        | Botta's pocket gopher  |