APPENDIX B BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

TENTATIVE TRACT MAP 38346 PROJECT

CITY OF MENIFEE, COUNTY OF RIVERSIDE, CALIFORNIA

Biological Resources Assessment and MSHCP Consistency Analysis

Prepared For:

CITY OF MENIFEE COMMUNITY DEVELOPMENT SERVICES

29844 Haun Road Menifee, California 92586 Contact: *Fernando Herrera, Associate Planner* 951.723.3718

Prepared By:

MICHAEL BAKER INTERNATIONAL

5 Hutton Centre Drive, Suite 500 Santa Ana, California 92707 Contact: *Ryan Winkleman* 949.533.0918

> February 2023 JN 192038

TENTATIVE TRACT MAP 38346 PROJECT

CITY OF MENIFEE, COUNTY OF RIVERSIDE, CALIFORNIA

Biological Resources Assessment and MSHCP Consistency Analysis

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

Ryan Winkleman Senior Biologist

Natural Resources & Environmental Services

Tom Millington

Senior Biologist

Natural Resources & Environmental Services

Executive Summary

The project site is located in southwestern Riverside County and generally comprises a mixture of undeveloped, but highly disturbed, land that is generally devoid of vegetation or dominated by non-native, ruderal plant species. No natural vegetation communities were mapped within the project site. However, the project site contains a land cover type classified as disturbed habitat. Land uses surrounding the project site mainly consist of existing residential developments, commercial businesses, and a few small plots of undeveloped land.

No special-status plant species were observed within the project site during the field survey. Based on the results of the literature review and field survey, existing/historical site conditions, and a review of specific habitat requirements, occurrence records, and known distributions, Michael Baker determined that all special-status plant species identified during the literature review either have a low potential or are not expected to occur within the project site.

No special-status wildlife species were observed within the project site during the field survey. Based on the results of the literature review and the field survey, existing site conditions, and a review of specific habitat requirements, occurrence records, and known distributions, Michael Baker determined that Cooper's hawk (*Accipiter cooperii*; a State Watch List [WL] species), northern harrier (*Circus hudsonius*; a State Species of Special Concern [SSC]), and California horned lark (*Eremophila alpestris actia*; a State WL species) all have a moderate potential to forage within the project site. All other special-status wildlife species identified during the literature review either have a low potential or are not expected to occur within the project site. No special-status wildlife species are expected to nest or breed within the project site.

In order to avoid impacts to nesting birds, including Cooper's hawk and California horned lark, any vegetation removal and ground disturbance should occur outside of the nesting bird season (February 1 to August 31). If avoidance of the nesting bird season is not feasible, a pre-construction nesting bird clearance survey should be conducted by a qualified biologist no more than seven (7) days prior to the start of any vegetation removal or ground disturbing activities to maintain compliance with the Migratory Bird Treaty Act and the California Fish and Game Code and ensure that impacts to nesting birds do not occur. The qualified biologist should survey all suitable nesting habitat within the project site and within a biologically defensible buffer distance surrounding the project site for the presence of nesting birds and should provide documentation of the surveys and findings to City of Menifee for review prior to initiating project activities. If no active bird nests are detected, project-related activities may begin. If an active nest is found, the bird should be identified to species and the approximate distance from the closest work site to the active nest should be estimated and the qualified biologist should establish a "no-disturbance" buffer around the active nest. The distance of the "no-disturbance" buffer may be increased or decreased according to the judgement of the qualified biologist depending on the level of construction activity and sensitivity of the species. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project-related activities within the "no disturbance" buffer may occur.

No potentially jurisdictional resources or riparian/riverine resources are located within the project site.

Although suitable habitat for burrowing owls (*Athene cunicularia*; a State SSC) is present, based on the high degrees of on-site and surrounding disturbance including routine mowing/discing and surrounding residential communities, a general lack of suitable burrows on-site, and presence of perching and nesting opportunities for predatory raptors along adjacent power lines and a nearby owl box, it is Michael Baker's determination that burrowing owls have a low potential to occur on-site and focused burrowing owl surveys are not recommended. However, the Western Riverside County Multiple Species Habitat Conservation Plan would still require that a pre-construction clearance survey be conducted no more than thirty (30) days prior to initiating ground disturbance activities to avoid direct take of burrowing owls that may occur on or within 500 feet of the project impact area. This survey is required at all times of the year but can be conducted concurrently with the nesting bird clearance survey within seven (7) days prior to the start of construction between February 1 and August 31. This survey would need to be conducted by a qualified biologist and in accordance with the methods outlined in the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan* (RCA 2006).

Table of Contents

Section 1	Introduction	1
1.1	Project Location	1
1.2	Project Description	1
Section 2	Methodology	6
2.1	Literature Review	6
2.2	Field Survey	7
2.3	Vegetation Communities	7
2.4	Plants	7
2.5	Wildlife	8
2.6	Other Field Studies	8
2.6.1	Delineation of State and Federal Jurisdictional Waters	8
Section 3	Results	9
3.1	Topography and Soils	9
3.2	Vegetation Communities and Land Cover Types	
3.2.1	Disturbed Habitat	9
3.3	Wildlife	9
3.3.1	Fish	12
3.3.2	Amphibians	12
3.3.3	Reptiles	12
3.3.4	Birds	12
3.3.5	Mammals	13
3.4	Migratory Corridors and Linkages	13
3.5	Special-Status Biological Resources	13
3.5.1	Special-Status Plant Species	14
3.5.2	Special-Status Wildlife Species	15
3.5.3	Special-Status Vegetation Communities	15
3.6	Critical Habitat	15
3.7	Stephens' Kangaroo Rat Habitat Conservation Plan	16
3.8	State and Federal Jurisdictional Resources	16
Section 4	MSHCP Consistency Analysis	18
4.1	Project Introduction and Setting	18
4.1.1	Project Area	18
4.1.2	Project Description	18
4.1.3	Covered Roads	20
4.1.4	Covered Public Access Activities	20
4.1.5	General Setting	21

Section 6	References	30
Section 5	Conclusion	28
4.9	Standard Best Management Practices	26
4.8	Guidelines Pertaining to the Urban/Wildlands Interface	26
4.7.2	Species Not Adequately Conserved	26
4.7.1	Delhi Sands Flower-Loving Fly	26
4.7	Information on Other Species	26
4.6.4	Mammals	25
4.6.3	Burrowing Owl	24
4.6.2	Amphibians	23
4.6.1	Criteria Area Plant Species	23
4.6	Additional Survey Needs and Procedures	23
4.5	Protection of Narrow Endemic Plant Species	23
4.4.4	Riparian Birds	23
4.4.3	Fairy Shrimp	23
4.4.2	Vernal Pools	22
4.4.1	Riparian/Riverine Resources	22
4.4	Protection of Species Associated With Riparian/Riverine Resources and Verna	l Pools 22
4.3	Vegetation Mapping	21
4.2.2	Public/Quasi-Public Lands Analysis	21
4.2.1	Criteria Cell Analysis	21
4.2	Reserve Assembly Analysis	21

FIGURES

Figure 1:	Regional Vicinity	2
Figure 2:	Project Vicinity	3
Figure 3:	Project Site	4
Figure 4:	USDA Soils	10
Figure 5:	Vegetation Communities and Land Cover Types	11
Figure 6:	Critical Habitat	17
Figure 7:	MSHCP Conservation Areas	19
TABLES		
Table 1: Su	arvey Date, Surveyor, and Conditions	7
<u>APPENDI</u>	<u>ICES</u>	
Appendix A	A Site Photographs	
Appendix E	Plant and Wildlife Species Observed	
Appendix C	C Potentially Occurring Special-Status Biological Resources	

ACRONYMS AND ABBREVIATIONS

APN assessor's parcel number

CDFW California Department of Fish and Wildlife

CFGC California Fish and Game Code

CIRP Inventory of Rare and Endangered Plants of California

CNDDB California Natural Diversity Database

CNPS California Native Plant Society

CWA federal Clean Water Act

DBESP Determination of Biologically Equivalent or Superior Preservation

du/ac dwelling units per acre

EMWD Eastern Municipal Water District
FESA federal Endangered Species Act
GIS Geographic Information Systems

I Interstate

MBTA Migratory Bird Treaty Act
Michael Baker Michael Baker International

MSHCP Western Riverside County Multiple Species Habitat Conservation Plan

NEPS Narrow Endemic Plant Species

P/QP Public/Quasi-Public project TTM 38346 Project

RCA Western Riverside County Regional Conservation Authority

SKR Stephens' kangaroo rat

SKR HCP Stephens' Kangaroo Rat Habitat Conservation Plan

SR State Route

SSC Species of Special Concern

TTM Tentative Tract Map

USDA U.S. Department of Agriculture USFWS U.S. Fish and Wildlife Service

USGS U.S. Geological Survey

WL Watch List

Section 1 Introduction

This report contains the findings of Michael Baker International's (Michael Baker) biological resources assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the proposed Tentative Tract Map (TTM) 38346 (project or project site). A Michael Baker biologist conducted a field survey/habitat assessment of the project site on October 19, 2022, to characterize existing site conditions and assess the potential for special-status¹ biological resources to occur within the project site that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the habitat within the project site and its potential to support special-status biological resources that were identified as potentially occurring in the vicinity of the project site by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database RareFind 5 (CNDDB; CDFW 2023), the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (CIRP; CNPS 2023), the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) database (USFWS 2023), and the Western Riverside County Regional Conservation Authority's (RCA) online MSHCP Information Application (RCA 2022).

1.1 PROJECT LOCATION

The project site is located within the City of Menifee, generally to the north of Newport Road, south of State Route 74 (SR-74), east of Interstate 215 (I-215), and west of SR-79 (refer to Figure 1, *Regional Vicinity*). The project site is depicted in Section 14, Township 5 South, Range 3 West, on the U.S. Geological Survey's (USGS) *Romoland, California* 7.5-minute quadrangle map (refer to Figure 2, *Project Vicinity*). Specifically, the project site is composed of assessor's parcel numbers (APN) 331-250-028, 331-250-029 and 331-250-030 and totals approximately 8.02 net acres located to the north of Rouse Road, south of Case Road, east of Junipero Road, and west of Menifee Road (refer to Figure 3, *Project Site*).

1.2 PROJECT DESCRIPTION

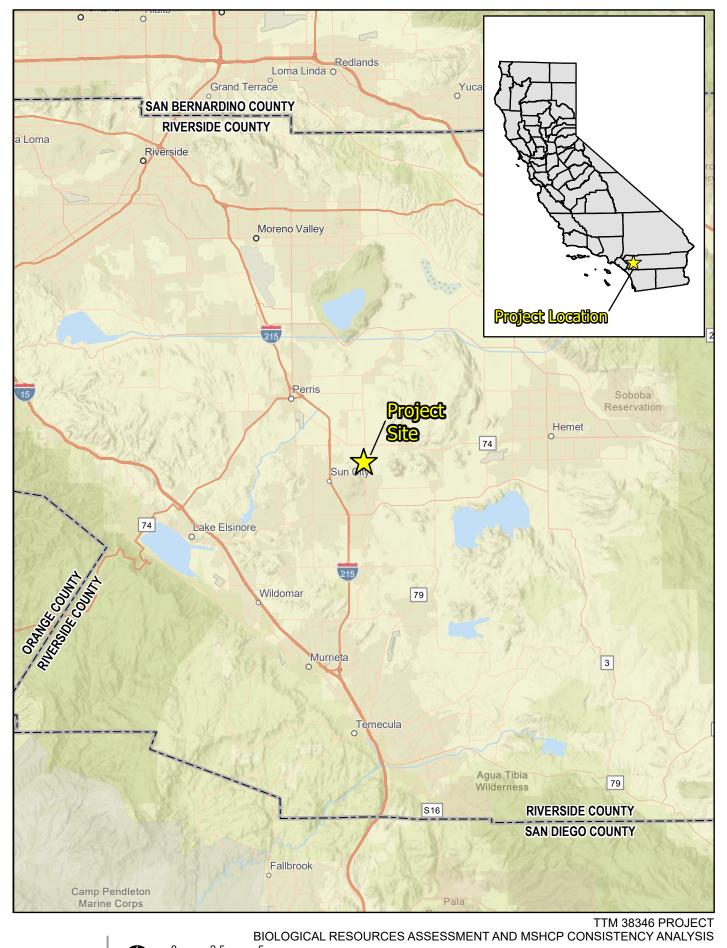
Development Concept

The proposed project consists of the development of 162 two-story attached condominium units on an approximately 8.05-net acre site (refer to Figure 3, *Project Site*). The density of the project would be approximately 23.65 dwelling units per acre (du/ac), which is within the allowable density range of 20.1 to 24 du/ac for land with the High Density Residential zoning designation. Interior livable space would consist of 1, 2, and 3-bedroom units ranging from approximately 918 square feet to 1,336 square feet. The maximum building height of the residences would be approximately 28 feet. 357 parking spaces would be provided for residents and guests, inclusive of 287 garage spaces, 65 standard stalls, four accessible stalls, and one electric vehicle stall. Amenities within the development would include a clubhouse, pool, and common open space area.

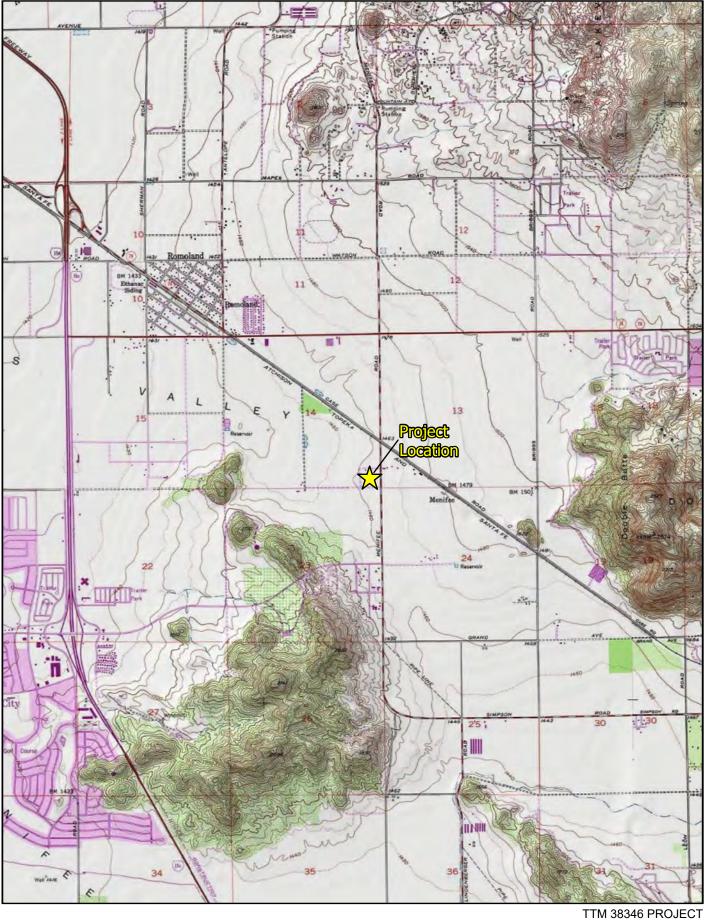
1

Tentative Tract Map 38346 Project Biological Resources Assessment and MSHCP Consistency Analysis

¹ As used in this report, "special-status" refers to species that are either federally-/State-listed, proposed, or candidates; species that have been designated a California Rare Plant Rank by the California Native Plant Society; species designated as Fully Protected, Species of Special Concern, or Watch List by the California Department of Fish and Wildlife; State/locally rare vegetation communities; or species covered under the Western Riverside County Multiple Species Habitat Conservation Plan.



Michael Baker



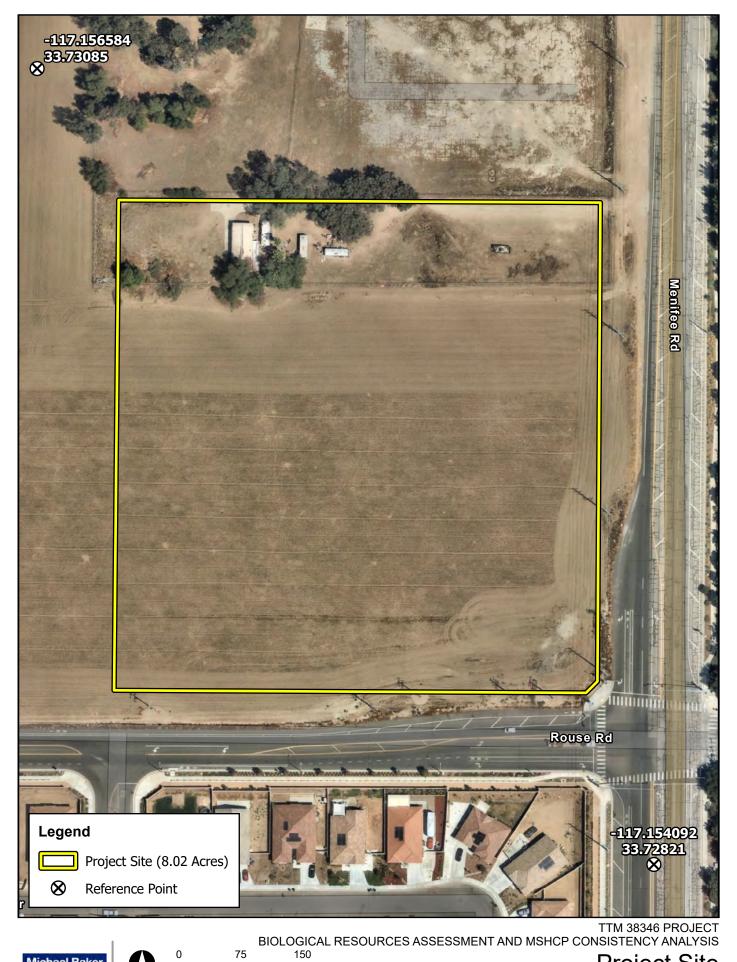
BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

O 0.5 1
Miles Project Vicinity

Source: ESRI, Riverside County

Michael Baker

INTERNATIONAL



Michael Baker

75

Project Site

Additional improvements include installation of a stormwater infiltration basin in the southwest corner of the project site, approximately 810 feet of offsite sewer lines, 1,220 feet of offsite reclaimed water piping, and connections to existing storm drain and water facilities. Sidewalk, curb, and gutter would be installed along the project's frontages at Rouse Road and Menifee Road.

The project would be constructed to conform with the City of Menifee Comprehensive Development Code (Municipal Code Title 9, Planning and Zoning, Article 4, Site Development Regulations and Performance Standards) and the City's adopted Design Guidelines (amended March 2, 2022), which includes design standards related to building size, height, setback, and materials, as well as landscaping, signage, and other considerations.

Site Access

Access to the site would be provided via two entry points: one from Rouse Road and one from Menifee Road. The project would install a raised median on each street to limit movements to left in/right in, right out on Menifee Road and right in, right out only on Rouse Road. Access and circulation improvements would be designed and constructed consistent with City design and engineering standards.

Landscaping

Ornamental water-efficient landscaping would be installed throughout the site. A conceptual landscape plan was developed for the project in accordance with the requirements of the Menifee Municipal Code Title 9, *Planning and Zoning*, Chapter 9.195.040, *Landscape Requirements*. Planting materials would include a mix of trees, shrubs, vines, groundcover, and turf. The total size of landscaped areas would be approximately 1.47 acres or approximately 17 percent of the site. A 4- to 6-foot retaining wall would be installed around the perimeter of the property.

Utilities and Services

The following utilities and services would serve the site:

- *Water*. The proposed development would be served by Eastern Municipal Water District (EMWD) for domestic (drinking) water supply services.
- <u>Sewer</u>. EMWD provides wastewater/sanitary sewer service to the project area.
- <u>Stormwater Drainage</u>. Open drainage channels and underground storm drains larger than 36 inches
 diameter are operated and maintained by the Riverside County Flood Control and Water
 Conservation District; smaller underground storm drains are operated and maintained by the City
 of Menifee Public Works Department.

<u>Dry Utilities</u>. The site would be served by Southern California Edison for electricity services and the Southern California Gas Company for natural gas services. It is noted that the project is bordered on the east and south by Southern California Edison aboveground transmission and distribution lines.

Section 2 Methodology

Michael Baker conducted thorough literature reviews and records searches to determine which specialstatus biological resources have the potential to occur on or within the general vicinity of the project site prior to conducting the field survey. A general field survey/habitat assessment was conducted in order to document existing conditions and determine the potential for special-status plant and wildlife species to occur within the project site.

2.1 LITERATURE REVIEW

Prior to conducting the field survey, literature reviews and records searches were conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Specifically, previous special-status plant and wildlife species occurrence records within the USGS *Romoland, Perris, Lakeview*, and *Winchester, California* 7.5-minute quadrangles were determined through a query of the CNDDB (CDFW 2023) and the CIRP (CNPS 2023). Current conservation status of species was verified through lists and resources provided by the CDFW, specifically the *Special Animals List* (CNDDB 2022a), *State and Federally Listed Endangered and Threatened Animals of California* (CNDDB 2022b), *Special Vascular Plants, Bryophytes, and Lichens List* (CNDDB 2022c), and *State and Federally Listed Endangered, Threatened, and Rare Plants or California* (CNDDB 2022d).

In addition to the databases referenced above, Michael Baker reviewed various publicly available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site to understand existing site conditions, confirm previous species observations, and note the extent of any disturbances, if present, that have occurred in the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources.

On-site and adjoining soils were identified prior to conducting the field survey using the U.S. Department of Agriculture's (USDA) *Custom Soil Resource Report for Western Riverside Area, California* (USDA 2022). In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes and disturbances that may have occurred within the project site. Aerial photography was reviewed prior to the field survey to locate potential natural corridors and linkages that may support the movement of wildlife through the area using Google Earth Pro Historical Aerial Imagery from 1985 to 2021 (Google, Inc. 2022). The literature review provided a baseline from which to inventory the existing biological resources and evaluate the ability of the project site to support special-status biological resources. Additional occurrence records of those species that have been documented on or within the vicinity of the project site were derived from database queries including the Calflora database (Calflora 2022). Additionally, standard field guides, texts and sources were used, such as species accounts provided by Birds of the World (Billerman et. al 2020) and the USFWS Critical Habitat Mapper and Environmental Conservation Online System (USFWS 2022). The CNDDB was used, in conjunction with Geographic Information Systems (GIS) ArcView software, to identify special-status species occurrence

records within the USGS *Romoland*, *Perris*, *Lakeview*, and *Winchester*, *California* 7.5-minute quadrangles. Refer to Section 6 for a complete list of technical references that were reviewed by Michael Baker.

2.2 FIELD SURVEY

Michael Baker biologist Ryan Winkleman conducted a field survey/habitat assessment on October 19, 2022, to document the extent and conditions of the vegetation communities occurring within the boundaries of the project site. Vegetation communities preliminarily identified on aerial photographs during the literature review were verified in the field by walking meandering transects through the vegetation communities and along boundaries between vegetation communities. Naturally vegetated areas typically have a higher potential to support special-status plant and wildlife species than areas that are highly disturbed or developed, which usually have lower quality and/or reduced amounts of suitable wildlife habitat. All plant and wildlife species observed during the field survey, as well as dominant plant species within each vegetation community, were recorded in a field notebook and are described below. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, the overall condition of on-site vegetation, and the presence of potentially regulated jurisdictional features (e.g., streams, flood control channels) were noted within the project site. Michael Baker used GIS ArcView software to digitize the mapped vegetation communities and then transferred these data onto an aerial photograph to further document existing conditions and quantify the acreage of each vegetation community. Refer to Table 1 below for a summary of the survey dates, surveyors, times, and conditions.

Table 1: Survey Date, Surveyor, and Conditions

2.3 VEGETATION COMMUNITIES

Vegetation communities occurring within the project site were delineated on an aerial photograph during the field survey and later digitized using the GIS ArcView software to quantify the area of each vegetation community in acres. Vegetation communities occurring within the project site were classified in accordance with vegetation descriptions provided in the *Manual of California Vegetation* (Sawyer et al. 2009) and cross referenced with vegetation community descriptions included in the MSHCP via the RCA's online MSHCP Information Application (RCA 2022).

2.4 PLANTS

Plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unfamiliar plants were photographed in the field and later identified in the laboratory using taxonomic guides. Plant nomenclature used in this report follows the Jepson Manual: Vascular Plants of California, Second Edition (Baldwin et al. 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

2.5 WILDLIFE

Wildlife species detected during the field survey by sight, calls, tracks, scat, or other types of sign were recorded in a field notebook. Field guides used to assist with identification of species during the field survey included *The Sibley Guide to Birds* (Sibley 2014) for birds, *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003) for herpetofauna, and *A Field Guide to Mammals of North America* (Reid 2006). Although common names of wildlife species are well standardized, scientific names are provided immediately following common names of wildlife species in this report (first reference only). To the extent possible, nomenclature of birds follows the most recent annual supplement of the American Ornithological Union's *Checklist of North American Birds* (Chesser et al. 2020); nomenclature of amphibians and reptiles follows *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding* (Crother 2017); and nomenclature of mammals follows the *Bats of the United States and Canada* (Harvey et al. 2011) and *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

2.6 OTHER FIELD STUDIES

2.6.1 DELINEATION OF STATE AND FEDERAL JURISDICTIONAL WATERS

Due to a lack of any potentially jurisdictional features within the project site, a jurisdictional delineation was not conducted for this project.

Section 3 Results

The project site is located in southwestern Riverside County and generally comprises a mixture of developed and undeveloped, but highly disturbed, land that is either devoid of vegetation or dominated by non-native, ruderal plant species. Land uses surrounding the project site mainly consist of existing residential developments, commercial businesses, and a few small plots of undeveloped land. Refer to Appendix A for representative photographs taken throughout the project site during the field survey.

3.1 TOPOGRAPHY AND SOILS

On-site surface elevation within the project site ranges from approximately 1,460 to 1,470 feet above mean sea level and generally slopes to the west. According to the *Custom Soil Resource Report for Western Riverside County, California* (USDA 2022), the project site is underlain by the following soil map units: Hanford coarse sandy loam, 2 to 8 percent lopes (HcC). Refer to Figure 4, *USDA Soils*, for a depiction of soil map units within the project site.

3.2 VEGETATION COMMUNITIES AND LAND COVER TYPES

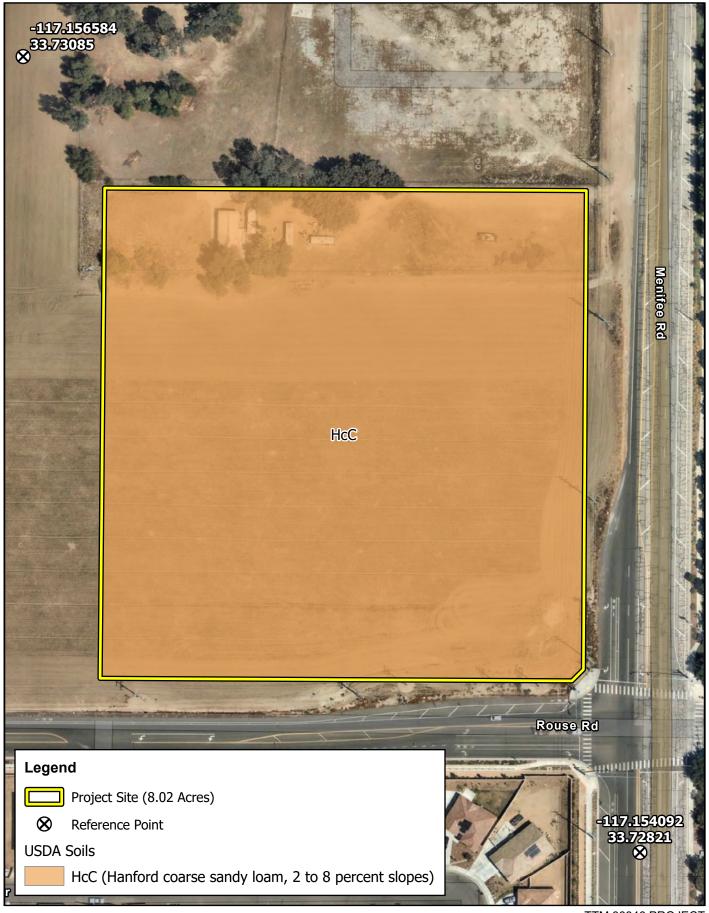
No natural vegetation communities occur within the project site. However, the project site contains two (2) land cover types classified as disturbed habitat and developed. These land cover types are depicted on Figure 5, *Vegetation Communities and Land Cover Types*, and described in further detail below.

3.2.1 DISTURBED HABITAT

Approximately 8.02 acres of disturbed habitat occurs within the project site, correlating to the "residential/urban/exotic" community described in the MSHCP. Disturbed habitat within the project site does not comprise a natural vegetation community and instead consists of unpaved bare ground or areas that have been previously disked or tilled as part of routine weed abatement activities. Surface soils within these areas have been heavily disturbed/mixed/compacted as a result of anthropogenic disturbances and are either devoid of vegetation or dominated by non-native, ruderal plant species including, but not limited to, stinknet (*Oncosiphon pilulifer*), telegraph weed (*Heterotheca grandiflora*), Russian thistle (*Salsola tragus*), cheatgrass (*Bromus tectorum*), red brome (*Bromus madritensis* ssp. *rubens*), and short-pod mustard (*Hirschfeldia incana*). Refer to Appendix B for a complete list of plant species that were observed within the project site during the field survey.

3.3 WILDLIFE

Natural vegetation communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a general discussion of those wildlife species that were observed during the field survey or that are expected to occur based on existing site conditions. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions during



TTM 38346 PROJECT BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS





TTM 38346 PROJECT BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS 150

Vegetation Communities and Land Cover Types



75

which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. Refer to Appendix B for a complete list of wildlife species observed during the field survey.

3.3.1 FISH

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would support populations of fish were observed in the project site during the field survey. Therefore, no fish are expected to occur.

3.3.2 AMPHIBIANS

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable breeding habitat for amphibians were observed within the project site during the field survey. Therefore, no amphibians are expected to occur.

3.3.3 REPTILES

Western side-blotched lizard (*Uta stansburiana elegans*) was the only reptile species observed within the project site during the field survey. The highly disturbed nature of the project site likely precludes the presence of a wide variety of reptile species, except those species that are most acclimated to edge or urban environments such as Great Basin fence lizard (*Sceloporus occidentalis longipes*), San Diego alligator lizard (*Elgaria multicarinata webbii*), and San Diego gophersnake (*Pituophis catenifer deserticola*).

3.3.4 BIRDS

Thirteen (13) bird species were detected within the project site during the field survey, the most commonly occurring of which included rock pigeon (*Columba livia*), house finch (*Haemorhous mexicanus*), yellow-rumped warbler (*Setophaga coronata*), American pipit (*Anthus rubescens*), and bushtit (*Psaltriparus minimus*). Refer to Appendix B for a complete list of bird species that were observed within the project site during the field survey.

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the California Fish and Game Code² (CFGC). No active or remnant bird nests were observed directly within the project site during the field survey. However, the project site does provide suitable nesting habitat for bird species that nest on the ground (e.g., killdeer). It should also be noted that an owl box was found nailed to a eucalyptus (*Eucalyptus* sp.) tree approximately 225 feet to the north of the project site. Michael Baker was unable to determine during the survey if the box is currently in use.

Tentative Tract Map 38346 Project Biological Resources Assessment and MSHCP Consistency Analysis

Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by CFGC or any regulation made pursuant thereto; Section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey); and Section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA, as amended (16 U.S.C. § 703 et. sq.).

3.3.5 MAMMALS

The project site and surrounding undeveloped plots provide marginal habitat for a limited variety of mammalian species adapted to living in highly disturbed edge or urban environments. The only mammalian species detected during the field survey was California ground squirrel (*Otospermophilus beecheyi*). Other urban-adapted mammalian species that could occur on the project site include desert cottontail (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), and domestic dog (*Canis lupus familiaris*).

3.4 MIGRATORY CORRIDORS AND LINKAGES

Wildlife corridors and linkages are key features for wildlife movement between habitat patches. Wildlife corridors are generally defined as those areas that provide opportunities for individuals or local populations to conduct seasonal migrations, permanent dispersals, or daily commutes, while linkages generally refer to broader areas that provide movement opportunities for multiple keystone/focal species or allow for propagation of ecological processes (e.g., for movement of pollinators), often between areas of conserved land.

The project site is not located within any wildlife corridors, wilderness areas, wilderness study areas, or areas of critical environmental concern identified in the MSHCP. Wildlife movement opportunities into or out of the project site have been significantly reduced, if not completely eliminated, due to surrounding high-traffic roadways (i.e., Menifee Boulevard, Rouse Road, Case Road) and existing residential/commercial developments, which have fragmented the connection between the project site and any naturally occurring vegetation communities within the vicinity. In addition, the disturbed and developed nature of the project site, absence of native vegetation for cover, and elevated noise levels, vehicle traffic, lighting, and human presence associated with surrounding residential developments and roadways has further reduced the potential for the project site to be used as a wildlife movement corridor or linkage.

3.5 SPECIAL-STATUS BIOLOGICAL RESOURCES

The CNDDB and CIRP were queried for reported locations of special-status plant and wildlife species as well as special-status natural vegetation communities in the USGS *Romoland, Perris, Lakeview,* and *Winchester, California* 7.5-minute quadrangles. The field survey was conducted to assess and evaluate the existing condition of the habitat(s) within the boundaries of the project site to determine if the existing vegetation communities, at the time of the field survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species. Additionally, the reported locations of the CNDDB and CIRP species records in relation to the project site were considered. The following categories were utilized to assign the potential for each species to occur within the project site:

- **Present**: the species was observed or detected within the project site during the field survey.
- **High**: Occurrence records (within 20 years) indicate that the species has been known to occur on or within one mile of the project site and the site is within the normal expected range of this

- species. Intact, suitable habitat preferred by this species occurs within the project site and/or there is viable landscape connectivity to a local known extant population(s) or sighting(s).
- Moderate: Occurrence records (within 20 years) indicate that the species has been known to occur within one mile of the project site and the site is within the normal expected range of this species. There is suitable habitat within the project site, but the site is ecologically isolated from any local known extant populations or sightings.
- Low: Occurrence records (within 20 years) indicate that the species has been known to occur within five miles of the project site, but the site is outside of the normal expected range of the species and/or there is poor quality or marginal habitat within the project site.
- **Not Expected**: There are no occurrence records of the species occurring within five miles of the project site, there is no suitable habitat within the project site, and/or the project site is outside of the normal expected range for the species.

The literature search identified twenty-nine (29) special-status plant species, forty-one (41) special-status wildlife species, and three (3) special-status vegetation communities as having occurred in the USGS Romoland, Perris, Lakeview, and Winchester, California 7.5-minute quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Special-status biological resources identified during the literature review as having the potential to occur within the vicinity of the project site are presented in Table C-1: Potentially Occurring Special-Status Biological Resources, in Appendix C.

3.5.1 SPECIAL-STATUS PLANT SPECIES

Twenty-nine (29) special-status plant species have been recorded within the USGS *Romoland, Perris, Lakeview*, and *Winchester, California* 7.5-minute quadrangles (CDFW 2023; CNPS 2023) or within the general project vicinity (USFWS 2023). No special-status plant species were observed within the project site during the field survey. Disturbed habitat within the project site does not comprise a natural vegetation community and instead consists of unpaved bare ground or areas that have been previously disked or tilled as part of routine weed abatement activities; according to historic aerial imagery the southern portion of the project site (the open field) has been regularly mowed and kept clear of any substantive non-weedy vegetative cover for decades, and the northern portion (private property) has been maintained and in active use also for decades (Google, Inc. 2022). Surface soils within these areas have been heavily disturbed/mixed/compacted as a result of anthropogenic disturbances and are either devoid of vegetation or dominated by non-native, ruderal plant species. Based on the results of the literature review and the field survey, existing/historical site conditions, and a review of specific habitat requirements, occurrence records, and known distributions, Michael Baker determined that all special-status plant species identified during the literature review either have a low potential or are not expected to occur within the project site (refer to Appendix C).

3.5.2 SPECIAL-STATUS WILDLIFE SPECIES

Forty-one (41) special-status wildlife species have been recorded within the USGS Romoland, Perris, Lakeview, and Winchester, California 7.5-minute quadrangles (CDFW 2023) or within the general project vicinity (USFWS 2023). No special-status wildlife species were detected within the project site during the field survey. Based on the results of the literature review and the field survey, existing site conditions, and a review of specific habitat requirements, occurrence records, and known distributions, Michael Baker determined that Cooper's hawk (Accipiter cooperii; a State Watch List [WL] species), northern harrier (Circus hudsonius; a State Species of Special Concern [SSC]), and California horned lark (Eremophila alpestris actia; a State WL species) all have a moderate potential to forage within the project site, but are not expected to nest. No special-status bird species are expected to nest within the project site due to a general lack of suitable nesting habitat. All other special-status wildlife species identified during the literature review either have a low potential or are not expected to occur within the project site (refer to Appendix C).

3.5.3 SPECIAL-STATUS VEGETATION COMMUNITIES

Three (3) special-status vegetation communities have been recorded within the USGS *Romoland, Perris, Lakeview,* and *Winchester, California* 7.5-minute quadrangles: Southern Coast Live Oak Riparian Forest; Southern Cottonwood Willow Riparian Forest; and Southern Riparian Scrub (CDFW 2023). However, none of these special-status vegetation communities occur within or adjacent to the project site.

3.6 CRITICAL HABITAT

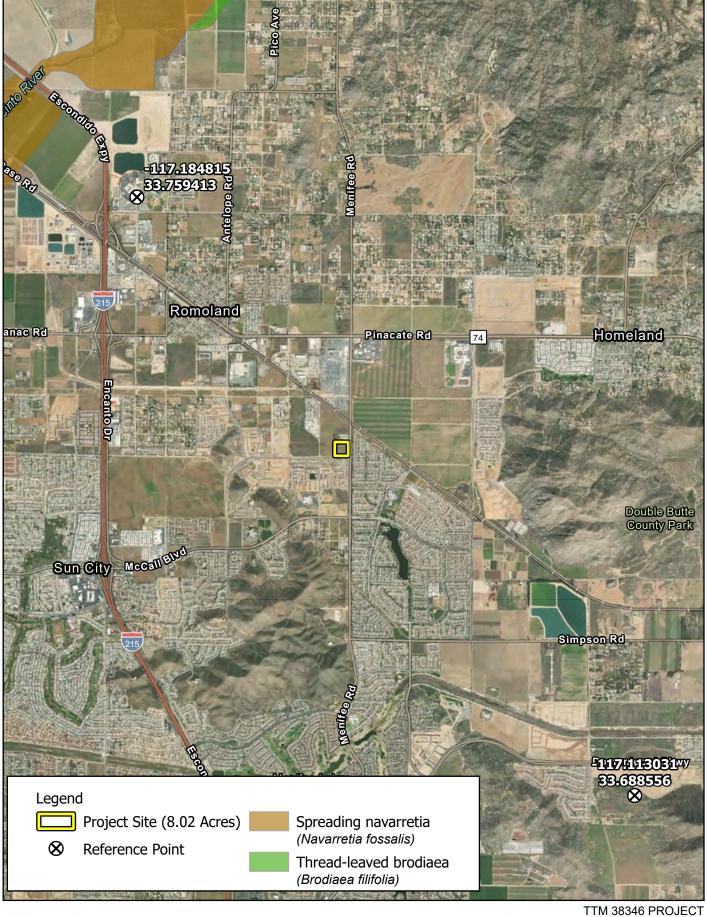
Under the definition used by the federal Endangered Species Act (FESA), designated Critical Habitat refers to specific areas within the geographical range of a species that were occupied at the time it was listed that contain the physical or biological features that are essential to the survival and eventual recovery of that species and that may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated as Critical Habitat if they contain one or more of the physical or biological features that are essential to that species' conservation and if the occupied areas are inadequate to ensure the species' recovery. If a project may result in take or adverse modification to a species' designated Critical Habitat and the project has a federal nexus, the project proponent may be required to provide suitable mitigation. Projects with a Federal nexus include those that occur on federal lands, require federal permits (e.g., federal Clean Water Act [CWA] Section 404 permit), or receive any federal oversight or funding. If there is a federal nexus, then the federal agency that is responsible for providing funds or permits would be required to consult with the USFWS under the FESA. The project site is not located within or adjacent to designated Critical Habitat for any federally listed species; the nearest Critical Habitat designation is located approximately 3.5 miles to the northwest of the project site (refer to Figure 6, *Critical Habitat*).

3.7 STEPHENS' KANGAROO RAT HABITAT CONSERVATION PLAN

Separate from the MSHCP, the County of Riverside established a boundary in 1996 for protecting the Stephens' kangaroo rat (*Dipodomys stephensi*; SKR), a federally endangered and State threatened species. The SKR is protected under the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP; County Ordinance No. 663.10). The project site does not provide suitable habitat for SKR and is not located within an established Core Reserve area identified within the SKR HCP. However, payment of the SKR mitigation fee may still be required prior to implementation of the proposed project.

3.8 STATE AND FEDERAL JURISDICTIONAL RESOURCES

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers regulates discharge of dredged or fill material into waters of the U.S. pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Water Quality Control Board regulates discharges to surface waters pursuant to Section 401 of the CWA and Section 13263 of the California Porter-Cologne Water Quality Control Act, and the CDFW regulates alterations to lakes, streambeds, and riparian habitats pursuant to Section 1600 *et seq.* of the CFGC. The project site does not contain any potentially jurisdictional features and will not require any additional regulatory permitting.



BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

2,500 5,000

Feet

Critical Habitat

Figure 6

Michael Baker

Section 4 MSHCP Consistency Analysis

This section contains the findings of Michael Baker's MSHCP consistency analysis for the proposed project. The purpose of this consistency analysis is to summarize the biological data for the proposed project and to document the project's consistency with the goals and objectives of the MSHCP. According to the RCA's online MSHCP Information Application (RCA 2022), the project site is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or Public/Quasi-Public (P/QP) Lands identified by the MSHCP. However, the project site is located within a designated survey area for burrowing owl (refer to Figure 7, MSHCP Conservation Areas).

4.1 PROJECT INTRODUCTION AND SETTING

4.1.1 PROJECT AREA

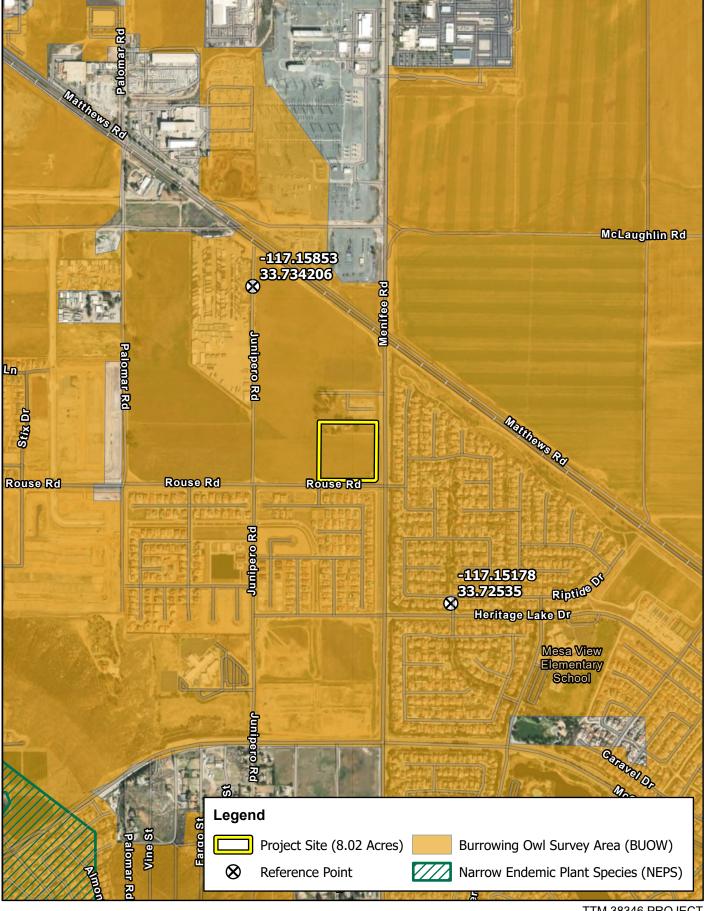
The project site is composed of APNs 331-250-028, 331-250-029 and 331-250-030 and totals approximately 8.02 net acres located to the north of Rouse Road, south of Case Road, east of Junipero Road, and west of Menifee Road. As previously stated, the project site is located within a designated survey area for burrowing owl but is not located within any other designated survey areas or any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP Lands identified by the MSHCP (RCA 2022).

4.1.2 PROJECT DESCRIPTION

The proposed project consists of the development of 162 two-story attached condominium units on an approximately 8.05-net acre site (refer to Figure 3, *Project Site*). The density of the project would be approximately 23.65 du/ac, which is within the allowable density range of 20.1 to 24 du/ac for land with the High Density Residential zoning designation. Interior livable space would consist of 1, 2, and 3-bedroom units ranging from approximately 918 square feet to 1,336 square feet. The maximum building height of the residences would be approximately 28 feet. 357 parking spaces would be provided for residents and guests, inclusive of 287 garage spaces, 65 standard stalls, four accessible stalls, and one electric vehicle stall. Amenities within the development would include a clubhouse, pool, and common open space area.

Additional improvements include installation of a stormwater infiltration basin in the southwest corner of the project site, approximately 810 feet of offsite sewer lines, 1,220 feet of offsite reclaimed water piping, and connections to existing storm drain and water facilities. Sidewalk, curb, and gutter would be installed along the project's frontages at Rouse Road and Menifee Road.

The project would be constructed to conform with the City of Menifee Comprehensive Development Code (Municipal Code Title 9, Planning and Zoning, Article 4, Site Development Regulations and Performance Standards) and the City's adopted Design Guidelines (amended March 2, 2022), which includes design standards related to building size, height, setback, and materials, as well as landscaping, signage, and other considerations.



Michael Baker

BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

1,000 2,000
Feet MSHCP Conservation Areas

Site Access

Access to the site would be provided via two entry points: one from Rouse Road and one from Menifee Road. The project would install a raised median on each street to limit movements to left in/right in, right out on Menifee Road and right in, right out only on Rouse Road. Access and circulation improvements would be designed and constructed consistent with City design and engineering standards.

Landscaping

Ornamental water-efficient landscaping would be installed throughout the site. A conceptual landscape plan was developed for the project in accordance with the requirements of the Menifee Municipal Code Title 9, *Planning and Zoning*, Chapter 9.195.040, *Landscape Requirements*. Planting materials would include a mix of trees, shrubs, vines, groundcover, and turf. The total size of landscaped areas would be approximately 1.47 acres or approximately 17 percent of the site. A 4- to 6-foot retaining wall would be installed around the perimeter of the property.

Utilities and Services

The following utilities and services would serve the site:

- *Water*. The proposed development would be served by Eastern Municipal Water District (EMWD) for domestic (drinking) water supply services.
- Sewer. EMWD provides wastewater/sanitary sewer service to the project area.
- <u>Stormwater Drainage</u>. Open drainage channels and underground storm drains larger than 36 inches
 diameter are operated and maintained by the Riverside County Flood Control and Water
 Conservation District; smaller underground storm drains are operated and maintained by the City
 of Menifee Public Works Department.

<u>Dry Utilities</u>. The site would be served by Southern California Edison for electricity services and the Southern California Gas Company for natural gas services. It is noted that the project is bordered on the east and south by Southern California Edison aboveground transmission and distribution lines.

4.1.3 COVERED ROADS

The proposed project does not include the construction of, or improvements to, any Covered Roads referenced in Section 7 of the MSHCP. Therefore, a discussion related to the proposed project and Covered Roads is not warranted.

4.1.4 COVERED PUBLIC ACCESS ACTIVITIES

The proposed project does not include the construction of, or improvements to, any public access facilities or propose any public access activities. Therefore, a discussion related to the proposed project and Covered Public Access Activities is not warranted.

4.1.5 GENERAL SETTING

The project site totals approximately 8.02 net acres and is generally located to the north of Rouse Road, south of Case Road, east of Junipero Road, and west of Menifee Road in a mostly developed portion of the City of Menifee. On-site surface elevation within the project site ranges from approximately 1,460 to 1,470 feet above mean sea level and generally slopes to the west. Land uses immediately surrounding the project site mainly consist of existing residential developments, commercial businesses, and a few small plots of undeveloped land, with a mixture of industrial uses and additional open space to the north across Case Road.

4.2 RESERVE ASSEMBLY ANALYSIS

According to the RCA's online MSHCP Information Application (RCA 2022), the project site is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP Lands identified by the MSHCP. Therefore, a discussion related to the proposed project and Reserve Assembly Analysis is not warranted.

4.2.1 CRITERIA CELL ANALYSIS

Pursuant to Section 6.1.1 of the MSHCP, development within a Criteria Cell is subject to the Habitat Evaluation and Acquisition Negotiation Strategy review process. Based on a review of the RCA's online MSHCP Information Application (RCA 2022), the project site is not located within any Criteria Cells (refer to Figure 7, *MSHCP Conservation Areas*). Therefore, a discussion related to the proposed project and Criteria Cell Analysis is not warranted.

4.2.2 PUBLIC/QUASI-PUBLIC LANDS ANALYSIS

According to the RCA's online MSHCP Information Application (RCA 2022), the project site is not located within any P/QP Lands identified by the MSHCP. Therefore, a discussion related to the proposed project and P/OP Lands is not warranted.

4.3 VEGETATION MAPPING

As stated in Section 6.3.1 of the MSHCP, project-level vegetation mapping may be required for projects that meet certain criteria to assess whether conservation is required. Michael Baker conducted a review of the 2012 vegetation layer presented in the RCA's online MSHCP Information Application and aerial photography to understand existing site conditions and extent of any disturbances that have occurred on the project site (RCA 2022). In addition, the field survey was conducted in order to document the extent and condition of the vegetation communities occurring within the boundaries of the project site.

Vegetation communities and land cover types occurring within the project site were delineated on an aerial photograph during the field survey and later digitized using the GIS ArcView software to quantify the area of each vegetation community in acres. If present, vegetation communities occurring within the project site

were classified in accordance with the vegetation descriptions provided in the *Manual of California Vegetation* (Sawyer et al. 2009) and cross referenced with the vegetation communities described in the MSHCP and identified by the RCA's online MSHCP Information Application (RCA 2022).

Based on the results of the field survey, the project site contains one (1) land cover type that would be classified as disturbed habitat, which correlates to the "residential/urban/exotic" community described in the MSHCP; no native vegetation communities occur (refer to Figure 5, *Vegetation Communities and Land Cover Types*). Implementation of the proposed project would result in the permanent loss of approximately 8.02 acres of disturbed habitat. No other vegetation communities or land cover types would be affected by the proposed project. It should be noted that the 2012 MSHCP vegetation layer (RCA 2022) maps most of the project site as "agricultural land." Michael Baker reviewed historic aerial imagery in Google Earth, historic street view imagery in Google Maps, and current conditions, and could not find evidence of active agriculture on the site since the October 2011 street view image in Google Maps. All other street view and aerial images available after October 2011 show the site either having weeds or, in nearly all images, being recently mowed, resulting in Michael Baker's decision to call much of the site "disturbed" rather than "agricultural land."

4.4 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE RESOURCES AND VERNAL POOLS

4.4.1 RIPARIAN/RIVERINE RESOURCES

As defined under Section 6.1.2 of the MSHCP, riparian/riverine resources are areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. Conservation of these areas is intended to protect habitat that is essential to a wide variety of listed or special-status water-dependent fish, amphibian, avian, and plant species. Based on the results of the October 2022 field survey, there are no potentially jurisdictional features present on the project site and therefore no features qualifying as riparian/riverine.

4.4.2 VERNAL POOLS

One of the factors for determining the presence of vernal pools would be demonstrable evidence of seasonal ponding in an area of topographic depression that is not subject to flowing waters. Prior to conducting the field survey, a review of historical aerial photographs using Google Earth was conducted. In addition, a review of the *Custom Soil Resource Report for Western Riverside Area, California* (USDA 2022), was also conducted to determine the soil associations within the project site. The MSHCP lists two general classes of soils known to be associated with special-status plant species and presence of suitable vernal pool habitat: clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with vernal pool habitat within the MSHCP Plan Area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willow association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek.

According to the *Custom Soil Resource Report for Western Riverside County, California* (USDA 2022), the southwest portion of the project site is underlain by Hanford coarse sandy loam (HcC) (refer to Figure 4, *USDA Soils*). No clay soils associated with vernal pools are present within the project site. Therefore, vernal pools are not expected to be present within the project site.

4.4.3 FAIRY SHRIMP

Two (2) species of fairy shrimp have been recorded in the USGS Romoland, Perris, Lakeview, and Winchester, California 7.5-minute quadrangles according to the literature review: vernal pool fairy shrimp (Branchinecta lynchi) and Riverside fairy shrimp (Streptocephalus woottoni). As described in Section 5.4.2 and throughout this report, the project site has undergone extensive disturbance, particularly vegetation clearance and mowing, for decades, and at least historically was used for agriculture. Natural habitats, including vernal pools, are no longer present on the project site. In addition, the soils typically associated with vernal pools are not present within the project site. Due to the lack of suitable habitat, fairy shrimp are not expected to occur within the project site. Therefore, a discussion related to the proposed project and fairy shrimp is not warranted.

4.4.4 RIPARIAN BIRDS

Based on the results of the field survey, no riparian vegetation communities or suitable nesting habitat for riparian birds covered under the MSHCP is present within the project site. Therefore, a discussion related to riparian birds and the proposed project is not warranted.

4.5 PROTECTION OF NARROW ENDEMIC PLANT SPECIES

According to the RCA's online MSHCP Information Application (RCA 2022) and Figure 6-1 of the MSHCP, the project site is not located within a designated survey area for Narrow Endemic Plant Species (NEPS; refer to Figure 7, *MSHCP Conservation Areas*). Therefore, a discussion related to the proposed project and NEPS is not warranted.

4.6 ADDITIONAL SURVEY NEEDS AND PROCEDURES

4.6.1 CRITERIA AREA PLANT SPECIES

According to the RCA's online MSHCP Information Application and Figure 6-2 of the MSHCP, the project site is not located within a designated survey area for Criteria Area Plant Species (RCA 2022). Therefore, a discussion related to the proposed project and Criteria Area Plant Species is not warranted.

4.6.2 AMPHIBIANS

According to the RCA's online MSHCP Information Application and Figure 6-3 of the MSHCP, the project site is not located within a designated survey area for amphibians covered under the MSHCP (RCA 2022). Therefore, a discussion related to the proposed project and amphibians is not warranted.

4.6.3 BURROWING OWL

According to the RCA's online MSHCP Information Application (RCA 2022) and Figure 6-4 of the MSHCP, the project site is located within a designated survey area for burrowing owl (refer to Figure 7, *MSHCP Conservation Areas*).

Literature Review/Habitat Assessment Results

The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk, 1993; Dechant *et al.*, 1999). Burrowing owls are dependent upon the presence of burrowing mammals (e.g., California ground squirrels, coyotes [*Canis latrans*], American badger [*Taxidea taxus*]) whose burrows are used for roosting and nesting. The presence or absence of mammal burrows is often a major factor that limits the presence or absence of burrowing owl. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning storm drains, stand-pipes, and dry culverts. Burrowing owls may also burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. They also require open vegetation allowing clear line-of-sight of the surrounding habitat to forage as well as watch for predators.

According to the CNDDB, there are twenty-five (25) occurrence records for burrowing owl within the USGS Romoland, California 7.5-minute quadrangle, and eighty-five (85) total within the Romoland, Perris, Lakeview, and Winchester, California 7.5-minute quadrangles (CDFW 2023). The closest extant occurrence (Occurrence Number 1940) was recorded approximately 0.5 mile northwest of the project site; one pair with young was detected over the course of March to August 2015. There have been no reports of this species at this location since 2015 in either the CNDDB or eBird and recent aerial imagery shows the surrounding area under new development (Google, Inc. 2022). Based on a review of the eBird database, burrowing owls have also been observed in numerous locations within a 5-mile radius, mostly south of Domenigoni Parkway and/or west of Murrieta Road or to the north on the outskirts of the City of Perris, with nearly all known occurrences several miles from the project site (eBird 2022).

No burrowing owls, sign (i.e., pellets, feathers, castings, or whitewash), occupied burrows, or remnant burrows were observed during Michael Baker's field survey/habitat assessment, which for the purposes of burrowing owl also included walking up to 500 feet outside of the project site to look for owls or owl sign. A total of five (5) suitable burrows (> 4 inches in diameter) were found on the project site, all in a single cluster in the northwest quadrant of the site; none of these burrows showed any sign of current or former owl occupancy. All other burrows throughout the project site and 500-foot buffer were generally approximately 2 inches in diameter, consistent with lizards or small rodents, and unsuitable for burrowing owls. The project site is bordered along its southern edge by transmission towers that could provide perching opportunities for predatory raptors, and to the east and south by large residential communities and busy roads that increase human disturbance in the area. In addition, historic aerial imagery shows that the

project site has been continually disced/mowed over the years, with nearly every aerial image since 2009 showing new mowing-related disturbance since the previous image and most street view images after 2011 showing recently mowed land (Google, Inc. 2022). Finally, the property immediately north of the project site has a cluster of large eucalyptus trees in it, one of which had an owl box nailed to the side of the tree. If the owl box is occupied, either of the two larger owl species that may occur in this area (great horned owl [*Bubo virginianus*] and barn owl [*Tyto alba*]) may act as predators of burrowing owls if active at the same time of day, further reducing the likelihood of burrowing owls to be present.

Additional Survey and Mitigation Requirements

Although suitable habitat is present within the project site and within 500 feet, for the above-mentioned reasons it is Michael Baker's determination that burrowing owls have a low potential to occur within the project site as anything other than transients during migration. Resident birds in either the breeding season or winter are not expected to occur. For this reason, Michael Baker does not recommend that focused surveys occur. However, because suitable habitat is present, Michael Baker recommends, consistent with the MSHCP, that a pre-construction clearance survey be conducted on the project site and in suitable habitat within 500 feet no more than thirty (30) days prior to initiating ground disturbance activities to avoid direct take of burrowing owls that may be present. Depending on the timing of the 30-day survey, a second survey could be conducted at the same time as a standard nesting bird clearance survey, typically within seven (7) days prior to the start of construction. These surveys would need to be conducted by a qualified biologist and in accordance with the methods outlined in the Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan (RCA 2006). Once the survey is completed, the qualified biologist should prepare and submit a final report documenting the results of the clearance survey to the City of Menifee for review and file. If no burrowing owls or occupied burrows are detected, project activities may begin, and no additional avoidance or minimization measures would be required. However, if an occupied burrow is found within the project impact area during the pre-construction clearance survey, a burrowing owl avoidance and minimization plan and Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis would need to be prepared and submitted to the Wildlife Agencies (CDFW and USFWS) for approval prior to initiating project activities.

4.6.4 MAMMALS

According to the RCA's online MSHCP Information Application and Figure 6-5 of the MSHCP (RCA 2022), the project site is not located within a designated survey area for mammals covered under the MSHCP (RCA 2022). Therefore, a discussion related to the proposed project and mammals is not warranted.

4.7 INFORMATION ON OTHER SPECIES

4.7.1 DELHI SANDS FLOWER-LOVING FLY

According to the RCA's online MSHCP Information Application (RCA 2022) and the *Custom Soil Resource Report for Western Riverside Area, California* (USDA 2022), the project site is not underlain by or fall within an area containing Delhi Sand soils. Therefore, no further discussion related to the proposed project and Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) is warranted.

4.7.2 SPECIES NOT ADEQUATELY CONSERVED

As described in Section 2.1.4 of the MSHCP, 118 of the 146 Covered Species addressed in the MSHCP are considered to be adequately conserved. The remaining 28 Covered Species will be considered to be adequately conserved when certain conservation requirements are met as identified in the species-specific conservation objectives listed in Table 9-3 of the MSHCP.

None of the species listed in Table 9-3 of the MSHCP were observed within the project site during the field survey. Based on the literature review, existing site conditions, and a review of the specific habitat requirements, occurrence records, and known distributions of these species, none of the 28 species listed in Table 9-3 of the MSHCP are expected to occur within the project site.

4.8 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE

The urban/wildlands interface guidelines presented in Section 6.1.4 of the MSHCP are intended to address indirect effects associated with new development in proximity to MSHCP Conservation Areas. The project site is not located adjacent to any Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP Lands identified by the MSHCP (refer to Figure 7, MSHCP Conservation Areas). Therefore, a discussion related to the proposed project and the urban/wildlands interface guidelines is not warranted.

4.9 STANDARD BEST MANAGEMENT PRACTICES

In accordance with Appendix C of the MSHCP, the following applicable standard Best Management Practices (BMPs) should be implemented to reduce project-related impacts:

- The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
- The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.

- Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
- To avoid attracting predators of the species of concern, the project site shall be kept as clean of
 debris as possible. All food related trash items shall be enclosed in sealed containers and regularly
 removed from the site(s).
- Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

Section 5 Conclusion

The project site is located in southwestern Riverside County and generally comprises a mixture of undeveloped, but highly disturbed, land that is generally devoid of vegetation or dominated by non-native, ruderal plant species. No natural vegetation communities were mapped within the project site. However, the project site contains a land cover type classified as disturbed habitat. Land uses surrounding the project site mainly consist of existing residential developments, commercial businesses, and a few small plots of undeveloped land.

No special-status plant species were observed within the project site during the field survey. Based on the results of the literature review and field survey, existing/historical site conditions, and a review of specific habitat requirements, occurrence records, and known distributions, Michael Baker determined that all special-status plant species identified during the literature review either have a low potential or are not expected to occur within the project site.

No special-status wildlife species were observed within the project site during the field survey. Based on the results of the literature review and the field survey, existing site conditions, and a review of specific habitat requirements, occurrence records, and known distributions, Michael Baker determined that Cooper's hawk (a State WL species), northern harrier (a State SSC), and California horned lark (a State WL species) all have a moderate potential to forage within the project site. All other special-status wildlife species identified during the literature review either have a low potential or are not expected to occur within the project site. No special-status wildlife species are expected to nest or breed within the project site.

No potentially jurisdictional resources or riparian/riverine resources are located within the project site.

According to the RCA's online MSHCP Information Application (RCA 2022), the proposed project is not located within any Criteria Cells, Subunits, Cores, Linkages, or P/QP Lands. As such, the proposed project will not require a HANS application and will not be subject to any required mitigation for loss of on-site habitat. No additional avoidance or minimization measures are expected other than the MSHCP's standard BMPs as listed in Section 4.9 of this report.

Although suitable habitat for burrowing owls is present, based on the high degrees of on-site and surrounding disturbance including routine mowing/discing and surrounding residential communities, lack of suitable burrows on-site, and presence of perching and nesting opportunities for predatory raptors, focused burrowing owl surveys are not recommended. However, the MSHCP would still require that a preconstruction clearance survey be conducted no more than thirty (30) days prior to initiating ground disturbance activities to avoid direct take of burrowing owls that may occur on or within 500 feet of the project impact area. This survey is required at all times of the year but can be conducted concurrently with the nesting bird clearance survey within seven (7) days prior to the start of construction between February 1 and August 31. This survey would need to be conducted by a qualified biologist and in accordance with the methods outlined in the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple*

Species Habitat Conservation Plan (RCA 2006). Once the survey is completed, the qualified biologist should prepare and submit a final report documenting the results of the clearance survey to the City of Menifee for review and file. If no burrowing owls or occupied burrows are detected, project activities may begin, and no additional avoidance or minimization measures would be required. However, if an occupied burrow is found within the project impact area during the pre-construction clearance survey, a burrowing owl avoidance and minimization plan and DBESP analysis would need to be prepared and submitted to the Wildlife Agencies (CDFW and USFWS) for approval prior to initiating project activities.

In order to avoid impacts to nesting birds, any vegetation removal and ground disturbance should occur outside of the nesting bird season (February 1 to August 31). If avoidance of the nesting bird season is not feasible, a pre-construction nesting bird clearance survey should be conducted by a qualified biologist no more than seven (7) days prior to the start of any vegetation removal or ground disturbing activities to maintain compliance with the MBTA and CFGC and ensure that impacts to nesting birds do not occur. The qualified biologist should survey all suitable nesting habitat within the project site and within a biologically defensible buffer distance surrounding the project site for the presence of nesting birds and should provide documentation of the surveys and findings to the City of Menifee for review prior to initiating project activities. If no active bird nests are detected, project-related activities may begin. If an active nest is found, the bird should be identified to species and the approximate distance from the closest work site to the active nest should be estimated and the qualified biologist should establish a "no-disturbance" buffer around the active nest. The distance of the "no-disturbance" buffer may be increased or decreased according to the judgement of the qualified biologist depending on the level of construction activity and sensitivity of the species. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project-related activities within the "no disturbance" buffer may occur.

Section 6 References

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, Editors. 2012. *The Jepson Manual: Vascular Plants of California, Second Edition*. University of California Press, Berkeley, CA.
- Billerman, S.M., B. K. Keeney, P. G. Rodewald, and T. S. Schulenberg (Editors). 2020. Birds of the World. Cornell Laboratory of Ornithology, Ithaca, NY, USA. Accessed online at: https://birdsoftheworld.org/bow/home.
- Bradley, D.R., Ammerman, L.K., Baker, R.J., Bradley, L.C., Cook, J.A., Dowler, R.C., Jones, C., Schmidly, D.J., Stangl Jr., F.B., Van Den Bussche, R.A., and B. Würsig. 2014. Revised Checklist of North American Mammals North of Mexico, 2014. Occasional Papers of the Museum of Texas Tech University. 327. 1-27.
- Calflora. 2022. Information on California plants for education, research and conservation. [web application]. Berkeley, California: The Calflora Database [a non-profit organization]. Accessed online at: https://www.calflora.org/.
- California Department of Fish and Wildlife (CDFW). 2022. RareFind 5, California Natural Diversity Database, California. Data base report on threatened, endangered, rare or otherwise sensitive species and communities for the *Romoland, Perris, Lakeview,* and *Winchester, California* USGS 7.5-minute quadrangles. Accessed online at: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data.
- California Native Plant Society (CNPS). 2022. Inventory of Rare and Endangered Plants of California (online edition, v9-01 1.5). Accessed online at: http://www.rareplants.cnps.org/.
- California Natural Diversity Database (CNDDB). 2022a. *Special Animals List*. California Department of Fish and Wildlife. Sacramento, CA. Dated October 2022. Available online at: https://www.dfg.ca.gov/wildlife/nongame/list.html.
- CNDDB. 2022b. State and Federally Listed Endangered and Threatened Animals of California. California Department of Fish and Wildlife. Sacramento, CA. Dated October 2022. Available online at: https://www.dfg.ca.gov/wildlife/nongame/list.html.
- CNDDB. 2022c. *Special Vascular Plants, Bryophytes, and Lichens List*. Quarterly publication. 140 pp. Dated October 2022. Available online at: https://www.dfg.ca.gov/wildlife/nongame/list.html.
- CNDDB. 2022d. State and Federally Listed Endangered, Threatened, and Rare Plants of California. California Department of Fish and Wildlife. Sacramento, CA. Dated October 2022. Available online at: https://www.dfg.ca.gov/wildlife/nongame/list.html.

- Chesser, R. T., S. M. Billerman, K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, N. A. Mason, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, and K. Winker. 2020. *Check-list of North American Birds (online)*. American Ornithological Society. Accessed online at: http://checklist.aou.org/taxa.
- Crother, B. I. (ed.). 2017. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding pp. 1–102. SSAR Herpetological Circular 43.
- Dechant, J.A., M.L. Sondreal, D.H. Johnson, L.D. Igl, C.M. Goldade, P.A. Rabie, and B.R. Euliss. 1999 (revised 2002). *Effects of management practices on grassland birds: Burrowing Owl*. Northern Prairie Wildlife Research Center. Jamestown, ND.
- eBird. 2022. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Accessed online at: http://www.ebird.org.
- Google, Inc. 2022. Google Earth Pro version 7.3.6.9285, build date 11/7/2022. Historical aerial imagery from 2002 to 2022.
- Harvey, M. J., J. S. Altenbach, and T.L. Best. 2011. *Bats of the United States and Canada*. John Hopkins University Press, Baltimore, Maryland.
- Haug, E. A. and Didiuk, B. A. 1993. Use of Recorded Calls to Detect Burrowing Owls.
- Reid, F.A. 2006. A Field Guide to Mammals of North America, Fourth Edition. Houghton Mifflin Company, New York, New York.
- Regional Conservation Authority (RCA). 2006. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Available online at: https://www.wrc-rca.org/species/survey protocols/burrowing owl survey instructions.pdf.
- RCA. 2022. RCA MSHCP Information Map. Accessed online at: https://www.wrc-rca.org/rcamaps/.
- Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009. *A Manual of California Vegetation (Second Edition)*. California Native Plant Society, Sacramento, California, USA.
- Sibley, D.A. 2014. *The Sibley Guide to Birds, Second Edition*. Alfred A. Knopf, Inc., New York, New York.
- Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians, Third Edition. Houghton Mifflin Company, New York, New York.
- U.S. Department of Agriculture (USDA). 2022. Custom Soil Resource Report for Western Riverside Area, California. Accessed online at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

U.S. Fish and Wildlife Service (USFWS). 2022. Environmental Conservation Online System: Critical Habitat Mapper. Accessed online at: https://ecos.fws.gov/ecp/report/table/critical-habitat.html.

USFWS. 2023. Information for Planning and Consultation database. Accessed online at: https://ipac.ecosphere.fws.gov/.

Appendix A Site Photographs



Photograph 1: North-facing view of disturbed habitat across most of the project site from the southwest corner.



Photograph 2: West-facing view of disturbed habitat across most of the project site from the southeast corner.



Photograph 3: South-facing view across disturbed habitat at an adjacent residential community across the street from the project site.



Photograph 4: East-facing view across disturbed habitat at an adjacent residential community across the street from the project site.



Photograph 5: West-facing view of disturbed habitat from the center of the project site.



Photograph 6: Northeast-facing view of disturbed habitat and some properties with tall ornamental trees from the western end of the project site.



Photograph 7: South-facing view of disturbed habitat from near the project's northeast corner.



Photograph 8: Northwest-facing view of the property along the project site's northern edge. This property was undergoing active tree removal at the time of the survey. It is separated from additional properties to the north by chain link fences.



Photograph 9: East-facing view from outside of the project site at the properties to the north. All of the tall trees on the left are immediately outside of the project site.



Photograph 10: An owl box in the adjacent property outside of the project site as shown above. If occupied, any larger owl inside could prey on burrowing owls if present.

Appendix B Plant and Wildlife Species Observed

Table B-1: Plant and Wildlife Species Observed

Scientific Name*	Common Name	Cal-IPC Rating**	Special-Status Rank
Plants			
Bromus rubens*	red brome	High	
Bromus tectorum*	cheatgrass		
Eriogonum fasciculatum	California buckwheat		
Eucalyptus sp.*	eucalyptus		
Heterotheca grandiflora	telegraphweed		
Hirschfeldia incana*	short-pod mustard	Moderate	
Oncosiphon pilulifer*	stinknet	High	
Platanus racemosa	western sycamore		
Salsola tragus*	Russian thistle	Limited	
Schinus molle*	Peruvian pepper		
Washingtonia robusta*	Mexican fan palm	Moderate	
Reptiles			
Sceloporus occidentalis longipes	Great Basin fence lizard		
Birds			
Anthus rubescens	American pipit		
Buteo jamaicensis	red-tailed hawk		
Calypte anna	Anna's hummingbird		
Columba livia*	rock pigeon		
Corvus brachyrhynchos	American crow		
Corvus corax	common raven		
Falco sparverius	American kestrel		
Haemorhous mexicanus	house finch		
Psaltriparus minimus	bushtit		
Sayornis nigricans	black phoebe		
Sayornis saya	Say's phoebe		
Setophaga coronata	yellow-rumped warbler		
Spinus lawrencei	Lawrence's goldfinch		
Mammals			
Otospermophilus beecheyi	California ground squirrel		

* Non-native species

** California Invasive Plant Council (Cal-IPC) Ratings

High These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Appendix C Potentially Occurring Special-Status Biological Resources

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
		SPECIAL-STATUS WILD	LIFE SPECIE	S	
Accipiter cooperii Cooper's hawk	WL G5 S4	Yearlong resident of California. Generally, found in forested areas up to 3,000 feet above mean sea level (amsl) in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	Yes	No	Moderate (Foraging), Not Expected (Nesting): There is no suitable nesting habitat for this species within the project site. The open fields in and immediately around the site, as well as the surrounding residential neighborhoods, provide foraging habitat, and there are a number of eBird reports within a 5-mile radius of the site (eBird 2022).
Agelaius tricolor tricolored blackbird	ST SSC G2G3 S1S2	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate freshwater marsh dominated by cattails, willows, and bulrushes, and either flooded or thorny/spiny vegetation and suitable foraging space providing adequate insect prey.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	WL G5T3 S3	Yearlong resident that is typically found between 3,000 and 6,000 feet amsl. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush, but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Anniella stebbinsi southern California legless lizard	SSC G3 S3	Locally abundant specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. A large, protected population persists in the remnant of the once extensive El Segundo Dunes at Los Angeles International Airport.	No	No	Not Expected: There is no suitable habitat for this species within the project site.

Table C-1: Potentially Occurring Special-Status Biological Resources

	_				
Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Aquila chrysaetos golden eagle	FP WL G5 S3	Yearlong resident of California. Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	Yes	No	Low (Foraging), Not Expected (Nesting): There is no suitable nesting habitat for this species within the project site. The open fields in and immediately around the site provide foraging habitat, and there are a number of eBird reports within a 5-mile radius of the site (eBird 2022). However, the development and human activity around the site may reduce the site's attractiveness to eagles.
Arizona elegans occidentalis California glossy snake	SSC G5T2 S2	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats. Appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing.	No	No	Not Expected: There is no suitable habitat for this species within the project site.
Artemisiospiza belli belli Bell's sage sparrow	WL G5T2T3 S3	This species has a wide, but sparse distribution in western Riverside County, specifically within the "Riverside lowlands, San Jacinto Foothills, Santa Ana Mountains, and Desert Transition Bioregions. Yearlong resident on the coastal side of southern California mountains. Breeds in coastal sage scrub and chaparral habitats from February to August. They require semiopen habitats with evenly spaced shrubs one to two meters high. Occurs in chaparral dominated by fairly dense stands of chamise.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Aspidoscelis hyperythra orange-throated whiptail	WL G5 S2S3	Uncommon to fairly common over much of its range in Orange, Riverside, and San Diego counties. Also occurs in southwestern San Bernardino County near Colton. Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Aspidoscelis tigris stejnegeri coastal whiptail	SSC G5T5 S3	This subspecies is found in coastal southern California, mostly west of the Peninsular Ranges and south of the Transverse Ranges, and north into Ventura County. Ranges south into Baja California. Found in a variety of ecosystems, primarily hot and dry open areas with sparse vegetation in chaparral, woodland, and riparian areas. Associated with rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Athene cunicularia burrowing owl	SSC G4 S3	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	Yes (c)	No	Low (Foraging), Low (Nesting): The project site provides marginal foraging and nesting habitat for this species. Burrowing owls are known to be relatively widespread in the region, but the project site is generally either developed or consists of open fields that have been maintained via mowing/discing for decades. There is a somewhat recent (2015) record of this species occurring approximately 0.5 mile northwest of the project site (CDFW 2022a), but the surrounding area has been undergoing active development since 2020, with new homes built in 2022. Transmission towers running along Rouse Road immediately south of the project site provide perching opportunities for larger raptors, and only one potentially suitable owl burrow complex was found within the project site.
Branchinecta lynchi vernal pool fairy shrimp	FT G3 S3	Endemic to California and only found in vernal pools. Vernal pool habitats form in depressions above an impervious substrate layer, or claypan/duripan. This species does not occur in riverine, marine, or other permanent bodies of water. When the temporary pools dry, offspring persist in suspended development as desiccation-resistant embryos (commonly called cysts) in the pool substrate until the return of winter rains and appropriate temperatures allow some of the cysts to hatch.	Yes (a)	No	Not Expected: There is no suitable habitat for this species within the survey area.
Buteo regalis ferruginous hawk	WL G4 S3S4	Common winter resident of grasslands and agricultural areas in southwestern California. Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. This species does not breed in California.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	SSC G5T3Q S3	The yearlong resident coastal population (<i>C.b. sandiegensis</i>) has a very limited range, extending from extreme northwestern Baja California north through the coastal lowlands of San Diego County and apparently into southern Orange County. Restricted to thickets of cholla (<i>Cylindropuntia prolifera</i>) or prickly-pear cacti (<i>Opuntia littoralis, O. oricola</i>) tall enough to support and protect the birds' nests. Typically, habitat consists of coastal sage scrub at elevations below 1,500 feet amsl.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Chaetodipus californicus femoralis Dulzura pocket mouse	SSC G5T3 S3	Found most often in grass-chaparral edges but may also be found in coastal scrub or other habitats, primarily in San Diego County.	No	No	Not Expected: There is no suitable habitat for this species within the project site.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	SSC G5T3T4 S3S4	Found terrestrially in a wide variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Open habitat on the Pacific slope from southwestern San Bernardino County to northwestern Baja California. Habitat types include coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. Major habitat requirement is the presence of low growing vegetation or rocky outcroppings, as well as sandy soil to dig burrows.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Circus hudsonius northern harrier	SSC G5 S3	Yearlong resident of California. Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded area. In general, it prefers saltwater marshes, wet meadows, sloughs, and bogs for nesting and foraging. Nests on the ground in shrubby vegetation or patches of dense vegetation, usually at the marsh edge.	Yes	No	Moderate (Foraging), Not Expected (Nesting): There is no suitable nesting habitat for this species within the project site. The open fields in and immediately around the site, as well as the surrounding residential neighborhoods, provide foraging habitat, and there are a number of eBird reports within a 5-mile radius of the site (eBird 2022).
Coleonyx variegatus abbotti San Diego banded gecko	SSC G5T3T4 S1S2	Prefers rocky areas in coastal sage and chaparral within granite or rocky outcrops. Occurs in coastal and cismontane southern California from interior Ventura Co. south.	Yes	No	Not Expected: There is no suitable habitat for this species within the survey area.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Crotalus ruber red-diamond rattlesnake	SSC G4 S3	Found in southwestern California, from the Morongo Valley west to the coast and south along the peninsular ranges to mid Baja California. It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet amsl), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, boulders associated coastal sage scrub, oak/pine woodlands, and desert slope scrub associations; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Danaus plexippus (California overwintering population) monarch butterfly	FC G4T2T3 S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts are located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	No	No	Not Expected: There is no suitable habitat for this species within the survey area.
Dipodomys merriami parvus San Bernardino kangaroo rat	FE CSE SSC G5T1 S1	Primarily found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidean upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidean alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	Yes (c)	No	Not Expected: There is no suitable habitat for this species within the project site.
Dipodomys stephensi Stephens' kangaroo rat	FT ST G2 S2	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Elanus leucurus white-tailed kite	FP G5 S3S4	Yearlong resident along the coastal ranges and valleys of California. Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole. Nests in tall (20 to 50 feet) coast live oaks.	Yes	No	Low (Foraging), Not Expected (Nesting): There is no suitable nesting habitat for this species within the project site. The open fields in and immediately around the site provide foraging habitat, and there are a number of eBird reports within a 5-mile radius of the site (eBird 2022). There are no records within one mile of the site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Empidonax traillii extimus southwestern willow flycatcher	FE SE G5T2 S1	Rare summer resident in southern California primarily found in lower elevation riparian habitats occurring along streams or in meadows. The structure of suitable breeding habitat typically consists of a dense mid-story and understory and can also include a dense canopy. Nest sites are generally located near surface water or saturated soils. The presence of surface water, swampy conditions, standing or flowing water under the riparian canopy are preferred.	Yes (a)	No	Not Expected: There is no suitable habitat for this species within the survey area.
Emys marmorata western pond turtle	SSC G3G4 S3	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet amsl.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Eremophila alpestris actia California horned lark	WL G5T4Q S4	Yearlong resident of California. This subspecies is typically found in coastal regions. Breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats. Within southern California, California horned larks breed primarily in open fields, (short) grasslands, and rangelands. Nests on the open ground.	Yes	No	Moderate (Foraging), Low (Nesting): The project site provides foraging and marginal nesting habitat for this species. There is a somewhat recent (2015) record of this species occurring approximately 0.5 mile northwest of the project site (CDFW 2022a), but this surrounding area has been undergoing active development since 2020, with new homes built in 2022. Although foraging may occur, the site generally lacks vegetation within the interior, which may reduce its attractiveness for nesting.
Eumops perotis californicus western mastiff bat	SSC G5T4 S3S4	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	No	Low: There is suitable foraging habitat within the project site and surrounding area, but no roosting habitat. There are no recent records of this species occurring within a 5-mile radius.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Euphydryas editha quino quino checkerspot butterfly	FE G5T1T2 S1S2	Occupies a variety of habitat types that support California plantain, the species primary larval host plant, including grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub. Can also be found in desert canyons and washes at the lower edge of chaparral habitats.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Lanius ludovicianus loggerhead shrike	SSC G4 S4	Yearlong resident of California. Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover including open-canopied valley foothill hardwood, riparian, pinyon-juniper desert riparian, creosote bush scrub, and Joshua tree woodland. Requires suitable perches including trees, posts, fences, utility lines, or other perches. Nests in branches up to 14 feet above the ground frequently in a shrub with thorns or with tangled branching habitats.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Lasiurus xanthinus western yellow bat	SSC G5 S3	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	No	Not Expected: There is no suitable habitat for this species within the project site.
Neotoma lepida intermedia San Diego desert woodrat	SSC G5T3T4 S3S4	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Found in a variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Woodrats often are associated with cholla cactus which they use for water and dens or boulders and boulder piles. The most common natural habitats for records are chaparral, coastal sage scrub (including RSS and Diegan coastal sage scrub) and grassland.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Onychomys torridus ramona southern grasshopper mouse	SSC G5T3 S3	Common in arid desert habitats of the Mojave and southern Central Valley of California. Known elevation range is generally below 3,000 feet amsl. Little is known about habitat requirements; however, it is commonly found in scrub habitats with friable soils for digging in desert areas. It is believed that alkali desert scrub and desert scrub habitats are preferred, with somewhat lower densities expected in other desert habitats, including succulent shrub, wash, and riparian areas. Also occurs in coastal scrub, mixed chaparral, sagebrush, low sage, and bitterbrush habitats.	No	No	Not Expected: There is no suitable habitat for this species within the project site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Perognathus longimembris brevinasus Los Angeles pocket mouse	SSC G5T1T2 S1S2	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	Yes (c)	No	Not Expected: There is no suitable habitat for this species within the project site.
Phrynosoma blainvillii coast horned lizard	SSC G3G4 S4	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. Its elevational range extends up to 4,000 feet in the Sierra Nevada foothills and up to 6,000 feet in the mountains of southern California. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (e.g., fire, floods, unimproved roads, grazing lands, and fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Plegadis chihi white-faced ibis	WL G5 S3S4	Locally rare resident/migrant in southern California. Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Polioptila californica californica coastal California gnatcatcher	FT SSC G4G5T2Q S2	Yearlong resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet amsl in coastal regions and below 1,500 feet amsl inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Setophaga petechia yellow warbler	SSC G5 S3S4	Yearlong resident along the southern coast of California with the remainder of the State being occupied during the summer. The species also winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, California sycamores, or alders (Alnus spp.) or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Spea hammondii western spadefoot	SSC G3 S3	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools which do not contain American bullfrogs, predatory fish, or crayfish are necessary for breeding. Estivates in upland habitats adjacent to potential breeding sites in burrows approximating 3 feet in depth.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site.
Streptocephalus woottoni Riverside fairy shrimp	FE G1G2 S1S2	Restricted to deep seasonal vernal pools, vernal pool like ephemeral ponds, and stock ponds and other human modified depressions. Basins that support Riverside fairy shrimp are typically dry a portion of the year, but usually are filled by late fall, winter, or spring rains, and may persist through May. Endemic to western Riverside, Orange, and San Diego Counties in tectonic swales/earth slump basins in grassland and coastal sage scrub. In Riverside County, the species been found in pools formed over the following soils: Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils. All known habitat lies within annual grasslands, which may be interspersed through chaparral or coastal sage scrub vegetation.	Yes (a)	No	Not Expected: There is no suitable habitat for this species within the project site.
Taxidea taxus American badger	SSC G5 S3	Occupies a wide variety of habitats including dry, open grassland, sagebrush, and woodland habitats. Require dry, friable, often sandy soil to dig burrows for cover, food storage, and giving birth. Occasionally found in riparian zones and open chaparral with less than 50% plant cover.	No	No	Not Expected: There is no suitable habitat for this species within the project site.
Vireo bellii pusillus least Bell's vireo	FE SE SSC G5T2 S2	Summer resident in southern California. Breeding habitat generally consists of dense, low, shrubby vegetation in riparian areas, and mesquite brushlands, often near water in arid regions. Early successional cottonwood-willow riparian groves are preferred for nesting. The most critical structural component of nesting habitat in California is a dense shrub layer that is 2 to 10 feet (0.6 to 3.0 meters) above ground. The presence of water, including ponded surface water or moist soil conditions, may also be a key component for nesting habitat.	Yes (a)	No	Not Expected: There is no suitable habitat for this species within the project site.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Xanthocephalus xanthocephalus yellow-headed blackbird	SSC G5 S3	Occurs primarily as a migrant and summer resident from April to early October; breeds from mid-April to early October. Small numbers winter in the southern Central Valley and the Imperial and Colorado River valleys. Occurs in freshwater emergent wetlands, and moist, open areas along croplands and mud flats of lacustrine habitats. Prefers to nest in tall, dense wetland vegetation characterized by tules (Scirpus spp.), cattails (Typha spp.), or other similar plant species along the border of lakes and ponds.	No	No	Not Expected: There is no suitable habitat for this species within the project site.
		SPECIAL-STATUS PLA	NT SPECIES		
Abronia villosa var. aurita chaparral sand- verbena	1B.1 G5T2? S2	Annual herb. Occurs on sandy soils within chaparral, coastal scrub, and desert dunes. Grows in elevations ranging from 246 to 5,250 feet above mean sea level (amsl). Blooming period is (January) March through September.	No	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Allium munzii Munz's onion	FE ST 1B.1 G1 S1	Perennial bulbiferous herb. Grows in mesic, clay soils within chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, and valley and foothill grassland habitats. Found at elevations ranging from 974 to 3,510 feet amsl. Blooming period is March through May.	Yes (b)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Ambrosia pumila San Diego ambrosia	FE 1B.1 G1 S1	Perennial rhizomatous herb. Occurs on sandy loam or clay soils (often in disturbed areas) and sometimes alkaline soils. Habitats include chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Grows in elevation ranging from 66 to 1,362 feet amsl. Blooming period is from April to October.	Yes (b)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Astragalus pachypus var. jaegeri Jaeger's bush milk- vetch	1B.1 G4T1 S1 USFS:S	Perennial shrub. Occurs within chaparral, cismontane woodland, coastal scrub, valley, and foothill grassland. Grows in elevations ranging from 1,197 to 3,199 feet amsl. Blooming period is from December to June.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Atriplex coronata var. notatior San Jacinto Valley crownscale	FE 1B.1 G4T1 S1	Annual herb. Occurs on alkaline soils within playas, valley and foothill grassland (mesic), and vernal pool habitats. Grows in elevations ranging from 456 to 1,640 feet amsl. Blooming period is from April to August.	Yes (d)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Atriplex parishii Parish's brittlescale	1B.1 G1G2 S1 USFS:S	Annual herb. Blooms June through October. Usually found on drying alkali flats with fine soils in vernal pools, chenopod scrub, wet meadows, and playas. Known elevations range from 15 to 4,660 feet amsl.	Yes (d)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Atriplex serenana var. davidsonii Davidson's saltscale	1B.2 G5T1 S1	Annual herb. Occurs on alkaline soils within coastal bluff scrub and coastal scrub habitats. Grows in elevations ranging from 33 to 656 feet amsl. Blooming period is from April to October.	Yes (d)	No	Not Expected: There is no suitable habitat for this species within the project site. In addition, project site is located outside the known elevation range for this species.
Brodiaea filifolia thread-leaved brodiaea	FT SE 1B.1 G2 S2	Perennial bulbiferous herb. Often found on clay soils within chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Found at elevations ranging from 82 to 3,675 feet amsl. Blooming period is March through June.	Yes (a)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Calochortus plummerae Plummer's mariposa-lily	4.2 G4 S4	Perennial bulbiferous herb. Occurs on granitic and rocky soils within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley/foothill grassland. Grows in elevations ranging from 328 to 5,577 feet amsl. Blooming period is from May to July.	Yes (e)	No	Not Expected: There is no suitable habitat for this species within the survey area. The survey area is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Calochortus weedii var. intermedius intermediate mariposa-lily	1B.2 G3G4T2 S2 USFS:S	Perennial bulbiferous herb. Found in chaparral, coastal scrub, and valley and foothill grasslands in rocky or calcareous soils. Found at elevations ranging from 344 to 2,805 feet amsl. Blooming period is from May to July.	Yes	No	Not Expected: There is no suitable habitat for this species within the survey area. The survey area is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Caulanthus simulans Payson's jewelflower	4.2 G4 S4	Annual herb. Occurs on sandy, granitic soils in chaparral and coastal scrub habitats. Found at elevations ranging from 295 to 7,218 feet amsl. Blooming period is (February) March through May (June).	Yes	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Centromadia pungens ssp. laevis smooth tarplant	1B.1 G3G4T2 S2	Annual herb. Occurs in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley/foothill grassland habitats. Grows in elevation from 0 to 2,100 feet amsl. Blooming period is April through September.	Yes (d)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Chorizanthe parryi var. parryi Parry's spineflower	1B.1 G3T2 S2	Annual herb. Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet amsl. Blooming period is April through June.	Yes (e)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Chorizanthe polygonoides var. longispina long-spined spineflower	1B.2 G5T3 S3	Annual herb. Occurs on clay soils within chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Found at elevations ranging from 98 to 5,020 feet amsl. Blooming period is April through July.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Convolvulus simulans small-flowered morning-glory	4.2 G4 S4	Annual herb. Found on wet clay and serpentine ridges within chaparral, coastal scrub, and valley and foothill grassland. Found at elevations ranging from 100 to 2820 feet amsl. Blooming period is March through July.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Deinandra paniculata paniculate tarplant	4.2 G4 S4	Annual herb. Occurs in coastal scrub, vernal pools, and valley/foothill grassland habitats. Found at elevations ranging from 82 to 3,084 feet amsl. Blooming period is April through November.	No	No	Low: There is marginal habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Harpagonella palmeri Palmer's grapplinghook	4.2 G4 S3	Annual herb. Occurs on clay soils within open grassy areas within chaparral, coastal scrub, and valley and foothill grassland habitats. Found at elevations ranging from 66 to 3,133 feet amsl. Blooming period is March through May.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Hordeum intercedens vernal barley	3.2 G3G4 S3S4	Annual herb. Habitat includes coastal dunes, coastal scrub, vernal pools, and valley/foothill grassland. Grows in elevations ranging from 16 to 3,281 feet amsl. Blooming period is from March to June.	Yes	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Lasthenia glabrata ssp. coulteri Coulter's goldfields	1B.1 G4T2 S2	Annual herb. Prefers playas, vernal pools, and coastal salt marshes and swamps. Found at elevations ranging from 3 to 4,003 feet amsl. Blooming period is February through June.	Yes (d)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Lepidium virginicum var. robinsonii Robinson's pepper- grass	4.3 G5T3 S3	Annual herb. Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 66 to 4,396 feet amsl. Blooming period is January through July.	No	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Microseris douglasii ssp. platycarpha small-flowered microseris	4.2 G4T4 S4	Annual herb. Occurs in alkaline soil in river bottoms in cismontane woodland, valley and foothill grassland, coastal scrub, and vernal pools. Found at elevations ranging from 50 to 3510 feet amsl. Blooming period is March through May.	Yes (e)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur
Myosurus minimus ssp. apus little mousetail	3.1 G5T2Q S2	Annual herb. Occurs on valley and foothill grassland and vernal pools (alkaline). Found at elevations ranging from 66 to 2,100 feet amsl. Blooming period is March through June.	Yes (d)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Nama stenocarpa mud nama	2B.2 G4G5 S1S2	Annual/perennial herb. Found in marshes and swamps (lake margins, riverbanks). Grows in elevation ranging from 16 to 1,640 feet amsl. Blooming period is from January to July.	Yes (d)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Navarretia fossalis spreading navarretia	FT 1B.1 G2 S2	Annual herb. Habitats include chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools. Grows in elevation ranging from 98 to 2,149 feet amsl. Blooming period is April through June.	Yes (b)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Orcuttia californica California Orcutt grass	FE SE 1B.1 G1 S1	Annual herb. Restricted to vernal pool habitats. Found at elevations ranging from 49 to 2,165 feet amsl. Blooming period is April through August.	Yes (b)	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Quercus engelmannii Engelmann oak	4.2 G3 S3	Perennial deciduous tree. Occurs in chaparral, cismontane woodland, riparian woodland, and valley/foothill grassland. Grows in elevations ranging from 160 to 4,275 feet amsl. Blooming period is from March to June.	Yes	No	Not Expected: There is no suitable habitat for this species within the survey area. The survey area is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Sidalcea neomexicana Salt Spring checkerbloom	2B.2 G4 S2	Perennial herb. Found on alkaline and mesic soils within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas. Found at elevations ranging from 49 to 5,020 feet amsl. Blooming period is from March to June.	No	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Tortula californica California screw moss	1B.2 G2S3 S2	Moss. Occurs on sandy soils in chenopod scrub and valley and foothill grassland. Grows at elevations ranging from 35 to 4,790 feet amsl.	No	No	Not Expected: There is no suitable habitat for this species within the project site. The project site is a mixture of developed areas and highly disturbed areas that have been mowed for decades.
Trichocoronis wrightii var. wrightii Wright's trichocoronis	2B.1 G4T3 S1	Annual herb. Grows on alkaline soils in marshes, swamps, meadows, seeps, riparian forest, and vernal pools. Found at elevations ranging from 15 to 1,425 feet amsl. Blooming period is from May to September.	Yes (b)	No	Not Expected: There is no suitable habitat for this species within the project site. In addition, project site is located outside the known elevation range for this species.

Table C-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Special- Status Rank*	Habitat Preferences and Distribution Affinities	Covered by MSHCP**	Observed On-site	Potential to Occur			
SPECIAL-STATUS VEGETATION COMMUNITIES								
CNDDB/Holland (1986) Southern Coast Live Oak Riparian Forest MCV (1995) Coast Live Oak Series NVCS (2009) Quercus agrifolia Woodland Alliance	G5 S4	Found at elevations ranging from sea level to 3,937 feet amsl in alluvial terraces, canyon bottoms, stream banks, slopes, and flats, Soils are deep, sandy or loamy with high organic matter. Coast live oak is a dominant or codominant in the tree canopy with bigleaf maple, box elder, madrono, southern California black walnut, California sycamore, Fremont cottonwood, blue oak, Engelmann oak, California black oak, valley oak, arroyo willow, and California bay. Trees are less than 98 feet tall; canopy is open to continuous. Shrub layer is sparse to intermittent. Herbaceous layer is sparse or grassy.	-	No	Absent: This vegetation community does not occur within the project site.			
CNDDB/Holland (1986) Southern Cottonwood Willow Riparian Forest MCV (1995) Fremont Cottonwood Series NVCS (2009) Populus fremontii Forest Alliance	G4 S3.2	Found at elevations ranging from sea level to 7,874 feet amsl on floodplains, along low-gradient rivers, perennial or seasonally intermittent streams, springs, in lower canyons in desert mountains, in alluvial fans, and in valleys with a dependable subsurface water supply that varies considerably during the year. Fremont cottonwood is a dominant or co-dominant in the tree canopy with box elder, desert baccharis, Oregon ash, northern California black walnut, California sycamore, coast live oak, narrowleaf willow, Goodding's willow, polished willow, arroyo willow, pacific willow, and yellow willow. Trees and less than 25 meters tall; canopy is continuous to open. Shrub layer is intermittent to open. Herbaceous layer is variable.	-	No	Absent: This vegetation community does not occur within the project site.			
CNDDB/Holland (1986) Southern Riparian Scrub MCV (1995) N/A NVCS (2009) N/A	N/A N/A	Riparian zones dominated by small trees or shrubs, lacking taller riparian trees.	-	No	Absent: This vegetation community does not occur within the project site.			

* U.S. Fish and Wildlife Service (USFWS)

- FE Endangered any species which is in danger of extinction throughout all or a significant portion of its range.
- FT Threatened any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- FC Candidate any species which is currently designated a candidate for listing under the Endangered Species Act.

California Department of Fish and Wildlife (CDFW)

SE Endangered – any native species or subspecies of 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.

- ST Threatened any native species or subspecies of 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 the special protection and management efforts required under the California Endangered Species Act.
- CSE Candidate State Endangered The classification provided to 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.
- FP Fully Protected any native species or subspecies of bird, mammal, fish, amphibian, or reptile that were determined by the State of California to be rare or face possible extinction.
- SSC Species of Special Concern any species, subspecies, or distinct population of fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following criteria: is extirpated from California or, in the case of birds, in its primary seasonal or breeding role; is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.
- WL Watch List taxa that were previously designated as "Species of Special Concern" but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

California Native Plant Society (CNPS) California Rare Plant Rank

- 1B Plants rare, threatened, or endangered in California and elsewhere.
- 2B Plants rare, threatened, or endangered in California but more common elsewhere.
- Plant that lack the necessary information to assign them to one of the other ranks or to reject them.
- 4 Plants of limited distribution Watch List.

Threat Ranks

- .1 Seriously threatened in California (over 80% of occurrences threatened/high degree any immediacy of threat).
- .2 Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat).
- .3 Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known).

NatureServe Conservation Status Rank

The Global Rank (G#) reflects the overall condition and imperilment of a species throughout its global range. The Infraspecific Taxon Rank (T#) reflects the global situation of just the subspecies or variety. The State Rank (S#) reflects the condition and imperilment of an element throughout its range within California. (G#Q) reflects that the element is very rare but there are taxonomic questions associated with it; the calculated G rank is qualified by adding a Q after the G#). Adding a ? to a rank expresses uncertainty about the rank.

- G1/T1 Critically Imperiled At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
- G2/T2 Imperiled— At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
- G3/T3 Vulnerable— At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
- G4/T4 Apparently Secure— Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5/T5 Secure Common; widespread and abundant.
- S1 Critically Imperiled Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
- S2 Imperiled Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or State.
- S3 Vulnerable Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
- S4 Apparently Secure Uncommon but not rare; some cause for long-term concern due to declines or other factors.

** Western Riverside County Multiple Species Habitat Conservation Plan

- Yes Fully Covered.
- No Not Covered.
- Yes (a) May require additional surveys pursuant to Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools.
- Yes (b) May require additional surveys pursuant to Section 6.1.3, Protection of Narrow Endemic Plant Species.
- Yes (c) May require additional surveys pursuant to Section 6.3.2, Additional Survey Needs and Procedures.
- Yes (d) May require additional surveys pursuant to Section 6.3.2, Additional Survey Needs and Procedures.
- Yes (e) Will be considered to be Covered Species Adequately Conserved when conservation requirements identified in species-specific conservation objectives as listed in Section 9.0 of the MSHCP have been met.
- Yes (f) Will be considered to be Covered Species Adequately Conserved when a Memorandum of Understanding is executed with the Forest Service that addresses management for these species on Forest Service Land.