# Appendix 3 Biological Technical Report

# Biological Technical Report and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the Wildomar 20-acre Passive Park Project

## Riverside County, California

Assessor's Parcel Numbers: 380-050-025 and 380-050-027

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## LIST OF ACRONYMS AND ABBREVIATIONS

| Term | Definition |
|---|---|
| Act | Endangered Species Act |
| amsl | above mean sea level |
| BMPs | Best Management Practices |
| BUOW | Burrowing Owl |
| CCR | California Code of Regulations |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CNPSEI | California Native Plan Society's Electronic Inventory |
| CRPR | California Rare Plant Rank |
| CWA | Clean Water Act |
| DPS | Distinct Population Segment |
| DSH | Diameter at Standard Height |
| ESA | Endangered Species Act |
| GPS | Global Positioning System |
| HCP | Habitat Conservation Plan |
| IA | Implementing Agreement |
| IPaC | Information for Planning and Consultation |
| LBVI | Least Bell's vireo |
| MBTA | Migratory Bird Treaty Act |
| MCV | Manual of California Vegetation |
| MSHCP | Multiple Species Habitat Conservation Plan |
| NEPA | National Environmental Policy Act |
| NEPSSA | Narrow Endemic Plant Species Survey Area |
| NPPA | Native Plant Protection Act |
| NRCS | Natural Resources Conservation Service |
| NWI | National Wetlands Inventory |
| PQP | Public Quasi-Public |
| Project | Wildomar 20-acre Passive Park Project |
| RCA | Riverside Conservation Authority |
| RCHCA | Riverside County Habitat Conservation Agency |
| RCTLMA | Riverside County Transportation and Land Management Agency |
| RWQCB | Regional Water Quality Control Board |
| SAA | Streambed Alteration Agreement |
| SKR | Stephens' kangaroo rat |
| SSC | California Species of Special Concern |
| SWWF | Southwestern Willow Flycatcher |
| USACE | United States Army Corps of Engineers |
| USFWS | United States Fish and Wildlife Service |
| USGS | United States Geological Survey |
| WEAP | Worker Environmental Awareness Program |
| YBCU | Yellow-Billed Cuckoo |

# 1.0 INTRODUCTION

ECORP Consulting, Inc. conducted a biological reconnaissance survey at an approximately 20-acre property for the proposed Wildomar Passive Park Project (Project) in the City of Wildomar in Riverside County. The Project also includes offsite improvement areas. The survey was conducted to identify any potential biological resources that could be affected by the Proposed Project, pursuant to the terms of the California Environmental Quality Act (CEQA) and for the purposes of identifying any biological constraints that would affect the proposed site plan for the Project. The surveys were conducted in accordance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP provides information on plant and wildlife species of concern to the County of Riverside and outlines goals for their conservation. Information on the MSHCP can be found at www.rctlma.org (Riverside County Transportation and Land Management Agency [RCTLMA] 2024). The Project will be subject to county, state, and federal regulations regarding compliance with the federal Endangered Species Act (ESA), California ESA, Migratory Bird Treaty Act (MBTA), and California Fish and Game Code.

## 1.1 Project Location

The Project is generally located south of Interstate 15 and east of Wildomar Trail. The Project Area is located west of Refa Street, north of Palomar Street, and east of South Pasadena Street, in the City of Wildomar, Riverside County, California (Figures 1 and 2). The Project Area measures approximately 20 acres and comprises Assessor's Parcel Numbers (APNs) 380-050-025 and 380-050-027.

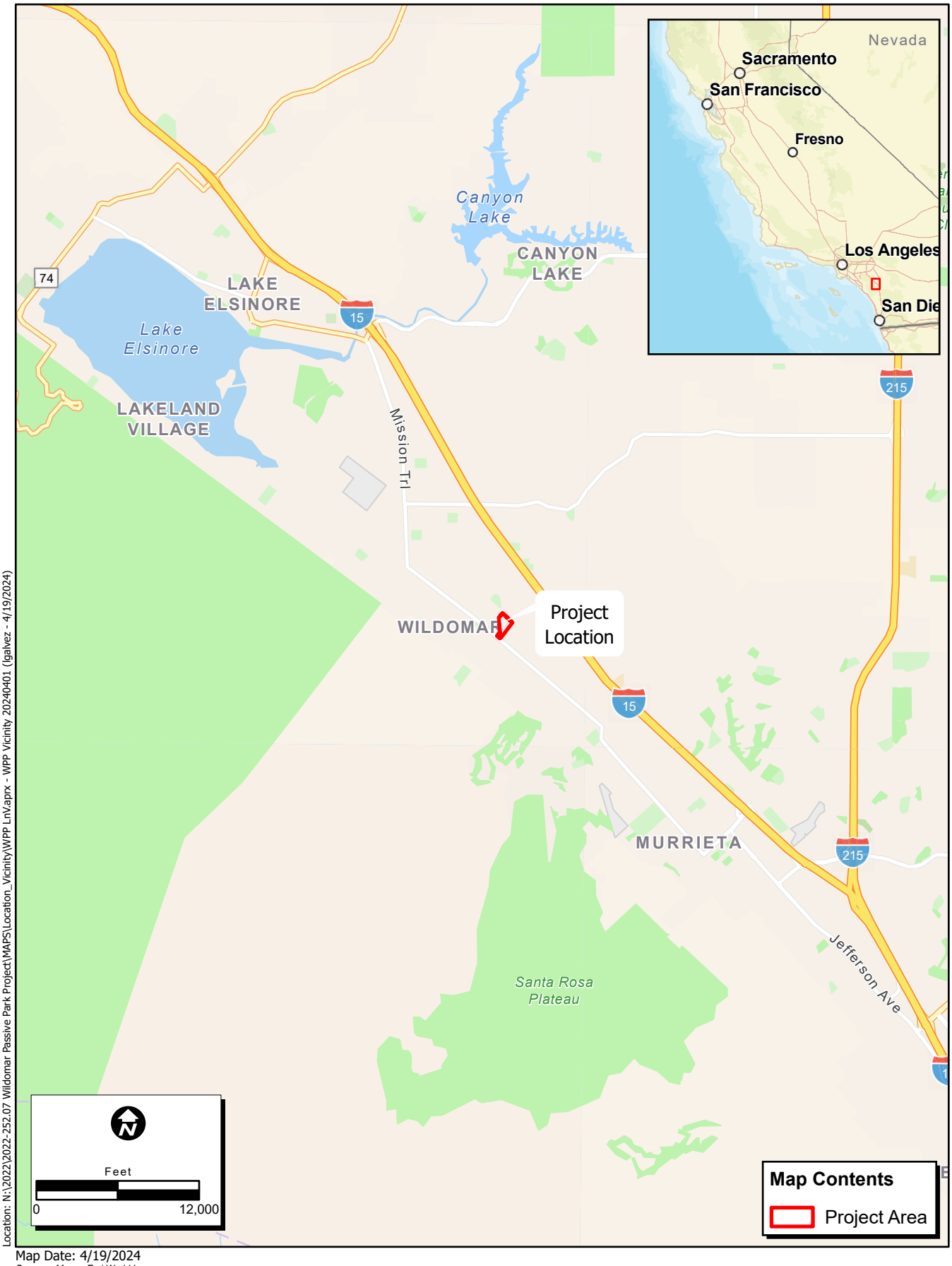
The Project, as depicted on the U.S. Geological Survey (USGS) Wildomar, California 7.5-minute topographic quadrangle map, is located within an unsectioned La Laguna (Stearns) land grant of Township 6 South, Range 4 West. The Project Area is relatively flat with elevation ranging from approximately 1,250 to 1,280 feet (381 to 390 meters) above mean sea level (amsl). The Project Area is currently vacant land covered with non-native grasses and a mix of native and non-native tree species within the central portion, and Eucalyptus (*Eucalyptus* sp,) and Peruvian pepper (*Schinus molle*) trees lining much of the perimeter. Disturbances onsite include several dirt roads used by pedestrians and occasional vehicles.

## 1.2 Project Description

This Project proposes to construct a 20-acre passive park with approximately 65 parking spaces in two separate lots, one in the northern portion of the Project site via Gierson Avenue and the other at the southwestern corner of the site along Palomar Street. The Proposed Project would include amenities such as an interpretive panel, raptor perch, solar lighting, bike racks, butterfly/pollinator garden, information kiosks, drinking fountains, pet stations, a network of trails, picnic tables, exercise stations, a disk golf course, a bird observation area, bench seating, community garden, lawn playfield, shade structures, a bridge crossing, gates, restrooms, and natural drainage swales.

Offsite improvements would include street improvements such as lighting, curb, gutter, sidewalk, and inlet improvements along Gierson Avenue and Palomar Street. The Project would also include the extension of

Gierson Avenue and Palomar Streets to create access into the Project site. The areas of offsite roadway improvements are not addressed in this Biological Technical Report.




Location: N:\2022\2022-252.07 Wildomar Passive Park Project\MAPS\Location_Vicinity\WPP LnV.aprx - WPP Vicinity 20240401 (lgalvez - 4/19/2024)

Map Date: 4/19/2024

*Sources: Maxar, Esri World Imagery*

**Figure 1. Project Vicinity**

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2022-252.07 Wildomar Passive Park Project




Location: N:\2022\2022-252.07 Wildomar Passive Park Project\MAPS\Location_Vicinity\WPP LnV.aprx - WPP Location 20240311 (lgalvez - 4/19/2024)

Map Date: 4/19/2024

*Sources: ESRI, Maxar (2022)*

**Figure 2. Project Location**

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2022-252.07 Wildomar Passive Park Project

## 1.3 Terms

The following terms will be used throughout this document and are defined as follows:

- *Project Area:* the approximately 20-acre property, comprising APNs 380-050-025 and 380-050-027, assessed during the general biological reconnaissance survey that will be permanently impacted to construct the park and associated amenities.
- *Survey Area:* includes the Project Area and a 500-foot buffer.

# 2.0 SPECIAL-STATUS SPECIES REGULATIONS

ECORP conducted the biological reconnaissance survey to identify potential constraints to development and to ensure compliance with state and federal regulations regarding listed, protected, and sensitive species. The regulations are detailed below.

## 2.1 Federal Regulations

### 2.1.1 The Federal Endangered Species Act

The federal ESA protects plants and animals that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of the federal ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code 1538). Under Section 7 of the federal ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed or proposed species, including plants or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the federal ESA provides for issuance of incidental take permits where no other federal actions are necessary provided a Habitat Conservation Plan (HCP) is developed.

### 2.1.2 Migratory Bird Treaty Act

The federal MBTA implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (i.e., rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General

Permit Procedures and 50 CFR Part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

### 2.1.3 Federal Clean Water Act

Under Section 404 of the federal Clean Water Act (CWA), potential Waters of the U.S., including wetlands, may be regulated by the U.S. Army Corps of Engineers (USACE). The limit of USACE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 CFR 328.4(c)(1) as the "ordinary high-water mark" (OHWM).

The OHWM is defined as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. The upstream limits of other waters are defined as the point where the OHWM is no longer perceptible.

Jurisdictional Waters of the U.S. are delineated in accordance with the "Revised Definition of 'Waters of the United States'" rule, published in the *Federal Register* in 2022 and which became final on January 18, 2023. This rule, set forth by the U.S. Environmental Protection Agency (USEPA) and USACE, was consistent with the pre-2015 regulatory definition as all waters that are currently used, or were used in the past, or may be susceptible to use in interstate commerce, including all waters subject to the ebb and flow of the tide. This definition also includes all interstate waters, including interstate wetlands, interstate lakes, rivers, streams (including all intermittent and ephemeral streams), mudflats, sand flats, sloughs, and prairie potholes, wet meadows, playa lakes, or natural ponds where the use, degradation, or destruction of which could affect interstate or foreign commerce. Under this rule, Waters of the U.S. do not include prior converted cropland.

The definition of Waters of the U.S.in accordance with this rule (40 CFR 230.3[s]), is summarized below.

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as Waters of the U.S. under the definition;
5. Tributaries of waters identified in paragraphs (s)(1)-(4) of this section;

6. The territorial sea; and

7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not Waters of the U.S.

On May 25, 2023, the U.S. Supreme Court adopted a narrower definition of Waters of the U.S. in the case *Sackett v. Environmental Protection Agency*. Under the majority opinion, Waters of the U.S. refers to "geographical features that are described in ordinary parlance as 'streams, oceans, rivers, and lakes' and to adjacent wetlands that are 'indistinguishable' from those bodies of water due to a continuous surface connection." On August 29, 2023, the agencies issued a final rule to amend the final "Revised Definition of 'Waters of the United States'" rule to conform the definition of "waters of the United States" to the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*.

Parts of the January 2023 Rule are invalid under the U.S. Supreme Court's interpretation of the CWA in the *Sackett* decision. Therefore, the agencies have amended key aspects of the regulatory text to conform to the Court's decision. Key changes under the amendment include:

- Definition of "adjacent" is now "having a continuous surface connection;"
- Only tributaries that are relatively permanent, standing or continuously flowing bodies of water (or tributaries with a continuous surface connection to those) are considered jurisdictional;
- Interstate wetlands are no longer jurisdictional just by virtue of being interstate; and
- Significant nexus test is eliminated.

Where areas jurisdictional to the USACE are present, and will be impacted by a project, the project proponent must usually apply for permitting with the agency, which generally consists of submittal of a Pre-Construction Notification under Section 404 of the CWA. As of the writing of this report, ECORP does not know the details of how the individual USACE offices will implement the conforming rule for permitting purposes.

## 2.2 State and Local Regulations

### 2.2.1 California Endangered Species Act

The California ESA generally parallels the main provisions of the federal ESA; however, unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called *candidates* by the State). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California ESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the California Department of Fish and Wildlife (CDFW) to ensure that any

action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

### 2.2.2 Fully Protected Species

The State of California first began to designate species as *fully protected* prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians, reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESA. Previously, the regulations that implement the Fully Protected Species Statute (California Fish and Game Code Section 4700) provide that fully protected species may not be taken or possessed at any time. However, as of July 10, 2023 Senate Bill 147 (SB147) was signed into law, authorizing CDFW to issue take permits under the California ESA for fully protected species for qualifying projects through 2033. As stated in section 2081.15 of SB147, qualifying projects include:

- A maintenance, repair, or improvement project to the State Water Project, including existing infrastructure, undertaken by the Department of Water Resources;
- A maintenance, repair, or improvement project to critical regional or local water agency infrastructure;
- A transportation project, including any associated habitat connectivity and wildlife crossing project, undertaken by a state, regional, or local agency, that does not increase highway or street capacity for automobile or truck travel;
- A wind project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is located in the state to a point of junction with any California based balancing authority; and
- A solar photovoltaic project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is located in the state to a point of junction with any California-based balancing authority.

### 2.2.3 California Fish and Game Code

#### *2.2.3.1 Native Plant Protection Act*

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code Sections 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as *endangered* or *rare* and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code Section 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

#### *2.2.3.2 Streambed Alteration Agreement*

Pursuant to Section 1602 of the California Fish and Game Code, a Streambed Alteration Agreement (SAA) application must be submitted for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake" (CDFW 2023a). In Title 14 of the California Code of Regulations (CCR), Section 1.72, the CDFW defines a *stream* (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation."

In Chapter 9, Section 2785 of the Fish and Game Code, *riparian habitat* is defined as "lands which contain habitat which grows close to, and which depends upon, soil moisture from a nearby freshwater source."

The CDFW's jurisdiction includes drainages with a definable bed, bank, or channel and areas associated with a drainage channel that support intermittent, perennial, or subsurface flows; supports fish or other aquatic life; or supports riparian or hydrophytic vegetation. It also includes areas that have a hydrologic source.

The CDFW will determine if the proposed actions will result in diversion, obstruction, or change of the natural flow, bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. If warranted, the CDFW will issue an SAA that includes measures to protect affected fish and wildlife resources; this SAA is the final proposal agreed upon by the CDFW and the applicant.

#### *2.2.3.3 Migratory Birds*

The CDFW enforces the protection of nongame native birds in Sections 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California nongame native birds' nests and make it unlawful to take these birds. All raptor species are protected from *take* pursuant to California Fish and Game Code Section 3503.5 and are also protected at the federal level by the MBTA of 1918 (USFWS 1918).

#### *2.2.3.4 Bats and Bat Roosts*

Bats in California are currently protected directly and indirectly by the California Fish and Game Code, Sections 86, 1600, 2000, 2014, 3007, and 4150; California Public Resources Code, Division 14, Section 21000 et seq.; and CCR, Title 14 including, but not limited to Section 251.1, CEQA regulations (Section 15000 et seq.), and Section 15382 – Significant Effect on the Environment.

Regulations of particular relevance to the protection of bats and bat roosts include Title 14, Section 251.1 of the CCR, which prohibits harassment (defined in that section as an intentional act that disrupts an animal's normal behavior patterns, including breeding, feeding, or sheltering) of nongame mammals (e.g., bats), and California Fish and Game Code Section 4150, which prohibits *take* or possession of all nongame mammals or parts thereof. Any activities resulting in bat mortality (e.g., the destruction of an occupied bat roost that results in the death of bats), disturbance that causes the loss of a maternity colony

of bats (resulting in the death of young), or various modes of nonlethal pursuit or capture may be considered *take* as defined in Section 86 of the California Fish and Game Code. In addition, impacts to bat maternity colonies, which are considered native wildlife nursery sites, could be considered significant under CEQA.

### 2.2.4 Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge" with the Regional Water Quality Control Board (RWQCB) through State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) (CCR, title 23, Section 3855; State Water Resources Control Board 2021). *Waters of the State* is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code Section 13050[e]). Pollution is defined as an alteration of the quality of the waters of the state by waste to a degree that unreasonably affects its beneficial uses (California Water Code Section 13050) and includes filling in waters of the State. Note that CCR, title 23, Section 3855 applies only to individual water quality certifications, but the new Procedures extend the application of Section 3855 to individual waste discharge requirements for discharges of dredged or fill material to Waters of the State and waivers thereof.

A permit for impacts to Waters of the State of California would likely be required under the CWA and/or Porter-Cologne Water Quality Control Act. To determine whether a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB considers whether project activities could impact the quality of Waters of the State.

On September 27, 2023, the U.S. Environmental Protection Agency published its final 2023 Clean Water Act Section 401 Quarter Quality Certification Improvement Rule (88 FR 66558.) The final 2023 Rule revises and replaces the 2020 Rule's regulatory requirements for water quality certification that were adopted by the prior federal administration. The updates realign the scope of the Section 401 certification process with established practices, while also restoring the roles of states, territories, and authorized Tribes as certifying agencies.

### 2.2.5 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP is a comprehensive, multijurisdictional HCP focusing on conservation of species and their associated habitats in western Riverside County. The MSHCP identified 146 species, referred to as *Covered Species*, for which the federal and California ESAs *take* authorization has been granted to signatories to the plan as long as they comply with its requirements. Of the 146 Covered Species within the MSHCP, 118 are considered to be *adequately conserved*. The remaining 28 Covered Species will be considered adequately conserved when certain landmark conservation requirements are met during the course of future development. The goal of the MSHCP is to maintain the biological and ecological diversity within a rapidly urbanizing region while also improving the future economic development in the county by providing an efficient, streamlined regulatory process through which development can proceed in an efficient way.

The approval of the MSHCP and execution of the Implementing Agreement (IA) by the wildlife agencies allows signatories of the IA to issue *take* authorizations for all species covered by the MSHCP, including state- and federally listed species, as well as other identified sensitive species and/or their habitats. Each city of local jurisdiction will impose a development mitigation fee for projects within their jurisdiction. With payment of the mitigation fee to the County and compliance with the survey requirements of the MSHCP where required, full mitigation in compliance with CEQA, National Environmental Policy Act (NEPA), and the federal and California ESAs, will be granted. The development mitigation fee varies according to project size and description and is dependent on development density (Riverside County Ordinance No. 810.2). Payment of the mitigation fee and compliance with the requirements of Section 6.0 of the MSHCP are intended to provide full mitigation under CEQA, NEPA, and the California and federal ESAs for impacts to the species and habitats covered by the MSHCP, pursuant to agreements with USFWS, CDFW, and/or any other appropriate participating regulatory agencies as set forth in the IA for the MSHCP.

### 2.2.6 Stephens' Kangaroo Rat (*Dipodomys stephensi*) Habitat Conservation Plan

The Project Area is located within the Long-Term Stephens' kangaroo rat HCP area. The plan is administered by the Riverside County Habitat Conservation Agency (RCHCA) and aims to conserve 15,000 acres of occupied Stephens' kangaroo rat habitat. To date, more than 46,000 acres have been assembled in western Riverside County for this species. The RCHCA has a Section 10A permit granted by USFWS that allows for take of Stephens' kangaroo rat as part of development activity. The federal ESA defines *take* as any attempt to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct as it relates to Stephens' kangaroo rat. As individual projects are proposed and approved in the Stephens' kangaroo rat HCP area, public and private land developers are required to pay a Stephens' kangaroo rat mitigation fee for land that is developed and removes Stephens' kangaroo rat habitat. This streamlined process benefits developers in the Stephens' kangaroo rat HCP Area because projects within this area do not require individual review and approval by the wildlife agencies.

Developers benefit from the streamlined process in the Stephens' kangaroo rat HCP area because projects within this area do not require individual review and approval by the wildlife agencies. The activities covered by the plan fall into three categories:

1. Actions by private landowners, local and regional public agencies, public and private utilities, and farmers that are otherwise lawful but constitute incidental take of Stephens' kangaroo rat as defined by the federal and California ESA;

2. Establishment and management of permanent Stephens' kangaroo rat reserves by the RCHCA in cooperation with other public agencies and individual landowners; and

3. Implementation by the RCHCA and its member agencies of the conservation, mitigation, and monitoring measures specified in this plan.

The Mitigation Fee is $500 per gross acre of the parcels proposed for development within the Stephens' kangaroo rat HCP Area.

### 2.2.7 California Environmental Quality Act Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA because although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

### 2.2.8 City of Wildomar

#### *2.2.8.1 Tree Preservation Policy and Protection Measures*

As a part of the City of Wildomar's Landscape Design Standards and Guidelines, Sections 7.1.4 outlines the protection of existing and protected trees.

The Existing and Protected Trees Measures are in place to ensure the protection, preservation, and maintenance of established and healthy existing and protected trees. A protected tree is defined by the following criteria:

- "The Diameter at Standard Height (DSH) is to be used to include or exclude a protected tree from evaluation. DSH means the diameter of the main trunk measured at 4.5 feet above natural grade: diameter = trunk circumference divided by 3.14.
- Mature native oak tree with a DSH of 4.0 inches or more, including, but not limited to, California or Coast Live Oak (*Quercus agrifolia*), Coastal Sage Scrub Oak (*Quercus dumosa*), Engelmann Oak (*Quercus engelmannii*), Scrub Oak (*Quercus berberidifoli*a), and the Valley Oak (*Quercus lobata*).
- Mature native tree with a DSH of 4.0 inches or more, including but not limited to, the California Sycamore (*Platanus racemosa*), Western Cottonwood (*Populus fremontii*), California Bay Laurel (*Umbellularia californi*a), and California Black Walnut (*Juglans californi*a).
- Mature tree, other than native oak or native tree, with a DSH of 9.5 inches or more.
- Historically significant tree as designated by resolution of the City council.
- Any tree required to be planted or preserved as environmental mitigation or condition of approval.

A protected tree shall not be cut down, removed, relocated, or otherwise destroyed without first obtaining the approval of the Planning Director. The director may require a tree report prepared by an arborist, horticulturist, or registered landscape architect. A tree report shall identify and locate each protected tree by a unique number and list common name, botanical name, DSH, tree canopy diameter, and rating for health and aesthetic quality. The report will also note those trees to be preserved in place and those proposed for removal listing supporting evidence. If a protected tree is approved for removal, the tree(s) shall be replaced at a 1:1 ratio with a container size to the satisfaction of the director. Replacements for native oak trees or native trees shall be of the same species as those removed or a species acceptable to the director. Mature tree replacements shall be limited to drought tolerant, fire resistive tree species. Detailed tree protection specifications shall be included on the landscape plan. The engineering plans shall note protected tree locations and reference the protection specifications on the landscape plans (City of Wildomar 2022).

# 3.0 METHODS

## 3.1 Literature Review

Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB; CDFW 2024a) and the California Native Plant Society (CNPS) Electronic Inventory (CNPSEI; CNPS 2024) to determine the documented special-status plant and wildlife species in the vicinity of the Project Area. ECORP searched CNDDB records within 5 miles of the Project and searched CNPSEI records within the USGS Wildomar, California 7.5-minute topographic quadrangle map. The CNPSEI literature review also included an 8-quadrangle search that

included: Lake Elsinore, Romoland, Fallbrook, Temecula, Alberhill, Margarita Peak, Sitton Peak, and Murrieta quadrangles. The CNDDB and CNPSEI contain records of reported occurrences of federally or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), and/or other special-status species or habitat that may occur within or in the vicinity of the Project. Additional information was gathered from the following sources and includes, but is not limited to:

- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2024);
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2024b);
- State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2024c);
- Special Animals List (CDFW 2024d);
- Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2024e);
- Information for Planning and Consultation (IPaC) (USFWS 2024a);
- *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012);
- *A Manual of California Vegetation*, 2nd Edition (MCV; Sawyer et al. 2009); and
- Various online websites (e.g., CalFlora 2024).

Using this information and field observations, ECORP biologists generated a list of special-status plant and wildlife species that have potential to occur within the Project Area. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, and/or are protected under either the federal or California ESAs;
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, Sections 3511, 4700, 5050, or 5515;
- are of expressed concern to resource and regulatory agencies or local jurisdictions; and/or
- are covered species under the MSHCP.

ECORP assessed special-status species reported for the region in the literature review or for which suitable habitat occurs within the Project Area for their potential to occur within the Project Area based on the following guidelines:

- **Present:** The species was observed onsite during a site visit or focused survey.
- **High:** Habitat (including soils and elevation factors) for the species occurs within the Project Area and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area.

- **Moderate:** Habitat (including soils and elevation factors) for the species occurs within the Project Area and a documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or a recently documented observation occurs within 5 miles of the area and marginal or limited amounts of habitat occurs within the Project Area.
- **Low:** Limited or marginal habitat for the species occurs within the Project Area and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.
- **Presumed Absent:** Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist onsite; or the known geographic range of the species does not include the Project Area.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species' occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that particular species.

## 3.2 U.S. Fish and Wildlife Service-Designated Critical Habitat

Biologists reviewed the USFWS online service for information regarding Threatened and Endangered Species Final Critical Habitat designation within California to determine if the Project is within any species' designated Critical Habitat (USFWS 2024b).

## 3.3 Aquatic Resources

ECORP biologists conducted a desktop review of the NRCS Web Soil Survey (NRCS 2024), USFWS National Wetlands Inventory (USFWS 2024c), and the corresponding USGS topographic maps to determine if there were any blue line streams or drainages that might potentially fall under the jurisdiction of either federal or state agencies within the Project Area.

## 3.4 Western Riverside County MSHCP Consistency Analysis

ECORP reviewed Project data to determine consistency with the MSHCP. Biologists queried the Riverside Conservation Authority (RCA) MSHCP Information Map to determine requirements for habitat assessment(s), potential focused survey(s), or other issues related to biological resources that could exist within the Project Area (RCA 2024a).

Section 6.0 of the MSHCP also requires that an assessment of the Project be completed to identify any potential applicable Project-related effects on biological resources, including riparian/riverine areas, vernal

pools, and fairy shrimp. In addition, the MSHCP requires that an Urban/Wildlands Interface analysis be conducted to address the indirect effects associated with locating proposed development in the proximity of MSHCP Conservation Areas.

## 3.5 Field Survey

### 3.5.1 Biological Reconnaissance Survey

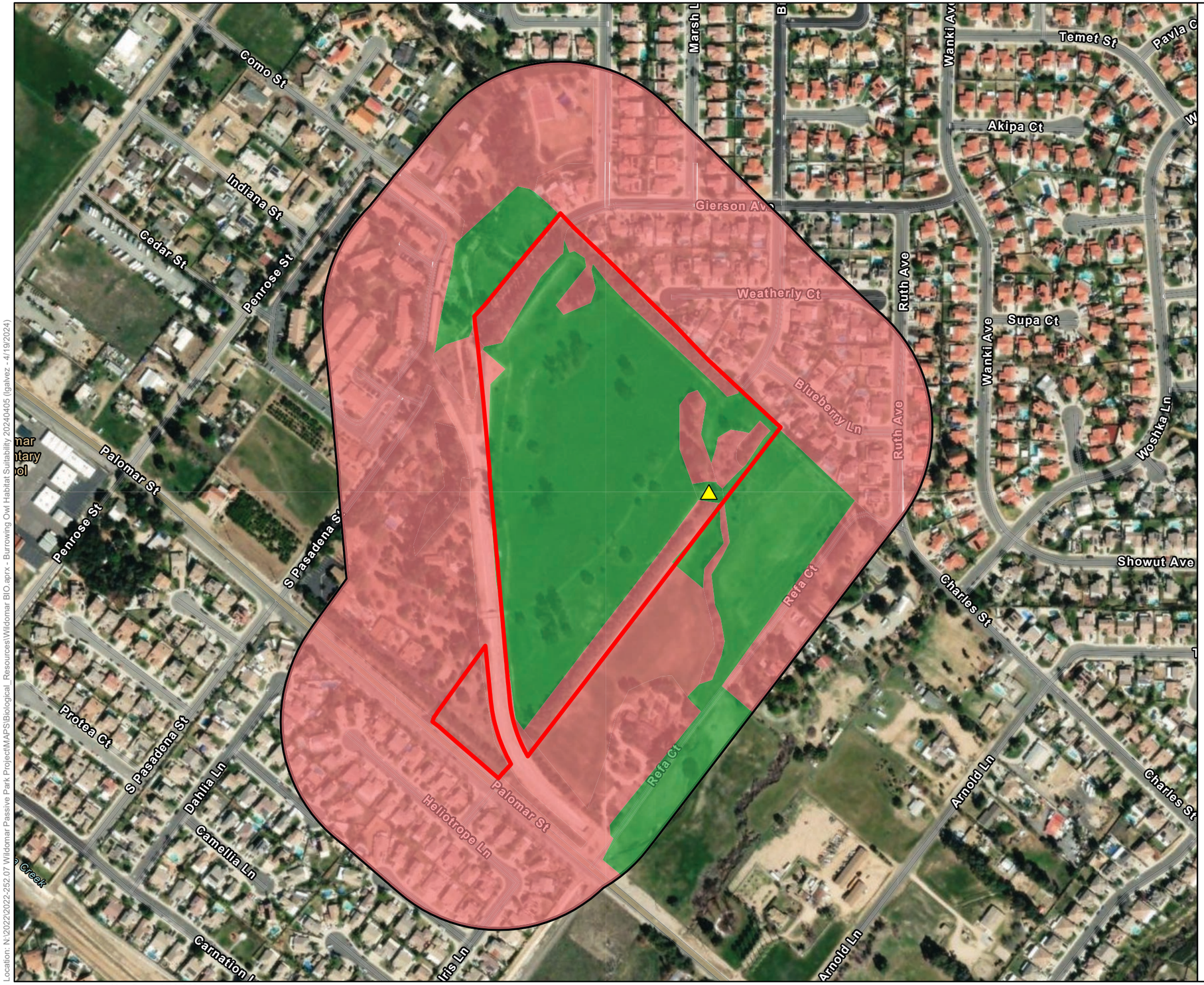
Biologists conducted a reconnaissance survey by walking the entire Project Area paying special attention to those areas that could host sensitive vegetation communities or had the potential to provide suitable habitat for special-status species. The biologists documented the plant and wildlife species present within the Project Area and assessed the location and condition of the Project for the potential to provide habitat for special-status plant and wildlife species. The data was recorded on a Global Positioning System (GPS) unit, field notebooks, and/or maps. Photographs were taken during the survey to provide visual representation of the various vegetation communities within the Project Area. The biologists examined the Project Area to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. In addition, the biologists mapped the vegetation communities and land cover types present within the Project Area and the 500-foot survey buffer surrounding the Project Area. The following minimum mapping units were used during vegetation mapping: 0.25 acre for sensitive vegetation communities and 1.0 acre for non-sensitive vegetation communities.

ECORP inspected the vegetation communities and habitat conditions to confirm presence and habitat quality of the vegetation found onsite. Where appropriate, biologists utilized descriptions of vegetation communities from the MCV second edition (Sawyer et al. 2009). Any deviations from standard vegetation classifications were made on best professional judgment when areas did not fit into a specific habitat description provided by the MCV. Biologists mapped vegetation communities using field observations and aerial imagery.

ECORP recorded plant and wildlife species including any special-status species that were observed during the survey. Plant nomenclature follows that of *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). Wildlife nomenclature follows Society for the Study of Amphibians and Reptiles (2017), *Check-list of North American Birds* (Chesser et al. 2023), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014). ECORP recorded GPS coordinates, the species, location, and habitat in instances where a special-status species was observed.

### 3.5.2 Burrowing Owl Habitat Assessment

The Project is located within the MSHCP Burrowing Owl (BUOW; *Athene cunicularia*) Survey Area and is subject to the MSHCP burrowing owl survey requirements (RCA 2024a). ECORP conducted a BUOW habitat assessment concurrently with the biological reconnaissance survey to determine the presence of suitable habitat. Biologists walked the Project Area and a 500-foot buffer (Figure 3) to identify the presence of owl habitat, scanning for suitable habitat using binoculars in areas that were inaccessible by foot. ECORP biologists determined that suitable burrowing owl habitat occurs onsite. Some suitable burrows were noted during the March 22, 2024 habitat assessment; however, a focused burrow survey was not completed.



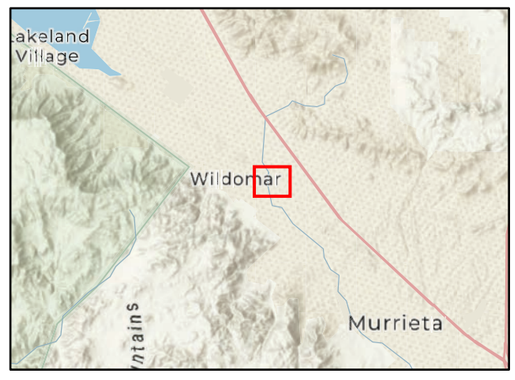

**Map Contents**

- Project Area
- 500-foot Buffer

Burrowing Owl Habitat Suitability

- Suitable
- Unsuitable
- Potential Burrowing Owl Burrow (No Sign)

Sources: Maxar, Esri World Imagery




Location: N:\2022\2022-252.07 Wildomar Passive Park Project\MAPS\Biological_Resources\Wildomar BIO.aprx - Burrowing Owl Habitat Suitability 20240405 (lgalvez - 4/19/2024)

Map Date: 4/19/2024

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Scale in Feet
0 400

**Figure 3. Burrowing Owl Habitat Suitability**

2022-252.07 Wildomar Passive Park Project

# 4.0 RESULTS

The results of the literature review and field survey, including site characteristics, vegetation communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors) are summarized below.

## 4.1 Literature Review

### 4.1.1 Special-Status Plants and Wildlife

ECORP conducted the CNDDB, CNPSEI, and IPaC searches on March 7, 2024. The database searches identified 51 special-status plant species and 42 special-status wildlife species that could occur within or near the Project Area. Biologists generated a list from the results of the literature review and evaluated the Project Area for suitable habitat that could support any of the special-status plant or wildlife species on the list.

### 4.1.2 U.S. Fish and Wildlife Service-Designated Critical Habitat

The Project is not located within any USFWS-designated critical habitat. The closest designated critical habitat is for coastal California gnatcatcher (*Polioptila californica californica*), approximately 1.8 miles northeast of the Project Area (USFWS 2024b).

## 4.2 Biological Reconnaissance Survey

ECORP biologists Greg Hampton and Verity Richardson conducted the biological reconnaissance survey of the Project Area on March 22, 2024. The results of the biological reconnaissance survey, including site characteristics, plants and plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors) are summarized below. The biologists surveyed areas of unknown property ownership within the 500-foot buffer surrounding the Project Area from a distance by using binoculars. Table 1 provides summarized weather conditions during the survey.

**Table 1. Weather Conditions During the Survey**

| Date | Time | | Temperature (˚F) | | Cloud Cover (%) | | Wind Speed (mph) | |
|---|---|---|---|---|---|---|---|---|
| | Start | End | Start | End | Start | End | Start | End |
| 3/22/2024 | 0720 | 1115 | 49.7 | 72.4 | 5 | 5 | 0-3 | 1-4 |

Notes: ˚F=degrees Fahrenheit; mph=miles per hour

### 4.2.1 Site Characteristics and Land Use

The Project Area is currently vacant, and the vegetation observed is primarily composed of non-native grasses and forbs with landscaped trees. Fencing lines the boundary of the Project Area and a concrete channel lies adjacent to the western boundary within the 500-foot. buffer. The remaining surrounding

land uses are residential and landscaped areas. Additionally, areas within the Project Area showed evidence of mechanical disturbance, likely associated with annual weed and fire abatement procedures.

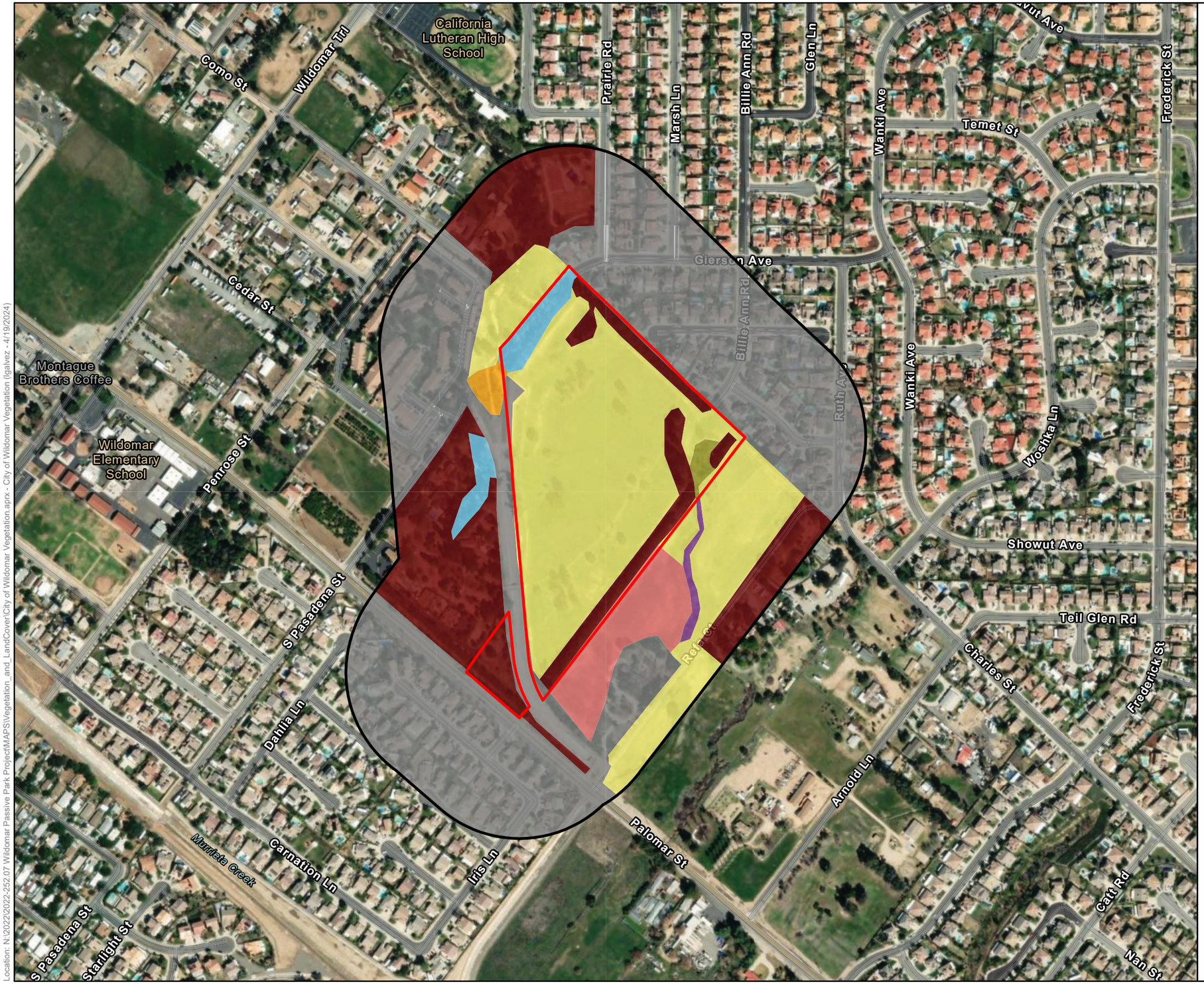
The NRCS Web Soil Survey (2024) identified nine soil types within the Project Area:

- Greenfield sandy loam, 0 to 2 percent slopes
- Greenfield sandy loam, 2 to 8 percent slopes, eroded
- Hanford coarse sandy loam, 2 to 8 percent slopes
- Hanford sandy loam, 2 to 15 percent slopes
- Monserate sandy loam, 0 to 5 percent slopes
- Monserate sandy loam, 5 to 8 percent slopes, eroded
- Monserate sandy loam, shallow, 5 to 15 percent slopes, eroded
- Placentia fine sandy loam, 0 to 5 percent slopes
- Placentia fine sandy loam, 5 to 15 percent slopes

The Project Area is bounded by a preschool and an assisted living facility to the west, residential development to the north and south, and low-density rural residences to the east. Representative site photographs are included in Appendix A.

### 4.2.2 Vegetation Communities and Land Cover Types

Vegetation within the Survey Area is composed of Fremont cottonwood forest and woodland, disturbed - California buckwheat scrub, tamarisk thickets, eucalyptus groves, and wild oats and annual brome grasslands. Three land cover types were also documented within the Survey Area: landscaped, developed, and disturbed. Vegetation communities and land cover types are further described below and shown in Figure 4. Acreages of these vegetation communities and land cover types within the Project Area and Survey Area are provided in Table 2. A comprehensive list of plant species observed in the Survey Area is included as Appendix B. Representative photographs of the habitats present on the Project Area and in the Survey Area are provided in Appendix A.




**Map Contents**

- Project Area
- 500-foot Buffer

Vegetation Communities and Land Cover Types

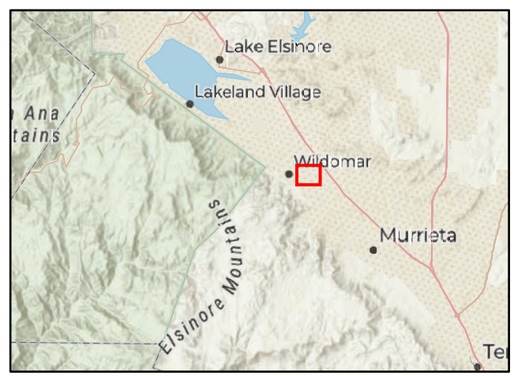
*Vegetation Types*

- Fremont Cottonwood Forest and Woodland (*Populus fremontii-Fraxinus velutina-Salix gooddingii* Forest and Woodland Alliance)
- Disturbed -California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance)
- Tamarisk Thickets (*Tamarix* spp. Shrubland Semi-Natural Alliance)
- Wild Oats and Annual Brome Grasslands (*Avena spp.-Bromus* spp. Herbaceous Semi-Natural Alliance)
- Eucalyptus Groves (*Eucalyptus* spp. Semi-Natural Woodland Stands)

*Land Cover Types*

- Developed
- Disturbed
- Landscaped

Sources: Maxar, ESRI, USGS




Location: N:\2022\2022-252.07 Wildomar Passive Park Project\MAPS\Vegetation_and_LandCover\City of Wildomar Vegetation.aprx - City of Wildomar Vegetation (lgalvez - 4/19/2024)

Map Date: 4/19/2024

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Scale in Feet
0 500

**Figure 4. Vegetation Communities and Land Cover Types**

2022-252.07 Wildomar Passive Park Project

| Table 2. Vegetation Communities and Land Cover Acreages | | |
|---|---|---|
| **Vegetation Community and Land Cover Type** | **Survey Area** | |
| | **Acreages within Project Area** | **Acreages within the 500-ft buffer** |
| Fremont Cottonwood Forest and Woodland | 0.33 | 0.33 |
| Disturbed California Buckwheat Scrub | 0.01 | 0.51 |
| Tamarisk Thickets | 0.00 | 0.42 |
| Wild Oats and Annual Brome Grasslands | 16.83 | 26.03 |
| Eucalyptus Groves | 1.01 | 1.73 |
| Developed | 0.62 | 43.44 |
| Disturbed | 0.16 | 3.91 |
| Landscaped | 4.13 | 18.92 |
| **Total:** | **23.09** | **95.29** |
| **Grand Total:** | **118.38** | |

#### *4.2.2.1 Fremont Cottonwood Forest and Woodland (Populus fremontii – Fraxinus velutina – Salix gooddingii Forest and Woodland Alliance)*

This vegetation community is dominated or co-dominated by Fremont cottonwood (*Populus fremontii*) in the tree canopy and occurs in riparian habitats with other species such as California sycamore (*Platanus racemosa*), narrowleaf willow (*Salix exigua*), Goodding's black willow (*Salix gooddingii*), and arroyo willow (*Salix lasiolepis*). This community typically occurs on floodplains, along low-gradient rivers, perennial or seasonally intermittent streams, alluvial fans, and in valleys with dependable subsurface flow of water. Vegetation layers within this community are described as a continuous to open tree layer, an intermittent to open shrub canopy, and a variable herbaceous layer, in elevations ranging from 0 to 2,400 meters amsl (CNPS 2024). Fremont cottonwood forest and woodland is considered sensitive by CDFW and has a state ranking of S3, indicating that this vegetation community is vulnerable in the state due to a restricted range, few populations, recent and widespread declines, or other factors making it vulnerable (VegCAMP, CDFW 2024f,g). This community was observed within a small section of the northeastern corner of the Project Area (Figure 4). Species observed in this community at the time of the survey included Fremont cottonwood, California sycamore, and mulefat (*Baccharis salicifolia*).

#### *4.2.2.2 Disturbed - California Buckwheat Scrub (Eriogonum fasciculatum Shrubland Alliance)*

This vegetation community is mostly dominated by California buckwheat (*Eriogonum fasciculatum*) in the shrub canopy and can occur with other ruderal native and nonnative species such as telegraph weed (*Heterotheca grandiflora*), short-pod mustard (*Hirschfeldia incana*), and red-stemmed filaree (*Erodium*

*cicutarium*). This community typically occurs in areas adjacent to California buckwheat scrub where recent anthropogenic disturbance (e.g., mowing, tilling, soil compaction) has occurred or non-native species are co-dominant. Disturbed - California buckwheat scrub is not considered sensitive by CDFW and does not have a global or state rank. This community was observed in the northern opening of the concrete channel that runs adjacent to the Project Area on the western side, within the 500-foot buffer (Figure 4). Species observed in this community at the time of the survey included California buckwheat, short-pod mustard, and fourwing saltbush (*Atriplex canescens*).

#### *4.2.2.3 Tamarisk Thickets (Tamarix spp. Shrubland Semi-Natural Alliance)*

This vegetation community is dominated by either saltcedar (*Tamarix ramosissima)* or another *Tamarix* spp. in the shrub layer. Other species such as Fremont cottonwood or willow (*Salix* spp.) may be present at a lower cover. This community typically occurs in arroyo margins, lake margins, ditches, washes, rivers, and other watercourses with a continuous shrub layer, and a variable herbaceous layer. Tamarisk thickets typically occur in elevations ranging from 75-800 meters amsl (CNPS 2024). Tamarisk thickets are not considered sensitive by CDFW and does not have a global or state rank. This community was observed in a drainage channel present in the eastern portion of the 500-foot buffer that is connected to the Fremont cottonwood forest and woodland that is present in the Project Area (Figure 4). Species observed in this community at the time of the survey included tamarisk and willow (*Salix* spp.).

#### *4.2.2.4 Wild Oats and Annual Brome Grasslands (Avena spp. - Bromus spp. Herbaceous Semi-Natural Alliance)*

Wild oats and annual brome grasslands are dominated by one or more nonnative annual grass species with an open to continuous herb layer of herbage up to four feet in height (CNPS 2024). The following nonnative species may be dominant or co-dominant on the landscape and occur with other nonnatives in the herb layer: slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), and farmer's foxtail (*Hordeum murinum*). This vegetation community accounts for the largest acreage of nonnative grassland vegetation in cismontane California, and occurs in all topographic settings including foothills, disturbed areas, rangelands, and openings in woodlands. Wild oats and annual brome grasslands typically occur in elevations ranging from 0-2200 meters amsl (CNPS 2024). Wild oats and annual brome grasslands were observed within the Project Area as well as the 500-foot. buffer on the eastern side (Figure 4). Plant species observed in this community at the time of the survey included species of slender wild oat , stinknet (*Oncosiphon pilulifer*), farmer's foxtail , foxtail brome (*Bromus madritensis)* and red-stemmed filaree.

#### *4.2.2.5 Eucalyptus Groves (Eucalyptus spp. Semi-Natural Woodland Stands)*

Eucalyptus groves are characterized by blue gum (*Eucalyptus globulus*), red gum (*E. camaldulensis*), or other *Eucalyptus* spp. dominant in an open to intermittent tree canopy and a sparse to intermittent shrub and herbaceous layer. Planted as trees, groves, and windbreaks, eucalyptus groves can occur from sea level to 300 meters amsl (Sawyer et al. 2009). Within the Survey Area, eucalyptus groves included red iron bark (*E. sideroxylon*), western Australian floodedgum (*E. rudis*), and blue gum and were most likely planted

as windbreaks and privacy screens. This community was documented in the northern portion of the Project Area and eastern portion of the 500-foot buffer.

### 4.2.3 Land Cover Types

#### *4.2.3.1 Developed*

Developed lands are those that are heavily affected by human use, including residential homes, commercial or industrial buildings and associated infrastructure, and transportation corridors. Developed land is not a vegetation classification, but rather a land cover type and is not restricted by elevation. Within developed areas, naturalized vegetation is often relatively sparse, and largely consists of ornamental, nonnative species. This land cover type was observed throughout the Survey Area (Figure 4).

#### *4.2.3.2 Disturbed*

Disturbed land includes areas where the native vegetation community has been heavily influenced by human actions, such as grading, trash dumping, equipment staging, and off-highway vehicle use, but lack development. Disturbed land is not a vegetation classification, but rather a land cover type and is not restricted by elevation. Disturbed areas may be actively maintained to be free of vegetation or have been compacted or disked to such a degree that native and nonnative vegetation is sparse. The areas mapped as disturbed are largely devoid of vegetation but contain sparse nonnative weedy and ruderal vegetation. This land cover type was observed in adjacent land, southeast of the Project Area within the 500-foot buffer and may have been scarified for future crops (Figure 4).

#### *4.2.3.3 Landscaped*

The landscaped classification includes areas where the main vegetation is continuous to non-continuous landscaped vegetation such as ornamental trees, lawn shrubs, and grass. Landscaped areas have little to no vegetation aside from landscaped vegetation. Landscaped is not a vegetation classification, but rather a land cover type and is not restricted by elevation. This land cover type was observed in scattered patches throughout the Survey Area (Figure 4).

### 4.2.4 Plants

Plant species observed within the Project Area were composed of both native and non-native species. Native plant species observed included California buckwheat, mulefat, black sage (*Salvia mellifera*), coast live oak, and bristly fiddleneck (*Amsinckia tessellata*). Non-native plant species observed included short-pod mustard , foxtail brome , stinknet, saltcedar, and Peruvian pepper tree . Appendix B provides a full list of plant species observed on or adjacent to the Project Area.

### 4.2.5 Wildlife

ECORP biologists observed wildlife species within the Project Area typical of the region. Bird species observed during the reconnaissance survey included Cooper's hawk (*Accipiter cooperii*), song sparrow

(*Melospiza melodia*), black phoebe (*Sayornis nigricans*), and mourning dove (*Zenaida macroura*). Appendix C provides a full list of wildlife species observed on or adjacent to the Project Area.

### 4.2.6 Potential for Special-Status Species to Occur within the Project Area

#### *4.2.6.1 Special-Status Plants*

There were 51 special-status plant species that appeared in the literature review and database searches for the Project Area (CDFW 2024a; CNPS 2024). ECORP generated a list from the results of the literature review and evaluated the Project for suitable habitat that could support any of the special-status plant species on the list.

Several species appeared in the literature review results that had no potential to occur on or near the Project Area due to elevational or habitat requirements. Additionally, biologists eliminated CNPS Rare Plant Rank 3 or 4 species from the analysis (unless they are characterized as MSHCP Covered Species) because these rankings are considered a review list and a watch list, respectively. No plant species were designated with a high potential to occur within the Project Area. Table 3 provides descriptions of the CNPS designations. Appendix D consists of a table outlining each plant species, designation, and potential for occurrence within the Project Area.

**Table 3. CNPS Status Designations**

| List Designation | Meaning |
|---|---|
| 1A | Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere |
| 1B | Plants Rare, Threatened, or Endangered in California and Elsewhere |
| 2A | Plants Presumed Extirpated in California, but Common Elsewhere |
| 2B | Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere |
| 3 | Plants about which we need more information; a review list |
| 4 | Plants of limited distribution; a watch list |
| List 1B, 2, and 4 extension meanings: | |
| .1 | Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat) |
| .2 | Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) |

Note: According to California Native Plant Society (CNPS, Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code (California Department of Fish and Game 1984). This interpretation is inconsistent with other definitions.

## Plant Species Present within the Project Area

One special-status plant species, Engelmann oak (*Quercus engelmannii*), was observed within the Project Area during the biological reconnaissance survey. Engelmann oak is a California Rare Plant Rank (CRPR) 4.2 species (limited distribution in California) and is a covered species that is adequately conserved under the MSHCP.

## Plant Species with a Moderate Potential to Occur

The following nine (9) plant species have a moderate potential to occur within the Project Area because there are recent occurrences within 5 miles and marginal/limited riparian and/or grassland habitat occur within the Project Area:

- Munz's onion (*Allium munzii*), CRPR 1B.1, MSHCP Covered Species
- thread-leaved brodiaea (*Brodiaea filifolia*) CRPR 1B.1, MSHCP Covered Species
- smooth tarplant (*Centromadia pungens* ssp. *laevis*), CRPR 1B.1, MSHCP Covered Plant Species
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*), CRPR 1B.1, MSHCP Covered Plant Species
- long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*), CRPR 1B.2, MSHCP Covered Plant Species
- San Miguel savory (*Clinopodium chandleri*), CRPR 1B.2, MSHCP Covered Plant Species
- San Diego button-celery (*Eryngium aristulatum* var. *parishii)*, CRPR 1B.1
- prostrate navarretia (*Navarretia prostrata*), CRPR 1B.2
- California Orcutt grass (*Orcuttia californica*), CRPR 1B.1, MSHCP Covered Plant Species

## Plant Species with a Low Potential to Occur

The following nineteen (19) species have a low potential to occur within the Project Area because limited/marginal habitat for the species occurs onsite and a known occurrence has been reported in the database, but not within 5 miles of the Project Area or a historic documented occurrence (more than 20 years old) was recorded within 5 miles of the Project Area.

- San Diego ambrosia (*Ambrosia pumila*), CRPR 1B.1, MSHCP Covered Species
- rainbow manzanita (*Arctostaphylos rainbowensis*), CRPR 1B.1, MSHCP Covered Species
- Jaeger's milk-vetch (Astragalus pachypus var. jaegeri), CRPR 1B.1, MSHCP Covered Species
- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), CRPR 1B.1, MSHCP Covered Species
- Orcutt's brodiaea (*Brodiaea orcuttii*), CRPR 1B.1, MSHCP Covered Species
- intermediate mariposa-lily (*Calochortus weedii* var. *intermedius*), CRPR 1B.2, MSHCP Covered Species

- many-stemmed dudleya (*Dudleya multicaulis*), CRPR 1B.2, MSHCP Covered Species
- Palmer's grapplinghook (*Harpagonella palmeri*), CRPR 4.2, MSHCP Covered Species
- vernal barley (*Hordeum intercedens*), CRPR 3.2, MSHCP Covered Species
- southern California black walnut (*Juglans californica*), CRPR 4.2, MSHCP Covered Species
- Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*), CRPR 1B.1, MSHCP Covered Species
- ocellated Humboldt lily (*Lilium humboldtii* ssp. *Ocellatum*), CRPR 4.2, MSHCP Covered Species
- small-flowered microseris (*Microseris douglasii* ssp. *Platycarpha*), CRPR 4.2, MSHCP Covered Species
- little mousetail (*Myosurus minimus* ssp. *apus*), CRPR 3.1, MSHCP Covered Species
- spreading navarretia (*Navarretia fossalis*), CRPR 1B.1
- chaparral rein orchid (*Piperia cooperi*), CRPR 4.2
- white rabbit-tobacco (*Pseudognaphalium leucocephalum*), CRPR 2B.2
- San Bernardino aster (*Symphyotrichum defoliatum*), CRPR 1B.2
- California screw moss (*Tortula californica*), CRPR 1B.2

**Plant Species Presumed Absent**

A total of 22 plant species were presumed absent from the Project Area due to lack of suitable habitat (including elevation and soils) or because the Project Area is located outside of the known range for the species. A table outlining each species, their designations, and potential for occurrence within the Project Area can be found in Appendix D.

#### *4.2.6.2 Special-Status Wildlife*

There were 42 special-status wildlife species that appeared in the literature review and database searches for Project Area. ECORP generated a list from the results of the literature review and evaluated the Project for suitable habitat that could support any of the special-status wildlife species on the list. No special-status wildlife species were designated with a high potential to occur within the Project Area. Appendix E provides a table outlining each species, their designations, and potential for occurrence within the Project Area or larger Survey Area.

**Wildlife Species Present within the Survey Area**

One special-status wildlife species, monarch butterfly (*Danaus plexippus*) was observed within the buffer of the Project Area during the biological reconnaissance survey.

***Monarch Butterfly***

Monarch butterfly , the California overwintering population, is a candidate species for listing under the federal ESA. This species inhabits a variety of habitats and has a reliance on milkweeds (*Asclepias* spp.) as its obligate larval host plant. No milkweed plants were observed within the Survey Area. The overwintering population is known to have a preference for and dependency on nonnative trees planted in the mild coastal zone. Overwintering habitat is present within the Project Area as this species roosts in wind-protected tree groves (coastal California conifers and eucalyptus groves).

## Wildlife Species with a Moderate Potential to Occur

Eight species were found to have a moderate potential to occur within the Project Area because of one of the following factors:

- Although these species were not observed during the biological reconnaissance survey, somewhat suitable habitat for the species occurs onsite, and a known occurrence has been reported in the database, but not within 5 miles of the Project Area; or
- a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or
- a recently documented observation occurs within 5 miles of the Project Area and marginal or limited amounts of habitat occurs onsite.

The special-status wildlife species with a moderate potential are listed below and detailed in Appendix E.

- burrowing owl (*Athene cunicularia*), CDFW SSC, MSHCP Covered Species
- coast range newt (*Taricha torosa*), CDFW SSC, MSHCP Covered Species
- Crotch bumble bee (*Bombus crotchii*), CDFW Candidate for Listing
- southern California legless lizard (*Anniella stebbinsi*), CDFW SSC
- Swainson's hawk (*Buteo swainsoni*), CDFW Threatened, MSHCP Covered Species
- western yellow bat (*Lasiurus xanthinus*), CDFW SSC
- western red bat (*Lasiurus frantzii*), CDFW SSC
- western spadefoot (*Spea hammondii*), USFWS Candidate (Proposed Threatened), CDFW SSC, MSHCP Covered Species

## Wildlife Species with a Low Potential to Occur

The following six species have a low potential to occur within the Project Area because of one of the following factors:

- There is limited habitat for the species onsite and a known occurrence has been reported in the database, but not within 5 miles of the Project Area; or

- a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or
- suitable habitat strongly associated with the species occurs onsite, but no records were found in the database search.

The special-status wildlife species with a low potential to occur are listed below and detailed in Appendix E.

- California glossy snake (*Arizona elegans occidentalis*), CDFW SSC
- coastal whiptail (*Aspidoscelis tigris stejnegeri*), CDFW SSC, MSHCP Covered Species
- least bell's vireo (*Vireo bellii pusillus*), USFWS Endangered, CDFW Endangered, MSHCP Covered Species
- loggerhead shrike (*Lanius ludovicianus),* CDFW SSC, MSHCP Covered Species
- Stephens' kangaroo rat (*Dipodomys stephensi*), USFWS Threatened and CDFW Threatened
- two-striped garter snake (*Thamnophis hammondii*), CDFW SSC

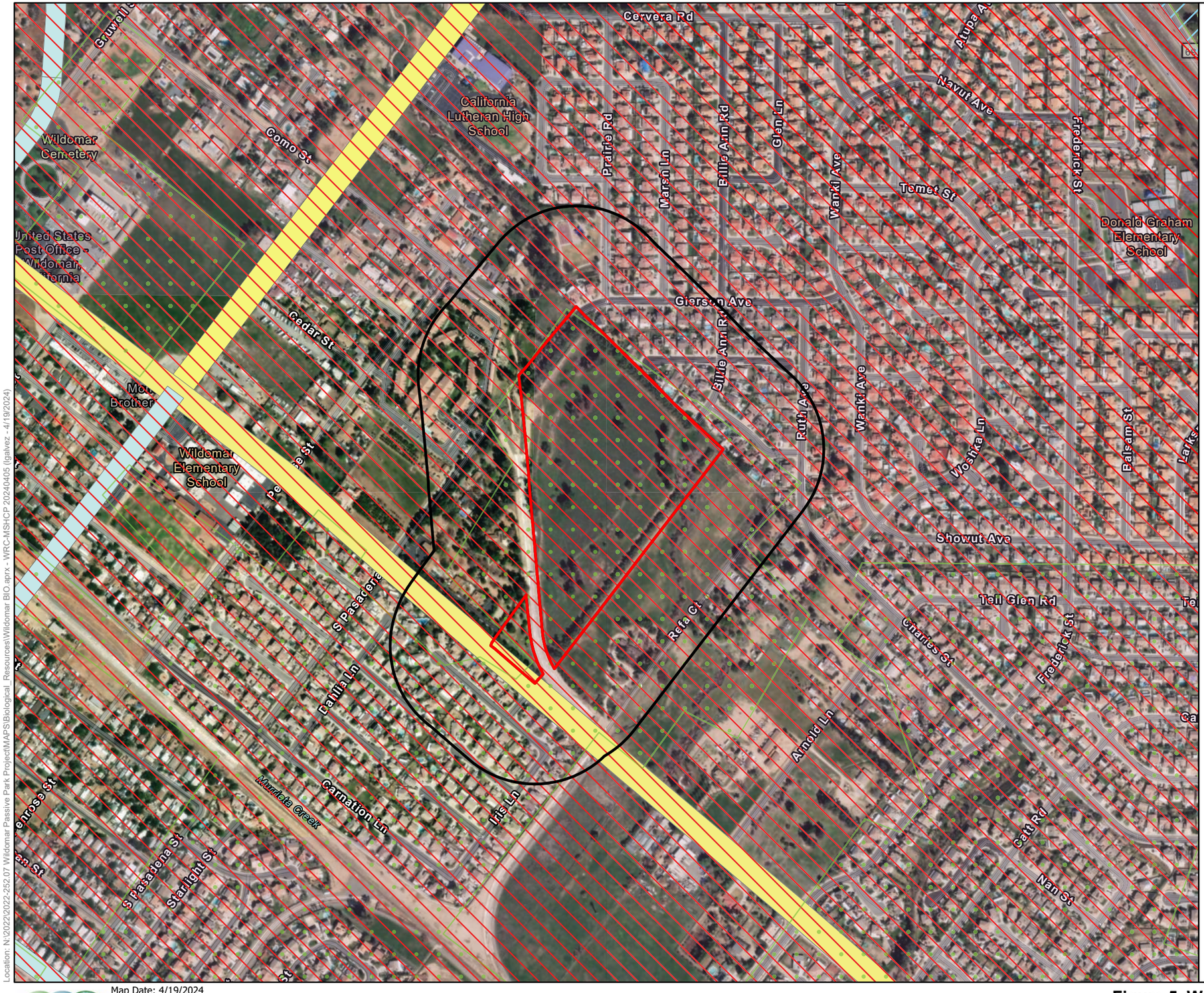
### Wildlife Species Presumed Absent

A total of 27 species were presumed absent. These species were not present at the Project Area during the biological reconnaissance survey and the habitat present within the Project Area was not suitable to support these species. For some species, there were historic or recent sightings near the Project Area; however, these species are presumed absent due to the lack of suitable habitat within the Project Area. Appendix E outlines each species, their designations, and potential for occurrence within the Project Area.

## 4.3 Burrowing Owl Habitat Assessment

A BUOW habitat assessment was required because the Project is located within the MSHCP-designated BUOW Survey Area (Figure 5). ECORP biologists Verity Richardson and Greg Hampton conducted the BUOW habitat assessment concurrently with the biological reconnaissance survey on March 22, 2024 within the Project Survey Area. Weather conditions during the assessment are summarized in Table 1.

The assessment determined that the Project Area included suitable habitat for BUOW primarily within the central portion of the Project Area consisting of non-native forbs and grasses on level terrain, with California ground squirrel burrows, a few of which could be suitable for BUOW (Figure 5). One potential burrowing owl burrow with no sign observed was documented within the Project Area. A focused burrow survey and protocol-level burrowing owl surveys were not performed by ECORP following the habitat assessment.




**Map Contents**

- Project Area
- 500-foot Buffer
- Burrowing Owl Survey Area
- SKR HCP Fee Area

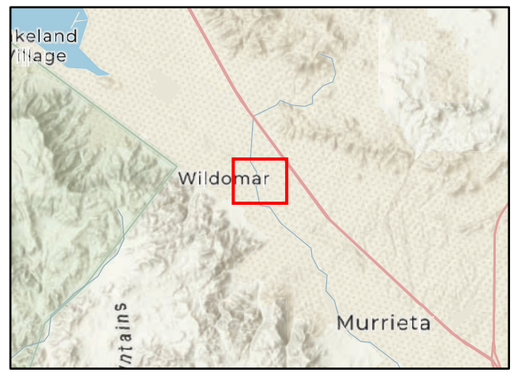
MSHCP Roads Right-of-Way (Covered Road)

- ARTERIAL
- SECONDARY

Habitat Management Unit

- Menifee
- Santa Ana Mountains

Sources: Maxar, Esri World Imagery




Location: N:\2022\2022-252.07 Wildomar Passive Park Project\MAPS\Biological_Resources\Wildomar BIO.aprx - WRC-MSHCP 20240405 (lgalvez - 4/19/2024)

Map Date: 4/19/2024

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Scale in Feet
0 400

**Figure 5. Western Riverside County MSHCP Designation**

2022-252.07 Wildomar Passive Park Project

## 4.4 Raptors and Migratory Birds

Potential nesting habitat for migratory birds and raptors protected by the MBTA and California Fish and Game Code was present on and adjacent to the Project Area in some of the larger trees and shrubs. Raptors typically breed between February and August, and songbirds and other passerines generally nest between March and August. There is potential for nesting to occur within the Project Area due to the presence of suitable nesting habitat.

## 4.5 Aquatic Resources Delineation

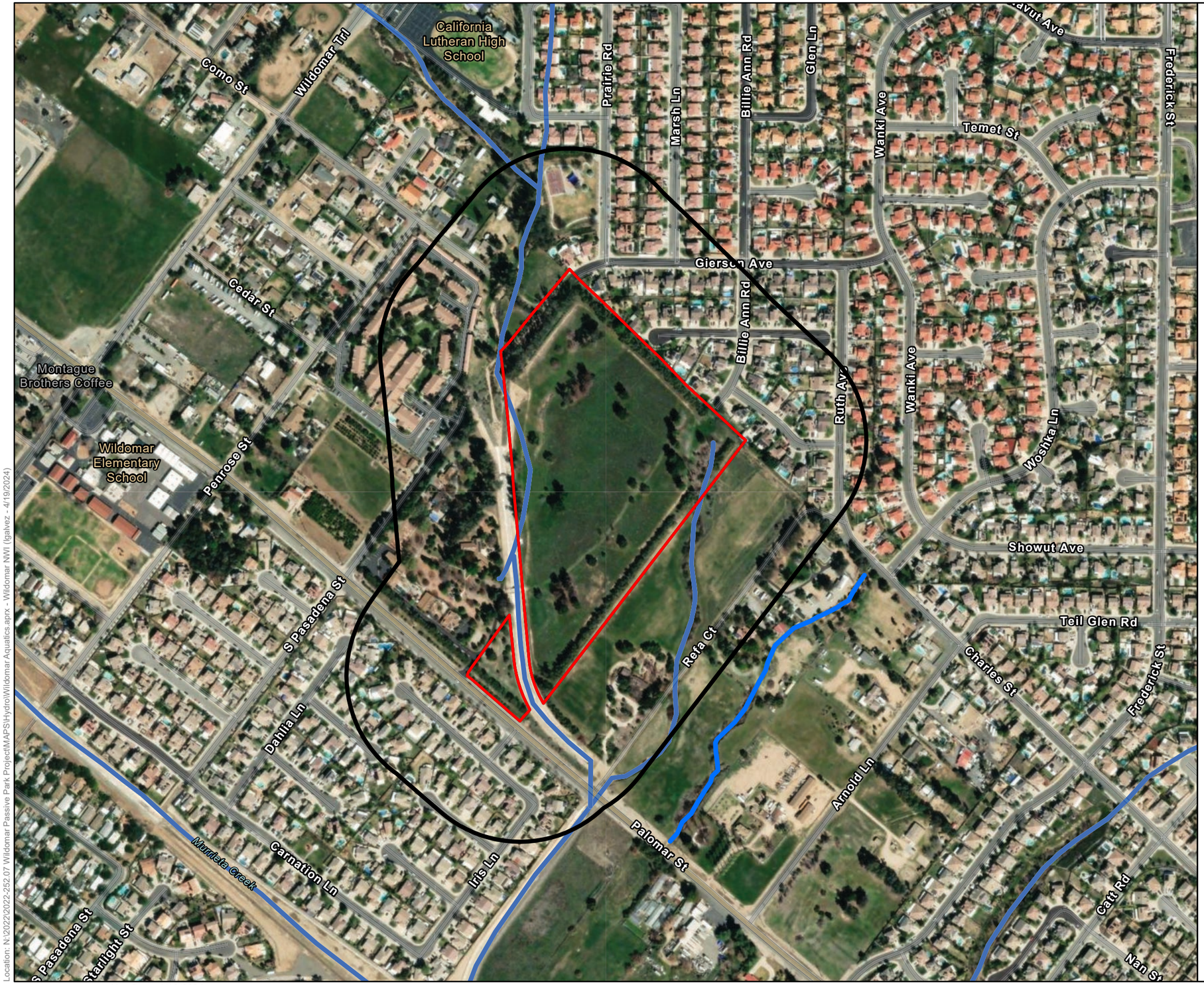
ECORP conducted a desktop review to identify potential streams and hydric soils on the property. This entailed examination of the NRCS Web Soil Survey (2024), National Wetland Inventory (NWI) mapping, USGS topographic mapping, and historic and recent aerial imagery of the Project Area to aid in identifying potential biological constraints to the Project due to jurisdictional streams. The NWI identified two drainage features occurring within the Survey Area (Figure 6). One is a natural drainage and the other is a concrete channel adjacent to the western boundary of the Project Area. Based on the desktop review of topographic mapping and historic and recent aerial imagery, in combination with the biological reconnaissance survey, one additional natural drainage feature occurs within the Project Area. A formal Aquatic Resources Delineation was not performed by ECORP for the Project.

## 4.6 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor is varied, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas.

In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. Naturally, the nature of corridor use and wildlife movement patterns varies greatly among species.

ECORP assessed the Project for its ability to function as a wildlife corridor. The Project likely provides some wildlife movement opportunities because it consists of open land; however, there is undeveloped parcels of land in proximity to the Project Area. The Project Area is unlikely to function as a wildlife corridor for this open space habitat as no large open space habitats occur directly south, east, or west of the Project.



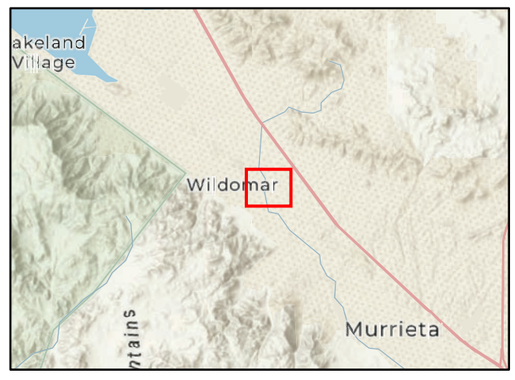

**Map Contents**

- Project Area
- 500-foot Buffer

Wetland Type

- Riverine

Sources: Maxar, Esri World Imagery, National Wetlands Inventory




Location: N:\2022\2022-252.07 Wildomar Passive Park Project\MAPS\Hydro\Wildomar Aquatics.aprx - Wildomar NWI (lgalvez - 4/19/2024)

Map Date: 4/19/2024

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Scale in Feet
0 400

**Figure 6. National Wetlands Inventory**

2022-252.07 Wildomar Passive Park Project

Suitable bat roosting habitat was identified within the Project Area in the form of mature trees. Should bats be found roosting in these features during the bat maternity season (April 1 through August 31), these roosts would be considered native wildlife nursery sites and are protected under CEQA.

The Project Area likely plays a minor role in local wildlife dispersal and foraging. Common wildlife species including coyotes (*Canis latrans*), skunks (*Mephitis mephitis*), opossums (*Didelphis virginiana*), and raccoons (*Procyon lotor*) likely travel through the Project Area and neighboring developed and undeveloped areas, but the Project Area does not provide connectivity between large areas of open space on a local or regional scale.

# 5.0 IMPACT ANALYSIS

Impacts to sensitive biological resources resulting from construction activities are presented below. The Avoidance, Minimization, and Mitigation Measures for the Proposed Project are discussed in Section 8.0.

## 5.1 Limitations of Analysis

This impact analysis is limited to the approximately 20-acre Project Area, comprising APNs 380-050-025 and 380-050-027, which will be permanently impacted to construct the proposed park and associated amenities. Offsite impacts are not addressed.

## 5.2 Special-Status Species

The literature review and database searches identified 51 special-status plant species. Of these, one species, Engelmann oak, was observed within the Project Area. A total of 3 Engelmann oaks were documented during the biological reconnaissance survey. Irrigation lines were present under the trees, which signifies that that were most likely planted and not naturally occurring. In addition, this species is a covered species that is adequately conserved under the MSHCP and has a CRPR rank of 4.2 (limited distribution in California). Species with a CRPR 4.2 do not have the same protections as plant species with a rank of 1B; therefore, impacts to this species are not considered significant. However, it is recommended, if possible, to avoid impacting the species. Avoidance and protection of the Engelmann oak would align with the City's tree preservation and protected trees policy. Nine additional special-status plant species have a moderate potential to occur and the remaining 41 species were determined to have a low potential to occur onsite or were presumed absent. No additional sensitive plant species were observed during the biological surveys. No impacts to special-status plant or narrow endemic plant species, with exception to Engelmann oak, are expected to occur as a result of the Proposed Project within the Project Area. Impacts to special-status plant species would be less than significant with the implementation of biological monitoring during vegetation removal activities and tree avoidance and protection measures as described in Section 8.0 of this document.

Of the 42 special-status wildlife species identified in the literature search, one insect species was present during the biological reconnaissance survey near the Project Area and within the 500-foot survey buffer: monarch butterfly, a candidate species for listing under the federal ESA. Suitable overwintering habitat for this sensitive insect species occurs within the eucalyptus groves within the Project Area. No larval host plants of the milkweed genus were observed within the Project Area. This species is not covered under the

MSHCP; impacts to monarch would be less than significant with the implementation of biological monitoring during vegetation removal activities and tree avoidance and protection measures as described in Section 8.0 of this document.

Eight special status wildlife species were determined to have moderate potential to occur within the Project Area. The Project is located within a designated survey area under the MSHCP for BUOW and the biological reconnaissance survey and habitat assessment determined that suitable BUOW habitat was present in the Survey Area. If BUOW are present within the Project Area, direct impacts in the form of ground disturbance, vegetation removal, habitat loss, and mortality and indirect impacts from construction noise and vibrations may occur. Protocol-level surveys for BUOW will need to occur within the Survey Area to determine presence/absence of the species within and adjacent to the Project Area, as described in Section 8.0 of this document.

Crotch bumble bee has a moderate potential to occur onsite and is listed as a Candidate species under the California ESA. Additional surveys for this species will be required in order to determine presence/absence of the species within the Project Area, as described in Section 8.0 of this document.

Three of the additional special-status wildlife species with a moderate potential to occur are covered by the MSHCP: coast range newt, Swainson's hawk, and western spadefoot. These three species are considered adequately conserved under the MSHCP; no additional surveys or mitigation will be required. Recently, western spadefoot was proposed as a candidate for listing under the federal ESA. Western spadefoot is also a CDFW SSC. There are five recent records in the CNDDB within five miles of the Project Area. One recent record from 2017 (Occurrence #319) is located two miles east of the Project Area. Suitable habitat for this species exists in and around the natural drainages and adjacent upland areas within the Project Area. Impacts to western spadefoot would be less than significant with the implementation of biological monitoring during construction activities in and around the onsite drainages as described in Section 8.0 of this document.

Southern California legless lizard has a moderate potential to occur onsite and is a CDFW SSC. Direct impacts in the form of ground disturbance, vegetation removal, habitat loss, and mortality and indirect impacts from construction noise and vibrations may occur to the species. However, if this species were to be present within the Project Area; they would likely occur in low numbers due to anthropogenic disturbances and lack of connectivity on the Project and Project-related impacts would not contribute to the overall decline of populations of this species. Therefore, no impacts to southern California legless lizard are anticipated to result from this Project. Additionally, impacts to southern California legless lizard would be less than significant with the implementation of biological monitoring as described in Section 8.0 of this document.

Two special status bat species were determined to have a moderate potential to occur within the Project Area: western yellow bat and western red bat. They are both CDFW SSC and are not covered under the MSHCP. Suitable bat roosting habitat was identified within the Project Area in the form of mature trees for both of these special-status bat species. Direct impacts to occupied bat roosts could include removal or destruction that could result in direct mortality, indirect impacts from noise, dust, and vibration during Project construction could result in roost abandonment and mortality of flightless young. Impacts to

special-status bat species would be less than significant with the implementation of a tree avoidance and removal process as described in Section 8.0 of this document.

The large eucalyptus trees, pepper trees, pine trees, Fremont cottonwoods and other trees located within or near the Project Area could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code. Ground-disturbing construction activities could directly affect nesting birds and other birds protected by the MBTA and their nests through habitat removal within the Project Area, and indirectly through increased noise, vibrations, and increased human activity if any tree or vegetation removal needs to occur during the bird breeding season (typically January 15 through August 31). Impacts to sensitive bird species and/or nesting birds would be less than significant with the implementation of preconstruction surveys for nesting birds as described in Section 8.0 of this document.

The remaining 33 special status wildlife species analyzed were determined to have a low potential to occur or are presumed absent due to the lack of suitable habitat occurring within the Project Area; thus, these species are not expected to occur within the Project Area and impacts to these species are not anticipated as a result of the Proposed Project.

## 5.3 Sensitive Natural Communities

One sensitive natural community was observed within the Project Area, Fremont cottonwood forest and woodland. Approximately 0.33 acre of Fremont cottonwood forest and woodland occur within the Project area, which is considered sensitive by CDFW and has a state ranking of S3, indicating that this vegetation community is vulnerable in the state due to a restricted range, few populations, recent and widespread declines, or other factors making it vulnerable (CDFW 2024f). No impacts to other sensitive natural communities are anticipated to result from the Proposed Project. Impacts to special-status sensitive natural communities would be less than significant with the implementation of the tree preservation and protection policy as described in Section 8.0 of this document.

## 5.4 State or Federally Protected Wetlands and Waters of the U.S.

As discussed in Section 4.5 of this document, the NWI identified one drainage within the Project Area and a desktop review of aerial imagery by ECORP and biological reconnaissance survey identified another drainage feature within the Project Area and an additional concrete channel within the 500-foot buffer. A formal Aquatic Resources Delineation was not conducted by ECORP as part of this Biological Technical Report. A formal delineation is recommended as further detailed in Section 8.0 of this document.

## 5.5 Wildlife Corridors and Nursery Sites

The Project does not likely provide local wildlife movement opportunities because of the developed parcels of land surrounding the Project Area. A large open space area occurs within the Project Area; however, it is unlikely to function as a wildlife corridor because no large open space habitats occur directly north, south, east, or west of the Project Area. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project Area. No impacts to these resources are expected to occur within the Project Area.

Suitable bat roosting habitat was identified within the Project Area in the form of mature trees. Should bats be found roosting in these features during the bat maternity season (April 1 through August 31), these roosts would be considered native wildlife nursery sites and are protected under CEQA. Direct impacts to occupied bat roosts could include removal or destruction that could result in direct mortality, indirect impacts from noise, dust, and vibration during Project construction could result in roost abandonment and mortality of flightless young. Impacts to maternity bat roosts would be less than significant with the implementation of the bat protection - tree avoidance and removal process measure as described in Section 8.0 and additional recommendations of Section 9.0 of this document.

## 5.6 Habitat Conservation Plans and Natural Community Conservation Plans

The Project is located within the planning area for the Western Riverside MSHCP. The Project is not located within any Conservation Areas. An MSHCP Consistency Analysis is included in Section 6.0, below.

## 5.7 City of Wildomar—Tree Preservation Policy and Protection Measures

Several native and protected trees, according to the definitions provided in Sections 7.1.4 of the City of Wildomar's Landscape Design Standards and Guidelines, were observed within the Project Area. The Project aims to preserve as much of the native vegetation and trees onsite as possible. No impacts to these resources are anticipated to occur as a result of the Project. Impacts to existing native and protected trees would be less than significant with the implementation of the tree preservation and protection policy as described in Section 8.0 of this document.

# 6.0 MSHCP CONSISTENCY ANALYSIS

## 6.1 Introduction

The purpose of this Consistency Analysis is to summarize the biological data for the Proposed Project and to document the Proposed Project's consistency with the goals and objectives of the MSHCP.

### 6.1.1 Project Description and Area

The Project is located in the City of Wildomar, Riverside County, California (Figure 1), within APNs 380-050-025 and 380-050-027.

Please refer to Section 1.2 of this document for a Project description. This Consistency Analysis is limited to the approximately 20-acre Project Area composed of the two parcels identified above.

### 6.1.2 Covered Roads

The Project proposes to extend the two existing streets that surround the parcels onsite to create access into the Project site: Gierson Avenue and Palomar Street. The RCA MSHCP Information Map identifies Palomar Street as a Covered Road (Arterial) [RCA 2024a]. These offsite roadway improvements were not assessed as part of this Consistency Analysis.

### 6.1.3 General Setting

The Project is surrounded by a mix of developed and undeveloped land, with residential development to the north and south, an assisted living facility and a preschool to the west, and low-density rural residences to the east.

## 6.2 Reserve Assembly Analysis

The Project is located in the Elsinore Area Plan but not within any Area Plan Subunits with specific target conservation acreages and goals, planning species, biological issues and considerations, or criteria (Figure 7). The Project is not located within any Criteria Cells. The nearest Criteria Cell is 5350 located approximately 1.5 miles northeast of the northeastern boundary of the Project. The Project is not located within any Linkage that connects Core Areas nor does it function as a Core Area itself.

The entire Project Area lies within the MSHCP Burrowing Owl Survey Area (RCA 2024a). The Project is within the Santa Ana Mountains Habitat Management Unit. The Project Area is not within a Criteria Area Species Survey Area or a Cell Group.

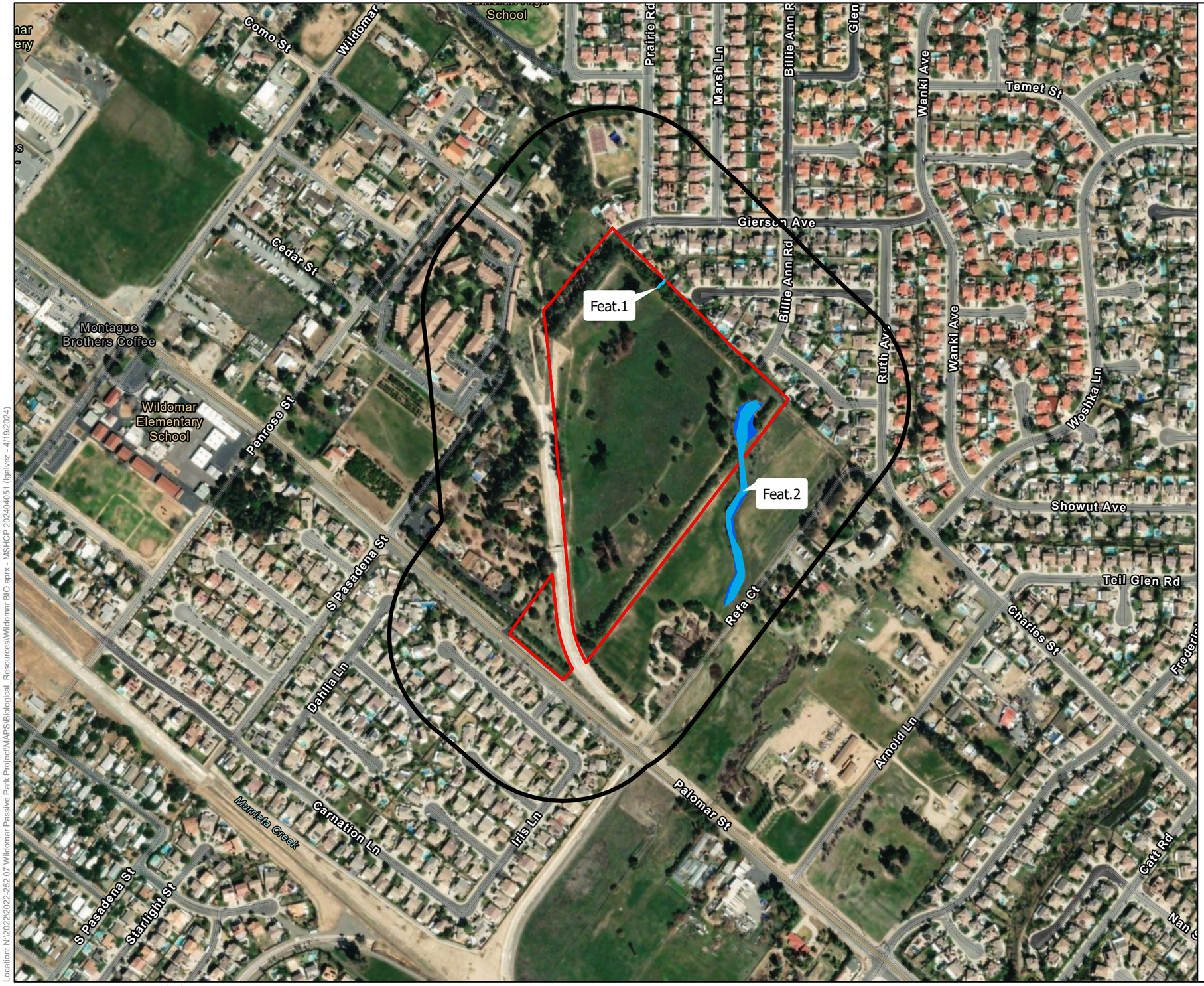
The Proposed Project will be able to contribute to the overall MSHCP Reserve Assembly goals. The Proposed Project would not result in impeding the functionality of the Reserve features that are the focus of the Menifee Habitat Management Unit or the Elsinore Area Plan.

### 6.2.1 Public Quasi-Public Lands

The Proposed Project is not located within Public/Quasi-Public (PQP) Conserved Lands (RCA 2024a). The nearest PQP Conserved Lands occur approximately 1.5 miles northeast of the northeastern boundary of the Project Area. Furthermore, the Project is not located in an area designated as Rural/Mountainous in the MSHCP Area, American Indian Lands, Lake, Pre-existing Conservation Agreements, or San Jacinto Wildlife Area Additional Acquisitions. Therefore, the Proposed Project would not have impacts on PQP-designated lands.

## 6.3 Vegetation Mapping and Species Compendia

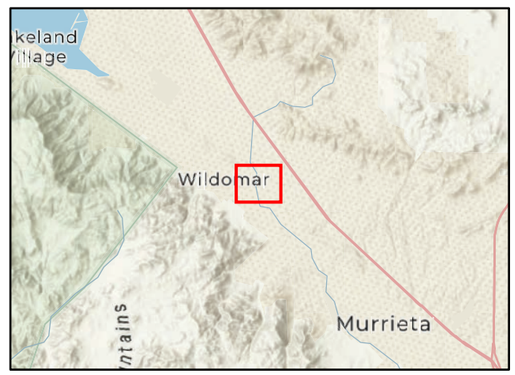
Vegetation communities within the Project Area were mapped as part of the biological reconnaissance survey conducted by ECORP, as depicted in Figure 4. Please refer to Section 4.2.2 of this report for descriptions of vegetation communities onsite. Plants and wildlife observed within and adjacent to the Project Area during the biological reconnaissance survey are provided as Appendices B and C, respectively.




**Map Contents**

- Project Area
- 500-foot Buffer
- MSHCP Riparian
- Drainage Feature

Sources: Maxar, Esri World Imagery




Location: N:\2022\2022-252.07 Wildomar Passive Park Project\MAPS\Biological_Resources\Wildomar BIO.aprx - MSHCP 20240051 (galvez - 4/19/2024)

Map Date: 4/19/2024

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Scale in Feet
0 400

**Figure 7. MSHCP Riparian/Riverine Resources**

2022-252.07 Wildomar Passive Park Project

## 6.4 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2)

### 6.4.1 Riparian/Riverine

In accordance with Section 6.1.2 of the MSHCP, ECORP performed a habitat assessment for riparian and riverine communities. The MSHCP defines Riparian and Riverine resources as "…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" (RCTLMA 2024).

According to the RCA MSHCP Consistency Analysis Report Template, a riverine feature includes:

> "any feature that is natural in origin as well as past natural features that have been heavily modified and/or redirected and can include features indirectly created through man-made manipulation of the landscape, including channelization of a historic riverine feature. If these features connect to nearby downstream resources that are either existing or described conservation lands, they would be considered riverine" (RCA 2024b).

Both vegetated (riparian) and unvegetated (riverine) drainages may be considered MSHCP resources.

#### *6.4.1.1 Methods*

**Literature Review**

Hydrology, soil, and USFWS NWI data were reviewed prior to the habitat assessment. In addition, Google Earth™ aerial imagery was reviewed to locate potential additional riparian/riverine areas within the Project Area.

**Habitat Assessment**

ECORP biologists visually surveyed the potential riparian/riverine areas of the Project Area. Where riparian/riverine habitat was present, the extent was verified if it had been previously mapped and new areas were mapped using a post-processing-capable GPS device. The extent of riparian habitat was based on the canopy of the riparian community, to the limits of the dripline, within or directly adjacent to the streambed that is likely deriving benefit from the hydrology of the streambed.

#### *6.4.1.2 Existing Conditions and Results*

The riparian/riverine habitat assessment was conducted for the Project Area by ECORP biologists Verity Richardson and Greg Hampton on March 22, 2024.

The NWI identified two drainage features occurring within the Project Area [(Figure 6) USFWS 2024c]. One feature exists along the western perimeter of the Project Area and flows into the Project Area from the north and exits near the southwestern corner. It is classified as riverine intermittent streambed temporary flooded (R4SBA). The habitat assessment confirmed that this drainage feature is a manmade concrete

lined channel that directs flow outside of but adjacent to the Project Area. This feature has been altered to direct flow and no longer matches the entirety of the NWI mapped riverine feature. The concrete lined channel supports two pedestrian bridges over the channel. This concrete lined channel connects downstream to Murrieta Creek but the channel itself does not support MSHCP riverine wildlife or plants. This feature does not contain MSHCP riparian resources due to the lack of riparian vegetation. The second NWI feature occurs along the eastern perimeter of the Project Area. It is classified as riverine intermittent streambed seasonally flooded (R4SBC). The habitat assessment confirmed that this drainage feature, labeled Feature 2, includes a culvert with a natural drainage that directs flow south from the residential homes to the north into the Project Area and continues flowing southwest exiting the Project Area eventually flowing into Murrieta Creek. Feature 2 contains MSHCP riverine resources and riparian habitat due to the presence of a bed and bank, its connection to downstream drainage features, and the presence of riparian vegetation located within or directly adjacent to the drainage feature (Figure 7).

Based on the desktop review of topographic mapping and historic and recent aerial imagery coupled with the on-site habitat assessment, one additional MSHCP riverine feature occurs within the Project Area. This additional drainage feature, labeled Feature 1, is located in the northern portion of the Project Area and includes a culvert with a natural drainage that directs flow south from the residential homes outside of the Project Area into the Project Area. This feature contains MSHCP riverine resources based on the presence of a bed and bank. This feature does not contain MSHCP riparian resources due to the lack of riparian vegetation.

The NRCS Web Soil Survey (2024) identified nine soil types within the Project Area, as described in Section 4.2.1 of this document. All of the identified soils are well-drained sandy loam soils. None are characterized as hydric, alkaline, or saline. The MSHCP riparian/riverine resources onsite may provide certain physical or chemical functions; however, their functionality is limited by their ephemeral nature, the presence of well-draining soils that prevent onsite retention or ponding, and by the routine habitat disturbance that occurs in some areas for weed/fire abatement and landscape maintenance. Functions may include nutrient and toxicant trapping, pollutant filtration, and flood flow attenuation.

The two MSHCP riverine features, Features 1 and 2, that flow within the Project Area occur within both landscaped and Fremont cottonwood forest and woodland vegetation communities. The areas containing landscaped vegetation contain low-quality habitat because they are disturbed in nature due to annual vegetation management consistent with weed/fire abatement activities. The areas of MSHCP riverine resources within Fremont cottonwood forest and woodland are characterized as moderate to high quality habitat due to the relative lack of disturbance and presence of riparian species.

The MSHCP riparian/riverine resources within the Project Area provide some biological functions due to the presence of native habitat in some areas; however, low-quality, disturbed and landscaped habitat dominated by non-native vegetation is also present on-site. The MSHCP riparian/riverine resources overall do not support or provide good quality habitat for MSHCP Section 6.1.2 species, including amphibians, riparian birds, fairy shrimp, fish, or sensitive plants, as detailed in the following sections of this document. However, there is some potential habitat to support amphibian species such as western spadefoot toad discussed in Section 4.0 and 5.0 of this document.

#### *6.4.1.3 Impacts and Mitigation*

The Project proposes to impact MSHCP riparian/riverine resources located within the Project Area through enhancement and preservation. An additional pedestrian bridge is planned to be built over the concrete lined channel at the western perimeter of the Project Area. Additionally, native riparian woodland is proposed to be planted along the drainage corridor at the western portion of the site. The two natural drainages are proposed to be enhanced with plantings to remove pollutants and to maintain the natural aesthetic of the site. The Project proposes to strategically place boulders and cobbles along the drainage features to minimize erosion and stabilize flow lines. Implementation of measure Bio-8 is recommended to assess impacts to MSHCP riparian/riverine resources.

A Determination of Biologically Equivalent or Superior Preservation will be required to address proposed impacts to these resources as reflected in measure BIO-9. Mitigation may include on-site habitat restoration, off-site habitat restoration, the purchase of mitigation credits from an approved mitigation bank, or a combination thereof.

### 6.4.2 Vernal Pools and Fairy Shrimp

In accordance with Section 6.1.2 of the MSHCP, ECORP conducted a habitat assessment for vernal pools and fairy shrimp species on May 22, 2024 for the Proposed Project.

#### *6.4.2.1 Vernal Pools*

The MSHCP defines vernal pools as:

> "…seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records (RCTLMA 2024)."

Vernal pools are seasonal wetlands that alternate between periods of inundation and desiccation on an annual basis, corresponding to California's Mediterranean climate of cool, wet winters and warm, dry summers. Distinct phases in this annual cycle include a wetting phase, an aquatic or inundation phase, a waterlogged-terrestrial phase, and a drought phase (Keeley and Zedler 1998). Keeley and Zedler (1998) define vernal pools as "precipitation-filled seasonal wetlands inundated during periods when temperature is sufficient for plant growth, followed by a brief waterlogged-terrestrial stage and culminating in extreme desiccating soil conditions of extended duration."

California vernal pools host unique communities of plants and animals that have adapted to vernal pool conditions over a long geological timeframe. Vernal pools provide fishless breeding habitat for numerous invertebrates, aquatic insects, and amphibians during the aquatic phase (Zedler 1987). Western spadefoot toads utilize vernal pools for reproductive purposes and as a food source. As stated in Zedler's report: "…because of the brief periods of high productivity of the aquatic and amphibious plants and animals, the vernal pools probably also are a significant source of forage and prey" (Zedler 1987). Snakes may be attracted by the abundance of amphibians to prey upon, and mammals may utilize inundated pools as a source of water. Wading birds and waterfowl are attracted to the pools for food and as migratory stopovers and are probably a major means by which plant propagules too large for wind dispersal are carried long distances (Zedler 1987). The desiccating soil conditions present during the summer months prevent the establishment of plant species typical of more perennial wetland ecosystems. The growth period of vernal pool plant species typically begins during the wetting or inundation phases. As pools begin to draw down, flowering is initiated for the majority of vernal pool plants. The drawdown process often creates ring-shaped stratification of plant species adapted to drier or wetter conditions around the perimeter of the shrinking inundation zone. Invasive plants such as Italian rye grass (*Festuca perennis*) and wild oat (*Avena barbata* and *A. fatua*) also follow the receding water, often crowding out the native vernal pool plant species.

#### *6.4.2.2 Fairy Shrimp*

**Riverside Fairy Shrimp (*Streptocephalus woottoni*)**

According to the USFWS 5-Year Review, Riverside fairy shrimp was first described in 1985 using specimens collected in Murrieta, California (USFWS 2008). This small crustacean is in the Order Anostraca and is distinguished from other fairy shrimp species due to the shape of their second antennae (males). Riverside fairy shrimp typically occur in vernal pools and other basins that hold water for sufficient periods (i.e., 7 to 8 weeks) to allow for completion of its lifecycle. Riverside fairy shrimp typically occur in vernal pools with depths greater than 12 inches (30 centimeters) and consume algae, bacteria, protozoa, rotifers, and particulate organic matter. Riverside fairy shrimp would not be able to persist in perennial bodies of water because they have evolved to require habitat that dries completely during the summer months, as well as having temperature constraints that cue hatching of cysts during the wet season. Once rainfall fills a vernal pool, cyst hatching, maturity, and reproduction occur within 7 to 8 weeks, and during some years hatch later in the season if late rains occur; typically, Riverside fairy shrimp are observed from January through March. Cysts (eggs) are typically deposited in the water column by females and sink to the bottom of the vernal pool, or if still within the brood sac of the female, will later fall to the floor of the basin when the female dies. Cysts can withstand temperature extremes and prolonged dry periods and not all cysts hatch during each inundation of a vernal pool, thereby producing a cyst bank. This cyst bank is one of the factors contributing to the long-term survival of Riverside fairy shrimp (USFWS 2008).

**Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)**

The vernal pool fairy shrimp are endemic to California and southern Oregon and have the widest geographic range of the federally listed vernal pool crustaceans. They are genetically distinct from other Branchinecta species, distinguished by the morphology of the male's second antenna and the female's

third thoracic segment (Belk and Fugate 2000). As with Riverside fairy shrimp, the vernal pool fairy shrimp has an ephemeral life cycle that relies on winter rains to fill pools for sufficient periods of time. Vernal pool fairy shrimp mostly occur in vernal pools and require cool water with temperatures below 50°F for cysts to hatch (Eriksen and Belk 1999; Helm 1998). Vernal pool fairy shrimp are typically associated with smaller, shallow pools (6 inches deep) with relatively short inundation periods (Helm 1998). Their time to reach maturity and reproduction is temperature dependent, ranging from 18 to 147 days, with a mean of 40 days (Helm 1998).

**Santa Rosa Plateau Fairy Shrimp (*Linderiella santarosae*)**

The Santa Rosa Plateau fairy shrimp is endemic to southern California and has an extremely restricted range. It is only known to occur in a few vernal pools on the Santa Rosa Plateau, which are characterized as southern basalt flow vernal pools that contain cool clear to milky waters (Eriksen and Belk 1999; Thiéry and Fugate 1994). The specific microhabitat used by Santa Rosa Plateau fairy shrimp is only known to occur on the Santa Rosa Plateau, and as such, it is unlikely Santa Rosa Plateau fairy shrimp occur outside this range (Keeler-Wolf et al. 1998).

**San Diego Fairy Shrimp (Branchinecta sandiegonensis)**

The San Diego fairy shrimp is endemic to Orange and San Diego counties. It inhabits vernal pools and shallow ephemeral basins that are between 2 and 12 inches in depth of San Diego mesa hardpan and claypan basins, typical of those found on coastal mesas of San Diego County (Eriksen and Belk 1999). Habitats commonly associated with San Diego fairy shrimp include chamise chaparral and occasionally coastal sage scrub and annual grasslands.

#### *6.4.2.3 Methods*

**Literature Review**

ECORP performed a literature search prior to the habitat assessments to determine if any fairy shrimp species observations were documented in the Project vicinity. ECORP conducted a review of the (CDFW 2024a), NRCS Web Soil Survey (2024), NWI (USFWS 2024c), and RCA MSHCP Information Map (RCA 2024a) to determine if listed fairy shrimp species are known to occur within the Project Area or vicinity (within 5 miles) prior to the habitat assessment. ECORP performed a review of the USFWS IPaC (USFWS 2024a) to determine if USFWS-designated Critical Habitat is present within the Project Area. Google Earth™ historic aerial imagery was reviewed to locate any wetted depressions that may have the potential to support listed fairy shrimp or could qualify as a vernal pool within the Project Area.

**Habitat Assessment**

Following completion of the literature review, ECORP biologists Verity Richardson and Greg Hampton conducted a habitat assessment survey to evaluate potential vernal pool and branchiopod habitat within the Project Area. The biologists walked the Project Area and areas of the 500-foot surrounding buffer where accessible in search of features that could provide listed branchiopod habitat and/or qualify as vernal pools. Potential habitat for federally listed large branchiopods, per USFWS Guidelines, is defined as

any seasonal inundated depression that ponds water at a sufficient depth and duration for a listed large branchiopod to complete its life cycle (USFWS 2017). The presence of water marks, algae mats, drift lines, hydrophytic vegetation (i.e., water-loving plants), slope, contributing watershed, maximum potential ponding depth, and aquatic arthropod (i.e., crustacean and insect) exoskeletons are helpful indicators for evidence of ponding depth and duration. Habitats with swiftly flowing water (e.g., creeks, streams, ephemeral drainages) or semi-permanently to permanently inundated areas that support population of predators (e.g., bullfrogs, fish, crayfish) are generally not considered suitable habitat for listed large branchiopods.

#### *6.4.2.4 Existing Conditions and Results*

**Literature Review**

The review of the CNDDB documented four regional listed fairy shrimp species occurrences within 5 miles of the Project Area. The IPaC review identified no USFWS-designated Critical Habitat within or adjacent to the Project Area.

***Riverside Fairy Shrimp***

Riverside fairy shrimp is federally listed as Endangered and is an MSHCP Covered Species. There are three recent and one historic CNDDB occurrences within 5 miles of the Project Area. The nearest occurrence from 2009 (Occurrence #39) is located approximately 1.79 mile southeast of the Project Area; this occurrence documents thousands of the species onsite. Occurrence #19 is located approximately 1.4 miles southeast of the Project Area, at the Clayton Ranch Mitigation Site; the site was developed in 2003 and the species is confirmed extirpated by USFWS as of 2010 at this location. Occurrence #11 is located within the Australia Pool Mitigation Site within the Lake Elsinore Back Basin, approximately 4.8 miles northwest of the Project Area.

***Vernal Pool Fairy Shrimp***

Vernal pool fairy shrimp is federally listed as Threatened and is an MSHCP Covered Species. There is one CNDDB occurrence within 5 miles of the Project Area, located within the Santa Rosa Plateau Ecological Reserve, approximately 4.8 miles south of the Project Area (Occurrence #641).

***Santa Rosa Plateau Fairy Shrimp***

Santa Rosa Plateau fairy shrimp is an MSHCP Covered Species. There is one recent CNDDB occurrence within 5 miles of the Project Area located within the Santa Rosa Plateau Ecological Reserve, approximately 4.8 miles south of the Project Area (Occurrence #2).

***San Diego Fairy Shrimp***

San Diego fairy shrimp is an MSHCP Covered Species. There is one recent CNDDB occurrence within 5 miles of the Project Area located at Clayton Ranch Mitigation Site approximately 2.2 miles southeast of the Project Area. (Occurrence #117).

**Habitat Assessment**

The vernal pool and fairy shrimp habitat assessment was conducted on March 22, 2024 by ECORP biologists Verity Richardson and Greg Hampton. The biologists observed no features that could provide listed branchiopod habitat and/or qualify as vernal pools within the Project Area.

#### *6.4.2.5 Impacts and Mitigation*

The Project Area lacks suitable fairy shrimp and/or vernal pool habitat; therefore, impacts to these resources are not expected to occur due to implementation of the Proposed Project. Mitigation is not required for fairy shrimp or vernal pool habitat.

### 6.4.3 Riparian Birds

In accordance with Section 6.1.2 of the MSHCP, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, ECORP assessed areas potentially supporting riparian bird populations during a habitat assessment for special-status riparian bird species conducted on March 22, 2024.

#### *6.4.3.1 Methods*

**Literature Review**

ECORP performed a literature search prior to the habitat assessment to determine if any special-status bird species observations were documented in the Project vicinity. Biologists performed a review of the CNDDB (CDFW 2024a) to determine the special-status bird species that have been documented within 5 miles of the Project Area. ECORP performed a review of the USFWS IPaC (USFWS 2024a) to determine if USFWS-designated Critical Habitat is present on or within the Project vicinity. The literature search results were reviewed prior to the habitat assessment in order to identify the locations of previously documented special-status species. The CNDDB results were then mapped on aerial background for surveyor reference in the field and to aid in data analysis.

**Habitat Assessment**

Following completion of the literature review, ECORP biologists experienced with special-status riparian bird species habitat, identification, behavior, sign, and vocalizations conducted a habitat assessment. The biologists conducted the assessment by walking throughout the entire Project Area and 500-foot buffer where accessible to characterize and map the suitability of habitat for special-status riparian bird species. The biologists determined habitat suitability based on the natural history, habitat requirements, and the currently documented range boundaries of special-status bird species. Photographs were taken during the assessment to provide visual representation of the various vegetation communities within the Project Area.

### *6.4.3.2 Existing Conditions and Results*

**Literature Review**

The review of the CNDDB yielded four recent records (within the last 20 years) of special-status riparian bird species occurrences within 5 miles of the Project Area. The IPaC identified no USFWS-designated Critical Habitat within or adjacent to the Project Area. Documented occurrences for special-status riparian bird species are discussed in greater detail below.

***Western Yellow-Billed Cuckoo (Coccyzus americanus)***

The western Distinct Population Segment (DPS) of the yellow-billed cuckoo (YBCU) is migratory and arrives from its wintering grounds in South America during June and departs from California during September (Small 1994). Breeding activity for the western DPS peaks in July (Halterman et al. 2016). The YBCU is federally listed as threatened, state listed as endangered, a USFWS Bird of Conservation Concern, and a MSHCP Covered Species. Federal Critical Habitat for YBCU was proposed in 2014 (USFWS 2014), revised in 2020 (USFWS 2020), and finalized in 2021 (USFWS 2021). The Project Area is not located within or adjacent to Critical Habitat for the YBCU (USFWS 2024b). No CNDDB records occur within 5 miles of the Project Area for this species.

***Least Bell's Vireo (Vireo bellii pusillus)***

The least Bell's vireo (LBVI) is endemic to California and Baja California, Mexico. Least Bell's vireos are migratory species in which the males arrive in California between late March to April and establish breeding territories, and the females arrive shortly thereafter (USFWS 1998). The least Bell's vireo usually returns to the wintering grounds between August to September. The LBVI is federally listed as endangered, state listed as endangered, and a MSHCP Covered Species. Critical Habitat for LBVI was designated on March 4, 1994 (USFWS 1994). The Project Area is not located within or adjacent to Critical Habitat for the LBVI (USFWS 2024b). Five recent (within the last 20 years) CNDDB occurrences were recorded within 5 miles of the Project Area (CDFW 2024a).

***Southwestern Willow Flycatcher (Empidonax traillii extimus)***

The southwestern willow flycatcher (SWWF) is a neotropical migratory bird that winters in Central America and migrates to the U.S. and Canada to breed during summer. Their breeding habitat currently ranges from southern California, through Arizona, New Mexico, southern Nevada, southern Utah, and southwestern Colorado. Overall, individuals only spend 3 to 4 months paired with a mate during the breeding season. Individuals then begin their southward migration in early August through September. During their migration, individuals will stop at food-rich stopover locations in order to replenish their energy reserves (USFWS 2013). The SWWF is federally listed as endangered, state listed as endangered, and an MSHCP Covered Species. Critical Habitat for this species was originally designated in 1997, revised in 2005, and revised again in 2013 (USFWS 2013). The Project Area is not located within or adjacent to designated Critical Habitat for the SWWF (USFWS 2024b). No CNDDB occurrences were recorded within 5 miles of the Project Area for this species.

## Habitat Assessment

ECORP biologists Verity Richardson and Greg Hampton conducted the habitat assessment on March 22, 2024. Habitat suitability for sensitive riparian bird species within the Project Area is discussed in further detail below.

### *Western Yellow-Billed Cuckoo*

Habitat requirements for the YBCU includes fairly large trees and dense vegetation, and the species is typically associated with riparian woodlands along perennial rivers and streams at elevations below 6,600 feet amsl. The most commonly inhabited communities include species such as Fremont cottonwood and willow (*Salix* spp.); however, saltcedar, mesquite (*Prosopsis* sp.), and other riparian tree communities may also be used. Approximately 2 to 3 weeks prior to breeding, YBCU may occupy upland vegetation including pinyon (*Pinus* spp.), oak (*Quercus* spp.), juniper (*Juniperus* spp.), and manzanita (*Arctostaphylos* spp.) (Hughes 2020). Nesting habitat typically includes large contiguous patches of multilayered riparian habitat with dense understory foliage. YBCU feed primarily on large insects such as caterpillars, katydids, cicadas, grasshoppers, and crickets. Cuckoo populations fluctuate greatly with food availability and increase dramatically in years of highest insect abundance (Heath and Wilkin 1970).

ECORP determined that suitable breeding and foraging habitat for YBCU was not present within the Project Area. Based on the habitat requirements of YBCU, no potential nesting YBCU habitat was found within the Project Area. While small patches of willows, mulefat, and cottonwoods are present, the Project Area lacks the complex old growth structure that the YBCU need for foraging and breeding. Consequently, YBCU individuals are not expected to occur on or near the Project Area.

### *Least Bell's Vireo*

The LBVI is dependent upon riparian habitat during the breeding season and prefers willow-dominated woodland or scrub that typically exists along streams and rivers (Franzreb 1989). Other habitat types used by this species include mulefat scrub, mixed oak/willow woodland, mesquite woodland, and elderberry (*Sambucus* spp.) scrub. In southern California, least Bell's vireos typically occur below 2,000 feet amsl (Zeiner et al. 1990). The species has been documented at extreme elevations in Death Valley (i.e., -175 feet) and in the City of Bishop in Inyo County (i.e., 4,100 feet), although it is uncommon above 4,000 feet amsl in coastal southern California (Brown 1993; Grinnell and Miller 1944). Habitat characteristics that appear to be essential for least Bell's vireo occupation include dense cover from three to six feet in height for nesting and foraging, and a stratified canopy providing both foraging habitat and song perches for territorial advertisement.

ECORP determined that suitable breeding and foraging habitat for LBVI was not present within the Project Area. Based on the habitat requirements of LBVI, no potential nesting habitat was found within the Project Area. While small patches of tamarisk and cottonwoods are present, they are not abundant or continuous enough to provide suitable foraging and breeding habitat for the species. Consequently, LBVI individuals are not expected to occur on or near the Project Area.

### *Southwestern Willow Flycatcher*

Habitat requirements for the SWWF includes dense riparian vegetation near permanent or semipermanent sources of water or saturated soil, such as cottonwood, willow, and salt cedar vegetation communities along rivers and streams below 8,500 feet amsl. SWWF typically breed within dense tree or shrubby riparian vegetation that is equal to or greater than 10 feet tall (Allison et al. 2003). Additional migration habitat occurs along major drainages in the southwest, and may include riparian habitats without an understory, non-riparian areas with high food concentrations, or within linear patches that may typically be considered too small or short (USFWS 2013).

ECORP determined that suitable nesting and foraging habitat for the SWWF was not present within the Project Area. While small patches of willows, mulefat, and cottonwoods are present, they are not abundant or continuous enough to provide suitable foraging and breeding habitat for the species. Consequently, SWWF individuals are not expected to occur on or near the Project Area.

#### *6.4.3.3 Impacts and Mitigation*

Impacts are not expected to occur to YBCU, LBVI, or SWWF due to implementation of the Proposed Project. Therefore, mitigation is not required for YBCU, LBVI, or SWWF.

### 6.4.4 Other Section 6.1.2 Species

ECORP assessed other Section 6.1.2 plant and wildlife species for their potential to occur which are included in Appendices D and E of this document. Please refer to Section 4.2.5 for a discussion of sensitive species with potential to occur onsite.

No impacts are expected to Section 6.1.2 plant and wildlife species provided in Appendices D and E.

Comprehensive plant and wildlife species compendia documenting plant and wildlife species observed within the proposed Project Area are included as Appendices B and C, respectively.

## 6.5 Protection of Narrow Endemic Plant Species (Section 6.1.3)

The RCA MSHCP Information Map was reviewed to determine whether the Proposed Project is located within a Narrow Endemic Plant Species Survey Area (NEPSSA; RCA 2024a) in accordance with Section 6.1.3 of the MSHCP. The Proposed Project is not located within an NEPSSA, and no further discussion is provided in this document.

## 6.6 Additional Survey Needs and Procedures (Section 6.3.2)

### 6.6.1 Criteria Area Plant Species

The Proposed Project Area is not located within a mapped survey area for MSHCP Criteria Area plant species (RCA 2024a); therefore, no further discussion is provided in this document.

### 6.6.2 Amphibians

The proposed Project Area is not located within a mapped survey area for MSHCP amphibian species (RCA 2024a); therefore, no further discussion is provided in this document.

### 6.6.3 Burrowing Owl

The Proposed Project is located within the MSHCP Survey Area for BUOW (RCA 2024a; Figure 3). A BUOW habitat assessment was conducted within the Survey Area on March 22, 2024.

#### *6.6.3.1 Methods*

**Literature Review**

ECORP performed a literature search prior to the habitat assessment to determine if any burrowing owl observations were documented in the Project vicinity. Biologists performed a review of the CNDDB (CDFW 2024a) to determine the burrowing owl occurrences that have been documented within 5 miles of the Project Area. The literature search results were reviewed prior to the habitat assessment in order to identify the locations of previously documented species occurrences. The CNDDB results were then mapped on aerial background for surveyor reference in the field and to aid in data analysis.

**Habitat Assessment**

Following completion of the literature review, ECORP conducted a BUOW habitat assessment concurrently with the biological reconnaissance survey to determine the presence of suitable habitat. Biologists walked the Project Area and a 500-foot buffer (Survey Area) (Figure 3) to identify the presence of owl habitat, scanning for suitable habitat using binoculars in areas that were inaccessible by foot. All encountered burrows were marked during the habitat assessment.

Photographs were taken during the assessment to provide visual representation of the various vegetation communities within the Survey Area.

#### *6.6.3.2 Existing Conditions and Results*

**Literature Review**

The review of the CNDDB yielded one burrowing owl occurrence within 5 miles and 56 burrowing owl occurrences within 10 miles of the Project Area (CDFW 2024a). The nearest occurrence to the Project Area was documented in 2007 and was located 2.13 miles northwest of the Project (Occurrence #974). Two adult burrowing owl were observed using a broken concrete pipe structure as a burrow within nonnative grassland.

**Habitat Assessment**

ECORP biologist Verity Richardson conducted the BUOW habitat assessment concurrently with the biological reconnaissance survey on March 22, 2024 within the Survey Area. Weather conditions during the assessment are summarized in Table 1.

The assessment determined that the Project Area included suitable habitat for BUOW, primarily within the central portion of the Project Area consisting of non-native forbs and grasses on level to gently rolling terrain, with an abundance of active California ground squirrel burrows, a few of which could be suitable

for BUOW. ECORP recorded a potential burrow within the Project Area (Figure 3). Protocol-level burrowing owl surveys were not performed by ECORP following the habitat assessment.

#### *6.6.3.3 Impacts and Mitigation*

Direct impacts to habitats that support foraging and nesting habitat for breeding and/or overwintering BUOW may occur as a result of the Project. Other direct impacts that may occur include injury or mortality during construction activities, injury by vehicles and equipment using the roadway, and/or loss of nest or nest occupants if habitat is cleared during the breeding season. Indirect impacts to BUOW foraging, nesting, migratory, or overwintering activities may also occur as a result of Project construction in the form of increased human and vehicular activity, noise, dust, ground vibrations, nighttime lighting, and habitat degradation. These temporary changes in the existing environment during construction of the Project may result in altered adult bird behavior that could lead to lower fitness due to decreased foraging activities, loss of shelter or protective cover, or abandonment of young or a nest with eggs in it. Potential direct and indirect impacts can be avoided or reduced with the implementation of appropriate avoidance and minimization measures as described in Section 8.0 of this document.

Suitable burrowing owl habitat exists within the Project Area. Therefore, protocol-level burrowing owl surveys will be required to be performed during the breeding season (March 1 through August 31) as required under Part 2B of the MSHCP Burrowing Owl Survey Instructions, consisting of four separate surveys conducted throughout the Project Area, and within the 500-foot buffer (Burrowing Owl Survey Area; RCTLMA 2006), where accessible, to determine if, when, and how the Survey Area is being used by BUOW. Additionally, a preconstruction survey will be required within 30 days prior to site disturbance. It is typically recommended by CDFW that two preconstruction surveys take place: one within 14 to 30 days and the second within 24 hours of the start of ground-disturbing activities (including vegetation removal, clearing and grubbing, and grading).

### 6.6.4 Mammals

The Proposed Project is not located within a mapped survey area for MSHCP mammal species (RCA 2024a); however, it is located within the long-term Stephens' kangaroo rat (SKR) Habitat Conservation Plan (HCP) area. As individual projects are proposed and approved in the SKR HCP area, public and private land developers are required to pay a SKR mitigation fee for land that is developed and removes habitat of SKR. No recent and 10 historic records of SKR occur within five miles of the Project Area (CDFW 2024a). This species was determined to have a low potential for occurrence; however, some habitat within the Project Area is suitable for this species. Impacts to SKR would be less than significant with the implementation of paying the Stephens' Kangaroo Rat Habitat Conservation Plan Area mitigation fee as described in Section 8.0 of this document.

## 6.7 Information on Other Species

### 6.7.1 Delhi Sands Flower Loving Fly

The Proposed Project is not located within an area with Delhi soils mapped within the MSHCP baseline data (RCA 2024a); no further discussion is provided in this document.

### 6.7.2 Species Not Adequately Conserved

No MSHCP Table 9-3 species were observed within or adjacent to the Project Area during the March 2024 biological reconnaissance survey. All species listed in MSHCP Table 9-3 were determined to have a low potential or are presumed absent from the Project Area, based on a lack of suitable habitat/soils and/or the Project Area is located outside of the known elevational range or distribution for the species.

## 6.8 Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4)

The Proposed Project Area is not located adjacent to and does not have onsite connection to either existing conservation or land described for conservation. As defined in the MSHCP, Conservation Areas are approximately 500,000 acres composed of roughly 347,000 acres of PQP Lands and 153,000 acres of Additional Reserves Lands within western Riverside County. The Urban/Wildland Interface is defined as a zone (less than 100 feet) between a project site and the MSHCP Conservation Area. Avoidance measures must be implemented if a project is located adjacent to a Conservation Area. The nearest Conservation Area is located approximately 1.5 miles northeast of the northeastern boundary of the Project Area, known as Borchard, TR (RCA 2024a). Thus, no further discussion of the guidelines pertaining to the Urban/Wildlands Interface is provided.

# 7.0 BEST MANAGEMENT PRACTICES

The Project shall comply with the Standard Best Management Practices (BMPs) of the MSHCP (Volume I, Appendix C), as follows:

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.

2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.

3. 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.

4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.

5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.

6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.

7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.

8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, [USFWS], and [California Department of Fish and Game], RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.

10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.

11. 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.

12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.

13. 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).

14. 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.

15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

## 8.0 AVOIDANCE MINIMIZATION, AND MITIGATION MEASURES

Avoidance, minimization, and mitigation measures for the Project are included below in order to satisfy federal, state, and local regulations, prior to Project implementation:

**BIO-1** **Worker Environmental Awareness Program and Biological Monitor:** Prior to the start of construction, a Worker Environmental Awareness Program (WEAP) will be developed by the City or the City's consultant. A qualified biologist with experience with the sensitive biological resources in the region will present the WEAP to all personnel working in the Project Area (either temporarily or permanently) prior to the start of Project activities. The WEAP may be videotaped and used to train newly hired workers or those not present for the initial WEAP. The WEAP could include but will not be limited to discussions of the sensitive biological resources associated with the Project, Project-specific measures to avoid or eliminate impacts to these resources, consequences for not complying with Project permits and agreements, and contact information for the lead biologist. Logs of personnel who have taken the training will be kept on the site at the construction or Project office.

In addition to a WEAP, a qualified biologist (biological monitor) with experience monitoring for and identifying sensitive biological resources known to occur in the area will be present during initial ground-disturbing activities related to the Project (including fence installation and vegetation removal activities) as well as during ground-disturbing work in and around the natural drainages within the site. As required by Project permits, the qualifications of a biological monitor may need to be submitted to appropriate wildlife agencies for approval based on the resources the biologist will be monitoring. Biological monitoring duties will include, but are not limited to, conducting worker education training, verifying compliance with Project permits, and ensuring Project activities stay within designated work areas.

The biological monitor will have the right to halt all activities in an affected area if a special-status species is identified in a work area and is in danger of injury or mortality. If work is halted by the biological monitor, work will proceed only after the hazards to the individual is removed and there is no longer a risk to the individual, or the individual has been moved from harm's way in accordance with the Project's permits and/or management/translocation plans. The biological monitor will take representative photographs of the daily activities and will also maintain a daily log that documents general Project activities and compliance with the Project's permit conditions. Non-compliances will also be documented in the daily log, including any measures that were implemented to rectify the issue.

**BIO-2** **Tree Preservation and Protection Policy:** The Project should adhere to the criteria and guidelines described within the City of Wildomar's Landscape Design Standards and Guidelines, Sections 7.1.4 in order to ensure the protection, preservation, and maintenance of established and healthy existing and protected trees. Tree protections specifications shall be included on the grading plans which include monitoring by a qualified arborist when working in proximity to protected trees. The qualified arborist shall implement measures to protect the root zone of oak trees and city-protected trees that may be impacted immediately adjacent to the Project impact areas, staging areas, and along ingress/egress roads.

**BIO-3** **Preconstruction Survey for Nesting Birds:** To the greatest extent practicable, ground-disturbing activities, including vegetation removal, shall be conducted outside of the nesting bird season (approximately September 1 through January 14) to avoid direct and indirect impacts to nesting birds. This will avoid violations of the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If seasonal avoidance cannot be implemented, it is recommended that ground-disturbing activities, including vegetation removal, be conducted outside of suitable habitat during the breeding season to the greatest extent possible. If Project-related activities cannot avoid the nesting bird season then preconstruction surveys, non-disturbance limit buffers, and biological monitoring during Project activities will be necessary to avoid impacts to nesting birds. A preconstruction survey for nesting birds is recommended prior to the commencement of ground-disturbing activities within the identified nesting bird season to avoid take of nesting birds. If activities with the potential to disrupt nesting birds are scheduled to occur during the bird breeding season (January 15 through August 31), a preconstruction survey for nesting birds shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys. The nesting survey shall include the Project Area and adjacent areas where Project activities have the potential to cause nest failure. The preconstruction survey shall be conducted no more than 3 days prior to the start of ground-disturbing activities within the bird breeding season. If no nesting birds are observed during the survey, site preparation and construction activities may begin. If nesting birds (including nesting raptors) are found to be present, avoidance or minimization measures shall be implemented to avoid potential Project-related impacts. Measures may include establishment of an avoidance buffer until nesting has been completed and periodic nest monitoring by the Project biologist until the juveniles have fledged and there has been no evidence of a second attempt at nesting. The width of the avoidance buffer will be determined by the Project biologist. The monitoring biologist will monitor the nest(s) during construction and document any findings. Once nesting is deemed complete by the Project biologist, work may resume within the avoidance buffer area.

**BIO-4** **Focused Survey for BUOW:** Protocol-level surveys for burrowing owl are recommended in order to demonstrate consistency with the requirements of the MSHCP. Surveys are required to be performed during the breeding season (March 1 through August 31) as required under Part 2B of the MSHCP Burrowing Owl Survey Instructions, consisting of four separate surveys

conducted throughout the Project Area, and within a 500-foot buffer surrounding the Project Area (RCTLMA 2006), where accessible, to determine if, when, and how the Survey Area is being used by burrowing owl. Additionally, a preconstruction survey will be required within 30 days prior to site disturbance. Recommended mitigation measure language for the preconstruction survey is included below:

- **Preconstruction Survey for BUOW:** A preconstruction survey for BUOW shall be conducted within the Project Area and adjacent areas within 30 days prior to the start of ground-disturbing activities. The surveys shall follow the methods described in the Western Riverside MSHCP *Burrowing Owl Survey Instructions* (RCTLMA 2006). If BUOW and/or suitable BUOW burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified within the Project Area during the survey and impacts to those features are unavoidable, consultation with the RCA and CDFW will be required.

**BIO-5** **Bat Protection - Tree Avoidance and Removal Process:** Prior to the trimming or removal of any trees, a focused bat habitat assessment of the trees shall be conducted by a qualified bat biologist. If trees are scheduled to be removed (e.g., relocating)/modified (i.e., trimming) that were determined to be suitable for bat roosting, these activities shall be scheduled during one of the seasonal periods of bat activity, listed below, and when evening temperatures are not below 45ºF and rain is not over 0.5 inch in 24 hours:

- September 1 to October 31 (preferred): This is after the maternity season but prior to winter torpor.
- February 15 to March 31: After winter torpor but prior to the start of the maternity season.

1. If trees with suitable bat roosting habitat are scheduled for removal or relocation outside of the maternity season, tree removal during the time periods and weather parameters described above using the two-step method shall be conducted:
    a. Prior to the two-step method, as much as feasible, vegetation and trees within the area that are not suitable for roosting bats will be removed first to provide a disturbance that might reduce the likelihood of bats using the habitat.
    b. Two-step tree removal will occur over two consecutive days under the supervision of a qualified bat biologist. On Day 1, small branches and small limbs containing no cavity, crevice or exfoliating bark habitat on habitat trees (or outer fronds in the case of palm trees), as identified by a qualified bat biologist are removed first, using chainsaws only (i.e., no dozers, backhoes). The following day (Day 2), the remainder of the tree is to be felled/removed. (The intention of this method is to disturb the tree with noise and vibration and branch removal on Day 1. This should cause any potentially present day-roosting bats to abandon the roost tree after they emerge for nighttime foraging. Removing the tree quickly the next consecutive day should avoid reoccupation of the tree by bats).

2. If tree removal/modification must occur during the maternity season (April 1 to August 31), a qualified bat biologist shall conduct a focused emergence survey(s) of the tree(s) within 48 hours of scheduled work. If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until after the maternity season or until a qualified biological monitor has determined the roost is no longer active.

**BIO-6** **Stephens' Kangaroo Rat Habitat Conservation Plan Area Mitigation Fee:** As individual projects are proposed and approved in the Stephens' Kangaroo Rat HCP Plan Area, public and private land developers are required to pay a Stephens' kangaroo rat mitigation fee for land that is developed and removes Stephens' kangaroo rat habitat. This streamlined process benefits developers in the Stephens' kangaroo rat Plan Area because projects within this area do not require individual review and approval by the wildlife agencies. Impacts to Stephens' kangaroo rat are covered by the MSHCP and the Stephens' kangaroo rat HCP. However, impacts to Stephens' kangaroo rat habitat within the Stephens' kangaroo rat HCP area will require Mitigation Fee payment of $500 per gross acre of the parcels proposed for development within the Stephens' kangaroo rat HCP Fee Area. Impacts to Stephens' kangaroo rat outside of the Stephens' kangaroo rat HCP Fee Area are covered by the MSHCP. The Mitigation Fee shall be paid upon issuance of a grading permit, a certificate of occupancy, or upon final inspection, whichever occurs first. Due to the Project's location within the Stephens' kangaroo rat HCP, no other compensatory mitigation or permits will be required for "take" of Stephens' kangaroo rat or suitable Stephens' kangaroo rat habitat.

**BIO-7** **Preconstruction Surveys for Crotch Bumble Bee:** If the Crotch bumble bee is no longer a Candidate or formally listed species under the California ESA at the time ground-disturbing activities occur, then no additional protection measures are proposed for the species.

If the Crotch bumble bee is legally protected under the California ESA as a Candidate or Listed species at the time ground-disturbing activities are scheduled to begin, preconstruction surveys shall be conducted in accordance with CDFW's Survey Considerations for California ESA Candidate Bumble Bee Species (CDFW 2023) the season immediately prior to Project-related ground disturbing activities (including but not limited to vegetation clearing, fence installation, and grading). If the species is observed within the Project Area, coordination with CDFW will be required to develop appropriate avoidance and minimization measures and determine if an Incidental Take Permit would be necessary.

**BIO-8** **Aquatic Resources Delineation:** A formal Aquatic Resource Delineation is recommended in order to determine if the drainage features within the Project Area contain aquatic resources jurisdictional to the USACE, RWQCB, or CDFW, and to determine the acreage of MSHCP Riparian/Riverine resources present onsite. Impacts to jurisdictional waters require mitigation through habitat creation, restoration, or enhancement as determined by consultation with the regulatory agencies during the permitting process. Any impacts to CDFW jurisdiction would require a Section 1602 SAA from CDFW. Any impacts to Waters of the U.S. would require a Section 404 permit from the USACE. Impacts to Waters of the U.S. or State would

also require a 401 Certification or Waste Discharge Requirements from the San Diego RWQCB.

**BIO-9** **Determination of Biologically Equivalent or Superior Preservation:** A Determination of Biologically Equivalent or Superior Preservation is recommended to be prepared, in conjunction with the Aquatic Resource Delineation, to address proposed impacts to MSHCP Riparian/Riverine resources located within the Project Area. Impacts to MSHCP Riparian/Riverine resources will require mitigation to be approved by the Wildlife Agencies (CDFW and USFWS).

# 9.0 ADDITIONAL RECOMMENDATIONS

## 9.1 Lighting/Glare

The Project is located within an urban environment with pre-existing light pollution from adjacent development (e.g., residential development and paved roadways). However, the Project will result in an increase in lighting/glare due to planned parking lot and park lighting. Although light pollution is not a novel addition to the Project's vicinity, it is recommended that to reduce the potential indirect impacts of increased lighting/glare from the Project to sensitive biological resources such as nesting birds and roosting bats, the following guidance be implemented:

- Eliminate all non-essential lighting;
- Avoid or limit use of lighting during dawn and dusk hours;
- Install shields on lights to reduce overpour into adjacent areas;
- Direct light downward;
- Incorporate light with warmer color temperatures; and
- Reduce light intensity where feasible.

## 10.0 CERTIFICATION

*I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the Project applicant or the applicant's representative and that I have no financial interest in the Project.*

SIGNED: _____ DATE: _____

Stacie Tennant
Senior Biologist and Project Manager
ECORP Consulting, Inc.

SIGNED: _____ DATE: _____

Caroline Garcia
Staff Biologist
ECORP Consulting, Inc.

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Appendix B – Plant Species Compendium

Appendix C – Wildlife Species Compendium

Appendix D – Special Status Plant Species Potential to Occur

Appendix E – Special Status Wildlife Species Potential to Occur

# APPENDIX A

Representative Site Photographs




**Photo 1: View of the Southeastern Portion of the Project Area with Mature Native and Non-Native Trees; facing southwest.**




**Photo 2: View of the Southeastern Portion of the Project Area with Non-Native Forbs and Grasses Recently Mowed; facing northeast.**




**Photo 3: View from the Eastern Corner of the Project Area with Mature Pine Trees; facing west.**




**Photo 4: View of a Culvert Drainage with Standing Water located in the Eastern Corner of the Project Area. The Drainage Runs South through the Buffer; facing east.**




**Photo 5: Trash in Drainage Feature Located in the Eastern Corner of the Project Area; facing south.**




**Photo 6: View of Brush Piles and Leaf Litter in the Eastern Corner of the Project Area; facing east.**

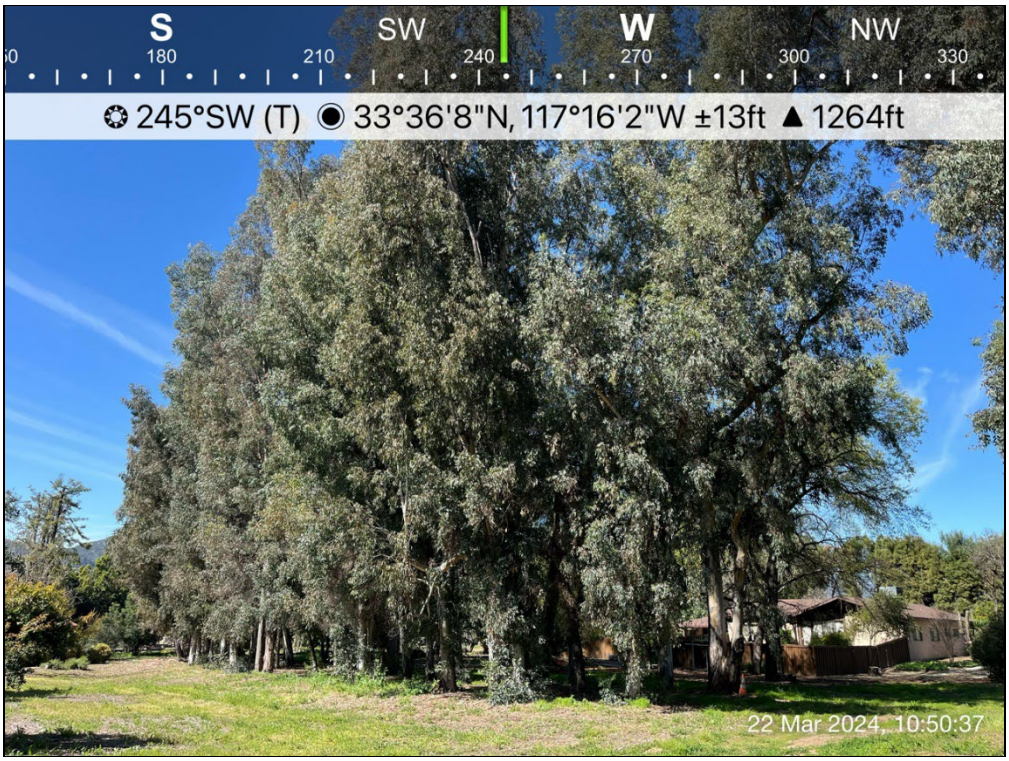



**Photo 7: View of a Eucalyptus Grove Located in the Buffer west of the Project Area; facing southwest.**



**Photo 8: View of an Engelmann Oak Observed in the Southwest Portion of the Project Area; facing southwest.**

# APPENDIX B

Plant Species Compendium

| SCIENTIFIC NAME | COMMON NAME |
|---|---|
| **GYMNOSPERMS** | |
| **CUPRESSACEAE** | **CYPRESS FAMILY** |
| *Calocedrus decurrens* | Incense cedar |
| **PINACEAE** | **PINE FAMILY** |
| *Pinus* sp.* | Pine |
| **ANGIOSPERMS (DICOTYLEDONS)** | |
| **AIZOACEAE** | **FIG-MARIGOLD FAMILY** |
| *Aptenia cordifolia** | Baby sun rose |
| **AMARANTHACEAE** | **PIGWEED FAMILY** |
| *Atriplex canescens* | Fourwing saltbush |
| **ANACARDIACEAE** | **SUMAC OR CASHEW FAMILY** |
| *Schinus molle** | Peruvian pepper tree |
| **APOCYNACEAE** | **DOGBANE FAMILY** |
| *Nerium oleander** | Oleander |
| **ASTERACEAE** | **SUNFLOWER FAMILY** |
| *Ambrosia psilostachya* | Western ragweed |
| *Baccharis salicifolia* | Mulefat |
| *Centaurea melitensis** | Maltese star thistle |
| *Cirsium vulgare** | Bull thistle |
| *Corethrogyne filaginifolia* | Common sandaster |
| *Cotula Australia** | Australian brass buttons |
| *Erigeron canadensis* | Canada horseweed |
| *Helianthus annuus* | Common sunflower |
| *Hypochaeris glabra** | Smooth cat's ear |
| *Lactuca serriola** | Prickly lettuce |
| *Oncosiphon pilulifer** | Stinknet |
| *Pseudognaphalium californicum* | Ladies' tobacco |
| *Sonchus asper** | Prickly sow-thistle |
| *Taraxacum officinale** | Red seeded dandelion |
| **BIGNONIACEAE** | **BIGNONIA FAMILY** |
| *Jacaranda mimosifolia** | Jacaranda |
| **BORAGINACEAE** | **BORAGE FAMILY** |
| *Amsinckia tessellata* | Bristly fiddleneck |
| *Plagiobothrys sp.* | Popcorn flower |
| **BRASSICACEAE** | **MUSTARD FAMILY** |
| *Capsella bursa-pastoris** | Shepherd's purse |
| *Hirshfeldia incana** | Short-pod mustard |
| *Raphanus sativus** | Wild radish |
| *Sisymbrium irio** | London rocket |

| SCIENTIFIC NAME | COMMON NAME |
|---|---|
| **CACTACEAE** | **CACTUS FAMILY** |
| *Opuntia ficus-indica** | Tuna cactus |
| **CARYOPHYLACEAE** | **PINK FAMILY** |
| *Spergularia* sp.* | Sandspurry |
| *Stellaria media* | Chickweed |
| **CRASSULACEAE** | **STONECROP FAMILY** |
| *Crassula connata* | Pigmy weed |
| **FABACEAE** | **LEGUME FAMILY** |
| *Acacia* sp.* | Wattle |
| *Acmispon* sp. | Lotus |
| *Albizia julibrissin* | Silktree |
| *Lupinus bicolor* | Annual lupine |
| *Medicago polymorpha** | Bur clover |
| **FAGACEAE** | **OAK FAMILY** |
| *Quercus agrifolia* | Coast live oak |
| *Quercus engelmann*[CRPR 4.2] | Engelmann oak |
| *Quercus lobata* | Valley oak |
| **GERANIACEAE** | **GERANIUM FAMILY** |
| *Erodium cicutarium** | Red-stemmed filaree |
| **HAMAMELIDACEAE** | **WITCH-HAZEL FAMILY** |
| *Liquidambar styraciflua** | Sweetgum |
| **LAMIACEAE** | **MINT FAMILY** |
| *Lamium* sp.* | Dead nettle |
| *Lavandula* sp.* | Lavender |
| *Salvia mellifera* | Black sage |
| **MYRSINACEAE** | **MYRSINE FAMILY** |
| *Lysimachia arvensis** | Scarlet pimpernel |
| **MYRTACEAE** | **MYRTLE FAMILY** |
| *Eucalyptus globulus** | Blue gum |
| *Eucalyptus rudis* | Western Australian floodedgum |
| *Eucalyptus sideroxylon** | Red iron bark |
| **OLEACEAE** | **OLIVE FAMILY** |
| *Fraxinus* | Ash |
| *Olea europaea** | Olive |
| **PLATANACEAE** | **PLANE TREE FAMILY** |
| *Platanus racemosa* | Western sycamore |
| **POLYGONACEAE** | **BUCKWHEAT FAMILY** |
| *Eriogonum fasciculatum* | California buckwheat |
| *Rumex crispus** | Curly dock |
| **ROSACEAE** | **ROSE FAMILY** |
| *Pyracantha coccinea** | Scarlet firethorn |

| SCIENTIFIC NAME | COMMON NAME |
|---|---|
| **RUBIACEAE** | **MADDER FAMILY** |
| *Galium aparine* | Common bedstraw |
| **SALICACEAE** | **WILLOW FAMILY** |
| *Salix gooddingii* | Black willow |
| **TAMARICACEAE** | **TAMARISK FAMILY** |
| *Tamarix ramosissima** | Saltcedar |
| **ULMACEAE** | **ELM FAMILY** |
| *Ulmus parvifolia** | Chinese elm |
| **URTICACEAE** | **NETTLE FAMILY** |
| *Urtica urens** | Dwarf nettle |
| **ANGIOSPERMS (MONOCOTYLEDONS)** | |
| **AGAVACEAE** | **AGAVE FAMILY** |
| *Yucca* sp.* | Yucca |
| **ARECACEAE** | **PALM FAMILY** |
| *Washingtonia robusta** | Mexican fan palm |
| **CYPERACEAE** | **SPIDERWORT FAMILY** |
| *Cyperus eragrostis* | Tall cyperus |
| **POACEAE** | **GRASS FAMILY** |
| *Avena barbata** | Slender wild oat |
| *Bromus madritensis** | Foxtail brome |
| *Festuca myuros** | Rattail sixweeks grass |
| *Hordeum murinum** | Farmer's foxtail |
| *Schismus barbatus** | Mediterranean grass |
| *Stipa miliacea** | Smilo grass |

*Non-native species

# APPENDIX C

Wildlife Species Compendium

| Scientific Name | Common Name |
|---|---|
| **INSECTS** | |
| **Apidae** | **Bees** |
| *Apis mellifera* | western honey bee |
| **Pieridae** | **Orange-Tips, Whites and Sulfurs** |
| *Pieris rapae* | small white butterfly |
| **Lycaenidae** | **Blues, Hairstreaks, & Gossamer Wings** |
| *Lycaenidae* sp. | blue sp. |
| **Nymphalidae** | **Brush-footed Butterflies** |
| *Danaus plexippus**** | monarch butterfly |
| **AMPHIBIANS** | |
| **Plethodontidae** | **Lungless Salamanders** |
| *Batrachoseps major major* | garden slender salamander |
| **REPTILES** | |
| **Anguidae** | **Alligator Lizards** |
| *Elgaria multicarinata* | southern alligator lizard |
| **Iguanidae** | **Iguanids** |
| *Uta stansburiana* | common side-blotched lizard |
| **Phrynosomatidae** | **Spiny Lizards** |
| *Sceloporus occidentalis* | western fence lizard |
| **BIRDS** | |
| **Accipitridae** | **Hawks, Kites, & Eagles** |
| *Accipiter cooperii* | Cooper's hawk |
| *Buteo jamaicensis* | red-tailed hawk |
| **Aegithalidae** | **Bushtits** |
| *Psaltriparus minimus* | bushtit |
| **Columbidae** | **Pigeons and Doves** |
| *Zenaida macroura* | mourning dove |
| **Corvidae** | **Jays and Crows** |
| *Corvus brachyrhynchos* | American crow |
| *Aphelocoma californica* | California scrub-jay |
| **Fringillidae** | **Finches** |
| *Carpodacus mexicanus* | house finch |
| *Spinus psaltria* | lesser goldfinch |
| **Parulidae** | **Wood Warblers** |
| *Setophaga coronata* | yellow-rumped warbler |
| **Passerellidae** | **Sparrows and Towhees** |
| *Melospiza melodia* | song sparrow |
| *Melozone crissalis* | California towhee |

| Scientific Name | Common Name |
|---|---|
| **Picidae** | **Woodpeckers & Allies** |
| *Melanerpes formicovorus* | acorn woodpecker |
| *Picoides nuttallii* | Nuttall's woodpecker |
| **Sturnidae** | **Starlings** |
| *Sturnus vulgaris* * | European starling |
| **Trochilidae** | **Hummingbirds** |
| *Archilochus anna* | Anna's hummingbird |
| **Troglodytidae** | **Wrens** |
| *Troglodytes aedon* | house wren |
| **Tyrannidae** | **Tyrant Flycatchers** |
| *Sayornis nigricans* | black phoebe |
| *Sayornis saya* | Say's phoebe |
| *Tyrannus vociferans* | Cassin's kingbird |
| **MAMMALS** | |
| **Sciuridae** | **Squirrels** |
| *Sciurus niger** | fox squirrel |

*nonnative species
***Federally or state-listed threatened or endangered, or Candidate for federal or state listing threatened or endangered

# APPENDIX D

Special Status Plant Species Potential to Occur

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| ***Abronia villosa* var. *aurita*** Chaparral sand-verbena | **USFWS:** None **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Not Covered | Jan-Sep (75-1600) | Chaparral Coastal scrub Desert dunes in sandy soils. | **Presumed Absent**: No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Aldama purisimae*** La Purisima viguiera | **USFWS:** None **CDFW:** None **CRPR:** 2B.3 **MSHCP:** Not Covered | Apr-Sep (365-425) | Coastal bluff scrub Chaparral | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Allium munzii*** Munz's onion | **USFWS:** END **CDFW:** THR **CRPR:** 1B.1 **MSHCP:** Covered | Mar-May (297-1070) | Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland | **Moderate:** One recent CNDDB record from 2017 (Occ # 13) less than 4 miles from the site; marginal grassland habitat exists within the Project Area. |
| ***Almutaster pauciflorus*** Alkali marsh aster | **USFWS:** None **CDFW:** None **CRPR:** 2B.2 **MSHCP:** Not Covered | Jun- Oct (240-800) | Meadows and seeps within alkaline areas. | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Ambrosia pumila*** San Diego ambrosia | **USFWS:** END **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Covered | Apr-Oct (20-415) | Chaparral Coastal scrub valley and foothill grassland Vernal pools. Found in sandy loam or clay soils, often in disturbed areas and sometimes in alkaline areas. | **Low:** No CNDDB records within 5 miles of the site; marginal grassland habitat for this species occurs within the Project Area. |
| ***Arctostaphylos rainbowensis*** Rainbow manzanita | **USFWS:** None **CDFW:** None | Dec-Mar (205-670) | Chaparral | **Low:** One historic and two recent CNDDB records within 5 miles of the site; no habitat |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| | **CRPR:** 1B.1<br>**MSHCP:** Covered | | | for this species occurs within the Project Area. |
| ***Astragalus pachypus*** **var. *jaegeri***<br>Jaeger's milk-vetch | **USFWS:** None<br>**CDFW:** None<br>**CRPR:** 1B.1<br>**MSHCP:** Covered | Dec-Jun<br>(365-975) | Chaparral, cismontane woodland, coastal scrub valley and foothill grassland habitats in sandy or rocky soils. | **Low:** No CNDDB records within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |
| ***Atriplex coronata*** **var. *notatior***<br>San Jacinto Valley crownscale | **USFWS:** END<br>**CDFW:** None<br>**CRPR:** 1B.1<br>**MSHCP:** Covered | Apr-Aug<br>(139-500) | playas, valley and foothill grassland in mesic soils, and vernal pools. Found in alkaline habitats. | **Low:** No CNDDB records within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |
| ***Atriplex parishii***<br>Parish's brittlescale | **USFWS:** None<br>**CDFW:** None<br>**CRPR:** 1B.1<br>**MSHCP:** Covered | Jun-Oct<br>(25-1900) | Chenopod scrub<br>Playas<br>Vernal pools in alkaline soils. | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Ayenia compacta***<br>California ayenia | **USFWS:** None<br>**CDFW:** None<br>**CRPR:** 2B.3<br>**MSHCP:** Not Covered | Mar-Apr<br>(150-1095) | Mojavean desert scrub<br>Sonoran desert scrub in rocky soils | **Presumed Absent:** One historic CNDDB record within 5 miles of the site; no habitat for this species occurs within the Project Area. |
| ***Baccharis vanessae***<br>Encinitas baccharis | **USFWS:** THR<br>**CDFW:** END<br>**CRPR:** 1B.1<br>**MSHCP:** Not Covered | Aug-Nov<br>(60-720) | Chaparral in maritime habitats<br>Cismontane woodland<br>Sandstone soils. | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| ***Brodiaea filifolia*** thread-leaved brodiaea | **USFWS:** THR<br>**CDFW:** END<br>**CRPR:** 1B.1<br>**MSHCP:** Covered | Mar-Jun (25-1120) | Chaparral<br>Cismontane woodland<br>Coastal scrub, Playas<br>Valley and foothill grassland<br>Vernal pools.<br>Often found in clay soils. | **Moderate:** Three recent CNDDB records within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |
| ***Brodiaea orcuttii*** Orcutt's brodiaea | **USFWS:** None<br>**CDFW:** None<br>**CRPR:** 1B.1<br>**MSHCP:** Covered | May-Jul (30-1692) | Closed-cone coniferous forest<br>Chaparral<br>Cismontane woodland<br>Meadows and seeps<br>Valley and foothill grassland<br>Vernal pools in mesic, clay, and sometimes serpentinite soils. | **Low:** No CNDDB records within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |
| ***Calochortus weedii*** **var. intermedius** intermediate mariposa-lily | **USFWS:** None<br>**CDFW:** None<br>**CRPR:** 1B.2<br>**MSHCP:** Not covered | May-Jul (105 - 855) | Chaparral, Coastal scrub, and Valley and foothill grassland in rocky soils. | **Low:** One historic CNDDB record within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |
| ***Caulanthus simulans*** Payson's jewelflower | **USFWS:** None<br>**CDFW:** None<br>**CRPR:** 4.2<br>**MSHCP:** Covered | (Feb)Mar-May(Jun) (90-2200) | Chaparral, Coastal scrub in granitic and sandy soils | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species occurs within the Project Area. |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| ***Ceanothus pendletonensis*** Pendleton ceanothus | **USFWS:** none **CDFW:** none **CRPR:** 1B.2 **MSHCP:** Not covered | Mar-Jun (110-870) | Chaparral Cismontane woodland | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species. |
| ***Centromadia pungens* ssp. *laevis*** smooth tarplant | **USFWS:** None **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Covered | Apr-Sep (0-640) | Alkaline soils in chenopod scrub meadows and seeps Playas Riparian woodlands Valley and foothill grassland. | **Moderate:** Six historic and six recent CNDDB records within 5 miles of the site; limited riparian woodland and marginal grassland habitat exists within the Project Area. |
| ***Chorizanthe leptotheca*** Peninsular spineflower | **USFWS:** None **CDFW:** None **CRPR:** 4.2 **MSHCP:** Covered | May-Aug (300-1900) | Chaparral Coastal scrub Lower montane coniferous forests in alluvial fan habitats in granitic soils. | **Presumed Absent**: No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Chorizanthe parryi* var. *parryi*** Parry's spineflower | **USFWS:** None **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Covered | Apr-Jun (275-1220) | Chaparral Cismontane woodland Coastal scrub Valley and foothill grassland habitats in openings in sandy or rocky soils. | **Moderate:** Ten recent CNDDB records within 5 miles of the site; marginal grassland habitat exists within the Project Area. |
| ***Chorizanthe polygonoides* var. *longispina*** long-spined spineflower | **USFWS:** None **CDFW:** None **CRPR:** 1B.2 **MSHCP:** Covered | Apr-Jul (30-1530) | Chaparral Coastal scrub Meadows and seeps | **Moderate:** One historic and eleven recent CNDDB records within 5 miles of the site; marginal grassland habitat exists within the Project Area. |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| | | | Valley and foothill grassland<br>Vernal pool habitats, often found in clay soils. | |
| ***Clinopodium chandleri***<br>San Miguel savory | **USFWS:** None<br>**CDFW:** None<br>**CRPR:** 1B.2<br>**MSHCP:** Covered | Mar-Jul (120-1075) | Chaparral<br>Cismontane woodland<br>Coastal scrub<br>Riparian woodland<br>Valley and foothill grassland<br>Rocky, gabbroic, or metavolcanic soils. | **Moderate:** One historic and two recent CNDDB records within 5 miles of the site; limited riparian woodland and marginal grassland habitat exists within the Project Area. |
| ***Comarostaphylis diversifolia* ssp. *diversifolia***<br>summer holly | **USFWS:** none<br>**CDFW:** none<br>**CRPR:** 1B.2<br>**MSHCP:** Not Covered | Apr-Jun (30-790) | Chaparral<br>Cismontane woodland | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Dodecahema leptoceras***<br>Slender-horned spineflower | **USFWS:** END<br>**CDFW:** END<br>**CRPR:** 1B.1<br>**MSHCP:** Not Covered | Apr-Jun (200-760) | Chaparral<br>Cismontane woodland<br>Alluvial fan coastal scrub in sandy soils. | **Presumed Absent:** One historic CNDDB record within 5 miles of the site; no habitat for this species occurs within the Project Area. |
| ***Dudleya multicaulis***<br>many-stemmed dudleya | **USFWS:** None<br>**CDFW:** None<br>**CRPR:** 1B.2<br>**MSHCP:** Covered | Apr-Jul (15-790) | Chaparral<br>Coastal scrub<br>Valley and foothill grassland habitats. Often found in clay soils. | **Low:** No CNDDB records within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| ***Dudleya viscida*** sticky dudleya | **USFWS:** None **CDFW:** None **CRPR:** 1B.2 **MSHCP:** Not Covered | May-June (10-550) | Coastal bluff scrub Chaparral Cismontane woodland Coastal sage scrub Rocky soils | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Eryngium aristulatum* var. *parishii*** San Diego button-celery | **USFWS:** END **CDFW:** END **CRPR:** 1B.1 **MSHCP:** Not Covered | Apr-Jun (20-620) | Coastal sage scrub Valley and foothill grassland Vernal pools Mesic soils | **Moderate**: One recent CNDDB record within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |
| ***Geothallus tuberosus*** Campbells's liverwort | **USFWS:** None **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Not Covered | N/A (10-600) | soils of mesic coastal scrub and vernal pools. | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Harpagonella palmeri*** Palmer's grapplinghook | **USFWS:** None **CDFW:** None **CRPR:** 4.2 **MSHCP:** Covered | Mar-May (20-955) | Chaparral Coastal scrub Valley and foothill grassland in clay soils. Found in open grassy areas within shrubland | **Low:** No CNDDB records within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |
| ***Hesperocyparis forbesii*** Tecate cypress | **USFWS:** None **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Not Covered | N/A (80-1500) | Closed-cone coniferous forests Chaparral in clay, gabbroic, or metavolcanic soils. | **Presumed Absent:** One historic CNDDB record within 5 miles of the site; no habitat for this species exists within the Project Area. |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| ***Holocarpha virgata*** **ssp. *elongata*** graceful tarplant | **USFWS:** None **CDFW:** None **CRPR:** 4.2 **MSHCP:** Covered | May-Nov (60-1100) | Chaparral and lower montane coniferous forest in rocky soils. | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Hordeum intercedens*** vernal barley | **USFWS:** None **CDFW:** None **CRPR:** 3.2 **MSHCP:** Covered | Mar-Jun (5-1000) | Coastal dunes Coastal sage scrub Valley and foothill grassland (depressions, saline flats) Vernal pools | **Low:** No CNDDB records within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |
| ***Horkelia cuneata*** **var. *puberula*** mesa horkelia | **USFWS:** None **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Not Covered | Feb-Jul (70-810) | Chaparral Cismontane woodland Coastal scrub | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Juglans californica*** Southern California black walnut | **USFWS:** None **CDFW:** None **CRPR:** 4.2 **MSHCP:** Covered | Mar-Aug (50-900) | Chaparral Cismontane woodland Coastal scrub Riparian woodland, often in alluvial soils | **Low:** One historic CNDDB record within 5 miles of the site; limited riparian woodland exists within the Project Area. |
| ***Juncus luciensis*** Santa Lucia dwarf rush | **USFWS:** None **CDFW:** None **CRPR:** 1B.2 **MSHCP:** Not Covered | Apr-Jul (300-2040) | Chaparral Great Basin scrub Lower montane coniferous forest, meadows and seeps vernal pools. | **Presumed Absent**: No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| ***Lasthenia glabrata ssp. coulteri*** Coulter's goldfields | **USFWS:** None **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Covered | Feb-Jun (1-1220) | Coastal salt marshes and swamps Playas, Vernal pools. | **Low:** Two historic CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Lilium humboldtii* ssp. *ocellatum*** ocellated Humboldt lily | **USFWS:** None **CDFW:** None **CRPR:** 4.2 **MSHCP:** Covered | Mar-Jul(Aug) (30-1800) | Chaparral Cismontane woodland Coastal scrub Lower montane coniferous forest Riparian woodland. | **Low:** No CNDDB records within 5 miles of the site; limited riparian woodland habitat occurs within the Project Area. |
| ***Microseris douglasii* ssp. *platycarpha*** small-flowered microseris | **USFWS:** None **CDFW:** None **CRPR:** 4.2 **MSHCP:** Covered | Mar-May (15-1070) | clay soils within chaparral, coastal sage scrub, riparian forest, riparian scrub, riparian woodland, and alluvial terraces and washes. | **Low:** No CNDDB records within 5 miles of the site; marginal habitat for this species exists within the Project Area. |
| ***Myosurus minimus* ssp. *apus*** little mousetail | **USFWS:** None **CDFW:** None **CRPR:** 3.1 **MSHCP:** Covered | Mar-Jun (20-640) | Valley and foothill grassland Vernal pools (alkaline) | **Low:** One historic CNDDB record within 5 miles of the site; marginal habitat for this species exists within the Project Area. |
| ***Navarretia fossalis*** spreading navarretia | **USFWS:** THR **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Not Covered | Apr-Jun (30-655) | Chenopod scrub Marshes and swamps Playas Vernal pools | **Low:** One historic and four recent CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| ***Navarretia prostrata*** prostrate navarretia | **USFWS:** None **CDFW:** None **CRPR:** 1B.2 **MSHCP:** Not Covered | Apr-Jul (3-1210) | Coastal sage scrub Wetland-riparian Meadows and seeps Valley and foothill grassland Vernal pools. | **Moderate:** One recent CNDDB record within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |
| ***Nolina cismontana*** chaparral nolina | **USFWS:** None **CDFW:** None **CRPR:** 1B.2 **MSHCP:** Not Covered | May-Jul (140-1275) | Chaparral, Coastal sage scrub | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Orcuttia californica*** California Orcutt grass | **USFWS:** END **CDFW:** END **CRPR:** 1B.1 **MSHCP:** Covered | Apr-Aug (15-660) | Vernal pools Valley grassland wetland-riparian | **Moderate:** One historic and one recent CNDDB record within 5 miles of the site; limited grassland and riparian habitat exists within the Project Area. |
| ***Piperia cooperi*** chaparral rein orchid | **USFWS:** None **CDFW:** None **CRPR:** 4.2 **MSHCP:** Not Covered | Mar-Jun (15-1585) | Chaparral Cismontane woodland Valley and foothill grassland | **Low:** No CNDDB records within 5 miles of the site; limited grassland habitat exists within the Project Area. |
| ***Pseudognaphalium leucocephalum*** white rabbit-tobacco | **USFWS:** None **CDFW:** None **CRPR:** 2B.2 **MSHCP:** Not Covered | Aug-Nov (0-2100) | Sandy or gravelly soils within chaparral, cismontane woodland, coastal sage scrub, and riparian woodland. | **Low:** One historic CNDDB record within 5 miles of the site; limited riparian woodland habitat exists within the Project Area. |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| ***Quercus dumosa*** Nuttall's scrub oak | **USFWS:** None **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Not Covered | Feb-Apr (15-400) | Sandy, clay loam soils within closed cone coniferous forest, chaparral, coastal sage scrub | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Quercus engelmannii*** Engelmann oak | **USFWS:** None **CDFW:** None **CRPR:** 4.2 **MSHCP:** Covered | Mar-Jun (50-1300) | Chaparral, cismontane woodland riparian woodland, valley and foothill grassland. | **Present:** Four individuals were mapped during the Bio Recon survey. No CNDDB records within 5 miles of the site. |
| ***Romneya coulteri*** Coulter's matilija poppy | **USFWS:** None **CDFW:** None **CRPR:** 4.2 **MSHCP:** Covered | Mar-Jul(Aug) (20-1200) | chaparral and coastal sage scrub; often found in burn areas | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Sphaerocarpos drewiae*** bottle liverwort | **USFWS:** None **CDFW:** None **CRPR:** 1B.1 **MSHCP:** Not Covered | N/A (90-600) | Openings and soils within chaparral and coastal sage scrub | **Presumed Absent:** Three historic CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Symphyotrichum defoliatum*** San Bernardino aster | **USFWS:** None **CDFW:** None **CRPR:** 1B.2 **MSHCP:** Not covered | Jul-Nov (2-2040) | Near ditches, streams, and springs in cismontane woodland, coastal sage scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and | **Low:** One historic CNDDB record within 5 miles of the site; limited grassland habitat occurs within the Project Area. |

| ***Scientific Name*** **Common Name** | **Status** | **Flowering Period/ Elevation Range (meters)** | **Habitat** | **Potential to Occur on the Proposed Project** |
|---|---|---|---|---|
| | | | valley and foothill grassland | |
| ***Tetracoccus dioicus*** Parry's tetracoccus | **USFWS:** None **CDFW:** None **CRPR:** 1B.2 **MSHCP:** Not Covered | Apr-May (165-1000) | Chaparral Coastal sage scrub | **Presumed Absent:** No CNDDB records within 5 miles of the site; no habitat for this species exists within the Project Area. |
| ***Tortula californica*** California screw moss | **USFWS:** None **CDFW:** None **CRPR:** 1B.2 **MSHCP:** Not Covered | N/A (10-1460) | Sandy soils within chenopod scrub and valley and foothill grassland | **Low:** No CNDDB records within 5 miles of the site; marginal grassland habitat occurs within the Project Area. |

Federal Designations
(FESA, USFWS)
END: Federally listed, endangered
THR: Federally listed, threatened

State Designations
(CESA, CDFW)
END: State-listed, endangered
THR: State-listed, threatened

California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) Designations:
1A: Plants presumed extinct in California.
1B: Plants rare and endangered in CA and throughout their range.
2: Plants rare, threatened, or endangered in CA but more common elsewhere in their range.
3: Plants about which need more information; a review list.
4: Plants of limited distribution; a watch list.
Plants 1B, 2, 3, and 4 extension meanings:
.1 Seriously endangered in CA (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Fairly endangered in California (20-80% occurrences threatened)
.3 Not very endangered in CA (<20% of occurrences threatened or no current threats known)

Local Designations
[Multiple Habitat Conservation Plan (MSHCP)]
Covered: Species adequately conserved through the conservation and management actions implemented through adoption of the MSHCP Plan and by each Subarea Plan once finalized.

**Sources:** California Natural Diversity Data Base (CDFW 2022a), California Native Plant Society Electronic Inventory (CNPS 2022), Final MSHCP Plan (SANDAG 2003)

# APPENDIX E

Special Status Wildlife Species Potential to Occur

| Scientific Name<br>Common Name | Status | Habitat Preferences | Potential for Occurrence |
|---|---|---|---|
| **INSECTS** | | | |
| ***Bombus crotchii***<br>Crotch bumble bee | USFWS: None<br>CDFW: CAN<br>**MSHCP:** Not Covered | Occurs in grasslands and shrublands. Nests and overwinters underground, often in abandoned rodent dens, but also rock piles, thatch, fallen logs, and brush piles. Generalist forager but reported food plants include *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia,* and *Salvia*. | **Moderate:** Suitable foraging habitat and nectaring plants present within the Project Area and buffer. Suitable nesting habitat is present within the Project Area and buffer. One historic CNDDB record is within five miles of the Project Area. |
| ***Danaus plexippus***<br>monarch - California overwintering population | **USFWS:** CAN<br>**CDFW:** None<br>**MSHCP:** Not Covered | Roosts in wind-protected tree groves (Coastal California conifer, eucalyptus) from Northern Mendocino to Baja California. Milkweed is essential for the larvae of this species. | **Present**: Suitable nectaring and overwintering habitat is present throughout the Project Area and this species was observed during the biological reconnaissance survey within the buffer. |
| ***Euphydryas editha quino***<br>Quino checkerspot butterfly | **USFWS:** END<br>**CDFW:** None<br>**MSHCP:** Covered | Occurs in sunny openings within chaparral and coastal sage scrub in parts of Riverside and San Diego counties. Occurs on hills and mesas along the coast. Requires high densities of food plants *Plantago erecta, P. insularis, and Orthocarpus purpurescens*. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. Three historic CNDDB records are within five miles of the Project Area. |
| **CRUSTACEANS** | | | |
| ***Branchinecta lynchi***<br>vernal pool fairy shrimp | **USFWS:** THR<br>**CDFW:** None<br>**MSHCP:** Covered | Vernal pools and ephemeral wetlands. Typically in small and shallow pools with mud or grassy bottoms. | **Presumed Absent:** No suitable habitat is present within the Project Area due to lack of vernal pools and ephemeral wetlands. One recent CNDDB record is within five miles of the Project Area. |
| ***Branchinecta sandiegonensis***<br>San Diego fairy shrimp | **USFWS:** END<br>**CDFW:** None<br>**MSHCP:** Not Covered | Restricted to vernal pools and shallow ephemeral basins in Orange and San Diego Counties. | Presumed Absent: No suitable habitat is present within the Project Area due to lack of vernal pools and ephemeral basins and the Project is outside of the known range of this species. One recent CNDDB record is within five miles of the Project Area. |

| Scientific Name<br>Common Name | Status | Habitat Preferences | Potential for Occurrence |
|---|---|---|---|
| ***Linderiella santarosae***<br>Santa Rosa Plateau fairy shrimp | **USFWS:** None<br>**CDFW:** None<br>**MSHCP:** Covered | Occurs in cool-water vernal pools that are formed from southern basalt flows. This species and its microhabitat are only known to occur on the Santa Rosa Plateau. | **Presumed Absent:** No suitable habitat is present within the Project Area due to lack of vernal pools and the Project is outside of the known range of this species. One recent CNDDB record is within five miles of the Project Area at the Santa Rosa Plateau Ecological Reserve. |
| ***Streptocephalus woottoni***<br>Riverside fairy shrimp | **USFWS:** END<br>**CDFW:** None<br>**MSHCP:** Covered | Restricted to deep, long lasting vernal pools. | **Presumed Absent:** No suitable habitat is present within the Project Area due to lack of vernal pools. Four recent CNDDB records are within five miles of the Project Area. |
| **FISH** | | | |
| ***Gila orcutti***<br>arroyo chub | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Covered | Creeks, streams, and rivers with areas of slow moving water with sand or mud bottoms. Ranges from San Diego to San Luis Obispo county. | **Presumed Absent:** No suitable habitat is present within the Project Area. No recent CNDDB records within five miles of the Project Area. |
| ***Oncorhynchus mykiss irideus* pop. 10**<br>steelhead - southern California DPS | **USFWS:** END<br>**CDFW:** CAN<br>**MSHCP:** Not Covered | Freshwater lagoons, river mouths/tidal rivers, bays/sounds, rivers, and creeks for breeding. Spawning streams are relatively warm. Migrate between freshwater breeding and marine non-breeding habitats. Marine habitat is pelagic and near shore. | **Presumed Absent:** No suitable habitat is present within the Project Area. No recent CNDDB records within five miles of the Project Area. |
| **AMPHIBIANS** | | | |
| ***Anaxyrus californicus***<br>arroyo toad | **USFWS:** END<br>**CDFW:** SSC<br>**MSHCP:** Covered | Sandy banks of rivers, arroyos, and streams with shallow sandy pools. Also found in riparian woodlands or uplands adjacent to arroyos. | **Presumed Absent:** Suitable habitat is not present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |
| ***Rana draytonii***<br>California red-legged frog | **USFWS:** THR<br>**CDFW:** SSC<br>**MSHCP:** Covered | Found near water features such as ponds or streams in humid forests, grasslands, coastal scrub, and woodlands. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. One historic CNDDB record from Cole Creek, four miles from Project Area. |

| Scientific Name<br>Common Name | Status | Habitat Preferences | Potential for Occurrence |
|---|---|---|---|
| ***Spea hammondii***<br>western spadefoot | **USFWS:** CAN<br>**CDFW:** SSC<br>**MSHCP:** Covered | Prefers open areas with sandy or gravelly soils in a wide range of habitats including lowlands to foothills, coastal sage scrub, chaparral, mixed woodlands, alluvial fans, and grasslands. Requires rain pools free of bullfrogs and crayfish for breeding. | **Moderate:** Marginal suitable habitat is present within the Project Area and buffer. Five historic and five recent records in CNDDB within five miles of the Project Area. One recent record from 2017 (occ # 319) within two miles east of Project Area. |
| ***Taricha torosa***<br>coast range newt | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Covered | Upland areas including grasslands, forests, and woodlands. Burrows in soil or wood debris. | **Moderate:** Marginal suitable habitat is present within the Project Area and buffer. One historic and one recent record in CNDDB within five miles of the Project Area. One recent record from 2012 (occ # 24) occurred 4 miles south of Project Area near Cole Creek. |
| **REPTILES** | | | |
| ***Anniella stebbinsi***<br>southern California legless lizard | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Not Covered | Moist, loose soil is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. | **Moderate:** Marginal suitable habitat is present within the Project Area and buffer. Three recent CNDDB records within two miles of the Project Area. |
| ***Arizona elegans occidentalis***<br>California glossy snake | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Not Covered | Loose soils preferred. Arid scrub, rocky washes, grasslands, and chaparral habitats. | **Low:** Limited suitable habitat is present within the Project Area and buffer. Five historic CNDDB records occur within five miles of the Project Area. |
| ***Aspidoscelis tigris stejnegeri***<br>coastal whiptail | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Covered | Inhabits hot and dry open areas with sparse foliage, including chaparral, and riparian areas. | **Low:** Limited suitable habitat is present within the Project Area and buffer. One historic CNDDB record from 2001 (occ # 32) occurred less than five miles from Project Area. |
| ***Crotalus ruber***<br>red-diamond rattlesnake | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Covered | Found in coastal chaparral, arid scrub, rocky grassland, oak and pine woodlands, desert mountain slopes and rocky desert flats. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. One historic record in CNDDB from 2001 (occ # 30) occurred less than three miles northeast of the Project Area. |

| Scientific Name<br>Common Name | Status | Habitat Preferences | Potential for Occurrence |
|---|---|---|---|
| ***Emys marmorata***<br>western pond turtle | **USFWS:** CAN<br>**CDFW:** SSC<br>**MSHCP:** Not Covered | Ponds, lakes, rivers, streams, marshes, and other water sources with rocky or muddy substrate. Basks on logs, rocks, and exposed banks. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. Two historic CNDDB records from 1970 (occ # 827, 828) occurred less than four miles from Project Area. This population is now considered extirpated. |
| ***Phrynosoma blainvillii***<br>coast horned lizard | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Covered | Inhabits open areas of valleys, foothills, and semiarid mountains with sandy soil and low vegetation including chaparral, woodlands, and grasslands. | **Presumed Absent:** No suitable habitat is present within the Project Area and buffer. Ten historic CNDDB records occur within five miles of the Project Area. |
| ***Salvadora hexalepis virgultea***<br>coast patch-nosed snake | **USFWS:** None<br>**CDFW:** SSC<br>**MHCP:** Not Covered | Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides and plains. | **Presumed Absent:** No suitable habitat is present within the Project Area and buffer. No CNDDB records occur within five miles of the Project Area. |
| ***Thamnophis hammondii***<br>two-striped gartersnake | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Not Covered | Found near water sources, such as pools, creeks, and riparian areas. Associated with oak woodland, willow, coastal sage scrub, scrub oak, sparse pine, chaparral, and brushland. | **Low:** Limited suitable habitat is present within the Project Area and buffer. One historic CNDDB record occurs within five miles of the Project Area. |
| **BIRDS** | | | |
| ***Athene cunicularia***<br>burrowing owl | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Covered | Open grasslands including prairies, plains, and savannah, or vacant lots and airports. Nests in abandoned dirt burrows. | **Moderate:** Marginally suitable habitat is present within the Project Area and buffer. One recent CNDDB record from 2007 (occ # 974) occurred within two miles of the Project Area. |
| ***Aquila chrysaetos***<br>golden eagle | **USFWS:** P<br>**CDFW:** FP<br>**MSHCP:** Covered | Open country including prairies, sagebrush, savannah or sparse woodlands, and barren hills or mountainous areas. Nests on rocky cliff edges or in large trees such as eucalytus or oak. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |

| Scientific Name<br>Common Name | Status | Habitat Preferences | Potential for Occurrence |
|---|---|---|---|
| ***Buteo swainsoni***<br>Swainson's hawk | **USFWS:** None<br>**CDFW:** THR<br>**MHCP:** Covered | Open pine-oak woodland, savannah, and agricultural fields with scattered trees. Nests in solitary bush or tree, or in small groves. Nesting trees can include willow, black locust, oak, aspen, cottonwood, and conifers. | **Moderate:** Marginal suitable nesting and foraging habitat is present within the Project Area and buffer, with better habitat located in nearby open space areas. No CNDDB records occur within five miles of the Project Area. |
| ***Campylorhynchus brunneicapillus sandiegensis***<br>coastal cactus wren | **USFWS:** BCC<br>**CDFW:** SSC<br>**MHCP:** Covered | Inhabits coastal sage scrub and scrubby desert habitats. In coastal California, patches of prickly pear and cholla cacti within coastal sage scrub provides habitat. | **Presumed Absent:** No suitable habitat is present within the Project Area and buffer. No CNDDB records occur within five miles of the Project Area. |
| ***Charadrius nivosus nivosus***<br>western snowy plover | **USFWS:** THR<br>**CDFW:** SSC<br>**MSHCP:** Not Covered | Beaches, coastal dunes, coastal strand. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. One historic CNDDB record occurs within five miles of the Project Area. |
| ***Coccyzus americanus occidentalis***<br>western yellow-billed cuckoo (nesting) | **USFWS:** THR<br>**CDFW:** END<br>**MSHCP:** Covered | Occurs in wooded habitats with dense cover and nearby water. These can be woodlands with low, scrubby vegetation; overgrown orchards; or dense thickets along streams and marshes. They are rare breeders in riparian woodlands of willows, cottonwoods, and mesquite that occur in dense stands. Nests are often placed in willows located along streams with cottonwoods nearby for foraging. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |
| ***Elanus leucurus***<br>white-tailed kite | **USFWS:** None<br>**CDFW:** FP<br>**MSHCP:** Covered | Open habitat in lowlands including savanna, open woodlands, marshes, and agricultural fields. Nests in trees near a marsh. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |
| ***Empidonax traillii extimus***<br>southwestern willow flycatcher | **USFWS:** END<br>**CDFW:** END<br>**MSHCP:** Covered | Dense thickets of willow and other deciduous trees and shrubs, often near water. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |

| Scientific Name<br>Common Name | Status | Habitat Preferences | Potential for Occurrence |
|---|---|---|---|
| ***Icteria virens***<br>yellow-breasted chat | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Covered | Riparian and upland thickets, and dry overgrown pastures. Prefers to nest in dense scrub along streams or at the edges of ponds or swamps. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |
| ***Lanius ludovicianus***<br>loggerhead shrike | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Covered | Open country, with scattered shrubs and trees or other perches for hunting; includes agricultural fields, deserts, grasslands, savanna, and chaparral. | **Low:** Limited suitable habitat is present within the Project Area and buffer. One historic CNDDB record occurs within five miles of the Project Area. |
| ***Polioptila californica californica***<br>coastal California gnatcatcher | **USFWS:** THR<br>**CDFW:** SSC<br>**MSHCP:** Covered | Inhabits coastal sage scrub habitat less than 3000' in elevation along the coast. | **Presumed Absent:** No suitable coastal sage scrub habitat is present within the Project Area or buffer. Two recent records and 23 historic records in CNDDB occur within five miles of the Project Area with the closest recent record occurring 0.9 miles east of the Project Area, where six adults and nine juveniles were observed in 2016. |
| ***Vireo bellii pusillus***<br>least Bell's vireo | **USFWS:** END<br>**CDFW:** END<br>**MSHCP:** Covered | Inhabits dense, low shrubby vegetation, generally early successional stages in riparian areas, often near water in arid regions. | **Low:** Limited suitable riparian habitat is present within the Project Area and buffer. Five recent CNDDB records occur within five miles of the Project Area, with the closest occurrence being three miles northwest of the Project Area from 2010. |
| **MAMMALS** | | | |
| ***Antrozous pallidus***<br>pallid bat | **USFWS:** None<br>**CDFW:** SSC<br>**MHCP:** Not Covered | Roosts in rock crevices, caves, mines, buildings, bridges, and in trees. Generally in mountainous areas, lowland desert scrub, arid grasslands near water and rocky outcrops, and open woodlands. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |
| ***Dipodomys merriami parvus***<br>San Bernardino kangaroo rat | **USFWS:** END<br>**CDFW:** END, SSC<br>**MSHCP:** Covered | Alluvial sage scrub, flood plains, washes, and upland areas adjacent to desert habitat. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. One historic CNDDB record occurs within five miles of the Project Area. |

| Scientific Name<br>Common Name | Status | Habitat Preferences | Potential for Occurrence |
|---|---|---|---|
| ***Dipodomys stephensi***<br>Stephen's kangaroo rat | **USFWS:** THR<br>**CDFW:** THR<br>**MSHCP:** Covered | Annual grasslands and coastal sage scrub with sparsely spaced vegetation and loose friable soils, and flat or slightly rolling terrain. | **Low:** Limited suitable habitat is present within the Project Area or buffer. Ten historic CNDDB record occurs within five miles of the Project Area. |
| ***Eumops perotis californicus***<br>western mastiff bat | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Not Covered | Roosts high above ground in rock and cliff crevices, shallow caves, and rarely in buildings. Occurs in arid and semiarid regions including rocky canyon habitats. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. One historic CNDDB record occurs within five miles of the Project Area. |
| ***Lasiurus frantzii***<br>western red bat | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Not Covered | Tree-roosting bat that roosts in foliage. Solitary bat that roosts in foliage of trees or large leafy shrubs. Occurs in lowlands to mountains, in woodlands and forests and, especially along riparian habitats. | **Moderate:** Suitable habitat is present within the Project Area and buffer within the trees, especially those near the natural drainage. No CNDDB records occur within five miles of the Project Area. |
| ***Lasiurus xanthinus***<br>western yellow bat | **USFWS:** None<br>**CDFW:** SSC<br>**MSHCP:** Not Covered | Roosts in trees, especially in fan palms with intact dead frond skirts. Has also been found roosting in cottonwood trees. Found in riparian woodlands in arid regions, oak or pinyon-juniper woodlands, and human developed areas. | **Moderate:** Suitable habitat is present within the Project Area and buffer within the cottonwood trees. No CNDDB records occur within five miles of the Project Area. |
| ***Nyctinomops femorosaccus***<br>pocketed free-tailed bat | **USFWS:** None<br>**CDFW:** SSC<br>**MHCP:** Not Covered | During dry season, utilizes water sources with large available surfaces. Roosts in caves, rock crevices and cliff faces. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |
| ***Onychomys torridus ramona***<br>southern grasshopper mouse | **USFWS:** None<br>**CDFW:** SSC<br>**MHCP:** Not Covered | Low, semi-open, and open scrub habitats with flat, sandy valley floors. Habitats include coastal and mixed chaparral, coastal sage scrub, riparian scrub, low sagebrush, and grasslands with interspaced shrubs. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |
| ***Perognathus longimembris brevinasus***<br>Los Angeles pocket mouse | **USFWS:** None<br>**CDFW:** SSC<br>**MHCP:** Covered | Habitats with sandy and fine soils, including grasslands, coastal sage scrub, and alluvial sage scrub. | **Presumed Absent:** No suitable habitat is present within the Project Area or buffer. No CNDDB records occur within five miles of the Project Area. |

| Scientific Name<br>Common Name | Status | Habitat Preferences | Potential for Occurrence |
|---|---|---|---|

Federal Designations
(FESA, USFWS)
END: Federally listed, endangered
THR: Federally listed, threatened
CAN: Federal candidate for listing
P: Protected under the Bald and Golden Eagle Protection Act

State Designations
(CESA, CDFW)
END: State-listed, endangered
THR: State-listed, threatened
SSC: California Species of Special Concern
CAN: State candidate for listing
FP: Fully Protected

Local Designations
[Western Riverside Multiple Species Habitat Conservation Plan (MSHCP)]
Covered: Species adequately conserved through the conservation and management actions implemented through adoption of the MSHCP Plan.
Sources: California Natural Diversity Data Base (CDFW 2024a), State and Federally Listed Endangered and Threatened Animals of California (CDFW 2024b), Special Animals List (CDFW 2024d), MSHCP (RCTLMA 2024), IPAC Trust Resources List (USFWS 2024a)

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