

**HABITAT ASSESSMENT FOR APN 419-140-057  
SUN LAKES BOULEVARD, CITY OF BANNING, RIVERSIDE COUNTY, CALIFORNIA**

±47.02 Acre Property, ±47.02 Acres Surveyed

APN 419-140-057, City of Banning, Section 12, Township 3 South,  
Range 1 West, USGS *Beaumont* 7.5' Topographic Quadrangle Map

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**Report Summary:**

The site is mostly non-native annual grassland with small areas of willow thickets and California buckwheat scrub. The willow habitat is insufficient to support riparian birds. There are ornamental trees along the western, southern, and part of the eastern boundary. Habitat to support narrow endemic plants Marvin's onion and many-stemmed dudleya is absent. Other special status plants are either absent, not expected to occur, or have low potential for occurrence. There are no vernal pools or evidence of ponding, but tire ruts are present. No fairy shrimp or fairy shrimp habitat was observed. There is potentially suitable habitat for burrowing owl, but no owls or owl sign were observed. A preconstruction clearance survey will be required. There is suitable habitat for nesting birds (including raptors) and a nesting bird clearance survey is recommended prior to the start of vegetation or ground disturbance during the nesting season. No special status wildlife species were observed and most are either absent, not expected to occur, or have low potential for occurrence. A few have moderate or low to moderate potential to occur, most of which are covered under the MSHCP and considered adequately conserved. MSHCP Riparian habitat and an area of state wetland may be present onsite. If so, a DBESP (under the MSHCP) and regulatory permitting would be required for impacts.

**Surveys Conducted By:** Guy Bruyea

**Surveys Conducted On:** January 27, 2020

**Report Date:** March 30, 2020

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## MANAGEMENT SUMMARY

L&L Environmental, Inc. conducted a biological survey for Romo Planning Group on Assessor's Parcel Number (APN) 419-140-057, a ±47.02-acre proposed development site in the City of Banning, California. The purpose of this study was to examine the subject property for the presence/absence of biological resources and habitat for special status species.

The site is within the area covered by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) but is not within MSHCP Criteria Area. The MSHCP requires a habitat assessment to address riparian/riverine and vernal pool habitats, fairy shrimp, burrowing owl (*Athene cunicularia*), and narrow endemic plant species. The narrow endemic plant species requiring habitat assessments are Marvin's (Yucaipa) onion (*Allium marvinii*) and many-stemmed dudleya (*Dudleya multicaulis*).

The site is generally located south of Interstate Highway 10 and north of Sun Lakes Boulevard, between Highland Springs Avenue to the west and Northwood Avenue to the east, in Banning, Riverside County, California. Active railroad tracks are located just to the north of the site.

Most of the site is non-native annual grassland. There are small areas of willow thickets and California buckwheat scrub. There are no sensitive vegetation communities present. The site has been previously disturbed and remnants of that disturbance are present. Ongoing disturbance includes regular mowing and/or disking.

Based on the habitat and soils present and disturbances associated with current and past land use, habitat to support narrow endemic plants Marvin's onion and many-stemmed dudleya is absent. Other special status plants are either absent, not expected to occur, or have a low potential for occurrence onsite.

There are no vernal pools onsite and no evidence of ponding. Tire ruts are present, but soils onsite are sandy to coarse sandy loam and all areas were dry at the time of the survey. No fairy shrimp or potential fairy shrimp habitat was observed.

There is potentially suitable habitat for burrowing owl across much of the site and adjacent areas to the north between the site and I-10 freeway. No burrowing owl, occupied burrows, or burrowing owl sign (pellets, scat, feathers, etc.) were observed on or adjacent to the site during the survey. A preconstruction clearance survey is required within 30 days prior to the start of site disturbance.

There is suitable habitat for nesting birds, including raptors, onsite. A nesting bird clearance survey is recommended within three (3) days prior to the start of vegetation clearing or ground disturbance if it will begin during the nesting season (February 1 to September 15). If nesting birds are present, avoidance of nest sites is required and a buffer of 300 to 500 feet (or as determined by a biologist) is recommended until juvenile birds are no longer dependent on the nest and/or a biologist has verified that the nest is inactive.

No special status wildlife species were observed during the survey. Most special status wildlife known from the region are either absent, not expected to occur, or have low potential for occurrence onsite. A few species have moderate or low to moderate potential to occur, most of which are covered species under the MSHCP and considered adequately conserved. Riparian vegetation onsite is insufficient to provide habitat for riparian birds.

The Project site is surrounded by major roadways and residential developments and does not function as part of a wildlife corridor.

State jurisdictional waters subject to regulation under the California Fish and Game Code may be present. If present, any impacts would require regulatory permitting. MSHCP Riparian habitat may be present. If so, any impact would require the development and processing of a Determination of Biologically Equivalent or Superior Preservation (DBESP). A jurisdictional delineation survey and report is recommended in order to clarify presence or absence of jurisdictional features onsite.

## 1.0) INTRODUCTION

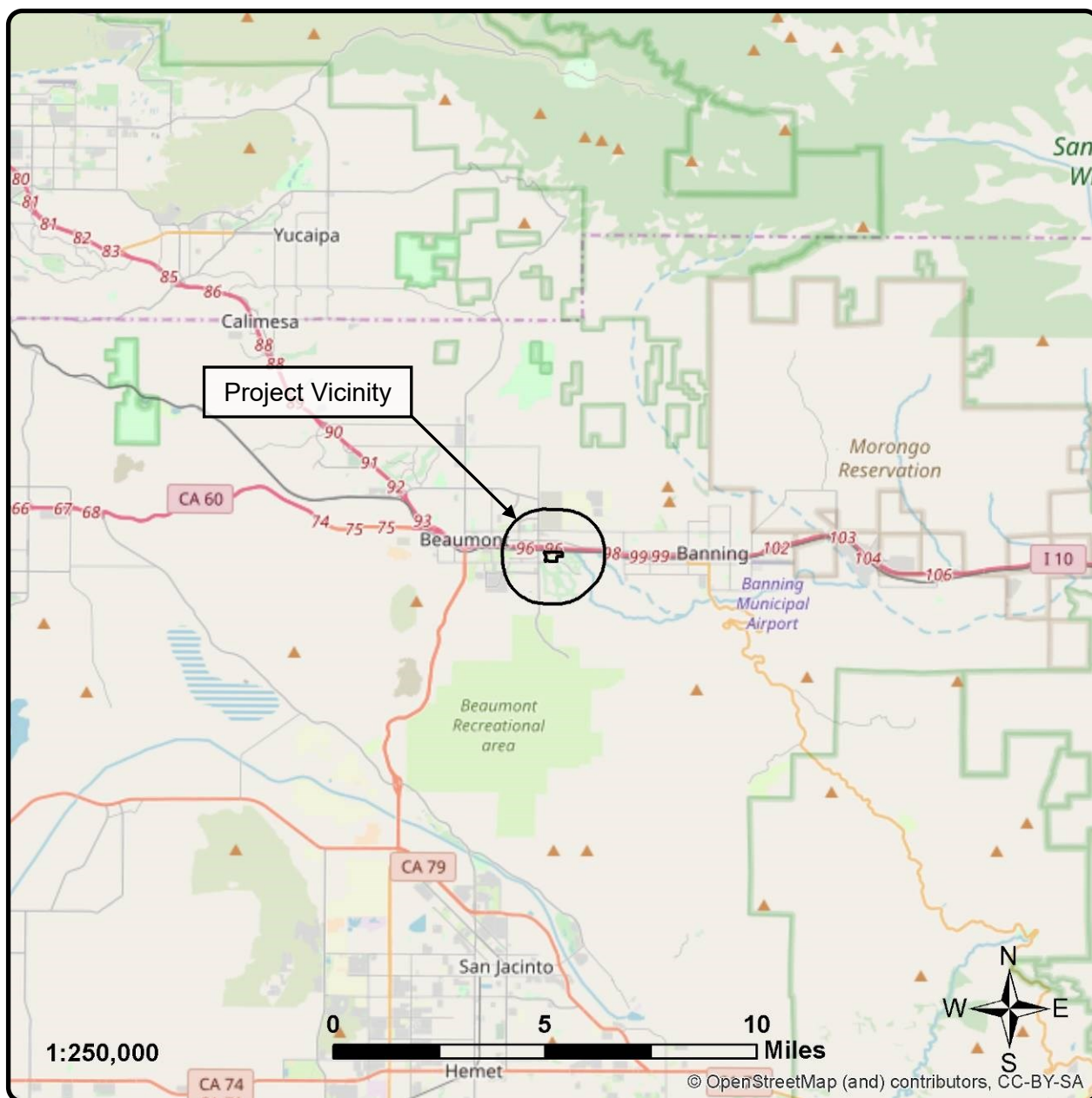
The following report was prepared by L&L Environmental, Inc. (L&L) for Romo Planning Group. It describes the results of biological surveys, including habitat assessments for burrowing owl and narrow endemic plants, on a proposed development site in the City of Banning in Riverside County, California. The Project site consists of Assessor's Parcel Number (APN) 419-140-057, totaling ±47.02 acres.

The assessment consisted of (1) a records search and literature review, conducted to determine the species of concern in the project area and proximity to documented special status species occurrences, and (2) field reconnaissance, intended to identify plants and animals on the property and presence/absence of habitat for species of concern, including burrowing owl and narrow endemic plants.

### 1.1) Location

The site is located in the City of Banning in Riverside County, California (Figure 1). Specifically, the site is located just south of Interstate 10 (I-10) and north of Sun Lakes Boulevard, about 0.2 mile east of the intersection of Highland Springs Boulevard and Sun Lakes Boulevard. The parcel is located in Section 12 of Township 3 South, Range 1 West, on the U. S. Geological Survey (USGS) *Beaumont, CA* topographic quadrangle (Figure 2). The parcel can be accessed by taking Interstate 10 to Banning, exiting on Highland Springs Boulevard and heading south, and then going east on Sun Lakes Boulevard for approximately 0.2 mile to reach the westernmost parcel boundary.

The site is generally bounded as follows: to the west by a shopping center, with Highland Springs Avenue beyond; to the east by a retirement community and residential/country club development, with vacant land beyond; to the north by active railroad tracks and I-10, with scattered commercial development and vacant lots beyond; and to the south by residential/country club development, with vacant land and federal land (Bureau of Land Management) beyond (Figure 3).



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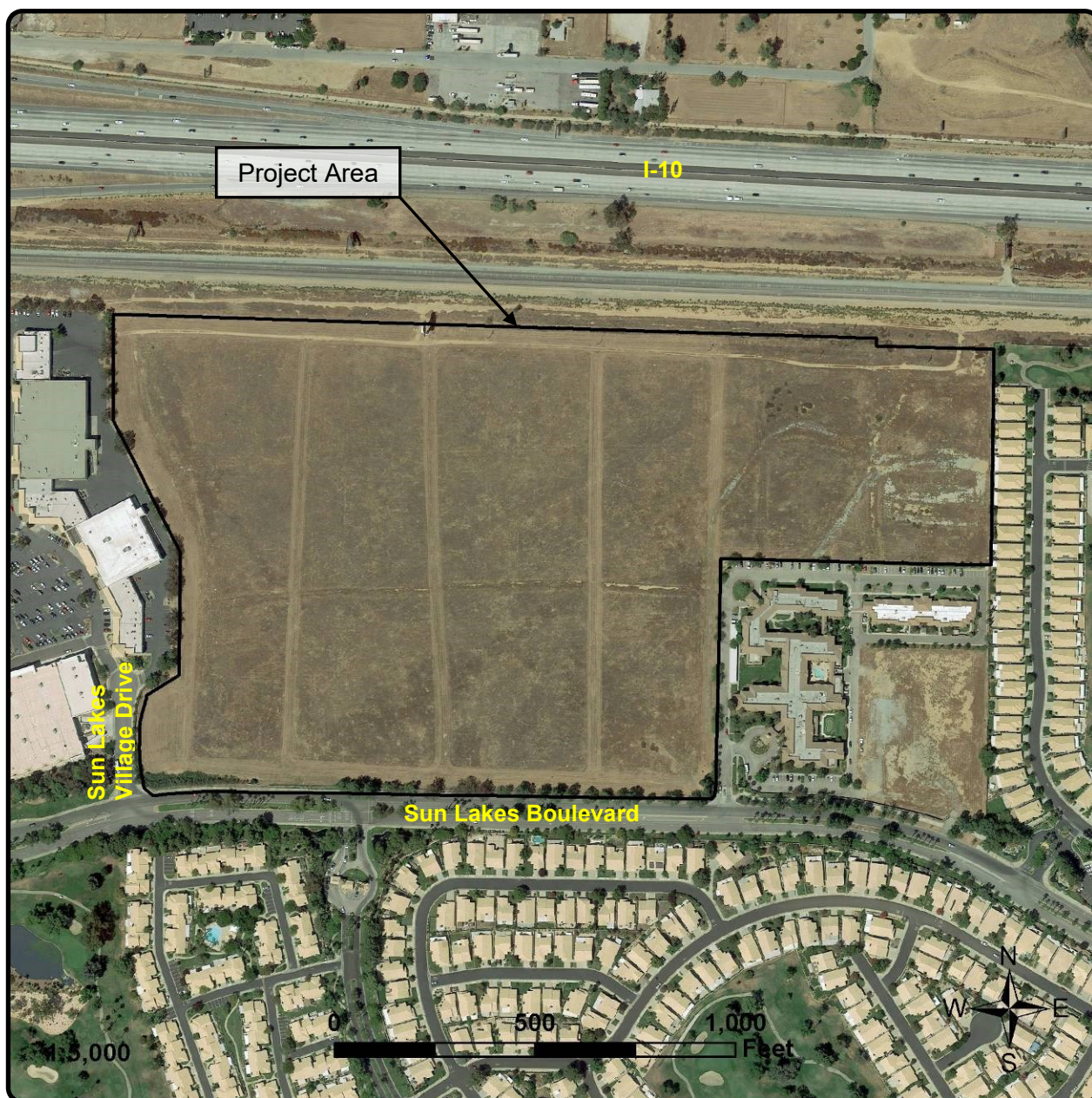
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## Figure 1

### Project Vicinity Map

APN 419-140-057, City of Banning  
 County of Riverside, California





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**Figure 3**

**Aerial Photograph**

(Aerial obtained from Google Earth, August 2018)

APN 419-140-057, City of Banning  
County of Riverside, California

## 1.2) Vegetation and Setting

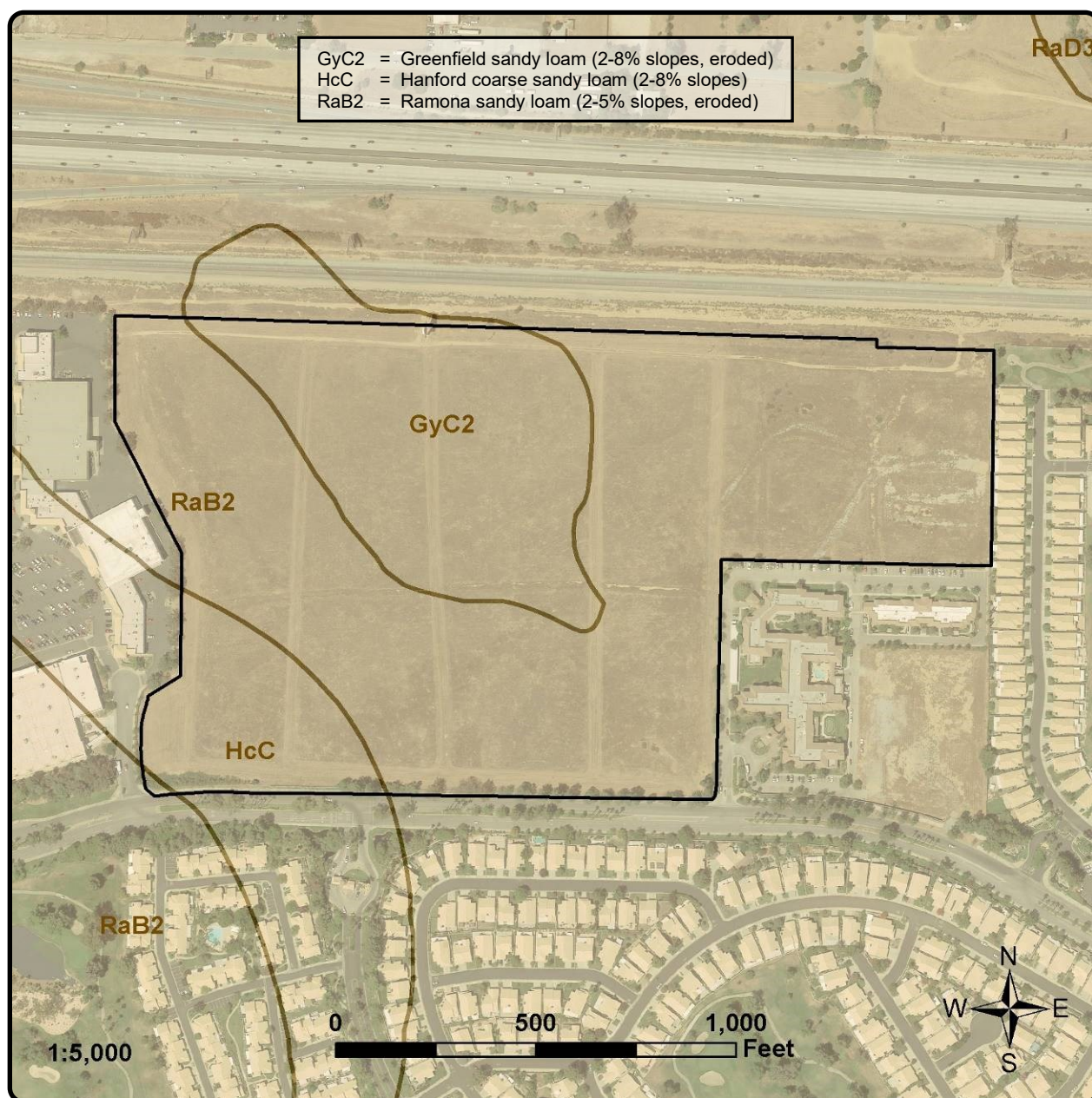
The site is a disturbed vacant lot and appears to be regularly disked or mown. Most of the site is non-native grassland. A small area of riparian vegetation is present in the southwest corner of the site. Ornamental trees are present along the southern and western boundaries and part of the eastern boundary. These trees are either on adjacent properties or along Sun Lakes Boulevard. Two sets of active railroad tracks run east-west just north of the site, with the I-10 freeway beyond. A large advertising sign is present along the north-central boundary of the site.

## 1.3) Soils and Topography

Topographically, the site is generally flat with elevation increasing gradually from southeast to northwest. Elevation onsite ranges from 2,546 to 2,565 feet above mean sea level. Soils onsite are mapped as Greenfield sandy loam (2-8% slopes, eroded), Hanford coarse sandy loam (2-8% slopes), and Ramona sandy loam (2-5% slopes, eroded) (NRCS 2020) (Figure 4). A gravel surface layer (from past disturbance) is present in some areas, particularly in the northeastern portion of the site.

There are no USGS mapped blue-line streams onsite. A shallow trench is present along the site's southern boundary along Sun Lakes Boulevard and trends from west to east. A double culvert is present at the southeast corner of the site. Another shallow trench is present within the central portion of the site and trends from west to east. The trenches appear to be remnants of past disturbance and do not have connectivity with any natural waterway.

A dirt access road is present near the northern site boundary. Other past disturbance onsite includes a grid of dirt roads or graded areas, remnants of which are still visible.



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## Figure 4

### Soils Map

(Aerial obtained from Google Earth, August 2018,  
 USDA Nat. Res. Cons. Serv. SSURGO Data)

APN 419-140-057, City of Banning  
 County of Riverside, California

## 2.0) METHODS AND PERSONNEL

### 2.1) Literature Review

Certain plants and animals have been listed as threatened or endangered under state or federal Endangered Species Acts. Other species have not been formally listed, but declining populations or habitat availability are reasons for concern regarding their long-term viability. These species are included in lists compiled by resource management agencies or private conservation organizations. In this report, the term “special status species” refers to all species included in one or more compendia or formal lists of rare, threatened, or endangered species.

In this report, the “Project” or “Project site” refers to the entire ±47.02-acre parcel. No offsite areas are included.

Pertinent literature was reviewed to identify local occurrences and habitat requirements of special status species and communities occurring in the region. Literature reviewed included compendia provided by resource agencies (CDFW 2019, 2020a), the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP; Dudek 2003), and a search of the California Natural Diversity Database (CNDDDB; CDFW 2020b) and California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2020) for the Beaumont topographic quadrangle and adjacent quadrangles (Yucaipa, Forest Falls, San Geronio Mountain, El Casco, Cabazon, Lakeview, San Jacinto, and Fulmor) and U. S. Fish and Wildlife Service Information for Planning and Consultation (IPaC; USFWS 2020) for the Project site.

The biological resources section of a CEQA document (MND ca. 2005) was also reviewed. This document cites data from a habitat assessment conducted on the parcel by BonTerra Consulting in 2005; however, the full CEQA document and the habitat assessment were not available for review.

Scientific names of plants follow Baldwin et al. (2012) with updates from the online Jepson eFlora (Jepson 2020). Scientific names of animals follow Stebbins (1985), Jameson and Peeters (1988), Cornell Laboratory of Ornithology (2020), and Arnett (2000), with updates from academic sources. Current conservation status of plant and wildlife species determined from CDFW (2019, 2020a). Vegetation community classifications follow Sawyer et al. (2009) with updates from CDFW (2018). State ranks (S ranks) for vegetation communities are from CDFW (2018). MSHCP conservation status from Dudek (2003) and RCA (2019). Documented occurrences are from CDFW (2020b) unless otherwise indicated.

Precipitation data was obtained from the Beaumont Remote Automated Weather Station (RAWS) (WRCC 2020). The Beaumont RAWS is located approximately 0.5 mile northwest of the Project site at an elevation of 2,604 feet.

## 2.2) Habitat Assessment Survey

L&L biologist Guy Bruyey visited the project area on January 27, 2020 to describe vegetation and habitat and evaluate the site for the presence of suitable habitat for special status wildlife and plant species, including burrowing owl and narrow endemic plants (Table 1).

Table 1. Survey dates, times, and weather conditions.

Date	Time	Weather	Wind (mph)
1-27-2020	1130-1430	Mostly clear, 68-73°F	2-7

A total of about 3.0 person-hours were spent onsite. All habitat types onsite were visited on foot. The site was surveyed by conducting a series of meandering transects across the subject property where possible, stopping periodically for observations and notations. A general habitat map and field notes were completed at the time of the survey. All field surveys were conducted during daylight hours. Digital photographs were taken to record condition of the site during the survey.

Plants of uncertain identity were collected and subsequently identified from keys, descriptions, and illustrations in Abrams (1923, 1944, and 1951), Abrams and Ferris (1960), Munz (1974), and Parker (1999).

## 2.3) Burrowing Owl Habitat Assessment

During the habitat assessment, the site was examined for potential burrowing owl habitat, including open areas onsite and areas where California ground squirrel (*Spermophilus beechyi*) activity was expected (i.e., potentially suitable burrows). A search for potentially suitable burrows within dirt, wood, and rock debris piles, artificially created berms, and other locations was conducted during the surveys. The site was also examined for signs of occupation by burrowing owl, including pellets, feathers, whitewash, prey remains, and eggshell fragments, as well as individual owls, but a focused protocol survey was not conducted.

The survey included all areas of the site with potential burrowing owl habitat. An additional 150-meter (500-foot) buffer area surrounding the site was visually inspected, where possible, in areas identified as potential burrowing owl habitat. Any developed areas were visually surveyed with binoculars due to trespassing concerns on private property.

### 3.0) RESULTS

#### 3.1) Literature Review Results

The site is not located within the MSHCP Criteria Area. Surveys required by the MSHCP are a habitat assessment to address riparian/riverine and vernal pool habitats, fairy shrimp, burrowing owl, and narrow endemic plant species. The narrow endemic plant species are Marvin's (Yucaipa) onion (*Allium marvinii*) and many-stemmed dudleya (*Dudleya multicaulis*).

##### 3.1.1) Precipitation Data

Table 2 provides the precipitation data from the Beaumont RAWS for the year preceding the survey (WRCC 2020). The total precipitation recorded by this RAWS for the 2019 water year (October 2018 through September 2019) is 19.76 inches. Average annual precipitation for this area is 15 to 20 inches (WRCC 2018).

Table 2. Precipitation data.

Month	Beaumont RAWS Precipitation (inches)
10.2018	0.66
11.2018	1.82
12.2018	1.52
01.2019	4.03
02.2019	6.83
03.2019	1.62
04.2019	0.48
05.2019	2.78
06.2019	0.00
07.2019	0.00
08.2019	0.00
09.2019	0.02
10.2019	0.00
11.2019	3.38
12.2019	2.74

### 3.1.2) 2005 Survey Results

A habitat assessment was conducted on the parcel by BonTerra Consulting in 2005, as cited in the Mitigated Negative Declaration (MND ca. 2005). The habitat assessment included burrowing owl, Marvin's onion, and many-stemmed dudleya. The assessment found that the site consists primarily of annual grasslands, with areas of southern willow scrub and ornamental vegetation. The site has been disturbed by off-road traffic and construction activities on adjacent properties.

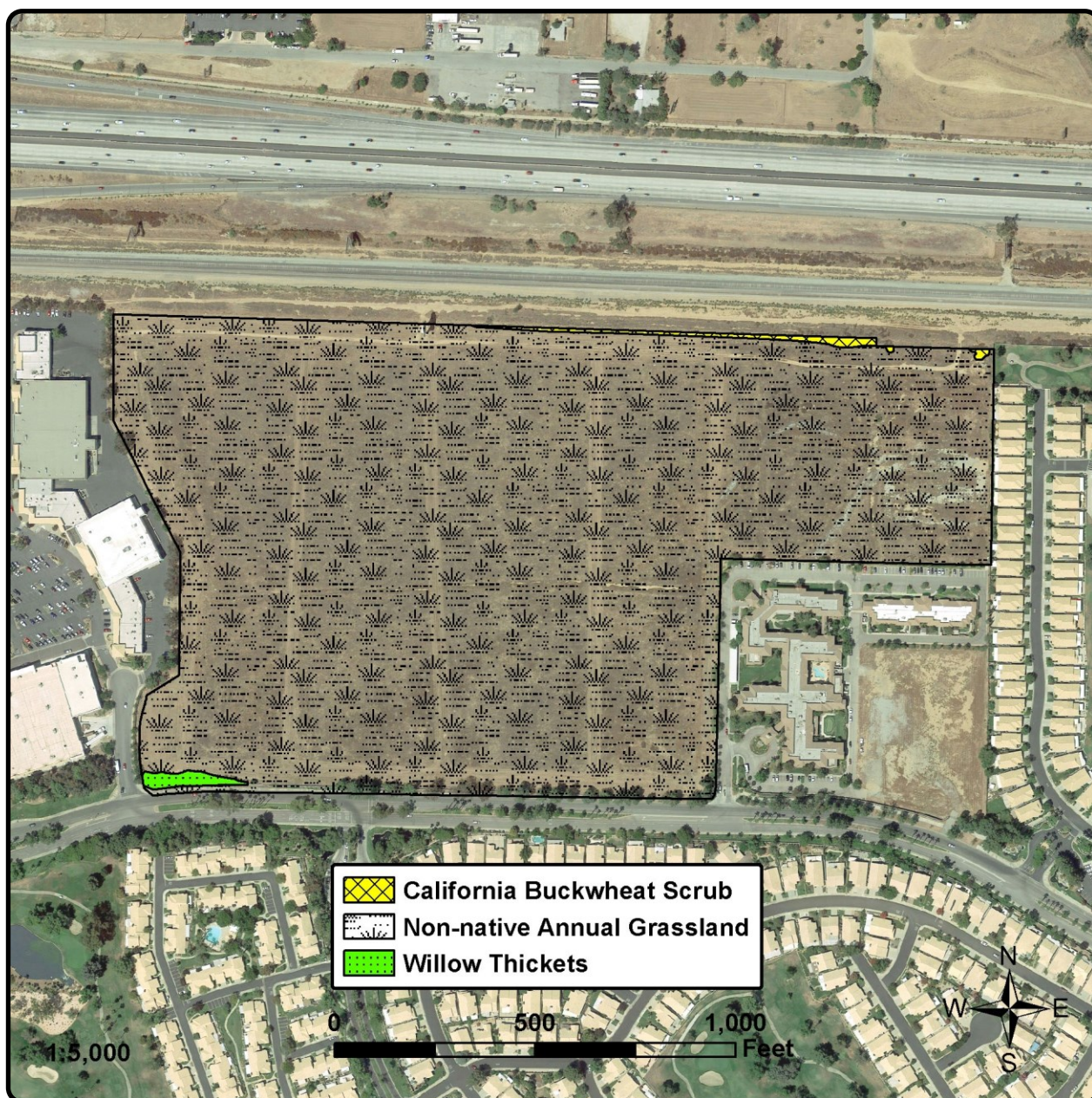
Habitat for burrowing owl was identified onsite, but no owls were found. Habitat for nesting raptors was present, but no raptor nests were identified. The assessment determined that there was no habitat for Marvin's onion or many-stemmed dudleya. Trapping for Stephens' kangaroo rat was also conducted with negative results. Data were not provided for other special status small mammals that may have been incidentally trapped.

### 3.2) Vegetation Communities

Vegetation communities onsite are summarized in Table 3 and shown in Figure 5. Representative photos are included in Appendix C. The majority of the site is non-native annual grassland, with a small patch of southern willow scrub at the southwest corner and a narrow strip of California buckwheat scrub along the northeastern site boundary. Ornamental trees line the southern and western boundaries and part of the eastern boundary. These trees are either on adjacent properties or along Sun Lakes Boulevard.

Table 3. Vegetation communities within survey area.

<b>Vegetation Community</b>	<b>Area (acres)</b>
Non-native Grassland	46.56
Willow Thickets	0.18
California Buckwheat Scrub	0.28
<b>Total</b>	<b>47.02</b>



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## Figure 5

### **Vegetation Communities**

(Aerial obtained from Google Earth, August 2018)

APN 419-140-057, City of Banning  
 County of Riverside, California

### 3.2.1) Non-native Annual Grassland

The majority of the site consists of disturbed non-native annual grassland dominated by Mediterranean grass (*Schismus barbatus*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), and cheatgrass (*Bromus tectorum*). Other non-native species present include Russian thistle (*Salsola tragus*), shortpod mustard (*Hirschfeldia incana*), redstem filaree (*Erodium cicutarium*), and tocalote (*Centaurea melitensis*).

Native annuals that are tolerant of disturbed areas and were observed onsite include large flower rancher's fiddleneck (*Amsinckia intermedia*), California aster (*Corethrogyne filaginifolia*), western sunflower (*Helianthus annuus*), horseweed (*Erigeron canadensis*), doveweed (*Croton setiger*), telegraph weed (*Heterotheca grandiflora*), and annual bur-weed (*Ambrosia acanthicarpa*).

Other plants less commonly observed include non-native tree tobacco (*Nicotiana glauca*) and native vinegar weed (*Trichostemma lanceolatum*), nightshade (*Solanum species*), and western jimsonweed (*Datura wrightii*).

This vegetation community is classified by Sawyer et al. (2009) as brome or Mediterranean grass grasslands (*Bromus species* – *Schismus barbatus* Herbaceous Semi-Natural Alliance). It is not considered a sensitive vegetation community.

### 3.2.2) California Buckwheat Scrub

A narrow strip of coastal scrub dominated by California buckwheat (*Eriogonum fasciculatum*) is present along portions of the northeastern site boundary. This vegetation community is classified by Sawyer et al. (2009) as California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance). CDFW ranks California buckwheat scrub as S5 (common, widespread, and abundant) and not considered sensitive.

### 3.2.3) Willow Thickets

A small area of small to medium-sized willows (*Salix species*) is present at the southwest corner of the site. The willows could not be identified due to season. These willows are likely supported by irrigation runoff and associated with a shallow trench that runs along the southern site boundary. This vegetation community is classified by Sawyer et al. (2009) as willow thickets and is synonymous with the southern willow scrub community noted in the 2005 survey

(MND ca. 2005). CDFW ranks willow thickets as S4 (apparently secure) and not considered sensitive.

### 3.3) Plant Species

A total of 36 plant species were identified during the survey. Of the 36 species, 19 (53 percent) are non-native. Additional annual plant species may occur, but were not detected due to timing of the survey. A list of observed plant species is included in Appendix A.

No federal or state-listed plants or special status plants were observed. The site is not within U. S. Fish and Wildlife Service (USFWS) designated critical habitat for any listed plant species. Listed and special status plants known from the region are either absent, not expected to occur, or have low potential for occurrence onsite (see Appendix B).

#### 3.3.1) Narrow Endemic Plants

Based upon habitat and soils present, non-native plant growth, and disturbances associated with current and past land use, habitat to support Marvin's onion and many-stemmed dudleya is absent from the site.

#### Marvin's Onion

Marvin's (Yucaipa) onion (*Allium marvinii*) is a perennial bulb-forming herb in the Alliaceae (Onion) family. It flowers from April through May and is found within openings in chaparral on clay soils. The species' elevation range is 2,500 to 3,500 feet. It is found only in Riverside and San Bernardino Counties (CNPS 2020). Marvin's onion may not flower in dry years; without flowers, the plant is difficult to locate and identify (Dudek 2003).

The species is not state or federally listed; it has a California Rare Plant Rank (CRPR) of 1B.2 (rare, threatened, or endangered in California and elsewhere; moderately threatened in California). Under the MSHCP, Marvin's onion is considered adequately conserved, but surveys are required in certain areas.

There is one (1) documented occurrence of Marvin's onion in the CNDDDB within five (5) miles of the Project site. It is from the general area of Banning, but the exact location is unknown and the species has not been documented from that area since the original discovery in 1921. The occurrence is mapped about 3.8 miles northeast of the site, but has a five-mile radius buffer that includes the site. An additional location was reported in SCE (2013) but is not in the CNDDDB.

This location is about four (4) miles northeast of the site along an electrical transmission line right-of-way.

Marvin's onion was not observed during surveys, but the surveys were not conducted during the flowering period for this species. Suitable clay soils have not been mapped onsite and were not detected during the survey. There is very little native habitat remaining onsite. Based upon soils, disturbances associated with current and past land use, and the thick growth of non-native plants onsite, suitable habitat to support Marvin's onion is absent from the Project site.

### Many-stemmed Dudleya

Many-stemmed dudleya (*Dudleya multicaulis*) is a perennial herb in the Crassulaceae (Stonecrop) family. It flowers from April through July and is found in chaparral, coastal scrub, and valley and foothill grassland, often on clay soils. The species elevation range is 50 to 2,600 feet. It is found in coastal southern California (CNPS 2020).

Many-stemmed dudleya is associated with openings and thinly vegetated areas in chaparral, coastal sage scrub, and grasslands underlain by clay and cobbly clay soils of the Altamont, Auld, Bosanko, Claypit, and Porterville series. In western Riverside County, the majority of the known populations are from the Temescal Canyon, Gavilan Hills, and Alberhill areas and the Santa Ana Mountains (Dudek 2003).

Many-stemmed dudleya is typically associated with clay soils in barrens, rocky places, and ridgelines as well as thinly vegetated openings in chaparral, coastal sage scrub, and southern needlegrass grasslands on clay soils. Most populations are associated with coastal sage scrub (Dudek 2003).

The species is not state or federally listed; it has a CRPR of 1B.2 (rare, threatened, or endangered in California and elsewhere; moderately threatened in California). Under the MSHCP, many-stemmed dudleya is considered adequately conserved, but surveys are required in certain areas.

There are no CNDDDB documented occurrences of many-stemmed dudleya within five (5) miles of the site. The nearest occurrence is about 28 miles to the southwest.

Many-stemmed dudleya was not observed during surveys, but the surveys were not conducted during the flowering period for this species. Suitable clay soils have not been mapped onsite and were not detected during the survey. There is very little native habitat remaining onsite.

Based upon soils, disturbances associated with current and past land use, and the thick growth of non-native plants onsite, suitable habitat to support many-stemmed dudleya is absent from the Project site.

### 3.3.2) Special Status Plants

No special status plant species were identified during the survey, but the survey was not conducted during the flowering season for most species.

The site has long-term and ongoing anthropogenic disturbance and undisturbed natural habitat capable of supporting special status plants is not present. Most special status plants known from the region are either absent or not expected to occur onsite. A few have low potential for occurrence. No special status plants have moderate or high potential to occur onsite (see Appendix B).

### 3.4) Wildlife Species

A total of 15 wildlife species (mostly birds) were detected during the survey. A list of all observed species is included in Appendix A.

No federal or state-listed endangered or threatened species were observed. The site is not within USFWS designated critical habitat for any listed wildlife species. No special status wildlife species were observed. Most listed or special status species are not expected to occur or have low potential for occurrence (see Appendix B), except as described below.

#### 3.4.1) Fairy Shrimp

Soil types mapped onsite are not consistent with an alkali playa or vernal pool complex (Bauder et al 2011). Pools or depressions characteristic of vernal pool habitat were not observed onsite. No evidence of ponding or fairy shrimp habitat was observed. No MSHCP species listed for protection associated with riparian/riverine areas or vernal pools, including fairy shrimp, were observed. Tire ruts are present on an access road along the northern site boundary, but the ruts were dry at the time of the survey and soils onsite are sandy to coarse sandy loam (i.e., well drained).

#### 3.4.2) Burrowing Owl

Burrowing owl (*Athene cunicularia*) is protected under the federal Migratory Bird Treaty Act and California Fish and Game Code and is a CDFW Species of Special Concern. It is a small,

ground-dwelling owl found in open dry grassland, desert, or shrubland areas and in uncultivated agricultural areas, rangelands, and other open areas with low-growing vegetation.

Burrows are an essential element of burrowing owl habitat. Although burrowing owl is capable of excavating its own burrows in soft soils, it typically modifies and inhabits abandoned burrows of small burrowing mammals, such as ground squirrels and pocket gophers. Burrowing owl has also been known to use man-made structures such as cement culverts, debris piles, and other artificial burrows.

Occupancy of burrowing owl habitat can be verified at a site by observation of at least one (1) owl or owl sign (molted feathers, cast pellets, prey remains, eggshell fragments, or excrement) at or near a burrow entrance. A site is considered occupied if at least one (1) owl has been identified onsite in the past three (3) years, because (if undisturbed) burrowing owls exhibit high site fidelity (CDFG 2012, CBOC 1993).

There are three (3) CNDDDB documented occurrences of burrowing owl within five (5) miles of the site. The closest is about 3.3 miles to the south in the Badlands. The other two (2) are further to the southwest. There are three (3) records of burrowing owl in eBird. eBird observations are submitted by “citizen scientists” and should be interpreted with caution. These observations are about 1.7 miles northeast of the site in a field near the Banning Substation (from March 2012), about 3.1 miles southeast of the site (from July 2018), and about 2.7 miles east-southeast of the site in a field adjacent to a neighborhood park. This last record includes clear photographs of a pair of burrowing owls with three (3) juveniles and is from April 2018 (eBird 2020).

Potentially suitable habitat and small mammal burrows are present onsite and within the buffer area to the north, between the site and the I-10 freeway. No burrowing owls, occupied burrows, or owl sign was observed during the survey.

A preconstruction clearance survey will be required within 30 days prior to the start of site disturbance.

### 3.4.3) Nesting Birds

There is suitable habitat for nesting birds on and adjacent to the site. Nesting birds may utilize trees and other vegetation, structures, idle vehicles/equipment, and open ground. However, given the level of ongoing disturbance on and adjacent to the site, nesting is likely to be limited to more common species that are tolerant of human presence.

Ornamental trees are present along the western, southern, and parts of the eastern boundaries of the parcel and surrounding areas and provide potential raptor nesting sites. Although some of the trees are of adequate height for nesting raptors, no raptor nests were observed during this survey or the 2005 survey (MND ca. 2005).

A large advertising sign is present along the north-central border of the site. The upper portion of the sign has either been removed or fallen into disrepair and the interior structure, as well as the exterior surfaces, of the sign are accessible to nesting birds. The sign was inspected from the ground with binoculars and no evidence of raptor nesting was observed.

#### 3.4.4) Other Special Status Wildlife

No federal or state-listed endangered or threatened wildlife species or special status wildlife species were observed during the survey. The 2005 small mammal trapping data for species other than Stephens' kangaroo rat was not available.

Due to long-term and ongoing anthropogenic disturbance, undisturbed natural habitat capable of supporting most special status wildlife is generally lacking onsite. Most special status wildlife known from the region are either absent, not expected to occur, or have low potential for occurrence onsite, except as described below (see Appendix B).

Cooper's hawk (*Accipiter cooperii*; CDFW Watch List Species) forages in various habitats including open areas and scrublands. It has one (1) CNDDDB documented occurrence of nesting about 3.7 miles west of the site. There are multiple eBird records of this species in the region, including one (1) in the golf course just south of the site. There is potentially suitable foraging habitat onsite. Based on available evidence, Cooper's hawk has low to moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Ferruginous hawk (*Buteo regalis*; CDFW Watch List Species) forages in various habitats including open grasslands. It has one (1) CNDDDB documented occurrence about 4.3 miles south of the site. There are some eBird records in the vicinity, including one (1) within a residential development along Potrero Creek about 0.8 mile southwest. Based on available evidence, ferruginous hawk has low to moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Costa's hummingbird (*Calypte costae*; USFWS Bird of Conservation Concern) is found in desert scrub, coastal scrub, chaparral, and adjacent meadows and gardens. There are no CNDDDB documented occurrences of nesting within five (5) miles. There are multiple eBird records in the

vicinity, including two (2) immediately adjacent to the site. There is limited potentially suitable native habitat on the Project site, but this species may also utilize ornamental plants for foraging and nesting. Based on available evidence, Costa's hummingbird has low to moderate potential to forage and nest onsite. It is not a covered species under the MSHCP.

California horned lark (*Eremophila alpestris actia*; CDFW Watch List Species) forages and nests in open grassland habitats. There is one (1) CNDDDB documented occurrence of nesting about four (4) miles west of the site and several eBird records in the area. There is potentially suitable foraging habitat onsite, but ongoing disturbance reduces the potential for nesting. Based on available evidence, California horned lark has moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Loggerhead shrike (*Lanius ludovicianus*; CDFW Species of Special Concern, USFWS Bird of Conservation Concern) forages in open areas with fences or shrubs for perching. There are several eBird records from the Project vicinity and two (2) CNDDDB documented occurrences of nesting in the Badlands to the south and southwest. The closest is about 2.5 miles from the site. There is potentially suitable foraging habitat and this species has low to moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Dulzura pocket mouse (*Chaetodipus californicus femoralis*; CDFW Species of Special Concern) is found in a variety of habitats, including coastal scrub and grassland. There is one (1) CNDDDB documented occurrence about 2.9 miles to the southeast. Data on this species from the trapping survey in 2005 is not available. Based on available evidence, it has low to moderate potential for occurrence on the Project site. It is not a covered species under the MSHCP.

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*; CDFW Species of Special Concern) is found in coastal scrub, chaparral, and grasslands in sandy, herbaceous areas, usually in association with rocks or coarse gravel. It has multiple CNDDDB documented occurrences within five (5) miles of the Project site. There is potentially suitable habitat on the Project site. Data on this species from the trapping survey in 2005 is not available. Based on available evidence, this species has moderate potential for occurrence. It is a covered species under the MSHCP and considered adequately conserved.

Los Angeles pocket mouse (*Perognathus longimembris brevinasus*; CDFW Species of Special Concern) is found in grassland, sage scrub, and alluvial sage scrub habitats. It has multiple CNDDDB documented occurrences within five (5) miles of the Project site; the closest is 2.3 miles

to the east. There is potentially marginal habitat on the Project site. Data on this species from the trapping survey in 2005 is not available. Based on available evidence, this species has moderate potential for occurrence. It is a covered species under the MSHCP and considered adequately conserved.

#### 3.4.5) Wildlife Corridor

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas, because movement barriers prohibit the infusion of new individuals and genetic information.

Wildlife movement activities usually fall into one of three movement categories: dispersal (e.g., juvenile animals dispersing from natal areas or individuals extending their range), seasonal migration, and movements related to home range activities (e.g., foraging for food or water, defending territories, or searching for mates, breeding areas, or cover).

The site is entirely surrounded by major roadways and residential developments and does not function as part of a wildlife corridor.

#### 3.5) MSHCP Riparian/Riverine and Vernal Pool Habitat

Under MSHCP Volume 1 Section 6.1.2 areas associated with wetland and streambed systems must be evaluated for consideration as riparian/riverine or vernal pool habitat. Riparian/riverine areas are defined within the MSHCP as:

“ . . . lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.” MSHCP Vol. 1, Section 6.1.2.

Vernal pools are defined within the MSHCP as:

“ . . . seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of

hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. . . .”  
MSHCP Vol. 1, Section 6.1.2.

There is no vernal pool habitat onsite. Soil types mapped (and observed) onsite are not consistent with an alkali playa or vernal pool complex (Bauder et al 2011). Pools or depressions characteristic of vernal pool habitat were not observed onsite. No MSHCP species listed for protection associated with riparian/riverine areas or vernal pools were observed. No evidence of ponding was observed onsite. Tire ruts are present on an access road along the northern site boundary, but the ruts were dry at the time of the survey and soils onsite are sandy to coarse sandy loam (i.e., well drained).

There are no USGS mapped blue-line streams onsite. A shallow trench is present along the site's southern boundary (along Sun Lakes Boulevard) and trends from west to east. A double culvert is present at the southeast corner of the site. A small area of willow thicket is present in the southwest corner of the site in association with a trench. Another shallow trench is present within the central portion of the site and trends from west to east. No water or evidence of flow was observed in these trenches during the survey. The trenches appear to be remnants of past disturbance involving water quality or flood control measures and do not have connectivity with any natural waterway.

#### 4.0) SUMMARY AND RECOMMENDATIONS

The purpose of this study was to identify biological resources present or potentially present onsite. The MSHCP requires a habitat assessment to address riparian/riverine and vernal pool habitats, fairy shrimp, narrow endemic plants (Marvin's [Yucaipa] onion and many-stemmed dudleya), and burrowing owl. L&L also analyzed the potential for impacts to special status species and sensitive vegetation communities. The recommendations are based on the literature review, L&L's knowledge of species and habitats in the region, and the biological field survey.

The site is largely composed of non-native grassland. Native vegetation onsite consists of small areas of willow thicket and California buckwheat scrub and these are not sensitive vegetation communities.

Narrow endemic plant species, Marvin's onion and many-stemmed dudleya, were not observed and habitat to support these species is absent from the site. Other special status plants are either absent, not expected to occur, or have low potential for occurrence onsite.

There are no vernal pools onsite. No evidence of ponding was observed. Tire ruts are present but were dry at the time of the survey and soils present are sandy to coarse sandy loam (i.e., well drained). No MSHCP species listed for protection associated with riparian/riverine areas or vernal pools, including fairy shrimp, were observed.

Potentially suitable habitat and small mammal burrows are present onsite, but no burrowing owls or owl sign were observed. A preconstruction clearance survey for burrowing owl will be required within 30 days prior to the start of site disturbance.

There is suitable habitat for nesting birds, including raptors, onsite. A nesting bird clearance survey is recommended within three (3) days prior to the start of vegetation clearing or ground disturbance if clearing will begin within the nesting season (February 1 to September 15). If nesting birds are present, avoidance of nest sites is required and a buffer of 300 to 500 feet (or as determined by a biologist) is recommended until juvenile birds are no longer dependent on the nest and/or a biologist has verified that the nest is inactive.

Undisturbed natural habitat capable of supporting most special status wildlife is generally lacking onsite. Most special status wildlife known from the region are either absent, not expected to occur, or have low potential for occurrence onsite. A few species have moderate or

low to moderate potential to occur, most of which are covered species under the MSHCP and considered adequately conserved. Riparian vegetation onsite is insufficient to provide habitat for riparian birds.

The Project site is surrounded by major roadways and residential developments and does not function as part of a wildlife corridor.

MSHCP Riparian habitat may be present and any impacts, if present, would require development and processing of a Determination of Biologically Equivalent or Superior Preservation (DBESP). State jurisdictional wetland may be present, if so, any impacts would require regulatory permitting. A jurisdictional delineation survey and report is recommended in order to clarify presence or absence of jurisdictional features onsite.

## **5.0) REGULATORY ENVIRONMENT**

### **5.1) Federal Endangered Species Act**

By law, it is a requirement of the federal Endangered Species Act (FESA), 1973 (as amended) at Section 7(a)(2) that federal agencies ensure that any action authorized, funded, or carried out by a federal agency is not likely to jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of critical habitat. In order to comply with this requirement, the federal agency must conduct a Biological Assessment (BA), in which effects to listed species are analyzed and disclosed in the form of an “effects determination.”

Section 7 requires federal agencies to consult with the U. S. Fish and Wildlife Service (USFWS) should it be determined that their actions may affect federally listed threatened or endangered species. Section 9 of FESA prohibits “take” (e.g., harm, harassment, pursuit, injury, kill) of federally listed wildlife. “Harm” is further defined to include habitat modification or degradation where it kills or injures wildlife by impairing essential behavioral patterns such including breeding, feeding, or sheltering. Take that is incidental to otherwise lawful activities can be authorized under Section 7 of FESA.

Procedures for obtaining a permit for incidental take are identified under Section 7 of FESA for federal properties or where federal actions are involved and are identified under Section 10 of FESA for non-federal actions. During the Section 7 process, measures to avoid and minimize project effects to listed species and their habitat will be identified and incorporated into a Biological Opinion (prepared by the USFWS) that includes an incidental take by the federal agency and applicant.

The County of Riverside has been issued a Section 10(a) permit for the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). This project falls within the area covered by the MSHCP.

### **5.2) Jurisdictional Waters and Wetlands**

Three (3) agencies generally regulate activities within streams, wetlands, and riparian areas in California: (1) the U. S. Army Corps of Engineers (USACE) regulates activities under Section 404 of the federal Clean Water Act; (2) the Regional Water Quality Control Board (RWQCB) regulates activities under Section 401 of the federal Clean Water Act and the State Porter-

Cologne Water Quality Control Act; and (3) the California Department of Fish and Wildlife (CDFW) regulates activities under California Fish and Game Code Sections 1600-1616.

#### 5.2.1) Federal Clean Water Act, Section 404

Section 404 of the federal Clean Water Act applies to "Waters of the United States" (WoUS). By definition these include waterways that could be used for interstate commerce and their tributaries, including any waters with a nexus with (ultimately flow into) traditional navigable waters. In non-tidal waters, the limits of jurisdiction are "ordinary high water marks" (OHWM) such as stream banks. Where wetlands occur above high water marks, they are considered "adjacent wetlands" and are included within USACE jurisdiction. USACE jurisdiction has often been extended to wetlands not adjacent to WoUS ("isolated wetlands"), such as vernal pools. Under the current administration, there have been recent changes to the definition of USACE jurisdictional waters.

Final determination and delineation of federal jurisdiction is made by the USACE and not by the project biologists. Therefore, fieldwork and documentation of the site conditions are done as a preliminary delineation until the USACE reviews and concurs with the results.

#### 5.2.2) Federal Clean Water Act, Section 401

The RWQCB has jurisdiction over wetlands, WoUS, and Waters of the State under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne) under the California Water Code (§ 13000, et seq.) Permitting is required for activities that will result in a discharge of soils, nutrients, chemicals, detrital materials, or other pollutants into WoUS, Waters of the State, or adjacent wetlands that will affect the water quality of those bodies and the watershed.

#### 5.2.3) California Fish and Game Code, Section 1600

The CDFW, through provisions of the California Fish and Game Code (Sections 1600-1616), is empowered to issue agreements ("Lake and Streambed Alteration Agreements") for projects that will adversely affect wildlife habitat associated with any river, stream, or lake edges. The Lake and Streambed Alteration Agreement will typically include required measures to mitigate impacts.

### 5.3) California Endangered Species Act

California Endangered Species Act (CESA) definitions of endangered and threatened species parallel those defined in the FESA. The CESA defines an endangered species as “. . . a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes including loss of habitat, change in habitat, overexploitation, predation, competition or disease.” Endangered species are in serious danger of becoming extinct and threatened species are likely to become endangered species in the foreseeable future (according to Sections 2062 and 2067, respectively, of the California Fish and Game Code). Candidate species are those under formal review by the CDFW for listing as endangered or threatened (Section 2067). Prior to being considered for protected status, the CDFW designates a species as being of special concern. Species of Special Concern are wildlife species for which the CDFW has information indicating population decline. Plant species of concern are designated by California Rare Plant Ranks, described below.

### 5.4) California Environmental Quality Act

The California Environmental Quality Act (CEQA) and CEQA Guidelines (§ 15000 et seq.) require identification of environmental effects from discretionary projects. Significant effects are to be mitigated by avoidance, minimization, rectification, or compensation whenever possible.

Effects to all state and federal listed species are considered significant under CEQA. In addition to formally listed species, CEQA considers effects to species that are demonstrably endangered or rare as important or significant. These definitions can include state designated species of special concern, federal candidate and proposed species, CNDDDB tracked species, and CRPR list 1B and list 2 plants.

Appendix G of the CEQA Guidelines specifically addresses biological resources and encompasses a broad range of resources to be considered.

### 5.5) California Natural Diversity Database

The California Natural Diversity Database (CNDDDB) includes documented occurrences of special status species that have been reported to the CDFW. It also includes ranks of overall condition of sensitive species and vegetation communities on global (throughout its range) and state (within California) levels. State ranking is numerical, ranging from one to five (S1 to S5),

with one indicating very few remaining individuals or little remaining habitat and five indicating a demonstrably secure to ineradicable population condition.

#### 5.6) California Rare Plant Rank

The California Native Plant Society (CNPS) Inventory of Rare and Endangered Species includes documented occurrences of special status plant species that are available through the Consortium of California Herbaria and other sources. The CNPS, in coordination with CDFW, has cataloged California's rare and endangered plants into lists according to population distributions and viability. These lists are numbered and indicate the following California Rare Plant Ranks (CRPR): (1A) presumed extinct in California; (1B) rare, threatened, or endangered throughout their range; (2A) presumed extirpated in California, but more common in other states; (2B) threatened or endangered in California, but more common in other states; (3) more information is needed to establish rarity; and (4) plants of limited distribution in California (i.e., naturally rare in the wild), but whose populations do not appear to be susceptible to threat. A CRPR may also have an extension (e.g., 1B.x) that indicates current level of threat: seriously threatened (x.1), moderately threatened (x.2), or not very threatened (x.3).

#### 5.7) Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) is an international treaty that makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Executive Order 13186 ensures that environmental analyses of federal actions required by the National Environmental Policy Act (NEPA) or other established environmental review processes evaluate the effects of actions on migratory birds, with emphasis on species of concern. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or loss of habitat upon which the birds depend could be considered "take" and constitute a violation of the MBTA.

#### 5.8) California Fish and Game Code, Sections 3503 and 3513

California Fish and Game Code Section 3503 prohibits take, possession, or needless destruction of bird nests or eggs except as otherwise provided by the Code; Section 3503.5 prohibits take or possession of birds of prey or their eggs except as otherwise provided by the Code; and Section 3513 provides for the adoption of the provisions of the federal Migratory Bird Treaty Act, described above.

## 5.9) Western Riverside County Multiple Species Habitat Conservation Plan

The County of Riverside, including eight (8) additional land jurisdictions and 14 cities, have prepared a Multiple Species Habitat Conservation Plan (MSHCP) for western Riverside County. The MSHCP will build upon existing preserves and provide connectivity and wildlife corridors throughout the region. The MSHCP proposes to conserve approximately 500,000 acres and 146 different species.

The MSHCP was approved by the county on June 17, 2003 and an Implementation Agreement (IA) between the USFWS, the CDFW, and the County was executed and an associated USFWS Section 10(a)(1)(B) Permit (No. TE-088609) was issued on June 22, 2004. The permit grants take authorization for certain species identified in the permit as "Covered Species Adequately Conserved."

The MSHCP establishes seven (7) core reserve areas and associated linkages between proposed and existing core areas. The MSHCP divides areas into Cells using USGS coordinates. Conservation efforts for the project site will be evaluated with regard to sensitive species identified as not adequately conserved and observed onsite, riverine/riparian or vernal pool habitat and their associated sensitive species (if located onsite), fairy shrimp, jurisdictional areas, and sage scrub.

Focused surveys are required for species identified as not adequately conserved under the MSHCP if suitable habitat is present onsite. If focused surveys are determined necessary and species identified as not adequately conserved under the MSHCP occur onsite, the proponent may be required to undergo a Habitat Acquisition and Negotiation Strategy (HANS) determination with the County of Riverside. If a single-family home or mobile home is to be placed on an existing legal lot, permitting will be reviewed according to the procedures outlined in MSHCP Section 6.1.1, *Expedited Review Process for Single-Family Homes or Mobile Homes to Be Located on an Existing Lot within the Criteria Area*.

### MSHCP Section 6.1.2 (Riparian/Riverine Habitat)

Section 6.1.2 of the MSHCP requires an assessment of the potentially significant effects of the proposed project on Riparian/Riverine areas, and vernal pools as currently required by CEQA using available information augmented by project-specific mapping. Riparian/Riverine areas and vernal pools are defined as follows:

- Riparian/Riverine Areas are lands that have flow for all or a portion of the year and which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.
- Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses, to which it has been subjected, and weather and hydrologic records.

With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

#### MSHCP Section 6.1.3 (Narrow Endemic Plants)

Per Section 6.1.3 of the MSHCP, surveys are required for narrow endemic plants within the identified survey areas. If suitable habitat and appropriate soils are present, site-specific focused surveys are required. Focused surveys must be conducted during the appropriate season in accordance with established protocols. If the survey finds that narrow endemic plants are present, any projects with the potential to impact narrow endemic plants is subject to avoidance, minimization, and mitigation requirements.

Prior to conducting surveys for narrow endemic plant species within the, a habitat suitability assessment may be undertaken by a biologist/botanist with expertise in the plant species of concern to determine whether focused surveys for individual species are required and to focus the species-specific survey efforts. In general, habitat suitability assessments may be undertaken year-round, with the exception of vernal pool species for which habitat suitability assessments must be conducted during the rainy season.

## Burrowing Owl

Section B (Species Accounts) of Volume 2 of the MSHCP lists the following objectives for burrowing owl conservation/protection:

### Objective 1

Include within the MSHCP Conservation Area at least 27,470 acres of suitable primary habitat for the burrowing owl including grasslands.

### Objective 2

Include within the MSHCP Conservation Area at least 5 Core Areas and interconnecting linkages. Core areas may include the following: (1) Lake Skinner/Diamond Valley Lake area (Existing Core C plus Proposed Extension of Existing Cores 5, 6, 7; 29,060 acres); (2) playa west of Hemet (Proposed Noncontiguous Habitat Block 7; 1,250 acres); (3) San Jacinto Wildlife Area/Mystic Lake area including Lake Perris area (Existing Core H; 17,470 acres); (4) Lake Mathews (Existing Core C plus Proposed Extension of Existing Cores 2; 23,710 acres); and (5) along the Santa Ana River (9,670 acres). The Core Areas should support a combined total breeding population of approximately 120 burrowing owls with no fewer than five pairs in any one Core area.

### Objective 3

Include within the MSHCP Conservation Area at least 22,120 acres of suitable secondary habitat for the burrowing owl including playas and vernal pools, and agriculture outside of the Core Areas identified above. Areas where additional suitable habitat could be conserved include west of the Jurupa Mountains, near Temescal Wash (i.e., vicinity of Alberhill), near Temecula Creek, within the Lakeview Mountains, Banning, the Badlands, Gavilan Hills, and Quail Valley.

### Objective 4

Include within the MSHCP Conservation Area the known nesting locations of the burrowing owl at Lake Perris, Mystic Lake/San Jacinto Wildlife area, Lake Skinner area, the area around Diamond Valley Lake, playa west of Hemet, Lakeview Mountains, Lake Mathews/Estelle Mountain Reserve and Sycamore Canyon Regional Park.

### Objective 5

Surveys for burrowing owl will be conducted as part of the project review process for public and private projects within the burrowing owl survey area where suitable habitat is present (see Burrowing Owl Survey Area Map, Figure 6-4 of the MSHCP, Volume I). The locations of this species determined as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.3.2, MSHCP, Volume I and the guidance provided below:

Burrowing owl surveys shall be conducted utilizing accepted protocols as follows. If burrowing owls are detected on the project site then the action(s) taken will be as follows:

If the site is within the Criteria Area, then at least 90 percent of the area with long-term conservation value will be included in the MSHCP Conservation Area. Otherwise:

1) If the site contains, or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than 3 pairs of burrowing owls, then the on-site burrowing owls will be passively or actively relocated following accepted protocols.

2) If the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.

The survey and conservation requirements stated in this objective will be eliminated when it is demonstrated that Objectives 1 – 4 have been met.

#### Objective 6

Pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one way doors and collapse of burrows) will occur when owls are present outside the nesting season.

#### Objective 7

Translocation sites for the burrowing owl will be created in the MSHCP Conservation Area for the establishment of new colonies. Translocation sites will be identified, taking into consideration unoccupied habitat areas, presence of burrowing mammals to provide suitable burrow sites, existing colonies and effects to other Covered Species. Reserve Managers will consult with the Wildlife Agencies regarding site selection prior to translocation site development.

#### 5.10) City of Banning General Plan

The City of Banning General Plan incorporates goals, policies, and programs to protect biological resources. These include the following:

Goal. A pattern of community development that supports a functional, productive, harmonious and balanced relationship between the built and natural environment.

Policy 1 The City shall continue to participate in the preservation of habitat for endangered, threatened and sensitive species.

Program 1.A Through the Western Riverside MSHCP, maintain an accurate and regularly updated map of sensitive plant and animal species and habitat in Banning and its planning area.

Program 1.B The City shall participate in the Western Riverside County Multiple Species Habitat Conservation Plan.

Program 1.C City staff shall continue to request biological resource surveys for new development.

Policy 2 As part of the development review process, the City shall evaluate projects based on their impact on existing habitat and wildlife, and for the land's value as viable open space.

Program 2.A The City shall encourage developers to recover native and drought tolerant plant materials, and incorporate them into project landscaping, to provide or enhance habitat for local species.

Program 2.B The City shall make available at City Hall a listing of planting materials that emphasizes native vegetation, but may also include non-native, plants that are compatible with the local environment.

## 6.0) REFERENCES

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## APPENDIX A: PLANT AND WILDLIFE SPECIES

List of plant and vertebrate animal species identified on the site during the survey. One asterisk (\*) indicates a non-native species; two asterisks (\*\*) indicates a special status species.

### Scientific Name

### Common Name

#### VASCULAR PLANTS

#### DICOTYLEDONS

#### Gymnosperms

#### PINACEAE

#### PINE FAMILY

\* *Pinus species*

Unid. ornamental pine

#### Angiosperms

#### ANACARDIACEAE

#### SUMAC or CASHEW FAMILY

\* *Schinus molle*

Peruvian pepper tree

#### ASTERACEAE

#### ASTER FAMILY

*Ambrosia acanthicarpa*

Annual bur-sage, annual sandbur

*Baccharis salicifolia* (*B. glutinosa*)

Mulefat

*Baccharis species* (*pilularis*?)

Unid. baccharis

\* *Centaurea melitensis*

Tocalote

*Corethrogyne filaginifolia* var. *filaginifolia*  
 (*Lessingia filaginifolia*)

California-aster, sand-aster

*Erigeron canadensis*

Horseweed, mare's tail

(*Conyza canadensis*)

*Helianthus annuus*

Western sunflower

*Heterotheca grandiflora*

Telegraph weed

\* *Sonchus oleraceus*

Common sow thistle

#### BORAGINACEAE

#### BORAGE OR WATERLEAF FAMILY

*Amsinckia intermedia*

Large flower rancher's fiddleneck

(*A. menziesii* var. *intermedia*)

#### BRASSICACEAE

#### MUSTARD FAMILY

\* *Hirschfeldia incana*

Shortpod mustard

(*Brassica geniculata*)

#### CHENOPODIACEAE

#### GOOSEFOOT FAMILY

\* *Salsola tragus*

Russian thistle

#### EUPHORBIACEAE

#### SPURGE FAMILY

*Croton setiger* (*C. setigerus*,

Turkey-mullein, doveweed

*Eremocarpus setiger*, *E.*

*setigerus*)

#### FABACEAE

#### LEGUME FAMILY, PEA FAMILY

\* *Acacia longifolia*

Sydney golden wattle

**Scientific Name**

**Common Name**

*Lupinus bicolor*

Miniature lupine, dove lupine

*Parkinsonia microphylla*

Little-leaved palo verde

(*Cercidium microphyllum*)

\* *Vicia villosa*

Winter vetch

GERANIACEAE

GERANIUM FAMILY

\* *Erodium cicutarium*

Redstem filaree

LAMIACEAE

MINT FAMILY

\* *Marrubium vulgare*

Horehound

*Trichostema lanceolatum*

Vinegar weed

MYRTACEAE

MYRTLE FAMILY, EUCALYPTUS FAMILY

\* *Eucalyptus species*

Ornamental eucalyptus, gumtree

POLYGONACEAE

BUCKWHEAT FAMILY

*Eriogonum elongatum*

Long-stem wild buckwheat, wand buckwheat

*Eriogonum fasciculatum*

California buckwheat

ROSACEAE

ROSE FAMILY

\* *Pyracantha coccinea*

Firethorn

SALICACEAE

WILLOW FAMILY

*Salix species*

Unid. willow

SOLANACEAE

NIGHTSHADE FAMILY

*Datura wrightii* (*D. meteloides*)

Jimsonweed, tolguacha

\* *Nicotiana glauca*

Tree tobacco

*Solanum species*

Nightshade

**MONOCOTYLEDONS**

ARECACEAE

PALM FAMILY

\* *Washingtonia robusta*

Mexican fan palm, ornamental fan palm

POACEAE

GRASS FAMILY

\* *Avena species*

Unid. wild oat

\* *Bromus diandrus* (*B. rigidus*)

Ripgut brome

\* *Bromus madritensis* ssp. *rubens*  
 (*B. rubens*)

Red brome

\* *Bromus tectorum*

Cheatgrass

\* *Schismus barbatus*

Mediterranean grass

**Scientific Name**

**Common Name**

**VERTEBRATES**

**Reptiles**

Iguanidae  
*Uta stansburiana*

Iguanid Lizards  
Side-blotched lizard

**Birds**

Accipitridae  
*Buteo jamaicensis*

Hawks, Eagles, and Harriers  
Red-tailed hawk

Columbidae  
\* *Columba livia*  
*Zenaida macroura*

Pigeons and Doves  
Rock dove, common pigeon  
Mourning dove

Corvidae  
*Corvus corax*

Crows and Jays  
Common raven

Fringillidae  
*Spinus (Carduelis) psaltria*  
*Haemorhous (Carpodacus) mexicanus*

Finches  
Lesser goldfinch  
House finch

Icteridae  
*Sturnella neglecta*

Blackbirds  
Western meadowlark

Passerellidae  
*Passerculus sandwichensis*  
*Zonotrichia leucophrys*

New World Sparrows  
Savannah sparrow  
White-crowned sparrow

Trochilidae  
*Calypte anna*

Hummingbirds  
Anna's hummingbird

Tyrannidae  
*Sayornis saya*

Tyrant Flycatchers  
Say's phoebe

**Mammals**

Geomyidae  
*Thomomys bottae*

Pocket Gophers  
Botta's pocket gopher (sign)

Leporidae  
*Sylvilagus audubonii*

Rabbits  
Audubon's cottontail

Sciuridae  
*Spermophilus beecheyi*

Squirrels  
California ground squirrel

Documented occurrences refers to species occurrences in the California Natural Diversity Database (CNDDDB) unless otherwise noted. For plant species that are not tracked in the CNDDDB, records from the Consortium of California Herbaria (CCH) may be used. eBird (eBird.org) records of bird observations from 'citizen scientists' are noted but should be interpreted with caution.

**Federal designations:** (Federal Endangered Species Act, U. S. Fish and Wildlife Service):

END:	Federally listed, endangered; an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
THR:	Federally listed, threatened; an animal or plant which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.
Cand	Candidate for federal listing as threatened or endangered; species that has been studied by the U.S. Fish and Wildlife Service, and the Service has concluded that it should be proposed for addition to the Federal Endangered and Threatened species list.
Prop	Proposed for federal listing as Endangered or Threatened under Section 4 of the Endangered Species Act.
Delisted:	Previously federally listed as endangered or threatened, but is no longer listed (e.g., due to recovery).
None:	The species has no federal conservation status.
BGEPA:	Federal Bald and Golden Eagle Protection Act; protects bald and golden eagles.
BCC:	USFWS Bird of Conservation Concern; migratory and non-migratory bird species (beyond those already designated as Federally threatened or endangered) that represent USFWS highest conservation priorities.

**State designations:** (California Endangered Species Act, California Dept. of Fish and Wildlife)

END:	State listed, endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
CanE:	Candidate Endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered species.
CanF:	Candidate Threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of threatened species.
THR:	State listed, threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.
RARE:	State listed as rare: a native plant species, subspecies, or variety when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens (Native Plant Protection Act of 1977).
SSC:	CDFW Species of Special Concern; vertebrate species of concern due to declining population levels, limited ranges, and/or continuing threats that have made them vulnerable to extinction.
FP:	Fully Protected; California Fish and Game Code states that Fully Protected species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research.
Delisted:	Previously state listed as threatened or endangered, but no longer listed (e.g., due to recovery).
SA:	CDFW Special Animal; wildlife of state conservation concern.
SH:	All California sites are historical.
None:	The species has no state conservation status.

**State Rank (S Rank):** A reflection of the condition and imperilment of an element (plant, animal, vegetation community) throughout its range within the state. The S ranks are determined through a combination of rarity, threat, and trend factors, weighted more heavily on the rarity factors. Where correct category is uncertain, the S rank includes two categories or a question mark. Older ranks, which need to be updated, may still contain a decimal "threat" rank of .1, .2, or .3, where .1 indicates very threatened status, .2 indicates moderate threat, and .3 indicates few or no current known threats.

- S1: Critically imperiled; imperiled in the state because of extreme rarity or some factor(s) 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, steep declines, or other factors making it very vulnerable to extirpation from the state or nation.
- S3: Vulnerable; vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation. S4: Apparently secure; uncommon but not rare, some cause for long-term concern due to declines or other factors.
- S5: Secure; common, widespread, and abundant in the state.
- SH: Possibly extirpated; species or community occurred historically in the state, and there is some possibility that it may be rediscovered. The element has not been seen for at least 20 years, but suitable habitat still exists.
- SX: Presumed extirpated; species or community is believed to be extirpated from the state.

**California Rare Plant Rank (CRPR):** The *California Rare Plant Ranks* are a ranking system originally developed by the California Native Plant Society (CNPS) to better define and categorize rarity in California's plants. These ranks were previously known as the CNPS lists but were renamed to the *California Rare Plant Ranks* to better reflect the joint effort among the CNPS, the CDFW, and a wide range of botanical experts, who work together to assign a rarity ranking.

- 1A: Plants presumed extinct in California and rare/extinct elsewhere.
- 1B: Plants rare, threatened, or endangered in California and elsewhere.
- 2A: Plants presumed extirpated in California, but more common elsewhere.
- 2B: Plants rare, threatened, or endangered in California but more common elsewhere.
- 3: Plants about which we need more information.
- 4: Plants of limited distribution.
- X.1: Extension to CRPR (e.g., 1B.1); seriously threatened in California.
- X.2: Extension to CRPR (e.g., 1B.2); fairly threatened in California.
- X.3: Extension to CRPR (e.g., 1B.3); not very threatened in California.
- CBR: Considered but rejected.

**Western Riverside County Multiple Species Habitat Conservation Plan:** Applied to species that are covered under state and federal permits for the MSHCP.

NAC: Species Not Adequately Conserved

AC: Species Adequately Conserved

- (a) Surveys may be required for these species as part of wetlands mapping as described in Section 6.1.2 of the MSHCP.
- (b) Surveys may be required for these species within Narrow Endemic Plant Species survey area as described in Section 6.1.3 of the MSHCP.
- (c) Surveys may be required for these species within locations shown on survey maps as described in Section 6.3.2 of the MSHCP.
- (d) Surveys may be required for these species within Criteria Area as described in Section 6.3.2 of the MSHCP.
- (e) These Covered Species will be considered Adequately Conserved when conservation requirements identified in species-specific conservation objectives have been met. Species-specific conservation objectives for these species are presented in Section 9.0 of the MSHCP. Please refer to Table 9-3 of the MSHCP for specific conservation objectives that must be met for these species prior to including them on the list of Covered Species Adequately Conserved.
- (f) These Covered Species will be considered Adequately Conserved when a Memorandum of Understanding is executed with the U.S. Forest Service that addresses management for these species on Forest Service Land. Refer to Table 9-3 of the MSHCP.

No entry: Not a Covered Species

#### Definitions of occurrence probability:

These definitions provide general guidance. Classifications for individual species may be modified based on biologists' experience and expert opinion.

*Occurs:* Species was detected during surveys or previously documented on the Project site or adjacent areas.

*High:* Species documented in the vicinity (i.e., within 5 miles) of the Project site and suitable habitat is present, but species not detected during surveys.

*Moderate:* Species documented in the vicinity of the Project site or suitable habitat present and site is within

	geographic and elevational range of the species.
<i>Low:</i>	Species not documented in the vicinity of the Project site or suitable habitat is marginal.
<i>Not Expected:</i>	Species not documented in the vicinity of the Project site and suitable habitat marginal or absent, or site is not within geographic and elevational range of the species.
<i>Absent:</i>	No potential for the species to occur due to lack of habitat, geographic or elevation range, species life history, survey results, etc.
<i>Unknown:</i>	No focused surveys have been performed in the region, and the species' distribution and habitat are poorly known.

## **APPENDIX B: POTENTIALS FOR OCCURRENCE**

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<b>Plants</b>				
<i>Abronia villosa</i> var. <i>aurita</i> Chaparral sand-verbena	Annual herb. Sandy soils in chaparral, coastal scrub, desert dunes at 75-1600m elevation. Southern CA, Arizona, Baja.	(Jan)Mar-Sep	Fed: None Calif: S2 CRPR: 1B.1	Not expected; no or marginal suitable habitat. One documented occurrence within 5 mi.
<i>Allium marvinii</i> Yucaipa onion	Perennial bulbiferous herb. Clay soils in openings in chaparral at 760-1065m. Riverside and San Bernardino Cos.	Apr-May	Fed: None Calif: S1 CRPR: 1B.2 MSHCP: AC b	Absent; no suitable habitat. One documented occurrence within 5 mi. in CNDDDB and one in published report for another project.
<i>Antennaria marginata</i> White-margined everlasting	Perennial stoloniferous herb. Upper and lower montane coniferous forest at 2120-3353m elevation. San Bernardino Co., W US, Sonora, Mexico.	May-Aug	Fed: None Calif: S1 CRPR: 2B.3	Absent; outside elevation range, no suitable habitat.
<i>Arenaria lanuginosa</i> var. <i>saxosa</i> Rock sandwort	Perennial herb. Mesic, sandy soils in upper montane coniferous forest, subalpine coniferous forest at 1455-2600m elevation. San Bernardino Co., western US and Baja.	Jul-Aug	Fed: None Calif: S2 CRPR: 2B.3	Absent; outside elevation range, no suitable habitat.
<i>Astragalus hornii</i> var. <i>hornii</i> Horn's milk-vetch	Annual herb. Alkaline soils along lake margins, meadows and seeps and playas at 60-850m elevation. San Bernardino, Inyo, Kern, Tulare(?) Co and Nevada. San Joaquin Valley, South Coast, Western Transverse Ranges, W edge of the Mojave Desert.	May-Oct	Fed: None Calif: S1 CRPR: 1B.1	Not expected; no suitable habitat. One documented occurrence within 5 mi.
<i>Astragalus lentiginosus</i> var. <i>borreganus</i> Borrogo milk-vetch	Annual herb. Sandy soils in Mojavean and Sonoran desert scrub at 30-895m elevation. Imperial, Riverside, San Bernardino, San Diego Cos., AZ, NV, Baja and Sonora. Not tracked in CNDDDB.	Feb-May	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat.
<i>Astragalus lentiginosus</i> var. <i>coachellae</i> Coachella Valley milk-vetch	Annual/perennial herb. Sandy soils in Sonoran desert scrub, desert dunes at 40-655m elevation. Riverside Co.	Feb-May	Fed: END Calif: S1 CRPR: 1B.2	Not expected; no suitable habitat. One documented occurrence within 5 mi.
<i>Astragalus pachypus</i> var. <i>jaegeri</i> Jaeger's milk-vetch	Perennial shrub. Sandy or rocky soils in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland at 365-975m elevation. Riverside and San Diego Cos.	Dec-Jun	Fed: None Calif: S1 CRPR: 1B.1 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance, not observed during survey. Five documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Atriplex coronata</i> var. <i>notatior</i> San Jacinto Valley crowscale	Annual herb. Alkaline soils in playas, mesic areas of valley and foothill grassland, vernal pools at 139-500m elevation. Western Riverside Co., Kern Co.	Apr-Aug	Fed: END Calif: S1 CRPR: 1B.1 MSHCP: AC d	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Atriplex pacifica</i> South Coast saltscale	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub, playas at sea level to 140m elevation. LA, Orange, Riverside, Santa Barbara, San Diego, Ventura Cos. and Channel Islands.	Mar-Oct	Fed: None Calif: S2 CRPR: 1B.2	Not expected; no suitable habitat, above elevation range. No documented occurrences within 5 mi.
<i>Atriplex parishii</i> Parish's brittlescale	Annual herb. Floodplains with alkali scrub, alkali playas, vernal pools, and alkali grasslands; southern California and Baja; 25-1900m elevation.	Jun - Oct	Fed: None Calif: S1 CRPR: 1B.1 MSHCP: AC d	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Atriplex serenana</i> var. <i>davidsonii</i> Davidson's saltscale	Annual herb. Alkaline soils in coastal bluff scrub, coastal scrub, floodplains with alkali scrub, alkali playas, vernal pools, and alkali grasslands; Channel Islands, coastal and cismontane southern California; 10-200m elevation.	Apr - Oct	Fed: None Calif: S1 CRPR: 1B.2 MSHCP: AC d	Not expected; no suitable habitat, above elevation range. No documented occurrences within 5 mi.
<i>Boechera parishii</i> Parish's rockcress	Perennial herb. Rocky areas, quartzite on clay or sometimes carbonate soils in pebble plains, pinyon and juniper woodland, and upper montane coniferous forest at 1770-2990m elevation. San Bernardino Co.	Apr-May	Fed: None Calif: S2 CRPR: 1B.2	Not expected; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Boechera peirsonii</i> San Bernardino rockcress	Perennial herb. Rocky areas in subalpine coniferous forest at 2700-3200m elevation. San Geronio Mt. in San Bernardino Co.	Mar-Aug	Fed: None Calif: S1 CRPR: 1B.2	Absent; well below elevation range, no suitable habitat. No documented occurrences within 5 mi.
<i>Botrychium crenalutum</i> Scalloped moonwort	Perennial rhizomatous herb. Bogs and fens, meadows and seeps, freshwater marshes and swamps, upper and lower montane coniferous forest at 1268-3280m elevation. N and S CA, western US.	Jun-Sep	Fed: None Calif: S3 CRPR: 2B.2	Absent; well below elevation range, no suitable habitat. No documented occurrences within 5 mi.
<i>Brodiaea filifolia</i> Thread-leaved brodiaea	Perennial bulbiferous herb. Often on clay soils in chaparral openings, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools at 25-1120m elevation. LA, Orange, Riverside, San Bernardino, and San Diego Co; scattered in Southern CA foothills & valleys.	Mar-Jun	Fed: THR Calif: END, S2 CRPR: 1B.1 MSHCP: AC d	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Calochortus palmeri</i> var. <i>palmeri</i> Palmer's mariposa-lily	Perennial bulbiferous herb. Mesic soils in chaparral, lower montane coniferous forest, meadows and seeps at 710-2390m elevation. Kern, LA, Riverside, Santa Barbara, San Bernardino, San Luis Obispo, Ventura Co.	Apr-Jul	Fed: None Calif: S2 CRPR: 1B.2	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
<i>Calochortus plummerae</i> Plummer's mariposa lily	Perennial bulbiferous herb. Granitic rocky soils in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland at 100-1700m elevation. LA, Orange, Riverside, San Bernardino, Ventura Co.	May-Jul	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance. Seven documented occurrences within 5 mi., six in the Badlands, one near Banning from 1926 and not found during surveys in 1989-1991, possibly extirpated by development.
<i>Castilleja lasiorhyncha</i> San Bernardino Mountain's owl's-clover	Hemiparasitic annual herb. Mesic areas in chaparral, montane meadows, pebble plains, riparian woodland, upper montane coniferous forest at 1300-2390m elevation. Moist edges of springs/seeps on clay soil, wet meadows, openings in coniferous forest. Riverside, San Diego, San Bernardino Co.; San Bernardino Mts, San Jacinto Mts.	May-Aug	Fed: None Calif: S2? CRPR: 1B.2	Absent; well below elevation range, no suitable habitat. No documented occurrences within 5 mi.
<i>Castilleja montigena</i> Heckard's paintbrush	Hemiparasitic perennial herb. Pinyon and juniper woodland, upper and lower montane coniferous forest at 1950-2800m elevation. San Bernardino Mts. Not tracked in CNDDB.	May-Aug	Fed: None Calif: S3 CRPR: 4.3	Absent; well below elevation range, no suitable habitat.
<i>Caulanthus simulans</i> Payson's jewelflower	Annual herb. Chaparral, coastal scrub, pinyon-juniper woodland at 90-2200m elevation. North-facing slopes and ridgelines on sandy-granitic soils, frequently on steep rocky slopes, in burned areas, or disturbed sites such as streambeds. Western Riverside Co., San Diego Co.	(Feb)Mar-May(Jun)	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Not expected; no or marginal suitable habitat with ongoing disturbance. One documented occurrence within 5 mi. from 1968 in burned chaparral in foothills of San Jacinto Mts.
<i>Centromadia pungens</i> ssp. <i>laevis</i> Smooth tarplant	Annual herb. Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland at 0-1170m elevation. Also fallow fields, drainage ditches; mainly in SW Riverside Co., a few sites in interior valleys of LA, San Bernardino, San Diego Co.	Apr-Sep	Fed: None Calif: S2 CRPR: 1B.1 MSHCP: AC d	Low; no or marginal suitable habitat with ongoing disturbance. No senesced plants observed during survey. Four documented occurrences within 5 mi., in the Badlands and along Potrero Creek.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Chorizanthe leptotheca</i> Peninsular spineflower	Annual herb. Granitic soils and alluvial fans in chaparral, coastal scrub, lower montane coniferous forest at 300-1900m elevation. Riverside, San Bernardino, San Diego Co., Baja. Not tracked in the CNDDB.	May-Aug	Fed: None Calif: S3 CRPR: 4.2 MSHCP: AC	Not expected; no or marginal suitable habitat with ongoing disturbance.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	Annual herb. Sandy or rocky soils and openings in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland at 275-1220m elev. LA, Riverside, San Bernardino Co.	Apr-Jun	Fed: None Calif: S2 CRPR: 1B.1 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance. Seven documented occurrences within 5 mi., closest is about 2 mi. south in the Badlands.
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> White-bracted spineflower	Annual herb. Sandy or gravelly soil in coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodlands at 300-1300m elevation. LA, Riverside, San Bernardino, San Diego Co.	Apr-Jun	Fed: None Calif: S3 CRPR: 1B.2	Not expected; no suitable habitat. One documented occurrence within 5 mi. along San Gorgonio River wash.
<i>Deinandra mohavensis</i> Mojave tarplant	Annual herb. Mesic areas in chaparral, coastal scrub, riparian scrub at 640-1600m. Inyo, Kern, Riverside, San Diego, Tulare Cos. Presumed extirpated in San Bernardino Co.	(May)Jun-Oct (Jan)	Fed: None Calif: END, S2 CRPR: 1B.3 MSHCP: NAC e	Not expected; no suitable habitat. Two documented occurrences within 5 mi. in foothills of San Jacinto Mts.
<i>Deinandra (Hemizonia) paniculata</i> Paniculate tarplant	Annual herb. Usually vernal mesic areas, sometimes sandy. Coastal scrub, valley and foothill grassland, vernal pools at 25-940m elevation. Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo Co., Baja. Not tracked in the CNDDB.	(Mar) Apr-Nov	Fed: None Calif: S4 CRPR: 4.2	Low; no or marginal suitable habitat with ongoing disturbance.
<i>Delphinium parishii</i> ssp. <i>subglobosum</i> Colorado Desert larkspur	Perennial herb. Chaparral, cismontane woodland, pinyon and juniper woodland, Sonoran desert scrub at 600-1800m elevation. Imperial, Riverside, San Diego Cos. and Baja. Not tracked in the CNDDB.	Mar-Jun	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat.
<i>Delphinium parryi</i> ssp. <i>purpureum</i> Mt. Pinos larkspur	Perennial herb. Chaparral, Mojavean desert scrub, pinyon and juniper woodland at 1000-2600m elevation. Kern, Santa Barbara, Ventura, Riverside, San Bernardino Cos. Not tracked in the CNDDB.	May-Jun	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat, below elevation range

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Diplacus johnstonii</i> Johnston's monkeyflower	Annual herb. Disturbed areas, scree, rocky or gravelly soils, roadsides in lower montane coniferous forest at 975-2920m elevation. LA and San Bernardino Co. Not tracked in CNDDDB.	(Apr)May-Aug	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat, below elevation range
<i>Dodecahema leptoceras</i> Slender-horned spineflower	Annual herb. Open, sandy alluvial benches in valleys & canyons. Chaparral, coastal scrub, alluvial scrub, cismontane woodland at 200-760m elevation. LA, Riverside, San Bernardino Co. San Fernando Valley, Santa Ana River Valley, W Riverside Co.	Apr-Jun	Fed: END Calif: END, S1 CRPR: 1B.1 MSHCP: AC b	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Dudleya multicaulis</i> Many-stemmed dudleya	Perennial herb. Often on clay soils in chaparral, coastal scrub, valley and foothill grassland at 15-790m elevation. LA, Orange, Riverside, San Bernardino, San Diego Co.	Apr-Jul	Fed: None Calif: S2 CRPR: 1B.2 MSHCP: AC b	Absent; no suitable habitat. No documented occurrences within 5 mi.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	Perennial herb. Sandy or gravelly soils in chaparral, coastal scrub (alluvial fans and plains) at 91-610m elevation. Orange, Riverside, San Bernardino Co., endemic to Santa Ana River watershed.	Apr-Sep	Fed: END Calif: END, S1 CRPR: 1B.1 MSHCP: AC	Not expected; no suitable habitat, above elevation range. No documented occurrences within 5 mi.
<i>Eriogonum kennedyi</i> var. <i>alpigenum</i> Southern alpine buckwheat	Perennial herb. Granitic, gravelly soils in alpine boulder and rock field, subalpine coniferous forest at 2600-3500m elevation. LA, Ventura, San Bernardino Cos.	Jul-Sep	Fed: None Calif: S3 CRPR: 1B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Erythranthe purpurea</i> Little purple monkeyflower	Annual herb. Meadows and seeps, pebble plain, upper montane coniferous forest at 1900-2300m elevation. Riverside and San Bernardino Cos., Baja.	May-Jun	Fed: None Calif: S2 CRPR: 1B.2	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Galium angustifolium</i> ssp. <i>jacinticum</i> San Jacinto Mountains bedstraw	Perennial herb. Partially shady or open lower montane mixed and coniferous forest at 1350-2100m. Riverside Co. (San Jacinto and Santa Rosa Mts) and San Diego Co. (Laguna and Volcan Mts).	Jun-Aug	Fed: None Calif: S2? CRPR: 1B.3 MSHCP: AC b	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Galium californicum</i> ssp. <i>primum</i> Alvin meadow bedstraw	Perennial herb. Granitic, sandy soil in chaparral, lower montane coniferous forest at 1350-1700m elevation. Riverside, San Bernardino Co.	May-Jul	Fed: None Calif: S2 CRPR: 1B.2 MSHCP: NAC f	Not expected; no suitable habitat, below elevation range. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Galium johnstonii</i> Johnston's bedstraw	Perennial herb. Chaparral, lower montane coniferous forest, pinyon and juniper woodland, riparian woodland at 1220-2300m elevation. LA, Riverside, San Bernardino, San Diego Co. Not tracked in CNDDDB.	Jun-Jul	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat, below elevation range
<i>Gentiana fremontii</i> Fremont's gentian	Annual herb. Mesic meadows and seeps, upper montane coniferous forest at 2400-2700m elevation. San Bernardino and San Diego Cos., SW US, central NW US.	Jun-Aug	Fed: None Calif: S2 CRPR: 2B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Gilia leptantha</i> ssp. <i>leptantha</i> San Bernardino gilia	Annual herb. Sandy or gravelly soils in lower montane coniferous forest at 1500-2560m elevation. San Bernardino Co.	Jun-Aug	Fed: None Calif: S2 CRPR: 1B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Heuchera parishii</i> Parish's alumroot	Perennial rhizomatous herb. Rocky, sometimes carbonate soils in alpine boulder and rock field, subalpine and montane coniferous forest at 1500-3800m elevation. Riverside and San Bernardino Cos.	Jun-Aug	Fed: None Calif: S3 CRPR: 1B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Hordeum intercedens</i> Vernal barley	Annual grass. Saline flats and depressions in valley and foothill grassland, vernal pools at 5-1000m elevation. Southern, Central CA, Channel Islands. Not tracked in CNDDDB.	Mar-Jun	Fed: None Calif: S3S4 CRPR: 3.2 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance.
<i>Horkelia cuneata</i> ssp. <i>puberula</i> Mesa horkelia	Perennial herb. Sandy or gravelly soils in maritime chaparral, cismontane woodland, coastal scrub at 70-810m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, Ventura Co.	Feb-Jul(Sep)	Fed: None Calif: S1 CRPR: 1B.1	Not expected; no suitable habitat. One documented occurrence within 5 mi. from 1921 mapped near Banning, possibly extirpated.
<i>Hulsea vestita</i> ssp. <i>callicarpa</i> Beautiful hulsea	Perennial herb. Rocky or gravelly granitic soils in chaparral and lower montane coniferous forest at 915-3050m elevation. Riverside and San Diego Cos. Not tracked in the CNDDDB.	May-Oct	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Not expected; no suitable habitat.
<i>Hulsea vestita</i> ssp. <i>parryi</i> Parry's sunflower	Perennial herb. Granitic or carbonate soils, rocky areas, openings in pinyon and juniper woodlands, upper and lower montane coniferous forest at 1370-2895m elevation. Kern, LA, Mono, San Bernardino, Ventura Cos. Not tracked in CNDDDB.	Apr-Aug	Fed: None Calif: S4 CRPR: 4.3	Absent; no suitable habitat, well below elevation range.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Hulsea vestita</i> ssp. <i>pygmaea</i> Pygmy hulsea	Perennial herb. Granitic, gravelly soils in alpine boulder and rock field and subalpine coniferous forest at 2835 to 3900m elevation. San Bernardino and Tulare Cos.	Jun-Oct	Fed: None Calif: S1 CRPR: 1B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Imperata brevifolia</i> California satintail	Perennial rhizomatous herb. Mesic areas in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), riparian scrub at 0-1215m elevation. Scattered location throughout CA, SW US, Baja.	Sep-May	Fed: None Calif: S3 CRPR: 2B.1	Not expected; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
<i>Juglans californica</i> Southern California black walnut	Perennial deciduous tree. Alluvial soils in chaparral, cismontane woodland, coastal scrub, riparian woodland at 50-900m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura Co. Not tracked in CNDDb.	Mar-Aug	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Absent; no suitable habitat, conspicuous tree not observed during surveys.
<i>Juncus duranii</i> Duran's rush	Perennial rhizomatous herb. Mesic areas in lower montane coniferous forest, meadows and seeps, upper montane coniferous forest at 1769-2804m elevation. LA, Riverside, San Bernardino Co. Not tracked in CNDDb.	Jul-Aug	Fed: None Calif: S3 CRPR: 4.3	Absent; no or marginal suitable habitat, well below elevation range, not observed during survey.
<i>Lasthenia glabrata</i> spp. <i>coulteri</i> Coulter's goldfields	Annual herb. Coastal salt marshes and swamps, playas, vernal pools at 1-1220m elevation. Scattered locations in CA, Baja.	Feb-Jun	Fed: None Calif: S2 CRPR: 1B.1 MSHCP: AC d	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Lepechinia cardiophylla</i> Heart-leaved pitcher sage	Perennial shrub, fire follower. Closed-cone coniferous forest, chaparral, cismontane woodland, oak woodland at 520-1370m elevation. Santa Ana Mts of Orange and Riverside Co., Iron Mt. in San Diego Co., and coastal mts. of Baja. Most (possible all) pops. in CA are in Cleveland National Forest.	Apr-Jul	Fed: None Calif: S2S3 CRPR: 1B.2 MSHCP: AC d	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	Annual herb. Chaparral, coastal scrub at 1-885m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura Co., Santa Cruz Island.	Jan-Jul	Fed: None Calif: S3 CRPR: 4.3	Not expected; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> Ocellated Humboldt lily	Perennial bulbiferous herb. Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland at 30-1800m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura Co, some Channel Islands. Lower stream benches in riparian corridors in lower montane coniferous forest and coastal chaparral or shaded, dry slopes beneath a dense oak or conifer canopy. Not tracked in CNDDB.	Mar-Jul(Aug)	Fed: None Calif: S4? CRPR: 4.2 MSHCP: NAC f	Not expected; no suitable habitat.
<i>Lilium parryi</i> Lemon lily	Perennial bulbiferous herb. Mesic soils in upper and lower montane coniferous forest, riparian forest, meadows and seeps at 1220-2745m elevation. LA, Riverside, San Bernardino, San Diego Co, Arizona, Sonora Mex.	Jul-Aug	Fed: None Calif: S3 CRPR: 1B.2 MSHCP: NAC f	Not expected; no or marginal suitable habitat with ongoing disturbance, below elevation range. No documented occurrences within 5 mi.
<i>Lycium torreyi</i> Torrey's box-thorn	Perennial shrub. Sandy, rocky, washes, streambanks, desert valleys in Mojavean and Sonoran desert scrub from below sea level to 1220m elevation. S CA, SW US, Sonora, Mexico. Not tracked in CNDDB.	(Jan-Feb)Mar-Jun(Sep-Nov)	Fed: None Calif: S3 CRPR: 4.2	Not expected; no suitable habitat, not observed during survey.
<i>Malaxis monophyllos</i> var. <i>brachypoda</i> White bog adder's-mouth	Perennial bulbiferous herb. Mesic areas in bogs and fens, meadows and seeps, and upper montane coniferous forest at 2200-2743m elevation. Riverside and San Bernardino Cos., presumed extirpated in Riverside Co. Eastern, central, southwest US and Alaska.	Jun, Aug	Fed: None Calif: S1 CRPR: 2B.1	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Mentzelia tricuspid</i> Spiny-hair blazing star	Annual herb. Sandy, gravelly slopes and washes in Mojavean desert scrub at 150-1280m elevation. San Bernardino, San Diego, Inyo, and possibly Riverside Co., AZ, NV, UT.	Mar-May	Fed: None Calif: S2 CRPR: 2B.1	Not expected; no suitable habitat. One documented occurrence within 5 mi. from 1886, exact location unknown.
<i>Monardella macrantha</i> ssp. <i>hallii</i> Hall's monardella	Perennial rhizomatous herb. Broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland at 730-2195m elevation. LA, Orange, Riverside, San Bernardino, San Diego Co.	Jun-Oct	Fed: None Calif: S3 CRPR: 1B.3 MSHCP: AC	Not expected; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Monardella nana</i> ssp. <i>leptosiphon</i> San Felipe monardella	Perennial rhizomatous herb. Chaparral, lower montane coniferous forest at 1200-1855m elevation. Riverside and San Diego Cos., Baja	Jun-Jul	Fed: None Calif: S2 CRPR: 1B.2	Not expected; no suitable habitat, below elevation range. No documented occurrences within 5 mi.
<i>Muilla coronata</i> Crowned muilla	Perennial bulbiferous herb. Chenopod scrub, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland at 670-1960m elevation. Inyo, Kern, LA, San Bernardino, Tulare Cos., Nevada. Not tracked in CNDDDB.	Mar-Apr(May)	Fed: None Calif: S3 CRPR: 4.2	Not expected; no suitable habitat.
<i>Myosurus minimus</i> ssp. <i>apus</i> Little mousetail	Annual herb. Valley and foothill grasslands, alkaline vernal pools at 20-640m elevation. Locations in northern, central, and southern CA, Oregon, Baja.	Mar-Jun	Fed: None Calif: S2 CRPR: 3.1 MSHCP: AC d	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
<i>Nama stenocarpa</i> Mud nama	Annual/perennial herb. Found in marshy habitat on lake margins and riverbanks at 5-500m elevation. S CA, San Clemente Island, central CA, AZ, TX, Baja, Sonora.	Mar-Oct	Fed: None Calif: S1S2 CRPR: 2B.2 MSHCP: AC d	Not expected; no suitable habitat, above elevation range. No documented occurrences within 5 mi.
<i>Navarretia fossalis</i> Spreading navarretia	Annual herb. Chenopod scrub, shallow freshwater marshes and swamps, playas, vernal pools at 30-655m elevation. LA, Riverside, San Diego, San Luis Obispo Co., Baja.	Apr-Jun	Fed: THR Calif: S2 CRPR: 1B.1 MSHCP: AC b	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Oreonana vestita</i> Woolly mountain parsley	Perennial herb. Gravel or talus soils in lower and upper montane and subalpine coniferous forest at 1615-3500m elevation. Kern, LA, San Bernardino Co. Endemic to San Bernardino, San Gabriel, and Scodie Mts.	Mar-Sep	Fed: None Calif: S3 CRPR: 1B.3	Absent; no suitable habitat, below elevation range. No documented occurrences within 5 mi.
<i>Oxytropis oreophila</i> var. <i>oreophila</i> Rock-loving oxytrope	Perennial herb. Gravelly or rocky soils in alpine boulder and rock field, subalpine coniferous forest at 3400-3800m elevation. LA and San Bernardino Cos., AZ, NM, NV, UT.	Jun-Sep	Fed: None Calif: S2 CRPR: 2B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Parnassia cirrata</i> var. <i>cirrata</i> San Bernardino grass-of-Parnassus	Perennial herb. Mesic areas, streamsides, sometimes calcareous soils in lower and upper montane coniferous forest, meadows and seeps at 1250-2440m elevation. San Gabriel Mts, San Bernardino Mts, Mexico.	Aug-Sep	Fed: None Calif: S2 CRPR: 1B.3	Absent; no suitable habitat, below elevation range. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Petalonyx linearis</i> Narrow-leaf sandpaper-plant	Perennial shrub. Sandy or rocky canyons in Mojavean and Sonoran desert scrub at 25-1115m elevation. Riverside, San Bernardino, San Diego, and Imperial Cos., Arizona, Sonora and Baja Mexico.	(Jan-Feb)Mar-May(Jun-Dec)	Fed: None Calif: S3? CRPR: 2B.3	Not expected; no suitable habitat. One documented occurrence within 5 mi. from 1879, exact location unknown.
<i>Piperia leptopetala</i> Narrow-petaled rein orchid	Perennial herb. Cismontane woodland, upper and lower montane coniferous forest at 380-2225m elevation. Not tracked in CNDDB.	May-Jul	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat.
<i>Pseudognaphalium leucocephalum</i> White rabbit-tobacco	Perennial herb. Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, riparian woodland at 0-2100m elevation. LA, Orange, Riverside, San Bernardino, San Diego, Ventura Co, Arizona, New Mexico, Texas, Baja and Sonora Mex.	(Jul)Aug-Nov(Dec)	Fed: None Calif: S2 CRPR: 2B.2	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Rupertia rigida</i> Parish's rupertia	Perennial herb. Chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, pebble plain, valley and foothill grassland at 700-2500m elevation. LA, Riverside, San Bernardino, San Diego Cos., Baja. Not tracked in the CNDDB.	Jun-Aug	Fed: None Calif: S4 CRPR: 4.3	Low; no or marginal suitable habitat with ongoing disturbance.
<i>Sedum niveum</i> Davidson's stonecrop	Perennial rhizomatous herb. Rocky soils in lower and upper montane and subalpine coniferous forest at 2075-3000m elevation. Riverside and San Bernardino Cos., Baja. Not tracked in CNDDB.	Jun-Aug	Fed: None Calif: S3 CRPR: 4.2	Absent; no suitable habitat, well below elevation range.
<i>Senecio astephanus</i> San Gabriel ragwort	Perennial herb. Rocky slopes in coastal bluff scrub, chaparral at 400-1500m elevation. Kern, LA, Monterey, Santa Barbara, San Bernardino, San Diego, San Luis Obispo Co. Not tracked in CNDDB.	May-Jul	Fed: None Calif: S3 CRPR: 4.3	Not expected; no suitable habitat.
<i>Sidalcea hickmanii</i> ssp. <i>parishii</i> Parish's checkerbloom	Perennial herb. Chaparral, cismontane woodland, lower montane coniferous forest at 1000-2499m elevation. Kern, Santa Barbara, San Bernardino, San Luis Obispo Cos. San Bernardino Mts.	(May)Jun-Aug	Fed: None Calif: Rare, S1 CRPR: 1B.2	Not expected; no suitable habitat, below elevation range. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Sidalcea malviflora</i> ssp. <i>dolosa</i> Bear Valley checkerbloom	Perennial herb. Meadows and seeps, riparian woodland, meadows and seeps in upper and lower montane coniferous forest at 1495-2685m elevation. San Bernardino Mts.	May-Aug	Fed: None Calif: S2 CRPR: 1B.2	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Sidalcea neomexicana</i> Salt Spring checkerbloom	Perennial herb. Alkaline, mesic soils in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas at 15-1530m elevation. Kern, LA, Orange, Riverside, San Bernardino, San Diego, Ventura Co, western US, Sonora Mex.	Mar-Jun	Fed: None Calif: S2 CRPR: 2B.2	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Sidothea caryophylloides</i> Chickweed oxytheca	Annual herb. Sandy soils in lower montane coniferous forest at 1114-2600m elevation. LA, Riverside, San Bernardino, Tulare, Ventura Co. Not tracked in CNDDDB.	Jul-Sep(Oct)	Fed: None Calif: S4 CRPR: 4.3 MSHCP: NAC e	Absent; no suitable habitat, below elevation range. No documented occurrences within 5 mi.
<i>Silene krantzii</i> Krantz's catchfly	Perennial herb. Usually sandy or gravelly, sometimes rocky, soils in alpine dwarf scrub at 3235-3510m elevation. San Gorgonio Mt. in San Bernardino Co.	Apr-Sep	Fed: None Calif: S1 CRPR: 1B.2	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
<i>Streptanthus bernardinus</i> Laguna Mountains jewelflower	Perennial herb. Chaparral, lower montane coniferous forest at 670-2500m elevation. Riverside, San Bernardino, San Diego Co.	May-Aug	Fed: None Calif: S3S4 CRPR: 4.3	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Streptanthus campestris</i> Southern jewelflower	Perennial herb. Rocky soils in chaparral, lower montane coniferous forest, pinyon and juniper woodland at 900-2300m elevation. Imperial, Santa Barbara, Ventura, San Bernardino, Riverside, San Diego Co, Baja.	(Apr)May-Jul	Fed: None Calif: S3 CRPR: 1B.3	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Symphotrichum defoliatum</i> San Bernardino aster	Perennial rhizomatous herb. Near ditches, streams, springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grasslands (vernally mesic) at 2-2040m elevation. Southern and Central California.	Jul-Nov	Fed: None Calif: S2 CRPR: 1B.2	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
<i>Taraxacum californicum</i> California dandelion	Perennial herb. Mesic meadows and seeps at 1620-2800m elevation. San Bernardino Co.	May-Aug	Fed: END Calif: S1S2 CRPR: 1B.1	Not expected; no or marginal suitable habitat with ongoing disturbance, below elevation range. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Tortula californica</i> California screw-moss	Moss. Sandy soil in chenopod scrub, valley and foothill grassland at 10-1460m elevation. Scattered occurrences in Southern and Central CA, Channel Islands.	Not applicable	Fed: None Calif: S2? CRPR: 1B.2	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
<i>Trichocoronis wrightii</i> var <i>wrightii</i> Wright's trichocoronis	Annual herb. Alkaline soils in meadows and seeps, marshes and swamps, riparian forest, vernal pools at 5-435m elevation. Riverside Co., Central Valley, Texas, Baja.	May-Sep	Fed: None Calif: S1 CRPR: 2B.1 MSHCP: AC b	Not expected; no or marginal suitable habitat with ongoing disturbance, above elevation range. No documented occurrences within 5 mi.
References: CDFW (2020a, 2020b), USFWS (2020), CNPS (2020), Dudek (2003), RCA (2019)				

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<b>Invertebrates</b>			
<i>Bombus crotchii</i> Crotch bumble bee	Coastal CA E to Sierra-Cascade crest & S into Mexico. Open grassland and scrub habitats. Food plant genera include <i>Antirrhinum</i> , <i>Asclepias</i> , <i>Chaenactis</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Salvia</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> . Lives in colonies that may be underground in rodent holes or above ground in rock piles, tree cavities, etc.	Fed: None Calif: CanE, S1S2	Not expected; native food plants limited or lacking. One documented occurrence within 5 mi. from 1952 near Banning, exact location unknown.
<i>Halictus harmonius</i> Harmonius halictid bee	Known only from the foothills of the San Bernardino Mts and possibly also the San Jacinto Mts.	Fed: None Calif: SA, S1	Not expected; outside of known geographic range. No documented occurrences within 5 mi.
<i>Stenopelmatus cahuiensis</i> Coachella Valley Jerusalem cricket	Desert dunes. Found in the large, undulating dunes piled up at the north base of Mt. San Jacinto. Inhabits a small segment of the sand and dune area of the Coachella Valley in the vicinity of Palm Springs.	Fed: None Calif: SA, S1S2	Absent; no suitable habitat, outside of geographic range.
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Coastal scrub, valley & foothill grassland, vernal pool, wetland. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season. Generally restricted to pools greater than 12 inches deep.	Fed: END Calif: SA, S1S2 MSHCP; AC a	Absent; no vernal pools or ponding areas present. Site is not within designated critical habitat.
<b>Fish</b>			
<i>Oncorhynchus mykiss irideus</i> pop. 10 Steelhead – southern California DPS	South coast flowing waters. Fed listing refers to pops from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego Co.)	Fed: END Calif: SA, S1	Absent; no aquatic habitat present.
<i>Rhinichthys osculus</i> “subspecies 3” Santa Ana speckled dace	Endemic to Santa Ana & San Gabriel River watersheds, historic in Big Tujunga Cyn. Santa Ana River populations in lower San Bernardino Mtn. foothills & washes.	Fed: None Calif: SSC, S1	Absent; no aquatic habitat present.
<b>Amphibians</b>			
<i>Rana muscosa</i> Southern mountain yellow-legged frog	Always encountered within a few feet of water. Tadpoles may require up to 2 years to complete development.	Fed: END Calif: END, WL, S1 MSHCP: AC c	Absent; no aquatic habitat present.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Spea hammondi</i> Western spadefoot toad	Cismontane woodland, coastal scrub, valley & foothill grassland, vernal pool. Breeds in quiet streams & vernal pools, burrows beneath sand during dry season. W CA, Central Valley to Baja California. From near sea level up to 4,500 ft elev.	Fed: None Calif: SSC, S3 MSHCP: AC	Low; no streams, vernal pools, or ponding areas present. Nine documented occurrences within 5 mi. Closest is about 0.4 mi. E of the site, near Montgomery/Smith Creek from 1990.
<b>Reptiles</b>			
<i>Anniella stebbinsi</i> ( <i>Anniella pulchra pulchra</i> ) Southern California legless lizard	Various habitats, mainly shrublands, <6500 ft. elev. Coast Ranges from Bay area to N Baja CA, SW Sierra Nevada, parts of the Central Valley, Transverse & Peninsular Ranges.	Fed: None Calif: SSC, S3	Low; no or marginal suitable habitat with ongoing disturbance. Four documented occurrences within 5 mi. Closest are about 2.8 mi. SW in Badlands and 3.4 mi. SE along Smith Creek.
<i>Arizona elegans occidentalis</i> California glossy snake	Arid scrub, rocky washes, grasslands, chaparral, often with loose or sandy soils. 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. Sea level to 7200' elev.	Fed: None Calif: SSC, S2	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
<i>Aspidoscelis hyperythra</i> Orange-throated whiptail	Low-elevation coastal scrub, chaparral, valley-foothill hardwood, sea level to 1040m. Sandy areas, patches of rock. S CA, west of desert to tip of Baja CA.	Fed: None Calif: WL, S2S3 MSHCP: AC	Not expected; no suitable habitat. One documented occurrence within 5 mi. from 1912 near Beaumont, exact location unknown, possibly extirpated.
<i>Aspidoscelis tigris stejnegeri</i> Coastal whiptail	Primarily hot, dry open areas with sparse foliage, chaparral, woodland, riparian; coastal So CA, mostly west of Peninsular Ranges and south of Transverse Ranges, north into Ventura County, below $\pm 7000'$ elev. and into Baja.	Fed: None Calif: SSC, S3 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance. Four documented occurrences within 5 mi. Closest is about 1.2 mi. S along Highland Springs Road in coastal sage scrub habitat in Badlands.
<i>Charina umbratica</i> Southern rubber boa	Found in a few locales in San Bernardino & San Jacinto Mtn. ranges. Moist coniferous forest and woodlands from about 5000-9000 ft. elev. Fossorial, nocturnal, sometimes crepuscular. Hibernates in rock outcrops, rotting logs, or other underground refuges. Active April-October. Thick duff and downed logs important for cover. Usually found within several hundred meters of water.	Fed: None Calif: THR, S2S3 MSHCP: NAC f	Absent; no suitable habitat, well below elevation range.
<i>Crotalus ruber</i> Red-diamond rattlesnake	Desert scrub, thorn scrub, chaparral below 4,000ft. San Bernardino County S through most of Baja California, Mexico.	Fed: None Calif: SSC, S3 MSHCP: AC	Not expected; no suitable habitat. One documented occurrence within 5 mi., about 4.4 mi. SW in Badlands.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	Open relatively rocky areas within valley-foothill locales, mixed chaparral/annual grasslands. Prefers moist habitats. W San Diego & Riv. Cos., SW San Bern., Vent. & LA Cos., NW Baja CA.	Fed: None Calif: SA, S2?	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
<i>Phrynosoma blainvillii</i> Coast horned lizard	Coastal sage scrub, low elevation chaparral, annual grassland, oak & riparian woodlands, coniferous forest. SW California to NW Baja California, Mexico.	Fed: None Calif: SSC, S3S4 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance. Eight documented occurrences within 5 mi., most in Badlands.
<i>Salvadora hexalepis virgulata</i> Coast patch-nosed snake	Shrublands, washes, sandy flats, rocky areas; Santa Barbara county through southwest Calif., to northwest Baja Calif.	Fed: None Calif: SSC, S2S3	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Thamnophis hammondi</i> Two-striped gartersnake	Usually in or near perennial fresh water & adjacent riparian habitat, pools in streams. SW CA & NW Baja California.	Fed: None Calif: SSC, S3S4	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<b>Birds</b>			
<i>Accipiter cooperii</i> Cooper's hawk	Cismontane woodland, riparian forest, riparian woodland, upper montane coniferous forest. Forages in open areas over scrublands; California, Mexico, Central America. Nests in trees, often in dense woods. Year-round resident in most of southern California range. CNDDB only tracks nesting.	Fed: None Calif: WL, S4 MSHCP: AC	Low-moderate (foraging), low (nesting); potentially suitable foraging habitat with ongoing disturbance, potentially suitable nesting habitat but reduced potential due to adjacent development/disturbance. One documented occurrence within 5 mi. (nesting) about 3.7 mi. W in riparian woodland. Multiple eBird observations in region including just to S in golf course.
<i>Agelaius tricolor</i> Tricolored blackbird	Breeds colonially in freshwater marshes, nomadic among marshes and fields in winter; almost completely endemic to Calif. Year-round resident in southern California range. CNDDB only tracks nesting.	Fed: BCC Calif: THR, SSC, S1S2 MSHCP: AC	Low (foraging), not expected (nesting); no or marginal suitable foraging habitat, no suitable nesting habitat. One documented occurrence within 5 mi. (nesting) along Potrero Creek. No eBird records in project vicinity.
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow	Sparse, mixed chaparral, scrub, rocky, brushy slopes. Central California to Baja California. Year-round resident in southern California range.	Fed: None Calif: WL, S3 MSHCP: AC	Low (foraging and nesting). No or marginal suitable habitat. Five documented occurrences within 5 mi., 2 in Badlands, one about 3 mi. NE in patch chaparral, rest along San Geronio River. Multiple eBird records in Badlands or foothills.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Aquila chrysaetos</i> Golden eagle	Found in a variety of habitats from sea level to 11,500 feet, rugged open habitats preferred. Large platform nests constructed on secluded cliffs, large trees, and occasionally structures (i.e., electrical transmission towers). CNDDDB tracks nesting and wintering.	Fed: BGEPA, BCC Calif: FP, WL, S3 MSHCP: AC	Not expected (foraging); absent (nesting). No suitable nesting habitat, potential foraging habitat likely avoided due to adjacent development. One documented occurrence within 5 mi. in San Jacinto Wildlife Area; a few eBird records in region.
<i>Artemisiospiza belli belli</i> Bell's sage sparrow	Sage scrub and chaparral communities. Nests mainly in shrubs, also in grass, and occasionally on ground under shrub. Found in coastal sage scrub in south of range. Central Washington southward to Baja California, Mexico. Year-round resident in southern CA.	Fed: BCC Calif: WL, S3 MSHCP: AC	Not expected (foraging and nesting); no or marginal suitable habitat. No documented occurrences within 5 mi.; a few eBird records in foothills.
<i>Athene cunicularia</i> Burrowing owl	Nests in rodent burrows, usually in grasslands. Forages in open habitat; increasingly uncomm. in S CA. Occurs through W US/Mex. Sparse in desert scrub but common around irrigated lands.	Fed: BCC Calif: SSC, S3 MSHCP: AC c	Low; potentially suitable habitat with ongoing disturbance, no owls or owl sign observed during survey. Three documented occurrences within 5 mi., one in Badlands, remainder further SW. Three eBird records in vicinity – about 1.7 mi. NE in field near Banning Substation (03.2012); 2.7 mi. NW in field near park 2 adult and 5 juveniles (04.2018); 3.1 mi. SE (07.2018).
<i>Baeolophus inornatus</i> Oak titmouse	Open pine or mixed oak-pine forest, juniper woodland, pinyon or juniper mixed with Joshua trees. Not migratory. CNDDDB only tracks nesting.	Fed: BCC Calif: SA, S4	Low (foraging and nesting). No or marginal suitable habitat. No documented occurrences within 5 mi. (nesting). Multiple eBird records in region.
<i>Buteo regalis</i> Ferruginous hawk	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Great Basin grassland and scrub, pinyon and juniper woodlands, valley and foothill grassland. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles. Does not breed in southern CA.	Fed: BCC Calif: WL, S3S4 MSHCP: AC	Low-moderate (foraging), absent (nesting); potentially suitable foraging habitat with ongoing disturbance, does not nest in area. One documented occurrence within 5 mi. in Badlands. Some eBird observations in region.
<i>Buteo swainsoni</i> Swainson's hawk	Grassland/agricultural, large trees for nesting, desert scrub with Joshua tree & Fremont cottonwood overstory, near streams & open fields. Breeds overwhelmingly in Great Basin & Central Valley of California. Seen in migration in southern California. CNDDDB only tracks nesting.	Fed: BCC Calif: THR, S3 MSHCP: AC	Low (foraging), absent (nesting). Marginal foraging habitat, outside current breeding range, may be seen in Project vicinity in migration. A few eBird observations in region.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Calypte costae</i> Costa's hummingbird	Desert and coastal scrub and chaparral in desert, semi-desert and mountain foothills and seasonally in mountains, adjacent open meadows and gardens. Found in NV, UT, AZ, CA and Mexico. Year-round resident in southern CA. CNDDDB only tracks nesting.	Fed: BCC Calif: SA, S4	Low-moderate (foraging and nesting); potentially suitable or marginal habitat. No documented occurrences within 5 mi. Multiple eBird records in region, including two immediately adjacent to site.
<i>Campylorhynchus brunneicapillus</i> <i>sandiegensis</i> Coastal cactus wren	Desert scrub and coastal sage scrub with cactus patches; Southern CA and northwestern Baja. Non-migratory. Pairs defend territories throughout the year. CNDDDB only tracks this species in San Diego and Orange Cos.	Fed: BCC Calif: SSC, S3 MSHCP: AC	Not expected (foraging and nesting); no suitable habitat and no cactus patches. No eBird records in Project vicinity.
<i>Chamaea fasciata</i> Wrentit	Chaparral, oak woodland, shrublands, western CA, northwestern Baja, western Oregon. Year-round resident in southern CA range. CNDDDB does not track this species.	Fed: BCC Calif: None	Low (foraging and nesting); no or marginal suitable habitat with ongoing disturbance. Multiple eBird records in region.
<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	Valley foothill and desert riparian. Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which abut on slow-moving watercourses, backwaters, or seeps. Willow almost always a dominant component of the vegetation. Most of the United States (excluding the NW states) & into Baja California & northern Mexico.	Fed: THR, BCC Calif: END, S1 MSHCP: AC a	Absent (foraging and nesting); small area of willows on site not adequate to provide suitable habitat. No documented occurrences within 5 mi. No eBird records in vicinity.
<i>Cypseloides niger</i> Black swift	Coastal belt of Santa Cruz and Monterey counties; central & southern Sierra Nevada; San Bernardino & San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely. CNDDDB only tracks nesting.	Fed: BCC Calif: SSC, S2 MSHCP: AC	Low (foraging), absent (nesting); no or marginal foraging habitat, no nesting habitat. No documented occurrences within 5 mi. (nesting). No eBird records in vicinity.
<i>Dryobates (Picoides) nuttallii</i> Nuttall's woodpecker	Found in low elevation riparian and oak woodlands; rarely in conifers. Central Valley, Transverse and Peninsular Ranges, Coast Ranges north to Sonoma Co., lower portions of the Cascade Range and Sierra Nevada. Year-round resident throughout coastal mountains of CA. Not tracked in CNDDDB.	Fed: BCC Calif: None	Low (foraging and nesting); no or marginal habitat. Multiple eBird records in region.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Elanus leucurus</i> White-tailed kite	Breeds in woodlands and riparian forests, forages over open terrain; Pacific Coast (Calif, northern Baja, Oregon), other scattered localities. Year-round resident in southern CA range. CNDDDB only tracks nesting.	Fed: None Calif: FP, S3S4 MSHCP: AC	Low (foraging), not expected (nesting); marginal foraging habitat with ongoing disturbance, potentially marginal nesting habitat but adjacent development/disturbance reduces potential. No documented occurrences within 5 mi. (nesting). Several eBird records in region.
<i>Empidonax traillii extimus</i> Southwestern willow flycatcher	Dense riparian forests, wet mountain meadow systems with standing water for at least part of the breeding season (May to July) & with ample numbers of willow & other associated trees & shrubs. Rare & local is S CA. SW US & N Baja California. CNDDDB only tracks nesting.	Fed: END Calif: END, S1 MSHCP: AC a	Absent (foraging and nesting); small area of willows on site not adequate to provide suitable habitat. Site is not within designated critical habitat. Two documented occurrences within 5 mi. in San Timoteo Canyon.
<i>Eremophila alpestris actia</i> California horned lark	Variety of open habitats with low growing vegetation or bare ground, grasslands, rangelands, "bald" hills, mtn. meadows, open coastal plains, fallow fields, alkali flats. Within coastal Sonoma Co. to San Diego Co., San Joaquin Valley & E to foothills.	Fed: None Calif: WL, S4 MSHCP: AC	Moderate (foraging), low (nesting). Potentially suitable foraging habitat, ongoing disturbance reduces potential for nesting. One documented occurrence within 5 mi., about 4 mi. W. Several eBird records in region.
<i>Icteria virens</i> Yellow-breasted chat	Summer resident, inhabits riparian thickets of willow near watercourses, low dense riparian willow. Migrant and summer resident in CA, northern CA, central coast, eastern Central Valley, coastal southern CA, Colorado River, western US, Canada, Mexico, Central America. CNDDDB only tracks nesting.	Fed: None Calif: SSC, S3 MSHCP: AC	Not expected (foraging and nesting); small area of willows on site not adequate to provide suitable habitat. No documented occurrences within 5 mi. (nesting). Few eBird records in region.
<i>Lanius ludovicianus</i> Loggerhead shrike	Open areas where small trees, shrubs, and fences can provide suitable perches. Nests in small trees and large shrubs. Throughout much of North America. CNDDDB only tracks nesting.	Fed: BCC Calif: SSC, S4 MSHCP: AC	Low-moderate (foraging), low (nesting); potentially suitable or marginal habitat with ongoing disturbance. Two documented occurrences within 5 mi. (nesting) in Badlands. Several eBird records in region.
<i>Plegadis chihi</i> White-faced ibis	Freshwater wetlands, shallow lakes, wet meadows, flooded pastures and croplands. Nests in dense, fresh emergent wetland. Salton Sea, local winter visitor along coast, uncommon elsewhere in southern CA and Central Valley. CNDDDB only tracks nesting colonies.	Fed: None Calif: WL, S3S4 MSHCP: AC	Not expected (foraging); absent (nesting); no suitable habitat. No documented occurrences within 5 mi. (nesting colony). No eBird records in Project vicinity.
<i>Poliioptila californica californica</i> Coastal California gnatcatcher	Sage scrub, also chaparral, grasslands, riparian adjacent to or mixed with sage scrub. S Ventura Co. to LA, Orange, Riv., San Bern., San D. Cos into Baja CA, Mexico.	Fed: THR Calif: SSC, S2 MSHCP: AC	Absent (foraging and nesting); no suitable habitat. No documented occurrences within 5 mi. Site is not within designated critical habitat.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Progne subis</i> Purple martin	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag. Broadleaved upland forest, lower montane coniferous forest.	Fed: None Calif: SSC, S3 MSHCP: AC	Not expected (foraging and nesting); no suitable habitat. One documented occurrence within 5 mi. from 1910, Beaumont area, exact location unknown. Few eBird records in region.
<i>Setophaga petechia</i> Yellow warbler	Migrant and summer resident in southern CA. Riparian, including willow, cottonwood, sycamore, alder, aspen for nesting & foraging, also conifer forest. CNDDDB only tracks nesting.	Fed: BCC Calif: SSC, S3S4	Not expected (foraging and nesting); small area of willows on site likely not adequate to provide suitable habitat. Two documented occurrences within 5 mi., one along San Geronio River, one from 2016 about a mile S of site along Potrero Creek in riparian woodland area.
<i>Spinus lawrencei</i> Lawrence's goldfinch	Summer breeder, may overwinter. Coastal side of southern and central CA, western edge of southern deserts, east side of Central Valley into northern CA, Colorado River, SW US and northern Mex. Valley foothill hardwood and hardwood-conifer, desert riparian, pinyon juniper, palm oasis, lower montane. CNDDDB only tracks nesting.	Fed: BCC Calif: SA, S3S4	Low (foraging and nesting); no or marginal suitable habitat. No documented occurrences within 5 mi. (nesting). Few eBird records in vicinity.
<i>Spizella atrogularis</i> Black-chinned sparrow	Chaparral, sagebrush, arid scrublands, and brushy hillsides. Not tracked in the CNDDDB.	Fed: BCC Calif: None	Low (foraging and nesting); no or marginal suitable habitat. A few eBird records in foothills and adjacent residential areas to the south of the site.
<i>Toxostoma lecontei</i> Le Conte's thrasher	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Fed: BCC Calif: SSC*, S3 *San Joaquin population only	Not expected (foraging and nesting); no suitable habitat. No documented occurrences within 5 mi. No eBird records in region.
<i>Vireo bellii pusillus</i> Least Bell's vireo	Riparian woodlands, bottomlands. N Mex. & Baja CA into S CA & the S mid-western US. CNDDDB only tracks nesting.	Fed: END Calif: END, S2 MSHCP: AC a	Absent (foraging and nesting); small area of willows on site not adequate to provide suitable habitat. Four documented occurrences within 5 mi., one along San Timoteo Canyon, three along Potrero Creek (closest is 0.8 mi. SSW). Site is not within designated critical habitat.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Xanthocephalus xanthocephalus</i> Yellow-headed blackbird	Marsh, swamp, wetland. Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects are abundant. CNDDDB only tracks nesting.	Fed: None Calif: SSC, S3	Not expected (foraging and nesting); no suitable habitat. No documented occurrences within 5 mi. (nesting). Few eBird records in region.
<b>Mammals</b>			
<i>Antrozous pallidus</i> Pallid bat	Rock outcrops of shrublands, ≤ 6000' elevation; southwest North America to interior Oregon and Washington; hibernates in winter. Locally common at low elevations in grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Forages over open ground. Roosts in caves, crevices, mines, hollow trees, buildings. Very sensitive to disturbance of roosting sites.	Fed: None Calif: SSC, S3	Low (foraging), not expected (roosting); potentially marginal foraging habitat, development and ongoing disturbances in area reduce potential for roosting. One documented occurrence within 5 mi., about 1.8 mi. S in Badlands.
<i>Chaetodipus californicus femoralis</i> Dulzura pocket mouse	Variety of habitats including coastal scrub, chaparral & grassland. Attracted to grass-chaparral edges. Chaparral, coastal scrub, valley and foothill grassland.	Fed: None Calif: SSC, S3	Low-moderate; potentially marginal suitable habitat. One documented occurrence within 5 mi., about 2.9 mi. SE. Data from 2005 trapping survey not available.
<i>Chaetodipus (Perognathus) fallax fallax</i> Northwestern San Diego pocket mouse	Sandy herbaceous areas, usually in association with rocks or coarse gravel, chaparral, coastal scrub, grasslands. SW CA & NW Baja California (inland to San Bernardino Valley).	Fed: None Calif: SSC, S3S4 MSHCP: AC	Moderate; potentially suitable habitat. Ten documented occurrences within 5 mi. SE. Data from 2005 trapping survey not available.
<i>Chaetodipus fallax pallidus</i> Pallid San Diego pocket mouse	Sandy, herbaceous areas, usually in association with rocks or coarse gravel, desert wash, desert scrub, pinyon juniper, chaparral. San Diego, Riv, Imperial, LA, San Bern cos.	Fed: None Calif: SSC, S3S4	Low; potentially marginal habitat. No documented occurrences within 5 mi. Data from 2005 trapping survey not available.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance. Broadleaved upland forest, chaparral, chenopod scrub, Joshua tree woodland, lower and upper montane coniferous forest, meadow and seep, Mojavean and Sonoran desert scrub, riparian forest/woodland, Sonoran thorn woodland, valley and foothill grassland.	Fed: None Calif: SSC, S2	Low (foraging), not expected (roosting); potentially marginal foraging habitat, development and ongoing disturbances in area reduce potential for roosting. One documented occurrence within 5 mi. near Potrero Creek in Badlands.
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	Alluvial floodplains and adjacent upland habitats within the San Bernardino, Menifee, and San Jacinto valleys, Riversidean alluvial fan sage scrub.	Fed: END Calif: CanE, SSC, S1 MSHCP: AC c	Not expected; no suitable habitat. No documented occurrences within 5 mi. Site is not within designated critical habitat. Data from 2005 trapping survey not available.
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	Sparse, gently sloping grassland, sometimes at margins of cultivated or disturbed lands; prefers grassland dominated by forbs rather than annual grasses, prefers sparse perennial vegetation; firm soil for burrowing (not too hard or too sandy); may use abandoned gopher burrows; W Riverside Co. and adjacent San Diego Co. San Bernardino County occurrences extirpated.	Fed: END Calif: THR, S2 MSHCP: AC	Low; potentially marginal suitable habitat. Five documented occurrences within 5 mi. Not found during trapping survey in 2005.
<i>Glaucomys oregonensis</i> ( <i>sabrinus</i> ) <i>californicus</i> San Bernardino flying squirrel	Mature mixed conifer forest (white fir, Jeffrey pine, & black oak) with large trees & snags, closed canopy, downed woody debris, & riparian areas. 4000-8500 ft. elev. San Bernardino & San Jacinto Mt. Ranges (may be extirpated in the San Jacinto Mts.).	Fed: None Calif: SSC, S1S2 MSHCP: NAC e	Absent; no suitable habitat, well below elevation range, outside of geographic range. No documented occurrences within 5 mi.
<i>Lasiurus xanthinus</i> Western yellow bat	Valley foothill riparian, desert riparian, desert wash, palm oasis. Roosts in trees, particularly palms. Forages over water and among trees. Desert regions of the SW US. Distributed in S CA, AZ, NM, & TX, into Mexico.	Fed: None Calif: SSC, S3	Low (foraging and roosting); no or marginal suitable habitat. One documented occurrence within 5 mi. from 1989, in foothills to the N.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Leptonycteris (curasoae) yerbabuenae</i> Lesser long-nosed bat	Nectar, pollen, fruit eating bat; primarily feeding on agaves, saguaro, organ pipe cactus. Mojavean and Sonoran desert scrub, Upper Sonoran scrub. Caves, mines used as day roosts. Caves, mines, rock crevices, trees and shrubs, abandoned buildings used as night roosts. No maternity roosts known from CA.	Fed: Delisted Calif: SSC, S1	Not expected (foraging and roosting). No suitable habitat or food plants. No documented occurrences within 5 mi.
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	Chaparral, coastal, or Riversidean sage scrub with adjacent open grassland. Los Angeles Co. S to San Quintin, Baja California, Mexico.	Fed: None Calif: SSC, S3S4 MSHCP: AC	Low; no or marginal suitable habitat. Three documented occurrences within 5 mi. in Badlands.
<i>Myotis yumanensis</i> Yuma myotis	Variety of habitats, optimal habitat is open forest with water sources over which to feed. Widespread in CA except for deserts. Elev. 0-11,000 ft but rare over 8,000 ft. Feeds over ponds and streams. Roosts in buildings, mines, caves, or crevices, under bridges. Hibernates in winter.	Fed: None Calif: SA, S4	Low (foraging), not expected (roosting); no or marginal suitable foraging habitat, roosting habitat lacking. No documented occurrences within 5 mi.
<i>Neotamias speciosus speciosus</i> Lodgepole chipmunk	Summits of isolated Piute, San Bernardino, & San Jacinto mountains. Usually found in open-canopy forests. Habitat is usually lodgepole pine forests in the San Bernardino Mts & chinquapin slopes in the San Jacinto Mts.	Fed: None Calif: SA, S2S3	Absent; no suitable habitat, well below elevation range, outside of geographic range.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	Arid shrublands, rocky outcrops, & crevices. Cismontane CA., San Luis Obispo to San Diego Co. & NW Baja California. 0-7000 ft. elev. Variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Constructs elaborate middens of sticks and other materials.	Fed: None Calif: SSC, S3S4 MSHCP: AC	Not expected; no suitable habitat. No middens observed during survey. Three documented occurrences within 5 mi., two in Badlands, one near San Geronio River.
<i>Onychomys torridus ramona</i> Southern grasshopper mouse	Nocturnal, active year-round. Desert scrub, coastal scrub, mixed chaparral, sagebrush, especially scrub habitats with friable soil, prefers low to moderate shrub cover. LA through San Diego counties and northwest Baja.	Fed: None Calif: SSC, S3	Not expected; no suitable habitat. No documented occurrences within 5 mi.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	Nocturnal, active Apr-Aug. Annual grassland, sage scrub, alluvial sage scrub. S California from Rancho Cucamonga (W boundary), San Geronio (E), Aguanga & Oak Grove, San Diego (S). Open ground with fine, sandy soils.	Fed: None Calif: SSC, S1S2 MSHCP: AC c	Low-moderate; marginal suitable habitat. Eight documented occurrences within 5 mi., closest about 2.3 mi. Data from 2005 trapping survey not available.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Taxidea taxus</i> American badger	Mountains, deserts, interior valleys where burrowing animals are available as prey & soil permits digging. Throughout Central & W North America.	Fed: None Calif: SSC, S3	Not expected; no or marginal suitable habitat, no dens or diggings observed during survey. One documented occurrence within 5 mi. from 1908 near Banning.
<i>Xerospermophilus tereticaudus chlorus</i> Palm Springs round-tailed ground squirrel	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees. Prefers open, flat, grassy areas in fine-textured, sandy soil. Density correlated with winter rainfall. Chenopod scrub, Sonoran desert scrub	Fed: None Calif: SSC, S2	Absent; no suitable habitat, outside geographic range.

References: CDFW (2019, 2020b), USFWS (2020), Dudek (2003), RCA (2019); BNA (2020)

**Documented occurrences refer to CNDDB records, unless otherwise indicated. EBird reports are submitted by citizen scientists and should be interpreted with caution.**

**Federal designations:** (Federal Endangered Species Act, U. S. Fish and Wildlife Service):

END:	Federally listed, endangered; an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
THR:	Federally listed, threatened; an animal or plant which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.
Cand	Candidate for federal listing as threatened or endangered; species that has been studied by the U.S. Fish and Wildlife Service, and the Service has concluded that it should be proposed for addition to the Federal Endangered and Threatened species list.
Prop	Proposed for federal listing as Endangered or Threatened under Section 4 of the Endangered Species Act.
Delisted:	Previously federally listed as endangered or threatened, but is no longer listed (e.g., due to recovery).
None:	The species has no federal conservation status.
BGEPA:	Federal Bald and Golden Eagle Protection Act; protects bald and golden eagles.
BCC:	USFWS Bird of Conservation Concern; migratory and non-migratory bird species (beyond those already designated as Federally threatened or endangered) that represent USFWS highest conservation priorities.

**State designations:** (California Endangered Species Act, California Dept. of Fish and Wildlife)

END:	State listed, endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
CanE:	Candidate Endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered species.
CanF:	Candidate Threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of threatened species.
THR:	State listed, threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.
RARE:	State listed as rare: a native plant species, subspecies, or variety when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens (Native Plant Protection Act of 1977).
SSC:	CDFW Species of Special Concern; vertebrate species of concern due to declining population levels, limited ranges, and/or continuing threats that have made them vulnerable to extinction.
FP:	Fully Protected; California Fish and Game Code states that Fully Protected species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research.
Delisted:	Previously state listed as threatened or endangered, but no longer listed (e.g., due to recovery).
SA:	CDFW Special Animal; wildlife of state conservation concern.
SH:	All California sites are historical.
None:	The species has no state conservation status.

**State Rank (S Rank):** A reflection of the condition and imperilment of an element (plant, animal, vegetation community) throughout its range within the state. The S ranks are determined through a combination of rarity, threat, and trend factors, weighted more heavily on the rarity factors. Where correct category is uncertain, the S rank includes two categories or a question mark. Older ranks, which need to be updated, may still contain a decimal "threat" rank of .1, .2, or .3, where .1 indicates very threatened status, .2 indicates moderate threat, and .3 indicates few or no current known threats.

- S1: Critically imperiled; imperiled in the state because of extreme rarity or some factor(s) 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, steep declines, or other factors making it very vulnerable to extirpation from the state or nation.
- S3: Vulnerable; vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation. S4: Apparently secure; uncommon but not rare, some cause for long-term concern due to declines or other factors.
- S5: Secure; common, widespread, and abundant in the state.
- SH: Possibly extirpated; species or community occurred historically in the state, and there is some possibility that it may be rediscovered. The element has not been seen for at least 20 years, but suitable habitat still exists.
- SX: Presumed extirpated; species or community is believed to be extirpated from the state.

**California Rare Plant Rank (CRPR):** The *California Rare Plant Ranks* are a ranking system originally developed by the California Native Plant Society (CNPS) to better define and categorize rarity in California's plants. These ranks were previously known as the CNPS lists but were renamed to the *California Rare Plant Ranks* to better reflect the joint effort among the CNPS, the CDFW, and a wide range of botanical experts, who work together to assign a rarity ranking.

- 1A: Plants presumed extinct in California and rare/extinct elsewhere.
- 1B: Plants rare, threatened, or endangered in California and elsewhere.
- 2A: Plants presumed extirpated in California, but more common elsewhere.
- 2B: Plants rare, threatened, or endangered in California but more common elsewhere.
- 3: Plants about which we need more information.
- 4: Plants of limited distribution.
- X.1: Extension to CRPR (e.g., 1B.1); seriously threatened in California.
- X.2: Extension to CRPR (e.g., 1B.2); fairly threatened in California.
- X.3: Extension to CRPR (e.g., 1B.3); not very threatened in California.
- CBR: Considered but rejected.

**Western Riverside County Multiple Species Habitat Conservation Plan:** Applied to species that are covered under state and federal permits for the MSHCP.

NAC: Species Not Adequately Conserved

AC: Species Adequately Conserved

- (a) Surveys may be required for these species as part of wetlands mapping as described in Section 6.1.2 of the MSHCP.
- (b) Surveys may be required for these species within Narrow Endemic Plant Species survey area as described in Section 6.1.3 of the MSHCP.
- (c) Surveys may be required for these species within locations shown on survey maps as described in Section 6.3.2 of the MSHCP.
- (d) Surveys may be required for these species within Criteria Area as described in Section 6.3.2 of the MSHCP.
- (e) These Covered Species will be considered Adequately Conserved when conservation requirements identified in species-specific conservation objectives have been met. Species-specific conservation objectives for these species are presented in Section 9.0 of the MSHCP. Please refer to Table 9-3 of the MSHCP for specific conservation objectives that must be met for these species prior to including them on the list of Covered Species Adequately Conserved.
- (f) These Covered Species will be considered Adequately Conserved when a Memorandum of Understanding is executed with the U.S. Forest Service that addresses

management for these species on Forest Service Land. Refer to Table 9-3 of the MSHCP.

- : Not a Covered Species

**Definitions of occurrence probability:**

These definitions provide general guidance. Classifications for individual species may be modified based on biologists' experience and expert opinion.

*Occurs:* Species was detected during surveys or previously documented on the Project site or adjacent areas.

*High:* Species documented in the vicinity (i.e., within 5 miles) of the Project site and suitable habitat is present, but species not detected during surveys.

*Moderate:* Species documented in the vicinity of the Project site or suitable habitat present and site is within geographic and elevational range of the species.

*Low:* Species not documented in the vicinity of the Project site or suitable habitat is marginal.

*Not Expected:* Species not documented in the vicinity of the Project site and suitable habitat marginal or absent, or site is not within geographic and elevational range of the species.

*Absent:* No potential for the species to occur due to lack of habitat, geographic or elevation range, species life history, survey results, etc.

*Unknown:* No focused surveys have been performed in the region, and the species' distribution and habitat are poorly known.

Documented occurrences refers to species occurrences in the California Natural Diversity Database (CNDDDB) unless otherwise noted. For plant species that are not tracked in the CNDDDB, records from the Consortium of California Herbaria (CCH) may be used. eBird (eBird.org) records of bird observations are noted but should be interpreted with caution.

## APPENDIX C: SITE PHOTOGRAPHS



Non-native annual grassland in the north-central portion of the site, facing south (01.27.2020).



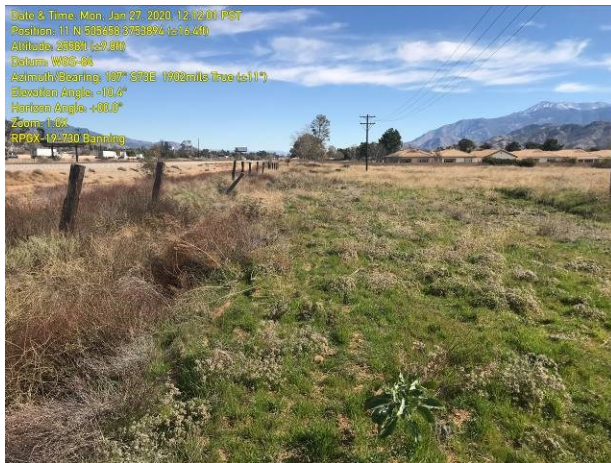
Non-native grassland in the northeast corner, facing south. Adjacent residential development visible in background (01.27.2020).



Non-native grassland in northern portion of site, facing southwest. Street trees visible in background (01.27.2020).



Non-native grassland in central portion of site, facing west. Adjacent shopping center visible in background (01.27.2020).



California buckwheat scrub along northeastern boundary of site (left side of photo), facing east (01.27.2020).



California buckwheat scrub in northeastern corner of site, facing northeast (01.27.2020).



Willow thickets in southwest corner of site, facing southwest. Willows are leafless due to season (01.27.2020).



Willow thickets in southwest corner of site, facing east. Shallow trench is visible at base of willows (01.27.2020).



Large advertising sign at north-central boundary of site, facing east. The sign could be utilized by nesting birds, including raptors (01.27.2020).



Small mammal burrows in the northeastern corner of the site. The site has potentially suitable habitat for burrowing owl, but no owls or owl sign was observed (01.27.2020).



Southern boundary of site (white fence) with street trees beyond, facing west. Shallow trench is visible just inside the fence (01.27.2020).



Double culvert in southeast corner of site, facing east (01.27.2020).

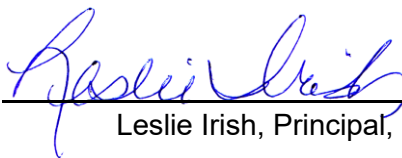
## **APPENDIX D: RIVERSIDE COUNTY DOCUMENTATION**

### Certification

Certification: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: March 30, 2020

SIGNED: \_\_\_\_\_



Leslie Irish, Principal, L&L Environmental, Inc.  
909-335-9897

1) Fieldwork Performed By:

Guy Bruyea

Name

2) Fieldwork Performed By:

\_\_\_\_\_  
Name

3) Fieldwork Performed By:

\_\_\_\_\_  
Name

4) Fieldwork Performed By:

\_\_\_\_\_  
Name

5) Fieldwork Performed By:

\_\_\_\_\_  
Name

6) Fieldwork Performed By:

\_\_\_\_\_  
Name

Check here ☐ if adding any additional names/signatures below or on other side of page.

## BIOLOGICAL REPORT SUMMARY SHEET

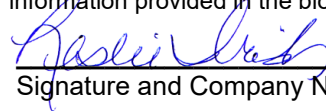
Applicant Name: Romo Planning Group  
 Assessor's Parcel Number(s): 419-140-057  
 Section, Township and Range: Section 12, Township 3 South, Range 1 West  
 Building and Safety Log Number: \_\_\_\_\_  
 Case Number: \_\_\_\_\_ Lot/Parcel \_\_\_\_\_ EA Number \_\_\_\_\_

MARK ITEM(S) SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE of CONCERN	(Mark Yes, No, or N/A regarding species findings on the referenced site)		
		Yes	No	n/a
	Arroyo Southwestern Toad	Yes	No	n/a
	Blue-line Stream(s)	Yes	No	n/a
<b>X</b>	Burrowing Owl (potential habitat)	Yes	No	n/a
	Coachella Valley Fringed-toed Lizard	Yes	No	n/a
	Coastal California Gnatcatcher	Yes	No	n/a
<b>X</b>	Coastal Sage Scrub	Yes	No	n/a
	Delhi Sands Flower-loving Fly	Yes	No	n/a
	Desert Pupfish	Yes	No	n/a
	Desert Slender Salamander	Yes	No	n/a
	Desert Tortoise	Yes	No	n/a
	Flat-tailed Horned Lizard	Yes	No	n/a
	Least Bell's Vireo	Yes	No	n/a
	Oak Woodlands	Yes	No	n/a
	Quino Checkerspot Butterfly	Yes	No	n/a
<b>X</b>	Riverside Fairy Shrimp (potential habitat)	Yes	No	n/a
	Santa Ana River Woollystar	Yes	No	n/a
	San Bernardino Kangaroo Rat	Yes	No	n/a
	Slender-horned Spineflower	Yes	No	n/a
	Stephens' Kangaroo Rat	Yes	No	n/a
<b>X</b>	Vernal Pools	Yes	No	n/a
<b>X</b>	Wetlands (MSHCP Riparian/Riverine)	Yes	No	n/a

MARK ITEM(S) SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE of CONCERN	(Mark Yes, No, or N/A regarding species findings on the referenced site)		
<b>X</b>	Marvin's onion (potential habitat)	Yes	No	n/a
<b>X</b>	Many-stemmed dudleya (potential habitat)	Yes	No	n/a
	Other	Yes	No	n/a

Species of concern shall be any unique, rare, endangered, or threatened species. It shall include species used to delineate wetlands and riparian corridors. It shall also include any hosts, perching, or food plants used by any animals listed as rare, endangered, threatened, or candidate species by either state, or federal regulations, or for Riverside County as listed by the California Department of Fish and Game Natural Diversity Data Base (CNDDB).

I declare under penalty of perjury that the information provided on this summary sheet is in accordance with the information provided in the biological report or habitat assessment.



**L & L Environmental, Inc.**

Signature and Company Name

**March 30, 2020**

Date

10(a) Permit Number (if applicable)

Permit Expiration Date

County Use Only	
Received By: _____	Date: _____
PD-B# _____	

Attachment E-4

**LEVEL OF SIGNIFICANCE CHECKLIST  
For Biological Resources**

Case Number: \_\_\_\_\_ Lot/Parcel No. \_\_\_\_\_ EA Number \_\_\_\_\_

Assessor's Parcel Number(s): 419-140-057

Date: March 30, 2020

**Biological Resources:** (Check the level of impact that applies to the following questions.)

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>a)</b> Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>b)</b> Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>c)</b> Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, or U. S. Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>d)</b> Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>e)</b> Have a substantial adverse effect on any riparian habitat, or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game, or the U. S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**LEVEL OF SIGNIFICANCE CHECKLIST  
For Biological Resources**

**f) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption)**

☐ ☐ ☐ ☒

**g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

☐ ☐ ☐ ☒

**Findings of Fact:**

- There are no sensitive vegetation communities present. Most of the site is non-native grassland.
- Habitat to support narrow endemic plant species Marvin's onion and many-stemmed dudleya is absent from the site.
- Special status plants are either absent, not expected to occur, or have low potential for occurrence onsite.
- No vernal pools or evidence of ponding was observed. Tire ruts are present but were dry at the time of the survey and soils are well drained (sandy to coarse sandy loam).
- Potentially suitable habitat for burrowing owl is present; no burrowing owls or owl sign observed.
- No species status wildlife species observed.
- There is suitable habitat for nesting birds, including raptors.
- Most special status wildlife species are either absent, not expected to occur, or have a low potential for occurrence on the site. A few have moderate or low to moderate potential to occur.
- There is a small area of willow scrub, but insufficient to provide habitat for riparian birds.
- MSHCP riparian habitat may be present. If so, a DBESP would be required for impacts.
- Jurisdictional state wetland may be present. If so, regulatory permitting would be required for impacts. A jurisdictional delineation is recommended.

**Proposed Mitigation:**

- Burrowing owl clearance survey prior to the start of any vegetation or ground disturbance.
- Nesting bird clearance survey prior to the start of any vegetation or ground disturbance during nesting season.

**Monitoring Recommended:**

None.

**Source:** CGP Fig. VI.36-VI.40

Revised October 1999

CEQA checklist update December 2018