

APPENDIX 2D

Habitat Assessment and MSHCP

HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

MILL CREEK PROMENADE APN 360-350-006, 360-350-011, & 360-350-017 MENIFEE, CALIFORNIA

Prepared for:

**Sherman & Haun, LLC
31103 Rancho Viejo Road, #535
San Juan Capistrano, CA 92675**

Prepared by:

**RCA Associates, Inc.
15555 Main Street, #D4-235
Hesperia, California 92345
Principal Investigators: Randall C. Arnold, Jr.,
Blake Curran, & Parker Smith**

**Report prepared by R. Arnold, P. Smith,
B. Curran**



EST. 1980

Project: #2016-60MSHCP

April 2018

TITLE PAGE

Date Report Prepared: April 11, 2018

Date Field Work Completed: January 15, 2018

Report Title: Habitat Assessment and MSHCP Consistency Analysis

Assessor's Parcel Number: APN 360-350-006, 360-350-011, & 360-350-017

Prepared for: Sherman & Haun, LLC

Principal Investigators: Randall C. Arnold, Jr., Principal Biologist
Parker Smith, Biologist
Blake Curran, Environmental Biologist

Contact Information: Randall C. Arnold, Jr.
RCA Associates, Inc.
15555 Main Street, #D4-235
Hesperia, CA 92345
(760) 956-9212
rarnold@rcaassociatesllc.com
www.rcaassociatesllc.com

Table of Contents

Sections		Page
Section 1	Summary	1
Section 2	Introduction	2
	2.1 Project Location.....	2
	2.2 Project Description.....	2
Section 3	Methods	
	3.1 Western Riverside County MSHCP Consistency.....	6
	Analysis	
	3.2 Literature Review.....	6
	3.3 Plant Communities.....	7
	3.4 Riparian/Riverine Habitat and Jurisdictional Areas.....	7
	3.5 Field Investigation.....	7
	3.6 Plants.....	8
	3.7 Wildlife.....	8
	3.8 Regional Connectivity/Wildlife Habitat Linkages.....	9
Section 4	Existing Conditions	
	4.1 Environmental Setting.....	10
	4.2 Soils.....	10
	4.3 Plant Communities.....	10
	4.4 Jurisdictional Waters.....	11
	4.5 Nesting Birds.....	11
	4.6 MSHCP.....	12
	4.7 Federal and State Listed Species.....	12
	4.8 Wildlife Species of Special Concern and Special Status Plants.....	12
Section 5	Western Riverside County MSHCP Consistency Analysis	
	5.1 MSHCP Requirements.....	14
	5.2 Project Relationship to Reserve Assembly.....	14
	5.3 Protection of Species Associated with Riparian/Riverine.....	14
	Areas and Vernal Pools	
	5.4 Jurisdictional Waters.....	15
	5.5 Protection of Narrow Endemic Plant Species.....	15
	5.6 Guidelines Pertaining to the Urban/Wildland Interface.....	15
	5.7 Wildlife Habitat Linkage.....	16
	5.8 Additional Survey Needs and Procedures.....	16
Section 6	Project Impacts	
	6.1 Impacts Per Plant Community.....	18
	6.2 Nesting Birds.....	18
	6.3 Special Status Species.....	18
	6.4 Habitat Fragmentation and Wildlife Movement.....	19
	6.5 Critical and Sensitive Habitat and Jurisdictional Waters.....	20
	6.6 Local Policies and Ordinances.....	20
Section 7	Conclusions	21
Section 8	Certification	22
Section 9	References	23

Appendix A: Figures and Tables
Appendix B: Site Photographs
Appendix C: Regulatory Background
Appendix D: CNDDB Summary Table

SECTION 1: SUMMARY

This report contains the results of a Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis by RCA Associates, Inc on approximately 59-acre site located in the City of Menifee, Riverside County, California. The Project area is characterized by gently rolling terrain.

The purpose of the Habitat Assessment is to identify potential impacts to biological resources associated with construction of a commercial business consisting of an office building and an automobile parking area. This report describes the results of the site visit, which assessed the Project Area for the potential to support special-status species; and the presence of other sensitive biological resources protected by local, state, and federal laws and regulations. If special-status species were observed during the site visit, they have been recorded accordingly. This report also contains an evaluation of potential impacts to special-status species and sensitive biological resources that may occur as a result of the proposed Project and potential mitigation measures to compensate for those impacts.

The assessment includes a review of pertinent literature, a review of the California Natural Diversity Data Base (CNDDDB), field investigations, and analysis of potential impacts to biological resources. A focused/protocol survey for the burrowing owl (*Athene cunicularia*) was also performed on the property and the results are summarized below.

SECTION 2: INTRODUCTION

At the request of the project proponent, RCA Associates, Inc. conducted a habitat assessment and MSHCP Consistency Analysis for the Sherman & Haun, LLC project in the City of Menifee, Riverside County. The proposed project will hereafter be referred to as the “project” or “project site.”

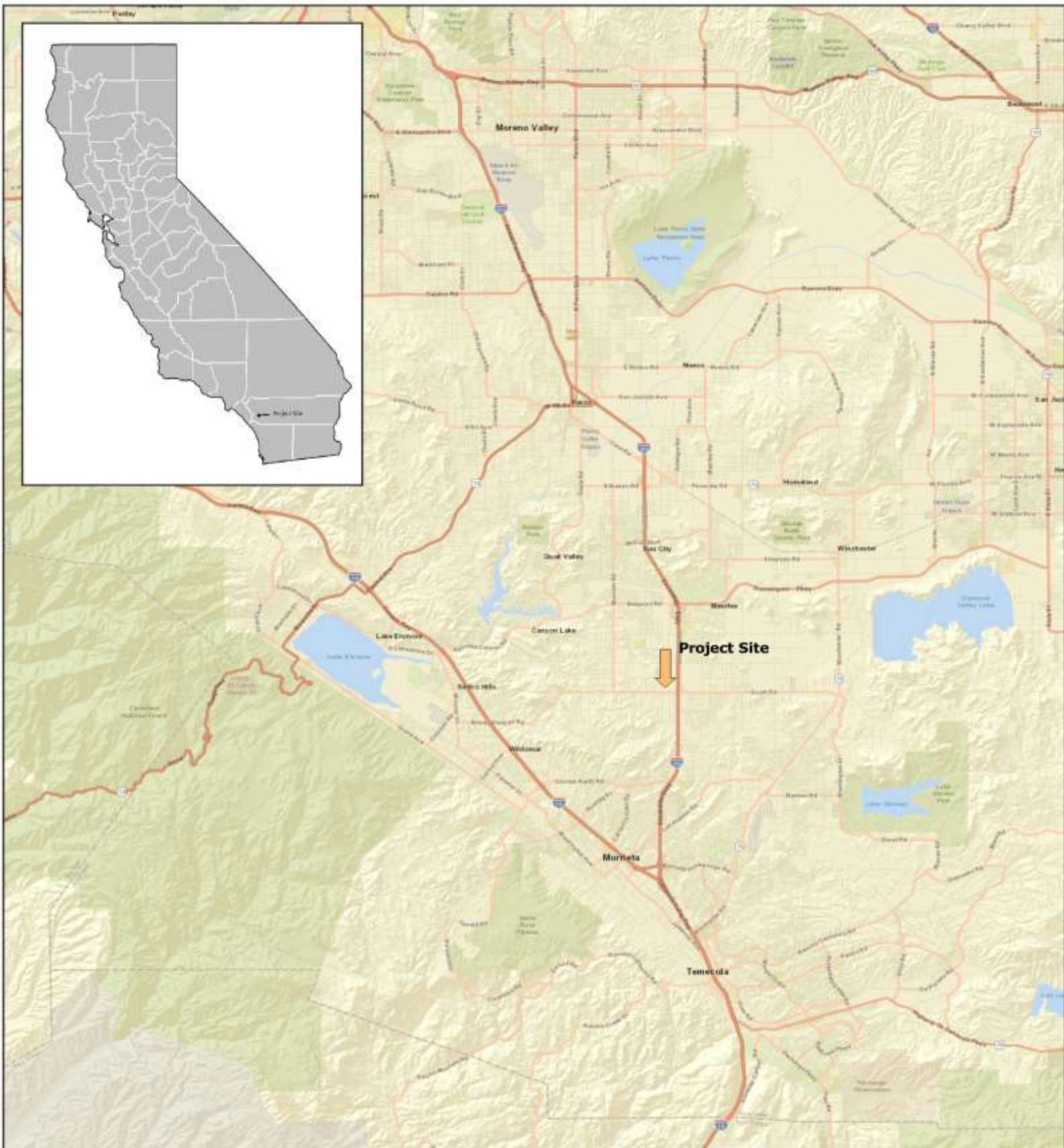
2.1 Project Location

The project site is located east of Haun Road, south of Garbani and west of Sherman Road in the City Menifee (Figures 1, 2, & 3). The site is located in Section 15, Township 6 South, Range 3 West on the USGS Romoland 7.5’ topographic quadrangle. The approximately 59-acre site is composed of three parcels (APN 360-350-006, 360-350-011, and 360-350-017), and is approximately 0.1-miles east of Interstate 215 (Figures 1 and 3).

2.2 Project Description

The project proponent is proposing to construct a townhome community as shown in Figure 5. Development activities would occur within areas which have been previously disturbed by various human activities including agricultural activities. As part of the proposed development, a two-lane road will be constructed across the channel which bisects the property (Appendix A, Figure 5). A jurisdictional delineation was conducted along the stream channel and a Jurisdictional Determination Report will be submitted under separate cover. The site is located within the Riverside County HCP fee area for Stephen’s kangaroo rat (Riverside County Habitat Conservation Agency, 1995) (Appendix A, Figure 9). Any potential impacts to this species will be mitigated through participation in the HCP and a per-acre fee will be required.

Regional Vicinity Map



Credit: Google Imagery 2017, ESRI

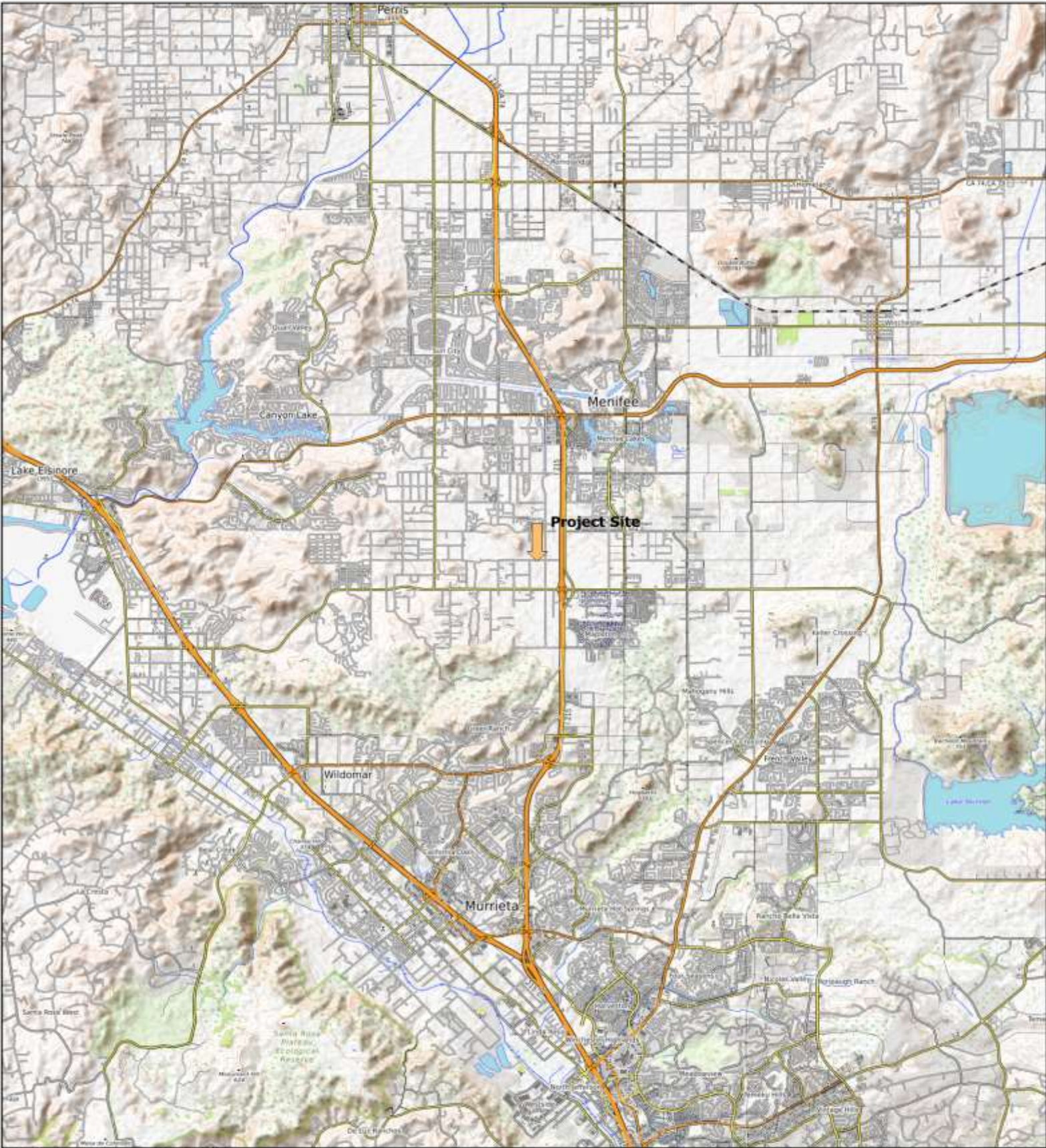
A horizontal scale bar with alternating black and white segments. Above the bar, numerical values are placed at intervals: 5, 0, 5, 10, 15, and 20 km. The bar starts at 5 km on the left, has a black segment to 0 km, a white segment to 5 km, a black segment to 10 km, a white segment to 15 km, and a final black segment ending at 20 km.



RCA
ASSOCIATES, INC.

Figure 2

Local Topographic Map



Credit: Google Imagery 2017, ESRI

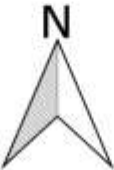
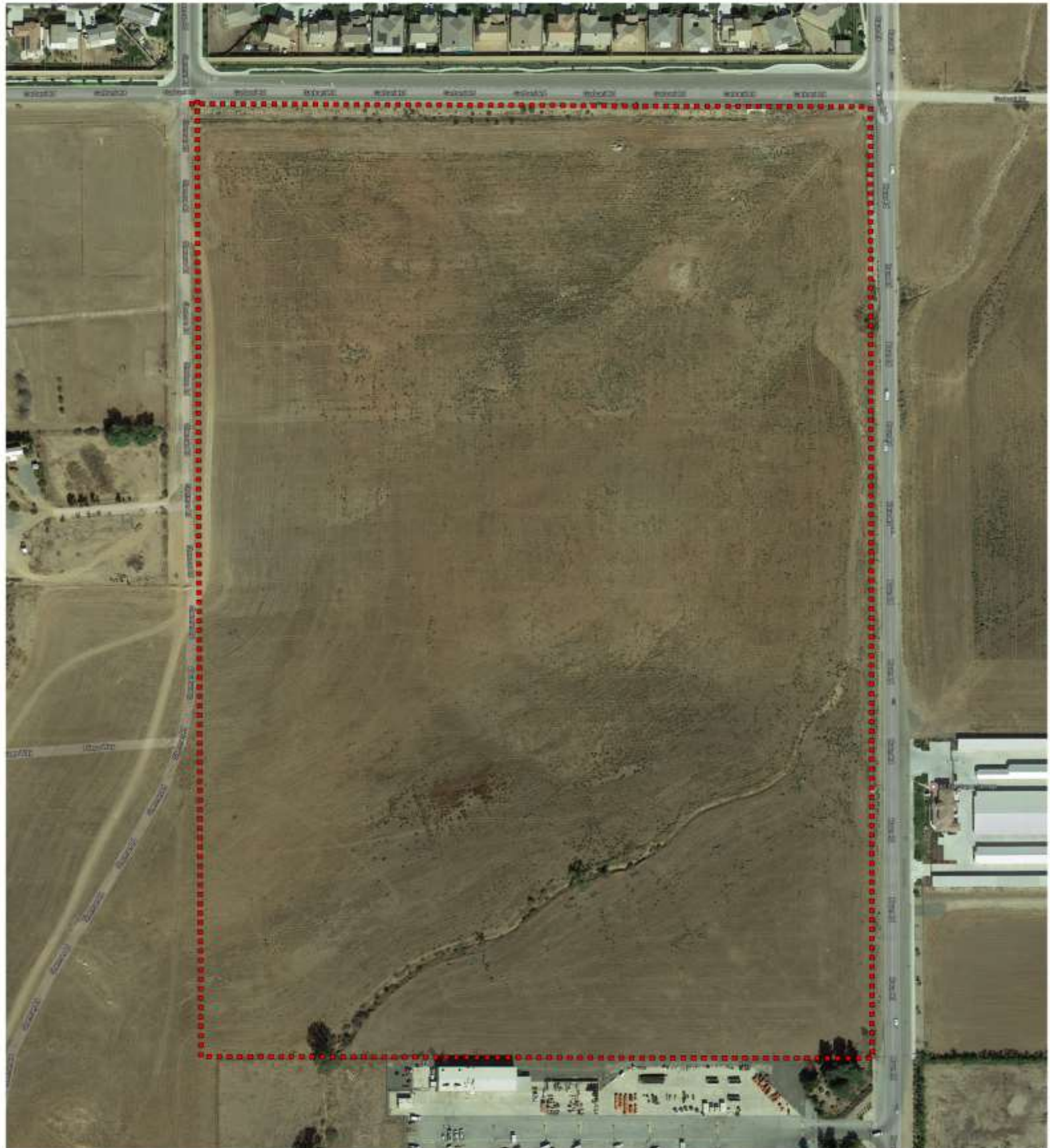


Figure 3

Local Vicinity Map



Credit: Google Imagery 2017



Legend

.... Project Border



SECTION 3: METHODS

3.1 Western Riverside County MSHCP Consistency Analysis

RCA Associates, Inc. utilized GIS software to map the project site in relation to the MSHCP areas including Criteria Cells, Core Habitat, Linkages, and areas proposed for conservation. The MSHCP also requires a riparian/riverine and vernal pool habitat assessment within the project site which were conducted by biologists from RCA Associates, Inc. According to the MSHCP, the documentation for the assessment shall include mapping and a description of the functions and values of the mapped areas with respect to the species listed in Section 6.1.2. In addition, protection of species associated with riparian/riverine areas and vernal pools also needs to be addressed.

3.2 Literature Review

Prior to conducting the field investigations, a literature review was conducted of all available background data as well as the environmental setting of the project site. The literature reviewed included, but was not limited to, the United States Department of Agriculture (USDA 1971) Soil Survey for the project site, U.S. Fish, and Wildlife Service (USFWS) data sources, and the California Natural Diversity Database (CNDDDB, 2018). The closest recorded location of sensitive species was determined through a five-mile radius query of the CNDDDB (2017) (Appendix A, Table 1). In addition, a search of the CNDDDB database was conducted for the Romoland USGS quadrangle and the surrounding eight quadrangles (See Appendix D). The CNDDDB ArcGIS database was utilized, together with ArcGIS software, to locate the previously recorded locations of sensitive plant and wildlife occurrences and determine the distance from the project site. Additionally, the Riverside County MSHCP was reviewed for additional information on the known occurrence of the species within Riverside County.

The MSHCP Online Conservation Report Generator and Riverside County Land Information System (RCLIS) databases were queried to determine the specific requirements for compliance with the policies of the MSHCP as described in Volume 1, Chapter 6 Implementation Structure (RCIP 2004), i.e. Reserve Assembly (6.1.1); Riparian/Riverine and Vernal Pools (6.1.2); Narrow Endemic Plants (6.1.3); Urban/Wildlands Interface (6.1.4); and Additional Survey Needs (6.2.3)

3.3 Plant Communities

Plant communities were mapped using aerial photography and were evaluated on the ground using pedestrian surveys by biologists from RCA Associates, Inc. on January 15, 2018. The plant communities within the project site were classified according to the California Department of Fish and Game (CDFG's) List of Terrestrial Natural Communities (2003) and descriptions provided in Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986) were also reviewed.

3.4 Riparian/Riverine Habitat and Jurisdictional Areas

Aerial photography was reviewed prior to conducting the field investigations on January 15, 2018. The aerial photographs were used to locate and inspect any potential natural drainage features and water bodies that may be considered riparian/riverine habitat or which may be under the jurisdiction of either the U.S. Army Corps of Engineers (USACE) and/or CDFW. In general, surface drainage features are typically indicated as blue-line streams on USGS maps, which are expected to exhibit evidence of water flow through the channel. Such areas are considered potentially riparian/riverine habitat and may be subject to State and federal regulatory authority as "Waters of the State" or "Waters" of the U.S. Under the MSHCP, riparian/riverine habitat is defined as lands which contain habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby freshwater source, or areas with freshwater flow during all or a portion of the year.

3.5 Field Investigation

RCA Associates, Inc. biologists Blake Curran and Parker Smith surveyed the project site on January 15, 2018, from about 0900 to 1700 p.m. Weather conditions during the survey included clear skies with temperatures from mid-60's to mid-70's °F. The entire project site was assessed to determine the extent of plant communities and to evaluate the presence of any areas which may have any jurisdictional features or may support riparian/riverine habitat. Parameters assessed included soil conditions, the presence of indicator species, slope, aspect, and hydrology.

3.6 Plants

Plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Samples of unusual and less familiar plants were collected and returned to the lab for identification using taxonomical guides. Soil maps were used to identify areas of the site which may contain suitable soils to support sensitive plant species. A list of all species observed on the project site was compiled from the survey data (Appendix A, Table 2). The taxonomic nomenclature used in this study follows the California Native Plant Society (CNPS 2018).

3.7 Wildlife

Wildlife species detected during the field surveys were identified by sight, calls, tracks, scat, or other signs and were recorded in a field notebook. Field guides were used to assist with identification of species during surveys and included the Sibley Field Guide to Birds of Western North America (2017) and Burt and Grossenheider (1980) for mammals. Although common names of wildlife species are fairly well standardized, scientific names are used in this report and are provided in Appendix A for reference.

As part of the field investigations, the project site was also evaluated for the presence of burrowing owls (*Athene cunicularis*). Field investigations for the species were conducted as per the survey requirements established for the MSHCP. A habitat assessment (Phase I) was conducted on January 15, 2018, to determine if the site supported habitat that might support the species. Burrowing owls use a variety of natural and modified habitats for nesting and foraging; therefore, the site would be classified as suitable habitat for owls. During the habitat assessment, transects were walked throughout the property to identify the presence of owl habitat. Given the presence of suitable habitat for the species, additional surveys (Phase II) will be performed to determine if any suitable burrows and/or burrowing owls were present on the project site. The Phase II requires 4 focused surveys, as well as burrow survey which can be done concurrently as the first focused survey. These surveys are required to be on separate days separated by a reasonable amount of time, and they must be conducted during BUOW breeding season (March 1st to August 31st). During the Phase II surveys, 30-meter transects were walked in such a manner as to provide 100 percent coverage of the ground surface. Surveys were conducted in adjacent areas to the south and west; however, no surveys were performed in areas to the east due to the presence of major

road Haun Rd. and to the north, there are residential communities. The zone of influence will be visually inspected for burrowing owl presence with binoculars and spotting scopes. A burrowing owl pair was observed out on the site while performing the field surveys (Appendix A, Figure 12).

3.8 Regional Connectivity/Wildlife Habitat Linkages

The analysis of wildlife habitat linkages associated with the Study Area is based on information compiled from literature, including MSHCP-mapped habitat linkages (Figure 3-2, Schematic Cores and Linkages Map in the MSHCP [2004]); analysis of aerial photographs; and direct observations (including sign, tracks and physical movement barriers, including recent development) made in the field during the reconnaissance survey. This information was crucial to assessing the relationship of the project site to large open space areas in the immediate vicinity. The discussions in this report are intended to focus on wildlife movement associated with the property and the immediate vicinity.

Wildlife habitat linkages mitigate the effects of habitat fragmentation by (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from natural disasters, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983, Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989).

Wildlife linkages are landscape features that connect and link habitat patches or habitat cores with each other. They serve a similar purpose in that they are areas that allow for animal movement, but they may not have all the resources a particular species needs to complete its life cycle.

SECTION 4: EXISTING CONDITIONS

4.1 Environmental Setting

The property site has been disturbed by past human activities over the last several decades due to past agricultural activities (hay production), and the site shows signs of recent mowing and plowing (Figures 3).

The project site is relatively flat with an elevation of about 1,490 feet (MSL). The project slopes primarily from west to east. The project site is located within an area of the City of Menifee that has been developed or disturbed over the last few decades. Existing single-family dwelling border the site along its western boundary. To the east, the property is bordered by a major roadway. The area to the north consists of a residential community, while to the south a contractor's equipment yard bordered the property. OHV trails and numerous debris piles (i.e., illegal dumping) are located onsite.

4.2 Soils

Figure 7 represents soils that are mapped within the project site and zone of influence (ZOI) (USDA, 1971). The soils of the project site are composed of Yokohl loam (52.4%), Honcut sandy loam (20.8%), Las Posas loam eroded (10.0%), Las Posas loam (6.2%), Cajalco fine sandy loam (5.9%), and Wyman loam (4.7%). Each of the sandy loam series are well drained and have moderately rapid permeability. The soil series onsite are not included in the MSHCP sensitive soil types (MSHCP 2004, Figure 2-4) and are not considered hydric per the U.S. Department of Agriculture (USDA) National List of Hydric Soils (USDA, 2018).

4.3 Plant Communities

The project sites consist of two different plant communities, labeled by the MSHCP database (2012). The majority of the site supports agricultural land which was used to grow hay. Vegetation observed is somewhat limited and includes brome grasses (*Bromus*, sp.), lamb's quarters (*Chenopodium album*), heliotrope (*Heliotropium* sp.), dove weed (*Eremocarpus setigerus*), and goldfields (*Lastenia California*). An intermittent blue-line channel bisects the southern portion of the site and supports a few riparian plant species such as seep willow (*Baccharis emoryi*), red-

osier dogwood (*Cornus stolonifera*), cottonwood (*Populus angustifolia*), and arroyo willow (*Salix lasiolepis*). Compendium of all plant species observed during January 15, 2018, are presented in Table 2 (Appendix A).

4.4 Jurisdictional Waters

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the United States, and the State of California also regulates waters of the State and streambeds under the prevue of regional water quality boards and CDFW jurisdiction. These waters include wetlands and non-wetland bodies of water that meet specific criteria. An intermittent blue-line channel does bisect the southeastern corner of the site and connects downstream with a larger stream channel which supports riparian habitat (Figures 2 and 5). Water flows through the on-site channel in a northerly direction and has a hydrological connection with downstream aquatic resources. Based on the results of the field investigations and the initial analysis, the channel will be considered jurisdictional. Therefore, a DBESP will be prepared for the project to fully analyze the intermittent channel and the potential impacts which will occur to the on-site channel and the downstream aquatic habitat. In addition, a “Notification of Lake or Streambed Alteration” will be submitted to CDFW and a 1600 Permit will be prepared for the project. USCOE will also be contacted regarding the potential need for a Section 404 permit. A 401 Water Quality permit is also being prepare and submitted.

4.5 Nesting Birds

The project site contains some suitable nesting habitat for avian species. Nesting birds are protected under section 3503 of the CDFW code and/or the Migratory Bird Treaty Act (MBTA). A few common bird species were observed within the project area during the survey with American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), western meadowlark (*Sturnella neglecta*), Anna’s hummingbird (*Calypte anna*), western kingbird (*Tyrannus verticalis*), and American kestrel (*Falco sparverius*). All bird species observed are included in the faunal compendium in Appendix A, Table 3. As noted in Section 3.7, the site does support habitat which could potentially be utilized by burrowing owls. A burrowing owl and two active burrows were observed during the field investigations (Appendix A, Figure 10). A BUOW focused survey will

be conducted and the Phase III report is being prepared and will be submitted under a separate cover.

4.6 Multiple Species Habitat Conservation Plan (MSHCP)

The project site is within APNs 360-350-006, 360-350-011, and 360-350-017 in the City of Menifee in Riverside County, California. The project site is located within the MSHCP Additional Survey Areas for Burrowing Owl (Appendix A, Figure 8).

4.7 Federal and State Listed Species

There are thirty-nine special status wildlife species which have been documented in the region. Of these species, only a few have occasionally been observed in the surrounding area of the property and a burrowing owl has inhabited the site.

Coastal California Gnatcatcher: Coastal California gnatcatchers were documented in the region (Occurrence # 736, Romoland quad, California Quad, CNNDDB, 2018). The California gnatcatcher was listed by the USFWS as a threatened species pursuant to the Federal Endangered Species Act (ESA) on March 25, 1993. The ESA prohibits anyone from "taking" a listed species. Take includes, but is not limited to, harming, harassing or killing individuals of a listed species as well as the destruction of habitat occupied by listed species.

Riverside fairy shrimp: Riverside fairy shrimp have been documented in the region (Occurrence #35, Romoland, California Quad, 2018), with the closed observation 1.5-mile southeast of the property. The most recent documentation was in 2006 (CNDDDB, 2018). The Riverside fairy shrimp is not likely to inhabit the site due to no suitable habitat for the species. The site does not support suitable habitat for fairy shrimp for the soils on-site is make up of sandy loam soil which does not hold water long enough. Other non-vernal pool features such as depressions, drainages, and road ruts were examined for suitable fairy shrimp habitat; it is RCA Associates opinion that they lack the suitable habitat required for fairy shrimp.

4.8 Wildlife Species of Special Concern and Special Status Plants

Burrowing Owl: There are owl colonies that have been observed in the region (Occurrence #762, Romoland quad, California quad, 2018) with the nearest observation about 0.1 miles west of the site. This sighting was recorded in 2004 (CNDDDB, 2018). Previously noted, one burrowing owl was observed during the field investigation on January 15, 2018. The owl was observed outside of its burrow in the northwest portion of the site (Appendix A, Figure 10). There are numerous other burrows observed on site that showed signs of owl activity (e.g., casting, whitewash, etc.), and more than one owl may be present on the site. A breeding season survey will be conducted and report will be prepared under a separate cover.

Long-spined spineflower: Long-spined spineflower has been observed in the region (Occurrence #57, Romoland quad, California Quad, 2018), with the most recent documented sitting 0.5 miles west of the property (CNDDDB, 2018). However, no spineflower was observed during the extensive field investigations conducted throughout the site.

Smooth tarplant: Smooth tarplant has been observed in the region (Occurrence #108, Romoland quad, California Quad, 2018), with the most recent documented sitting 1 mile south of the property (CNDDDB, 2018). However, no tarplants was observed during the extensive field investigations conducted throughout the site.

Parry's spineflower: Parry's spineflowers were identified in the region (Occurrence # 118, Romoland quad, California Quad, 2018). This documentation was recorded in 2010 (CNDDDB, 2018), approximately 1.5 miles southwest of the property. This particular plant species is found primarily in chaparral and cismontane woodlands but may also occur in coastal sage scrub and grassland habitat; however, no spineflower was observed during the extensive field investigations conducted throughout the site.

SECTION 5: WESTERN RIVERSIDE COUNTY MSHCP CONSISTENCY ANALYSIS

5.1 MSHCP Requirements

The purpose of this discussion is to provide an analysis of the proposed project with respect to compliance with biological aspects of the Western Riverside County MSHCP. Specifically, this analysis evaluates the proposed project with respect to the project's compliance with MSHCP Reserve Assembly Requirements (Section 6.1.1); Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2); Protection of Narrow Endemic Plant Species (Section 6.1.3); Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4), and Additional Survey Needs and Procedures (Section 6.3.2)

5.2 Project Relationship to Reserve Assembly

The proposed project site is located within the Sun City/Menifee Area Plan of the MSHCP and is not located within any Criteria Cells (Figure 4). The MSHCP established habitat assessment requirements for certain species of plants, birds, mammals, and amphibians. The MSHCP Conservation Areas (3.2.2) may be described in terms of bioregions, vegetation, soils, patch size, and edge affected lands. In regards to bioregions, the site is located in a developed area of the City of Menifee and is not within an area of public/quasi-public conserved lands or within any pre-existing conservation agreements, as depicted in Figure 3-1 of the MSHCP. In addition, the site is not located within any American Indian Lands.

5.3 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

None of the riparian/riverine species listed in Section 6.1.2 of the MSHCP were found within the project site nor are any of the species expected to inhabit the site given the lack of abundance of any suitable habitat.

There are no features on the site that meet the MSHCP definition of vernal pools. In order to be considered a vernal pool under the MSHCP, a feature must be a wetland (based on the presence of hydrophytic vegetation, hydric soil, and wetland hydrology). The feature must also have a natural origin. Although there are several depressions on the site that pond water; none meets wetland criteria and all are artificial in nature. In addition, no vernal pools were observed during the field

investigations on the project site; consequently, the site does not support suitable habitat for fairy shrimp. The lack of suitable habitat for fairy shrimp is due to the soil that is made up of sandy loam soil which cannot hold water long enough. Thus, the site is also unable to support any sensitive vegetation that is associated with wetland features. The topography of the site is such so that water is unable to pool. Other non-vernal pool features such as depressions, drainages, and road ruts were examined for suitable fairy shrimp habitat; it is RCA Associates opinion that they lack the suitable habitat required for fairy shrimp

5.4 Jurisdictional Waters

An intermittent blue-line channel does bisect the southeastern corner of the site and connects downstream with a larger stream channel which supports riparian habitat (Figures 3 and 6). Water flows through the on-site channel in a northerly direction and has a hydrological connection with downstream aquatic resources. Based on the results of the field investigations and the initial analysis, the channel will be considered jurisdictional. Therefore, a DBESP will be prepared for the project to fully analyze the intermittent channel and the potential impacts which will occur to the on-site channel and the downstream aquatic habitat. In addition, a “Notification of Lake or Streambed Alteration” will be submitted to CDFW and a 1600 Permit will be prepared for the project. USCOE will also be contacted regarding the potential need for a Section 404 permit.

5.5 Protection of Narrow Endemic Plant Species

The project site is not located within the MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA); therefore, focused plant surveys were not conducted for species identified under Section 6.1.3 of the MSHCP. In addition, no rare plants were observed during the January 2018; although, many plants are not readily identifiable in January. In addition, the property has been disturbed by past human activities and are unlikely to support any rare plants at the present time. No surveys are required and the project is consistent with the Narrow Endemic Plant Species requirements of the MSHCP

5.6 Guidelines Pertaining to the Urban/Wildland Interface

The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. The project site does not occur within the MSHCP Criteria Area and is not located adjacent to any Criteria Cell describing areas of conservation. While the site is not immediately adjacent to the Conservation Areas, it is connected to a small PQP Conservation Area to the north via the blue line stream which runs through the project site. The project is not expected to result in significant indirect impacts to special-status biological resources. Implementation of the Best Management Practices (BMPs) in Appendix C of the MSHCP would ensure that the project is in compliance with the MSHCP.

- **Drainage:** The project shall not create additional flow offsite. Measures should be taken to assure that the project storm water discharge are no greater in volume and velocity than current undeveloped conditions and that the water leaving the site complies with all applicable water quality standards.
- **Toxics:** In concert with drainage requirements, the project is subject to Riverside County Water Quality Management Plan (WQMP) for Urban Runoff, Santa Ana Region, adopted September 17, 2004 and the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharge Associated with Construction Activity (General Permit). Implementation of both the WQMP and the general permit would reduce potential impacts of toxics to the MSHCP conservation area to a level of less than significant.
- **Lighting:** Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated into project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.
- **Noise:** The project is already subject to fairly high ambient noise level due to street traffic. The completed project would not be subject to MSHCP Conservation Area noise above the existing ambient noise level. The construction site should be far enough away from the MSHCP Conservation Area that temporary construction-related noise impacts would not negatively impact resources within the Conservation Area.

- Invasives: No invasive species from MSHCP Table 6.2 shall be included in any landscaping for the project.
- Barriers: As needed, the project should include the incorporation of rocks/boulders, fencing, walls, signage, and or other appropriate measures to minimize unauthorized public access, domestic animal predation, and illegal trespass and dumping into the MSHCP Conservation Area. Any barriers shall be outside of the MSHCP Conservation Area.
- Grading: Project related grading would be outside of the project conservation area and the MSHCP Conservation Area.

5.7 Wildlife Habitat Linkage

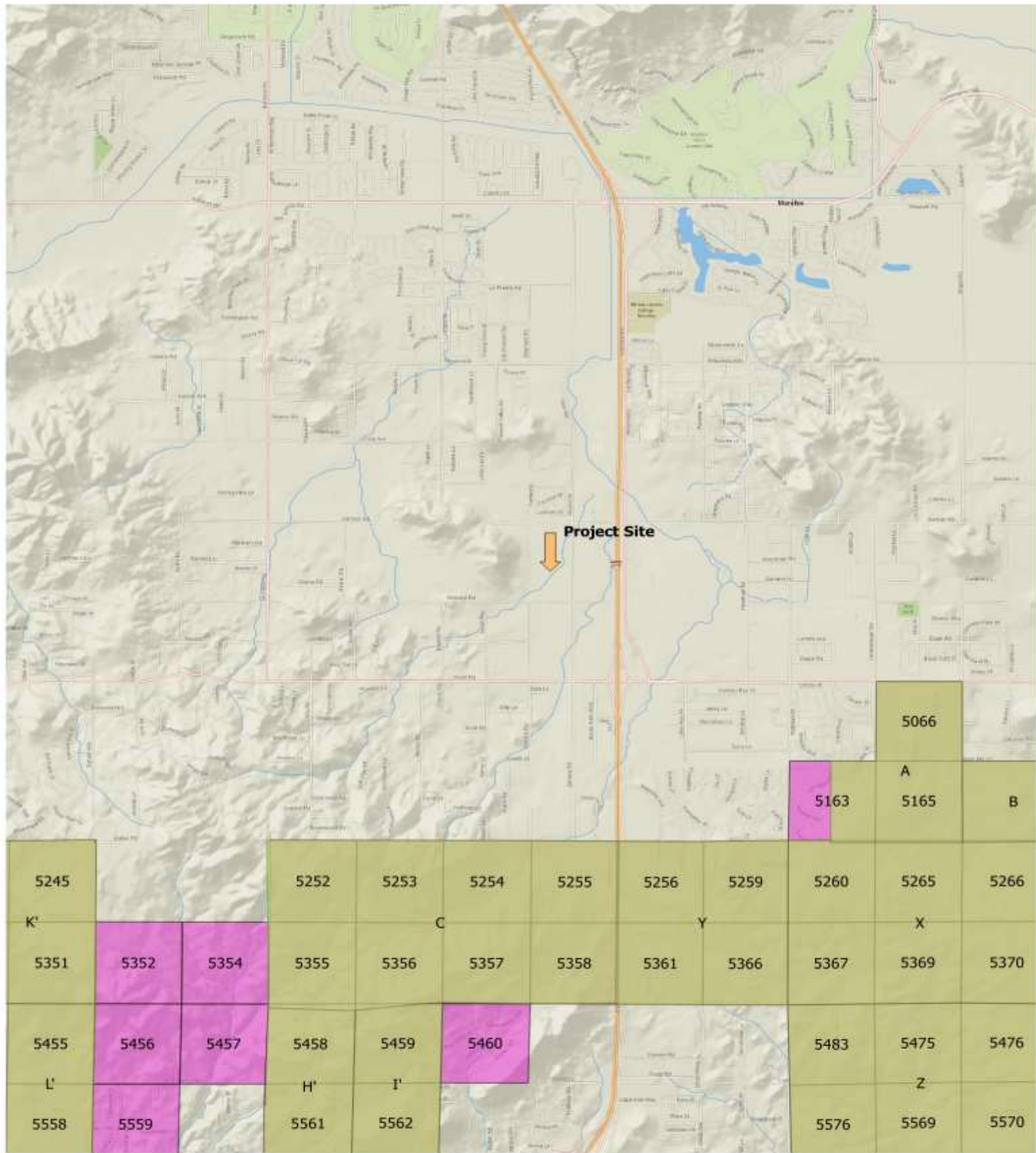
According to the MSHCP (Figure 3-2: Schematic Cores and Linkages Map), there are no documented terrestrial migration corridors in the vicinity of the project site. Furthermore, the project site is within a moderately developed portion of the City of Menifee and it is not anticipated that the site is used for migration, movement or dispersal of wildlife.

5.8 Additional Survey Needs and Procedures

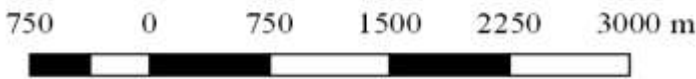
The project site is located within the MSHCP Additional Survey Areas for Burrowing Owl; however, no survey will be required for Amphibians, Criteria Area Species, Mammals, or Special Linkage Areas. A burrowing owl survey is required and the project is consistent with the Additional Survey Needs and Procedures of the MSHCP.

Figure 4

Proximity to Cell Groups & Criteria Cells of the Riverside MSHCP

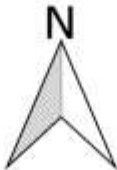


Credit: Google Imagery 2017, MSHCP, ESRI



Legend

- CellGroups
- CriteriaCells



SECTION 6: PROJECT IMPACTS AND MITIGATION

6.1 Impacts Per Plant Community

The proposed project will impact approximately 59-acres of vegetation, most of which is agriculture land that was used to grow hay. Only a few native plant species would be affected as per MSHCP Data Based (2018). Loss of the existing vegetation would also affect some wildlife species; although, the number of species that would be impacted is relatively low.

6.2 Nesting Birds

There is potential for various nesting birds to utilize the shrubs within the project site. However, potential impacts to nesting birds can be eliminated or significantly reduced if vegetation suitable for nesting birds is removed outside of the nesting bird season. The nesting season for birds typically occurs from February 15th to August 31st.

Grading and vegetation removal activities should be conducted outside of the nesting bird season, which is typically from about the end of February through August 31st. If grading and clearing activities must occur during the nesting season, a nesting bird survey should be conducted within seven days prior to the start of any ground disturbing activities to determine if any nesting birds occur within the project site. If nesting birds are not found within the project site, no further actions will be required. If nesting birds are observed on site, no impacts shall occur within 250 feet (500 feet for raptors) of any active nests. Also, construction activity may only occur within 250 feet of an active nest at the discretion of the project's biological monitor.

6.3 Special Status Species

A burrowing owl (Species of Special Concern) was observed on the site during the field investigation, January 15, 2018. One adult owl was observed outside of its burrow at approximately 9:30 am in the northwest corner of the property. As per the CDFW protocol, a nesting season survey will be conducted in order to assess the total population of owl's present on the property. Nesting season surveys will be conducted as early as March 15th and will include four separate site visits. Owls observed during the nesting season survey will be documented and passive relocation may be necessary, under the direction of CDFW. A burrowing focused survey

is being conducted and a report will be prepared under a separate cover as per *The California Burrowing Owl Consortium, 1993*.

If burrowing owls have colonized the site prior to initiation of site development, the project proponent should inform the Regional Conservation Authority (RCA) and the wildlife agencies. In addition, the project proponent would need to coordinate further with RCA and the wildlife agencies regarding the next steps, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan prior to initiating ground disturbance.

The western spadefoot toad could potentially inhabit the intermittent channel; although, no toads were observed during the field investigations. Based on the presence of burrowing owls and the possible presence of western spadefoot toads, the following additional surveys and mitigations are recommended as per CDFW requirements.

1. Conduct pre-construction surveys for the burrowing owl to determine if the species has remained on to the site since the April 2018 surveys.
2. The biological monitor will be present during vegetation clearing, grading, and construction, to monitor occupied burrowing owl burrows and any construction-related impacts.
3. A qualified biologist will conduct any necessary burrowing owl passive relocation that may be required to avoid project effects to burrowing owls.
4. Conduct pre-construction surveys for the western spadefoot toad to determine if the species is present on the site.
5. The site is located within the known distribution of the listed Stephens kangaroo rat and the species could potentially inhabit the site. Therefore, mitigation fees will be required as per the MSHCP.

6. Contact CDFW regarding conducting focused surveys for sensitive plant species known to occur in the region. If required, conduct focused surveys for sensitive plant species as per the survey requirements of the California Naïve Plant Society.

6.4 Habitat Fragmentation and Wildlife Movement

As previously noted, the property is located in an area where habitat has been fragmented due to past human activities, agricultural activities, and on-going developments in the surrounding region. Therefore, the incremental loss of wildlife habitat associated with the proposed development is expected to be negligible. There are no major wildlife corridors present on the site and the proposed project will not impede regional wildlife movement or impact any MSHCP-designated corridors or habitat linkages. Therefore, the proposed project is not expected to have any substantial impacts in regard to habitat fragmentation and regional wildlife movement.

6.5 Critical and Sensitive Habitat and Jurisdictional Waters

The proposed project will not generate any impacts to vernal pools; although, the project will impact the small intermittent blue-line channel in the southeast portion of the property (Figures 2 and 4). The proponent is proposing to install two vehicle bridges and a pedestrian bridge to cross the channel that will have an impact of 0.17-acres. As previously discussed, a DBESP analysis is being performed and will be submitted under separate cover. A 1600 permit will be submitted to CDFW as per State requirements and USCOE will also be contacted to determine if a Section 404 permit will be required.

6.6 Local Policies and Ordinances

The proposed project will not conflict with or have any adverse impact on any local policies or ordinances.

SECTION 7: CONCLUSIONS

A special status wildlife species, burrowing owl, was observed on the property during the January 2018, field investigations. The property does contain riverine/riparian habitat; however, there are no vernal pools or Urban/Wildlands interface areas on site. The following recommended actions will ensure that the project is consistent with the MSHCP:

- Preconstruction nesting bird survey if vegetation removal is conducted between February and August.
- A pre-construction survey for burrowing owls is conducted 30 days prior to the start of any ground disturbance activities to ensure no burrowing owls have moved onto the site since the BUOW focused survey completion on April 2018.
- Conduct a breeding season survey for the burrowing owl given the time of year the Phase II survey was conducted.
- The biological monitor will be present during vegetation clearing, grading, and construction, to monitor occupied burrowing owl burrows and any construction-related impacts.

If any sensitive species are observed on the property during future activities, CDFW and USFWS (as applicable) should be contacted to discuss specific mitigation measures which may be required for the individual species. CDFW and USFWS are the only agencies which can grant authorization for the “take” of any sensitive species and can approve the implementation of any applicable mitigation measures.

SECTION 8: 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. Fieldwork conducted for this assessment was performed by me or other biologists under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: 04/11/2018 Signed: Blake Curran
Report Author

Work Performed By: Randall Arnold
Principal Biologist

Work Performed By: Parker Smith
Biologist Field Technician

Work Performed By: Blake Curran
Environmental Biologist

SECTION 9: REFERENCES

- American Ornithologists' Union. 1989. Thirty-Seventh Supplement to the American Ornithologists' Union Checklist of North American Birds. *Auk*, 106:532-538.
- Baldwin, Bruce G, et. al.
2002. *The Jepson Desert Manual. Vascular Plants of Southeastern California.* University of California Press, Berkeley, CA.
- Barbour, M.G. and J. Major, editors. 1977. *Terrestrial Vegetation of California.* John Wiley and Sons, New York.
- Blair, W.F. 1968. *Vertebrates of the United States.* McGraw-Hill, Inc. New York. 616 pp
- California Burrowing Owl Consortium
1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines*
- California Department of Fish and Game
1990. *California Wildlife: Volume 1 (Amphibians and Reptiles), Volume II (Birds), and Volume III (Mammals).*
- California Department of Fish and Game
1995. *Staff Report on Burrowing Owl Mitigation.*
- California Department of Fish and Game
September 7, 2012. *Staff Report on Burrowing Owl Mitigation.* 34 pp.
- California Department of Fish and Game
2017. *Rarefind 3 Natural Diversity Database. Habitat and Data Analysis Branch.* Sacramento, CA.
- California Native Plant Society
2001. *Inventory of Rare and Endangered Plants of California (sixth edition).* Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA x + 388 pp.
- Dudek & Associates. 2003. *Western Riverside County Multiple Species Habitat Conservation Plan.*
- Ehrlich, P., Dobkin., Wheye, D.
Birder's Handbook. A Field Guide to the Natural History of North American Birds. Simon & Schuster Building Rockefeller Center 1230 Avenue of the Americas. New York, New York 10020.
- Grenfell, W.E. Jr. and W.F. Laudenslayer, Jr. editors. 1983. *Distribution of California*

Birds. California Wildlife/Habitat Relationship Program. Publication No. 4
California Department of Fish and Game, Sacramento, and USDA Forest Service.

Hickman, James C.

1996. The Jepson Manual Higher Plants of California. University of California Press.
Berkeley, CA. 3rd Edition.

Holland, R.

1986. A Description of the Terrestrial Natural Communities of California.
California Department of Fish and Game, October.

Jaeger, Edmund C.

1969. Desert Wild Flowers. Stanford University Press, Stanford, California.
321 pp.

Kays, R. W. & Wilson, D. E.

2002. Mammals of North America. Princeton University Press, Princeton, New Jersey.

Knecht, A.

1971. Soil survey of western Riverside Area, California. For USDA, Natural
Resources Conservation Service

Michael Brandon Associates. December 17, 2012. Determination of Biological
Equivalent or Superior Preservation (DBESP) Analysis for Riparian/Riverine Habitat.
Amberwood Project, City of Wildomar, Riverside County, California 32 pp.

Mock, P. J., B. L. Jones, and J. Konency.

1990. California Gnatcatcher Survey Guidelines.
ERC Environmental and Energy Service Company, San Diego, California.

Munz, Philip A.

1974. A Flora of Southern California. University of California Press, Berkeley,
California. 1086 pp.

Sibley, David Allen.

2000. National Audubon Society. The Sibley Guide to Birds. Alfred A Knopf, Inc.

Stebbins, Robert C.

A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Company.
2003.

U.S. Fish and Wildlife Service

2010. Desert Tortoise Survey Protocol.

United States Department of Agriculture, Soil Conservation Service.

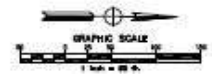
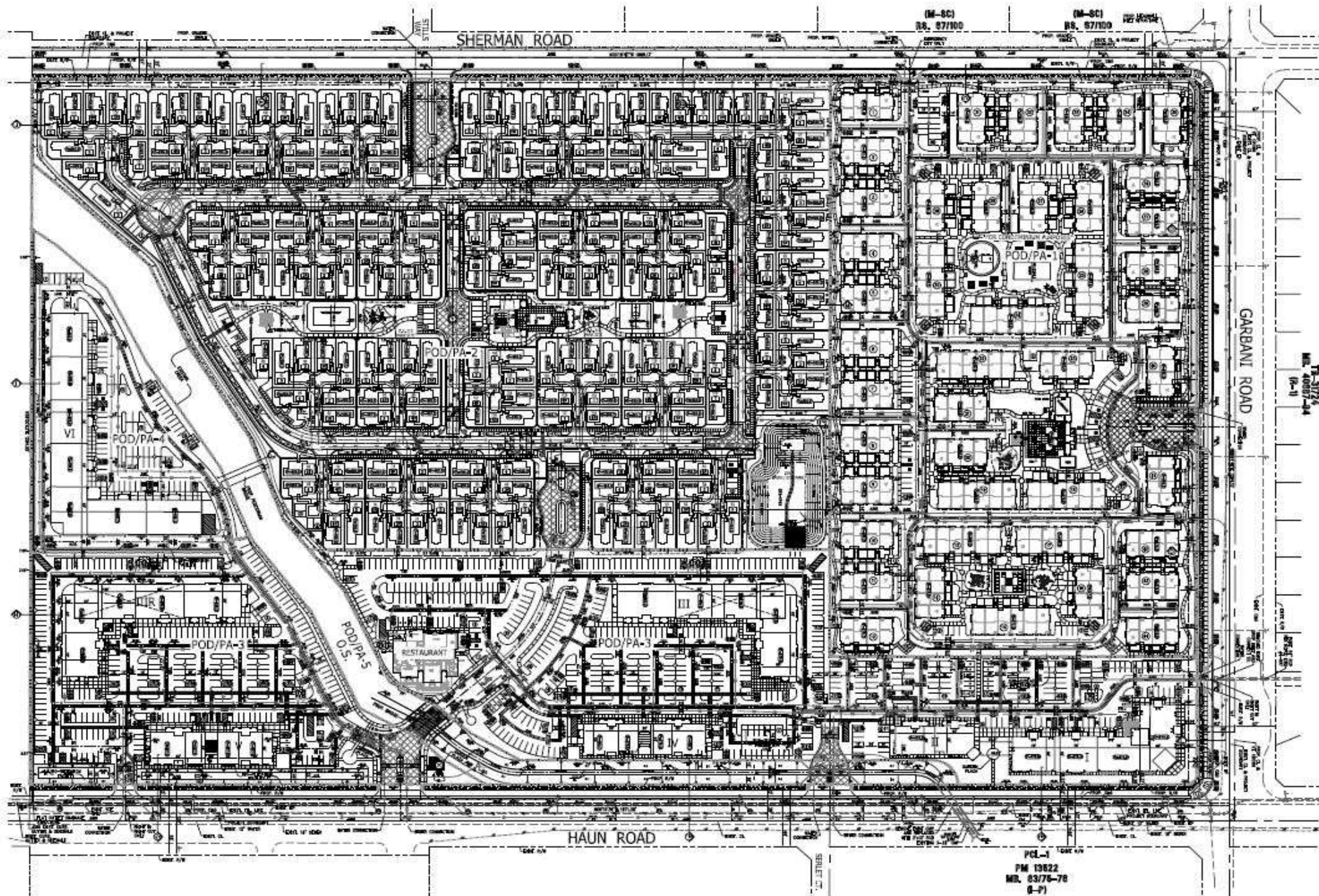
1991. Hydric Soils of the United States, 3rd Edition, Miscellaneous Publication Number

1491. National Technical Committee for Hydric Soils.
- Whitaker, John O.
1980. The Audubon Society Field Guide to North American Mammals. Alfred A Knopf, Inc.
- Williams, D. F.
1986. Mammal Species of Special Concern in California, Timton Kangaroo Rat. California Department of Fish and Game.
- Zeiner, D. C., W., F. Laudenslayer, Jr., K. E. Mayer, M. White. Editors.
1990. California's Wildlife. Volume 2. Birds. State of California, Department of Fish and Game. Sacramento, California. 731 pp.

Appendix A
Figures and Tables

Figure 5

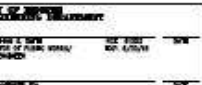
Site Plan



NO.	REVISION	DATE	BY
1	ISSUED FOR PERMIT	04/11/2017	XXX
2	REVISED TO SHOW CHANGES	04/11/2017	XXX
3	REVISED TO SHOW CHANGES	04/11/2017	XXX
4	REVISED TO SHOW CHANGES	04/11/2017	XXX
5	REVISED TO SHOW CHANGES	04/11/2017	XXX
6	REVISED TO SHOW CHANGES	04/11/2017	XXX
7	REVISED TO SHOW CHANGES	04/11/2017	XXX
8	REVISED TO SHOW CHANGES	04/11/2017	XXX
9	REVISED TO SHOW CHANGES	04/11/2017	XXX
10	REVISED TO SHOW CHANGES	04/11/2017	XXX

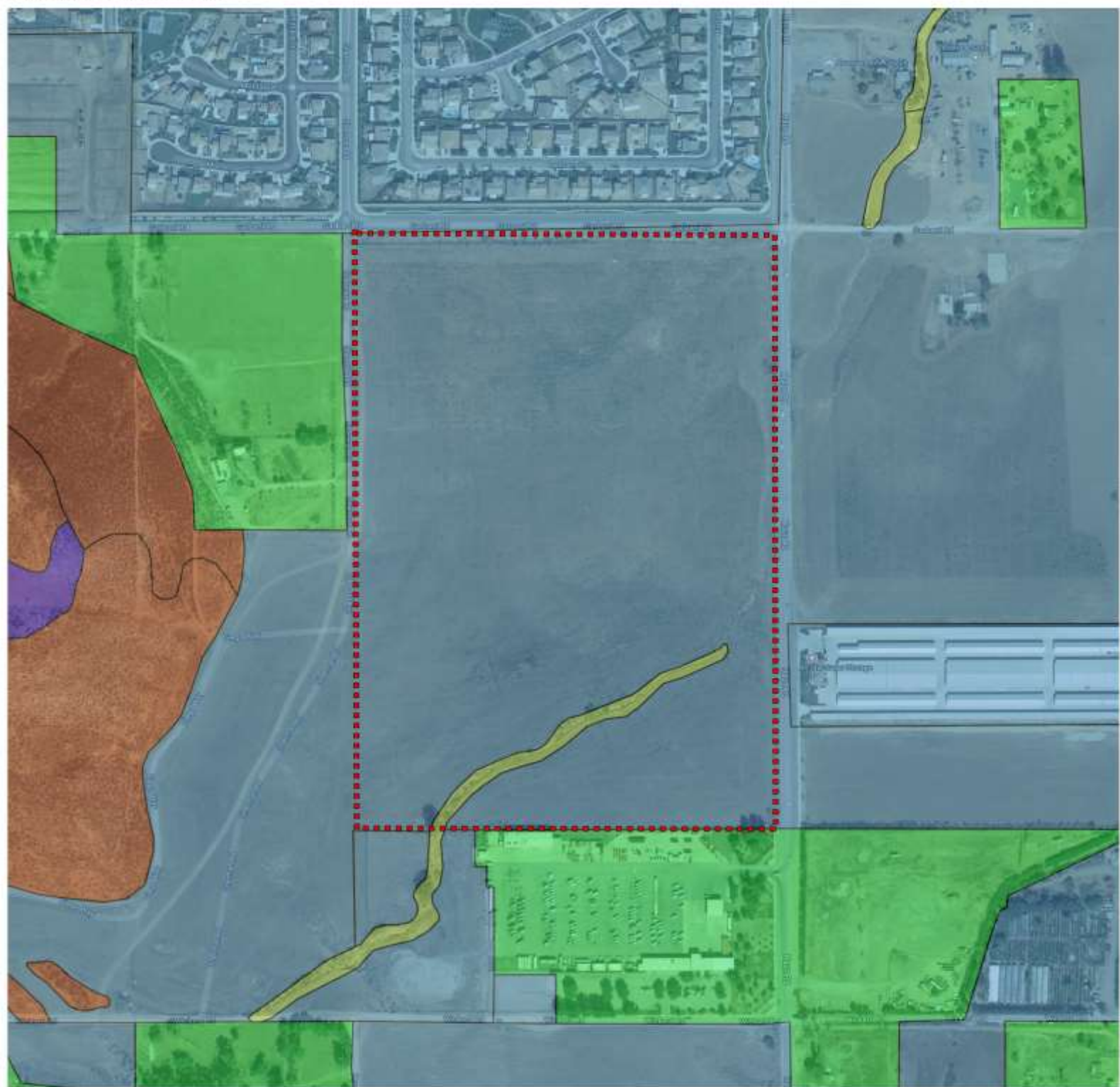


DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX
DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX
DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX
DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX
DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX
DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX
DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX
DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX
DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX
DATE: 04/11/2017	TIME: 10:00 AM	BY: XXX

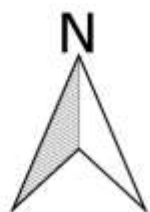


CITY OF MENFEE
DEVELOPMENT PLOT PLAN NO. 2017-167
MILL CREEK PROMENADE

Figure 6
Vegetation Community Map



Credit: Google Imagery 2017, MSHCP



Legend

..... Project Border

Vegetation

..... Agricultural Land

..... Coastal Sage Scrub

..... Developed/Disturbed Land

..... Grassland

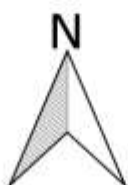
..... Riparian Scrub, Woodland, Forest

Figure 7

Soil Map



Credit: Google Imagery 2017, USDA



--- Project Border

Soil

- CaC2 - Cajalco fine sandy loam
- HnC - Honocut sandy loam
- LaC2 - Las Posas loam eroded
- WyC2 - Wyman loam
- LaC - Las Posas loam
- YbC - Yokohl loam

Figure 8

Riverside MSHCP Burrowing Owl Survey Area



Credit: Google Imagery 2017, MSHCP



..... Project Border
Burrowing Owl Survey Area

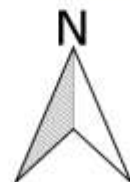
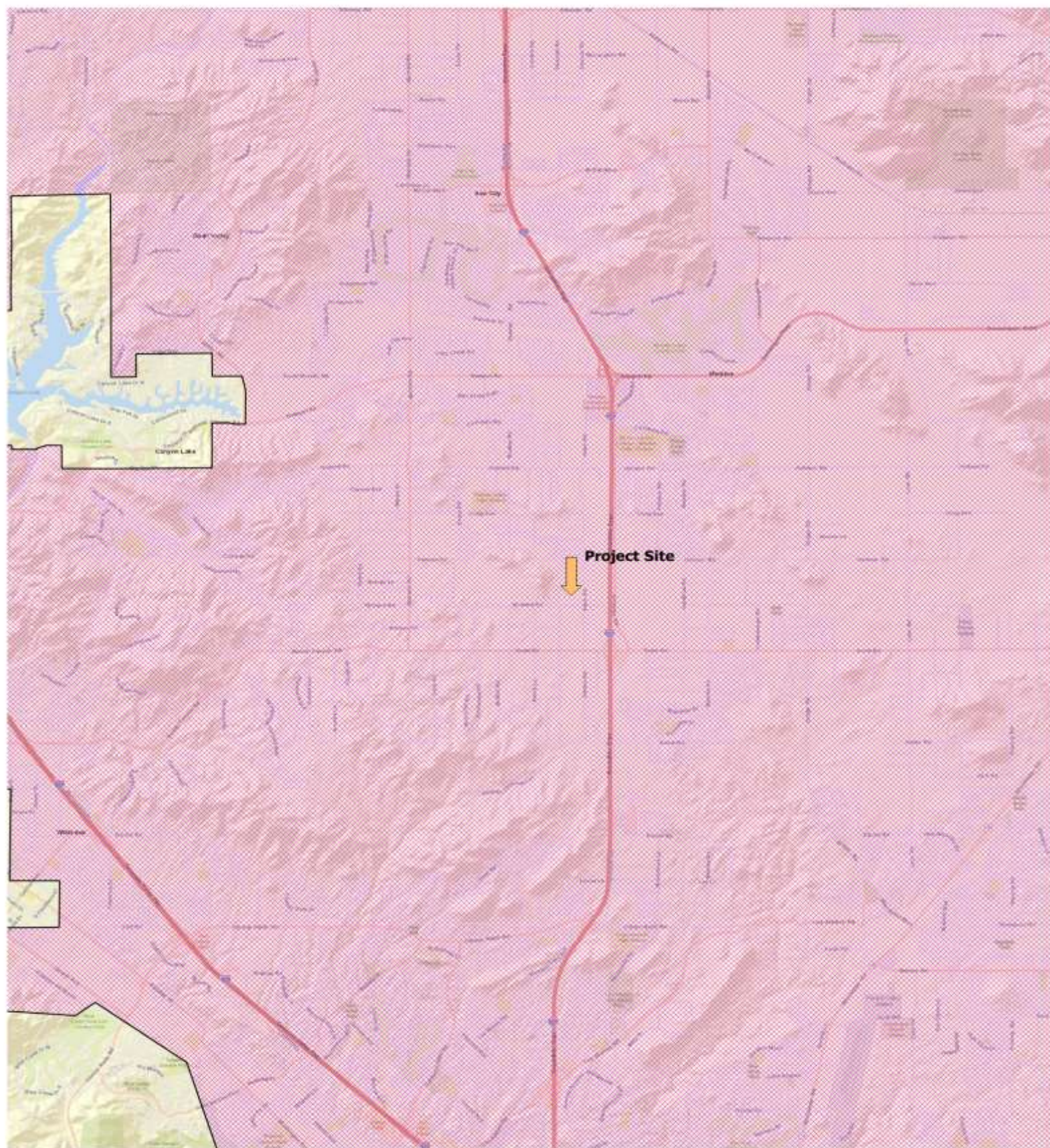


Figure 9

Stephen's Kangaroo Rat Plan and Fee Area



1 0 1 2 3 4 km



Project Site



Stephen's Kangaroo Rat Plan and Fee Area



Figure 10

Burrow Locations



75 0 75 150 m

Project Border

Burrows

Active Burrow

Potential Burrow

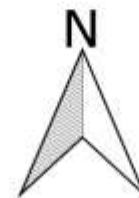
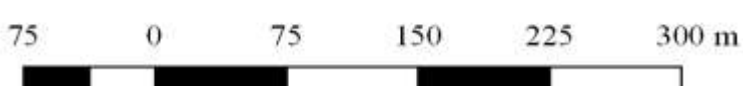


Figure 11

Transects Walked



Legend

- Transects
- Project Border

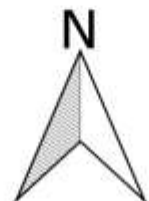


Figure 12

Burrows



Table 1: Special Status Species Within 5-Mile Radius of Project Site (CNDDB)

T = Threatened; E = Endangered; SSC = Species of special concern; CNDDB = California Natural Diversity Data Base

Name	Listing Status	Habitat Requirements	Potential to Occur
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	Fed: None State: None	Chaparral Coastal scrub Grassland	The site supports suitable habitat for the species.
California glossy snake (<i>Arizona elegans occidentalis</i>)	Fed: None State: None	Range of scrub and grassland habitats	The site supports suitable habitat for the species.
Bell's sage sparrow (<i>Artemisiospiza belli belli</i>)	Fed: None State: None	Chaparral Coastal scrub	The site does not support suitable habitat for the species.
Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	Fed: None State: None	Chaparral Cismontane woodland Coastal scrub	The site does not support suitable habitat for the species.
Smooth tarplant <i>Centromadia pungens ssp. laevis</i>	Fed: None State: None	Chenopod scrub Meadow & seep Riparian woodland Valley & foothill grassland Wetland	The site does not support suitable habitat for the species.
Parry's spineflower (<i>Chorizanthe parryi var. parryi</i>)	Fed: None State: None	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	The site supports suitable habitat for the species.
Long-spined spineflower (<i>Chorizanthe polygonoides var. longispina</i>)	Fed: None State: None	Chaparral Coastal scrub Meadow & seep Valley & foothill grasslands	The site supports suitable habitat for the species.
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	Fed: E State: T	Coastal scrub Valley & foothill grassland	The site supports marginal habitat for the species.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	Fed: None State: None	Coastal scrub	The site does not support suitable habitat for the species.
California Orcutt grass (<i>Orcuttia californica</i>)	Fed: E State: E	Vernal pool Wetland	The site does not support suitable habitat for the species.
Coast horned lizard (<i>Phrynosoma blainvillii</i>)	Fed: None State: None	Chaparral Cismontane woodland Coastal bluff scrub Coastal scrub	The site does not support suitable habitat for the species.
Coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	Fed: T State: None	Coastal bluff scrub Coastal scrub	The site does not support suitable habitat for the species.
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	Fed: E State: None	Coastal scrub Valley & foothill grassland Vernal pool Wetland	The site does not support suitable habitat for the species.
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	Fed: E State: None	Chaparral Coastal scrub	The site does not support suitable habitat for the species.

Coulter's goldfields (<i>Lasthenia glabrata ssp. coulteri</i>)	Fed: None State: None	Alkali playa Marsh & swamp Salt marsh Vernal pool	The site does not support suitable habitat for the species.
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	Fed: None State: None	Chaparral Coastal scrub	The site does not support suitable habitat for the species.
California horned lark (<i>Eremophila alpestris actia</i>)	Fed: None State: None	Marine intertidal & splash zone communities Meadow & seep	The site does not support suitable habitat for the species.
Red-diamond rattlesnake (<i>Crotalus ruber</i>)	Fed: None State: None	Chaparral Mojavean desert scrub Sonoran Desert scrub	The site does not support suitable habitat for the species.
Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	Fed: None State: None	Deserts and semi-arid areas with sparse vegetation and open areas	The site supports suitable habitat for the species.
Western mastiff bat (<i>Eumops perotis californicus</i>)	Fed: None State: None	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	The site supports suitable habitat for the species.
Western spadefoot (<i>Spea hammondi</i>)	Fed: None State: None	Cismontane woodland Coastal scrub Valley & foothill grassland	The site supports suitable habitat for the species.
Western yellow bat (<i>Lasiurus xanthinus</i>)	Fed: None State: None	Desert wash	The site does not support suitable habitat for the species.
Senile tiger beetle (<i>Cicindela senilis frosti</i>)	Fed: None State: None	Mud shore/flats Wetland	The site does not support suitable habitat for the species.
Burrowing owl (<i>Athene cunicularia</i>)	Fed: None State: None	Coastal prairie Coastal scrub Great Basin grassland Mojavean desert scrub Valley & foothill grassland	The site supports suitable habitat for the species. Species observed during Phase I and Phase II surveys.
Ferruginous hawk (<i>Buteo regalis</i>)	Federal: None State: None	Native grassland, Great Basin scrub, juniper woodland	Suitable nesting habitat absent from site, may use site for foraging.
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Federal: D State: E	Ridges and cliffs usually near lakes and rivers.	Suitable habitat absents from the site. Not expected to occur on the site.
Loggerhead shrike (<i>Lanius ludovicianus</i>)	Fed: None State: None	Broadleaved upland forest Desert wash Joshua tree woodland Mojavean desert scrub	The site does not support suitable habitat for the species.
Crotch bumble bee (<i>Bombus crotchii</i>)	Fed: None State: None	Chaparral Cismontane woodland Coastal scrub	The site does not support suitable habitat for the species.
Spreading navarretia (<i>Navarretia fossalis</i>)	Fed: T State: None	Alkali playa Chenopod scrub Marsh & swamp	The site does not support suitable habitat for the species.
Palmer's grapplinghook (<i>Harpagonella palmeri</i>)	Fed: None State: None	Chaparral Coastal scrub Valley & foothill grassland	The site supports suitable habitat for the species.
Munz's onion (<i>Allium munzii</i>)	Fed: E State: T	Vernal pool areas 1,000-2,000 feet elevation.	Suitable habitat absent from the site. Not

			expected to occur on the site.
Intermediate mariposa-lily (<i>Calochortus weedii</i> var. <i>intermedius</i>)	Fed: None State: None	Coastal sage scrub and native grassland communities.	Suitable habitat absent from the site. Not expected to occur on the site.
Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	Fed: None State: None	Coastal sage scrub and chaparral communities.	Suitable habitat absent from the site. Not expected to occur on the site.
Round-leaved filaree (<i>California macrophylla</i>)	Fed: None State: None	Cismontane woodland Valley & foothill grassland	The site supports suitable habitat for the species.
Little mouseltail (<i>Myosurus minimus</i> ssp. <i>apus</i>)	Federal: None State: None	Valley & foothill grassland Vernal pool Wetland	The site supports suitable habitat for the species.
Southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	Fed: None State: None	Chenopod scrub	Suitable habitat absent from the site. Not expected to occur on the site.
Tricolored blackbird (<i>Agelaius tricolor</i>)	Federal: None State: None	Freshwater marshes, wetlands.	Suitable habitat absent from site. Not expected to occur on the site.

Table 2 - Plants observed on the site and known to occur in the area.

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, Inc.

Common Name	Scientific Name	Comments
Annuals		
Snakeweed	<i>Gutierrezia sarothrea</i>	Observed off-site
Telegraph weed	<i>Heterotheca gradifolia</i>	“
Bladderpod	<i>Isomeris aroborea</i>	“
Fiddleneck	<i>Amsinckia tessellate</i>	“
Black mustard	<i>Brassica nigra</i>	“
Plantain	<i>Plantago erecta</i>	“
Croton	<i>Croton californica</i>	“
Coyote melon	<i>Cucurbita foetidissima</i>	“
Pearly everlasting	<i>Gnaphalium californicum</i>	“
Phacelia	<i>Phacelia distans</i>	“
Lambs quarters	<i>Chenopodium californicum</i>	“
Centaurem	<i>Centaurea squarrosa</i>	“
Brome grass	<i>Bromus sp.</i>	On-site
Dove weed	<i>Eremocarpus setigerus</i>	“
Tobacco	<i>Nicotiana attenuata</i>	“
Lamb's quarters	<i>Chenopodium album</i>	“
Cottonwood	<i>Populus angustifolia</i>	“
Arroyo Willow	<i>(Salix lasiolepis</i>	“
Heliotrope	<i>Heliotropium sp.</i>	“
Erodium	<i>Erodium cicutarium</i>	“
Goldfields	<i>Lasthenia californica</i>	“
Russian thistle	<i>Salsola tragus</i>	“
Stephanomeria	<i>Stephanomeria sp.</i>	“
Seep willow	<i>Baccharis emoryi</i>	“
Mustard	<i>Brassica tourneforti</i>	“
Red-osier dogwood	<i>Cornus stolonifera</i>	“
Tamarisk	<i>Tamarix ramoissina</i>	“

Source: Munz, P.A. 1974. A Flora of Southern California. University of California Press. Berkeley, California. 1086 pp.

Table 3 - Wildlife observed on the site and those species expected to the area.

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, Inc.

Common Name	Scientific Name	Comments
Mammals		
Desert cottontail	<i>Sylvilagus auduboni</i>	Observed on-site
California ground squirrel	<i>Spermophilus beecheyi</i>	“
Coyote	<i>Canis latrans</i>	Scats observed on-site.
Deer mouse	<i>Peromyscus maniculatus</i>	May occur on-site.
California mouse	<i>P. californicus</i>	“
Botta's pocket gopher	<i>Thomomys bottae</i>	“
Birds		
Raven	<i>Corvus corax</i>	Observed on-site.
Crow	<i>C. brachyrhynchos</i>	“
American Kestrel	<i>Falco sparverius</i>	“
Burrowing Owl	<i>Athene cunicularia</i>	“
Western meadowlark	<i>Sturnella neglecta</i>	“
Western kingbird	<i>Tyrannus verticalis</i>	“
Say's Phoebe	<i>Sayornis saya</i>	“
Northern mockingbird	<i>Mimus polyglottus</i>	“
Anna's hummingbird	<i>Calypte amna</i>	Observed on site
Mourning dove	<i>Zenaida macroura</i>	“
California quail	<i>Callipepla Californica</i>	Observed in surrounding area
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	“
Red-tail Hawk	<i>Buteo jamaicensis</i>	“
Greater Roadrunner	<i>Geococcyx californianus</i>	“
Rock pigeon	<i>Columba livia</i>	“
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	“
Lark sparrow	<i>Chondestes grammacus</i>	“
House finch	<i>Carpodacus mexicanis</i>	“
Bullock's oriole	<i>Icterus bullockii</i>	“
Sage sparrow	<i>Amphispiza belli</i>	“
Costa hummingbird	<i>Calypte costae</i>	“
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>	“
American robin	<i>Turdus migratorius</i>	“
Scrub jay	<i>Aphelocoma coerulescens</i>	“
Reptiles and Amphibians		
Side-blotched lizard	<i>Uta stansburiana</i>	Observed on site.
Western fence lizard	<i>Sceloporus occidentalis</i>	“
Granite spiny lizard	<i>Sceloporus orcuttii</i>	“
Common garter snake	<i>Thamnophis sirtalis</i>	Occurs in area
Gopher snake	<i>Pituophis melanoleucus</i>	“
Western toad	<i>Bufo boreas</i>	“
Southwestern toad	<i>Bufo microscaphus</i>	“

SOURCES:

- (1) Blair, W.F. 1968. Vertebrates of the United States. McGraw-Hill, Inc. New York. 616 pp.
- (2) Whitaker, J. O. 1980. The Audubon Society Field Guide to North American Mammals. A. A. Knopf, New York. 745 pp.
- (3) NGS. 1987. Field Guide to the Birds of North America. The National Geographic Society. 464 pp.

Appendix B
Site Photographs

Site Photographs



SITE LOOKING NORTH



SITE LOOKING EAST

Site Photographs Cont.



SITE LOOKING SOUTH



SITE LOOKING WEST

Appendix C

Regulatory Background

REGULATORY BACKGROUND

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and State levels, depending on the magnitude of the threat to continued existence and existing knowledge of population levels.

CEQA GUIDELINES SECTION 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected, and requires findings of significance if there would be substantial losses. Natural communities listed by CNDDDB as sensitive are considered by CDFW to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents such as general plans often identify these resources as well.

FEDERAL ENDANGERED SPECIES ACT

The U.S. Fish and Wildlife Service (USFWS) administers the federal Endangered Species Act (FESA) that provides a process for listing species as either threatened or endangered and the methods of protecting listed species. The FESA defines as “endangered” any plant or animal species that is in danger of extinction throughout all or a significant portion of its range. A

“threatened” species is a species that is likely to become endangered in the near future. A “proposed” species is one that has been officially proposed by USFWS in addition to the federal threatened and endangered species list.

Section 9 of the FESA prohibits “take” of threatened or endangered species. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if the development would result in “take” of the species or its habitat. Under the regulations of the FESA, the USFWS may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

CALIFORNIA ENDANGERED SPECIES ACT

The CDFW administers the California Endangered Species Act (CESA). The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against taking, as defined above.

SECTION 3503 AND 3511 OF CALIFORNIA FISH AND GAME CODE

The CDFW administers the California Fish and Game Code. There are particular sections of the Code that are applicable to natural resource management. For example, section 3503 of the Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3511 of the Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species.

CALIFORNIA NATIVE PLANT PROTECTION ACT

The California Native Plant Protection Act (CNPPA) of 1977 (Fish and Game Code Sections 1900–1913) is intended to preserve, protect, and enhance endangered or rare native plants in California and gives the CDFW authority to designate state endangered, threatened, and rare plants and provides specific protection measures for identified populations. The Act also directs the California Fish and Game Commission to adopt regulations governing taking, possessing, propagation, and sale of any endangered or rare native plant.

Vascular plants listed as rare or endangered by the California Native Plant Society (2011), but which have no designated status or protection under federal or state endangered species legislation, are defined as follows:

- Rank 1A: Plants Believed Extinct.
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.
- Rank 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.
- Rank 3: Plants About Which More Information is Needed - A Review List.
- Rank 4: Plants of Limited Distribution - A Watch List.

NATURAL COMMUNITY CONSERVATION PLANNING PROGRAM

The Natural Community Conservation Program (NCCP) Act, Sections 2800-2840 of the state Fish and Game Code, authorized the preparation of NCCPs to protect natural communities and species while allowing a reasonable amount of economic development. The MSHCP, adopted by the County of Riverside on June 17, 2003, serves as a Habitat Conservation Plan (HCP) pursuant to the NCCP Act and pursuant to Section 10 (a)(1)(B) of the FESA.

Appendix D

**CNND Summary Table for
Wildomar Quadrangle and
Surrounding Eight Quadrangles**



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad> IS (Romoland (3311762)> OR Steele Peak (3311773)> OR Perris (3311772)> OR Lakeview (3311771)> OR Winchester (3311761)> OR Bachelor Mtn. (3311751)> OR Murrieta (3311752)> OR Wildomar (3311753)> OR Lake Elsinore (3311763))
 AND Taxonomic Group> IS (Fish> OR Amphibians> OR Reptiles> OR Birds> OR Mammals> OR Mollusks> OR Arachnids> OR Crustaceans> OR Insects> OR Ferns> OR Gymnosperms> OR Monocots> OR Dicots> OR Lichens> OR Bryophytes)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	G5T2T3 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive USFS_S-Sensitive	1,000 1,600	95 S:6	0	1	1	1	1	2	2	4	5	0	1
<i>Accipiter cooperii</i> Cooper's hawk	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	1,509 2,000	113 S:6	3	0	2	0	0	1	4	2	6	0	0
<i>Agelaius tricolor</i> tricolored blackbird	G2G3 S1S2	None Candidate Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	1,342 1,493	951 S:9	0	0	0	0	0	9	0	9	9	0	0
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	G5T3 S3	None None	CDFW_WL-Watch List	1,180 2,340	226 S:38	3	9	6	0	0	20	6	32	38	0	0
<i>Allium munzii</i> Munz's onion	G1 S1	Endangered Threatened	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	1,300 3,400	20 S:16	1	8	2	0	1	4	7	9	15	1	0
<i>Almutaster pauciflorus</i> alkali marsh aster	G4 S1S2	None None	Rare Plant Rank - 2B.2		7 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Ambrosia pumila</i> San Diego ambrosia	G1 S1	Endangered None	Rare Plant Rank - 1B.1	1,170 1,900	59 S:5	0	2	2	0	0	1	0	5	5	0	0
<i>Anaxyrus californicus</i> arroyo toad	G2G3 S2S3	Endangered None	CDFW_SSC-Species of Special Concern IUCN_EN-Endangered	1,600 1,600	138 S:1	0	0	0	0	0	1	1	0	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Aquila chrysaetos</i> golden eagle	G5 S3	None None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,580 1,970	312 S:2	1	0	0	0	0	1	2	0	2	0	0
<i>Arctostaphylos rainbowensis</i> Rainbow manzanita	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive USFS_S-Sensitive	1,400 2,600	89 S:15	2	2	1	0	0	10	4	11	15	0	0
<i>Arizona elegans occidentalis</i> California glossy snake	G5T2 S2	None None	CDFW_SSC-Species of Special Concern	1,254 1,834	260 S:13	0	0	0	0	0	13	8	5	13	0	0
<i>Artemisiospiza belli belli</i> Bell's sage sparrow	G5T2T4 S3	None None	CDFW_WL-Watch List USFWS_BCC-Birds of Conservation Concern	1,240 2,380	60 S:21	2	1	0	0	0	18	2	19	21	0	0
<i>Asio otus</i> long-eared owl	G5 S3?	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,015 2,030	46 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	G5 S2S3	None None	CDFW_WL-Watch List IUCN_LC-Least Concern USFS_S-Sensitive	1,280 2,200	359 S:59	5	12	6	1	0	35	39	20	59	0	0
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	G5T5 S3	None None	CDFW_SSC-Species of Special Concern	1,300 2,000	132 S:6	0	0	0	1	0	5	2	4	6	0	0
<i>Astragalus pachypus var. jaegeri</i> Jaeger's milk-vetch	G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	2,000 2,000	18 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Athene cunicularia</i> burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,056 2,190	1955 S:113	13	30	12	8	2	48	11	102	111	2	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Atriplex coronata</i> var. <i>notatior</i> San Jacinto Valley crownscale	G4T1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	130 1,510	16 S:12	2	6	1	0	0	3	0	12	12	0	0
<i>Atriplex parishii</i> Parish's brittlescale	G1G2 S1	None None	Rare Plant Rank - 1B.1 USFS_S-Sensitive	1,420 1,500	16 S:5	1	0	0	0	0	4	5	0	5	0	0
<i>Atriplex serenana</i> var. <i>davidsonii</i> Davidson's saltscale	G5T1 S1	None None	Rare Plant Rank - 1B.2	1,400 1,500	28 S:9	0	1	0	0	0	8	3	6	9	0	0
<i>Ayenia compacta</i> California ayenia	G4 S3	None None	Rare Plant Rank - 2B.3	3,400 3,400	53 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Bombus crotchii</i> Crotch bumble bee	G3G4 S1S2	None None		1,000 2,200	234 S:9	0	0	0	0	0	9	9	0	9	0	0
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	G3 S3	Threatened None	IUCN_VU-Vulnerable	1,340 2,060	763 S:5	0	1	0	0	0	4	0	5	5	0	0
<i>Brodiaea filifolia</i> thread-leaved brodiaea	G2 S2	Threatened Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	498 3,370	134 S:13	2	3	3	1	1	3	1	12	12	1	0
<i>Brodiaea santarosae</i> Santa Rosa Basalt brodiaea	G1 S1	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	1,850 3,400	12 S:8	1	0	1	0	0	6	4	4	8	0	0
<i>Buteo regalis</i> ferruginous hawk	G4 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,200 2,200	107 S:8	0	5	0	0	0	3	3	5	8	0	0
<i>Buteo swainsoni</i> Swainson's hawk	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,000 1,000	2443 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>California macrophylla</i> round-leaved filaree	G4 S4	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden	1,342 1,700	204 S:8	0	1	0	1	0	6	3	5	8	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	G4 S4	None None	Rare Plant Rank - 4.2 SB_RSABG-Rancho Santa Ana Botanic Garden	1,620 2,000	230 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Calochortus weedii</i> var. <i>intermedius</i> intermediate mariposa-lily	G3G4T2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	1,290 2,400	138 S:4	0	0	0	0	0	4	1	3	4	0	0
<i>Campylorhynchus brunneicapillus sandiegensis</i> coastal cactus wren	G5T3Q S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	1,640 1,640	153 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Caulanthus simulans</i> Payson's jewelflower	G4 S4	None None	Rare Plant Rank - 4.2 USFS_S-Sensitive	1,940 2,400	31 S:7	0	0	0	0	0	7	7	0	7	0	0
<i>Centromadia pungens</i> ssp. <i>laevis</i> smooth tarplant	G3G4T2 S2	None None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	1,000 2,000	117 S:80	1	13	22	8	6	30	26	54	74	3	3
<i>Chaetodipus californicus femoralis</i> Dulzura pocket mouse	G5T3 S3	None None	CDFW_SSC-Species of Special Concern	1,150 1,480	54 S:2	1	0	0	1	0	0	1	1	2	0	0
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	G5T3T4 S3S4	None None	CDFW_SSC-Species of Special Concern	1,320 2,400	99 S:16	1	5	4	0	0	6	8	8	16	0	0
<i>Charadrius alexandrinus nivosus</i> western snowy plover	G3T3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	1,240 1,240	134 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	G3T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	1,263 2,600	127 S:47	0	7	2	2	6	30	15	32	41	1	5
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> long-spined spineflower	G5T3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	1,200 3,400	130 S:45	1	12	2	1	3	26	10	35	42	0	3



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Cicindela senilis frosti</i> senile tiger beetle	G2G3T1T3 S1	None None		1,350 1,350	9 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Circus cyaneus</i> northern harrier	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	1,200 1,498	53 S:3	0	2	1	0	0	0	2	1	3	0	0
<i>Clinopodium chandleri</i> San Miguel savory	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	1,100 1,700	30 S:6	0	0	0	0	0	6	3	3	6	0	0
<i>Coleonyx variegatus abbotti</i> San Diego banded gecko	G5T3T4 S1S2	None None	CDFW_SSC-Species of Special Concern	1,300 2,000	8 S:3	0	0	0	0	0	3	1	2	3	0	0
<i>Crotalus ruber</i> red-diamond rattlesnake	G4 S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	1,120 2,335	188 S:31	2	1	2	1	0	25	8	23	31	0	0
<i>Cryptantha wigginsii</i> Wiggins' cryptantha	G2 S1	None None	Rare Plant Rank - 1B.2		10 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	G5T2T3Q S2?	None None	USFS_S-Sensitive	1,300 1,600	13 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	G2 S2	Endangered Threatened	IUCN_EN-Endangered	1,060 2,250	220 S:109	7	12	35	17	15	23	95	14	94	3	12
<i>Dodecahema leptoceras</i> slender-horned spineflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden		38 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Dudleya multicaulis</i> many-stemmed dudleya	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	1,550 1,550	146 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Elanus leucurus</i> white-tailed kite	G5 S3S4	None None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	1,240 2,100	165 S:9	5	1	2	0	0	1	5	4	9	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Emys marmorata</i> western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	1,190 3,300	1291 S:8	2	1	0	0	5	0	8	0	3	5	0
<i>Eremophila alpestris actia</i> California horned lark	G5T4Q S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	1,260 1,700	93 S:15	1	2	5	0	0	7	5	10	15	0	0
<i>Eryngium aristulatum var. parishii</i> San Diego button-celery	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	1,950 2,060	79 S:3	1	1	0	0	0	1	0	3	3	0	0
<i>Eumops perotis californicus</i> western mastiff bat	G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern WBWG_H-High Priority	1,500 1,570	294 S:5	0	0	0	0	0	5	4	1	5	0	0
<i>Euphydryas editha quino</i> quino checkerspot butterfly	G5T1T2 S1S2	Endangered None	XERCES_CI-Critically Imperiled	1,200 2,450	100 S:26	7	2	1	0	2	14	3	23	24	2	0
<i>Geothallus tuberosus</i> Campbell's liverwort	G1 S1	None None	Rare Plant Rank - 1B.1	2,000 2,000	4 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Gila orcuttii</i> arroyo chub	G2 S2	None None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern USFS_S-Sensitive	1,000 1,000	49 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Haliaeetus leucocephalus</i> bald eagle	G5 S3	Delisted Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	1,400 1,500	327 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Harpagonella palmeri</i> Palmer's grapplinghook	G4 S3	None None	Rare Plant Rank - 4.2 SB_RSABG-Rancho Santa Ana Botanic Garden	1,300 2,100	57 S:10	2	2	0	0	1	5	10	0	9	1	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Hesperocyparis forbesii</i> Tecate cypress	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S-Sensitive		27 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Icteria virens</i> yellow-breasted chat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	1,510 1,510	96 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Juncus luciensis</i> Santa Lucia dwarf rush	G3 S3	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	2,000 2,000	37 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Lanius ludovicianus</i> loggerhead shrike	G4 S4	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,349 1,503	106 S:9	1	4	2	2	0	0	0	9	9	0	0
<i>Lasiurus xanthinus</i> western yellow bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBGW_H-High Priority	1,425 1,660	58 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	1,000 1,500	97 S:21	4	2	3	1	0	11	5	16	21	0	0
<i>Lepidium virginicum var. robinsonii</i> Robinson's pepper-grass	G5T3 S3	None None	Rare Plant Rank - 4.3	1,125 2,900	142 S:13	0	0	1	0	0	12	8	5	13	0	0
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	G5T3T4 S3S4	None None	CDFW_SSC-Species of Special Concern	1,050 1,900	103 S:27	1	11	5	1	0	9	2	25	27	0	0
<i>Lilium parryi</i> lemon lily	G3 S3	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive		138 S:1	0	0	0	0	0	1	0	1	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Limnanthes alba ssp. parishii</i> Parish's meadowfoam	G4T2 S2	None Endangered	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S-Sensitive	2,000 2,000	33 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Linderiella santarosae</i> Santa Rosa Plateau fairy shrimp	G1G2 S1	None None		1,960 2,200	2 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Monardella hypoleuca ssp. intermedia</i> intermediate monardella	G4T2? S2?	None None	Rare Plant Rank - 1B.3	1,970 1,970	38 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Myosurus minimus ssp. apus</i> little mousetail	G5T2Q S2	None None	Rare Plant Rank - 3.1	1,450 2,100	24 S:7	1	2	0	1	0	3	7	0	7	0	0
<i>Nama stenocarpa</i> mud nama	G4G5 S1S2	None None	Rare Plant Rank - 2B.2	1,400 1,400	22 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Navarretia fossalis</i> spreading navarretia	G2 S2	Threatened None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	1,200 2,000	78 S:26	3	7	3	2	1	10	2	24	25	0	1
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	G2 S2	None None	Rare Plant Rank - 1B.1	1,975 2,050	60 S:3	0	0	0	0	0	3	0	3	3	0	0
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	G5T3T4 S3S4	None None	CDFW_SSC-Species of Special Concern	1,300 1,500	118 S:3	0	2	0	0	0	1	1	2	3	0	0
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	G4 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_M-Medium Priority	1,600 1,600	90 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Onychomys torridus ramona</i> southern grasshopper mouse	G5T3 S3	None None	CDFW_SSC-Species of Special Concern	1,450 1,500	28 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Orcuttia californica</i> California Orcutt grass	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	1,140 2,030	37 S:11	0	3	1	0	2	5	5	6	9	1	1



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	G5T1T2 S1S2	None None	CDFW_SSC-Species of Special Concern	1,180 2,200	56 S:10	0	3	2	1	2	2	8	2	8	2	0
<i>Perognathus longimembris internationalis</i> Jacumba pocket mouse	G5T2T3 S2	None None	CDFW_SSC-Species of Special Concern	1,250 1,250	4 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Phrynosoma blainvillii</i> coast horned lizard	G3G4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	1,100 2,600	770 S:44	2	9	4	2	2	25	24	20	42	1	1
<i>Plegadis chihi</i> white-faced ibis	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	1,240 1,492	20 S:3	1	0	0	0	1	1	2	1	2	1	0
<i>Poliophtila californica californica</i> coastal California gnatcatcher	G4G5T2Q S2	Threatened None	CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List	750 2,200	828 S:94	5	18	9	2	2	58	20	74	92	1	1
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	G4 S2	None None	Rare Plant Rank - 2B.2		62 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Rana draytonii</i> California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	1,600 1,600	1448 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Salvadora hexalepis virgultea</i> coast patch-nosed snake	G5T4 S2S3	None None	CDFW_SSC-Species of Special Concern	1,600 1,600	28 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Scutellaria bolanderi ssp. austromontana</i> southern mountains skullcap	G4T3 S3	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	1,400 1,400	32 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Setophaga petechia</i> yellow warbler	G5 S3S4	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	1,445 1,445	70 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Sibaropsis hammittii</i> Hammitt's clay-creep	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	3,280 3,400	7 S:2	0	1	0	0	0	1	1	1	2	0	0
<i>Sidalcea neomexicana</i> salt spring checkerbloom	G4 S2	None None	Rare Plant Rank - 2B.2 USFS_S-Sensitive	1,500 1,500	30 S:1	0	0	0	0	0	1	1	0	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Socalchemmis icenoglei</i> Icenogle's socalchemmis spider	G1 S1	None None		1,470 1,500	2 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Spea hammondi</i> western spadefoot	G3 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	1,080 2,150	461 S:21	1	2	3	2	0	13	3	18	21	0	0
<i>Sphaerocarpos drewei</i> bottle liverwort	G1 S1	None None	Rare Plant Rank - 1B.1	1,920 1,920	3 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	G1G2 S1S2	Endangered None	IUCN_EN-Endangered	1,030 2,100	82 S:21	0	2	1	3	5	10	1	20	16	1	4
<i>Symphyotrichum defoliatum</i> San Bernardino aster	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	1,800 1,800	102 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Taricha torosa</i> Coast Range newt	G4 S4	None None	CDFW_SSC-Species of Special Concern	1,160 1,795	81 S:4	0	1	0	0	0	3	2	2	4	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	1,400 1,440	543 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Texosporium sancti-jacobi</i> woven-spored lichen	G3 S1	None None	Rare Plant Rank - 3	1,600 2,320	19 S:2	0	0	1	0	0	1	0	2	2	0	0
<i>Thamnophis hammondi</i> two-striped gartersnake	G4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	1,160 1,160	170 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Tortula californica</i> California screw moss	G2G3 S2S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	2,100 2,450	15 S:2	0	2	0	0	0	0	0	2	2	0	0
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	G4T3 S1	None None	Rare Plant Rank - 2B.1	1,400 1,420	9 S:4	0	1	0	0	0	3	4	0	4	0	0
<i>Vireo bellii pusillus</i> least Bell's vireo	G5T2 S2	Endangered Endangered	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	1,015 1,700	482 S:32	5	10	8	2	0	7	0	32	32	0	0



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	1,493 1,493	13 S:1	0	0	0	0	0	1	1	0	1	0	0