Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis

French Valley, Riverside County, California

AUGUST 2022 ***REVISED OCTOBER 2022 REVISED JULY 2023 REVISED AUGUST 2023 REVISED OCTOBER 2023 REVISED NOVEMBER 2023***

PREPARED FOR

Cross Engineering Services, LLC

PREPARED BY

SWCA Environmental Consultants

MULTIPLE SPECIES HABITAT CONSERVATION PLAN (MSHCP) CONSISTENCY ANALYSIS
FRENCH VALLEY, RIVERSIDE COUNTY, CALIFORNIA

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1 INTRODUCTION

Cross Engineering Services, LLC retained SWCA Environmental Consultants (SWCA) to prepare a Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis, including a Habitat Suitability Assessment and Wildland–Urban Interface Assessment for the proposed commercial development of an approximately 2.47-acre vacant parcel (Assessor Parcel Number [APN] 963070018) situated in the French Valley community of unincorporated Riverside County (Project Site; Project).

The Project Site is located in the *Western Riverside County Multiple Species Habitat Conservation Plan* (WRMSHCP) area in Criteria Cell 5778 within the Southwest Area Plan; it is not in a Cell Group (County of Riverside, 2003). The WRMSHCP defines special-status flora and fauna that may require specialized surveys, as well as the requirement to assess the site for riverine/riparian and vernal pool features and conduct an urban/wildlands interface analysis. The WRMSHCP also states that this criteria cell is not within survey areas for amphibians, mammals, or invertebrates. SWCA performed a desktop analysis and a 1-day field survey. As required by the WRMSHCP, study goals were to identify and map Riparian/ Riverine and Vernal Pool features and Narrow Endemic Plant Species (specified for this site in the WRMSHCP) and to conduct a Habitat Suitability Assessment for special-status wildlife identified in WRMSHCP. The field survey examined for all special-status species of flora and fauna identified within the Bachelor Mountain, California U.S. Geological Survey (USGS) 7.5-minute quadrangle, and the surrounding quadrangles (Romoland, Winchester, Hemet, Murrieta, Sage, Temecula, Pechanga, and Vail Lake), in addition to those specified in the WRMSHCP.

2 LOCATION AND PROJECT DESCRIPTION

2.1 Location

The Project Site is located at the southwest corner of Benton Road and Penfield Lane in the French Valley community of unincorporated Riverside County. The Project Site is surrounded on three sides by urban development. It is bounded by four-lane Benton Road to the north, Penfield Lane and a large private residence/swim school to the east, and industrial development to the south. A vacant ruderal parcel lies to the west, with commercial and industrial development west of that. Figure 1 provides the vicinity map and Figure 2 illustrates the Project location. Photos of the Project Site are included in Appendix A.

2.2 Project Description

The applicant proposes to construct two single-story fast-food restaurants with drive-through capabilities and outdoor seating, and a single-story drive-through car wash with vacuum stalls. Parking and landscaping are also proposed. The development concept would occupy the entire parcel with paved hardscape and irrigated landscaping. No offsite impacts are anticipated, such as roadwork, utility relocation, fuel modification, etc., and there are no conserved lands adjacent to the site. As such, this project will not have fuel modification zones or offsite fuel modification responsibilities. The adjacent property owner(s) would continue to be responsible for fuel modification, per County Ordinance No. 695.

3 REGULATORY SETTING

A complex network of federal, state, and local regulations governs the biological resources of California and Riverside County. The federal, state, and local regulations and policies pertinent to the update to the Project Site are included below.

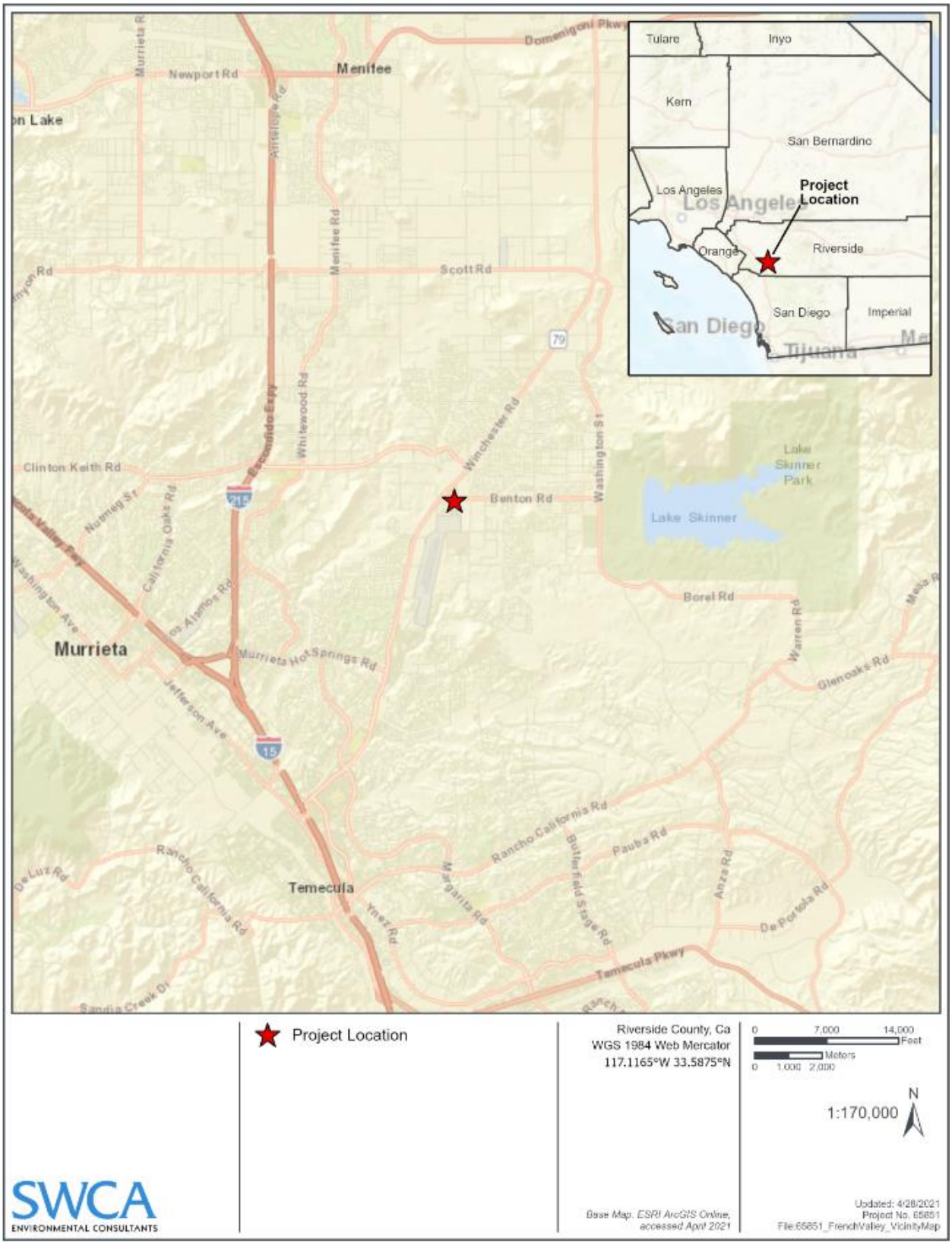

Figure 1. Vicinity map.

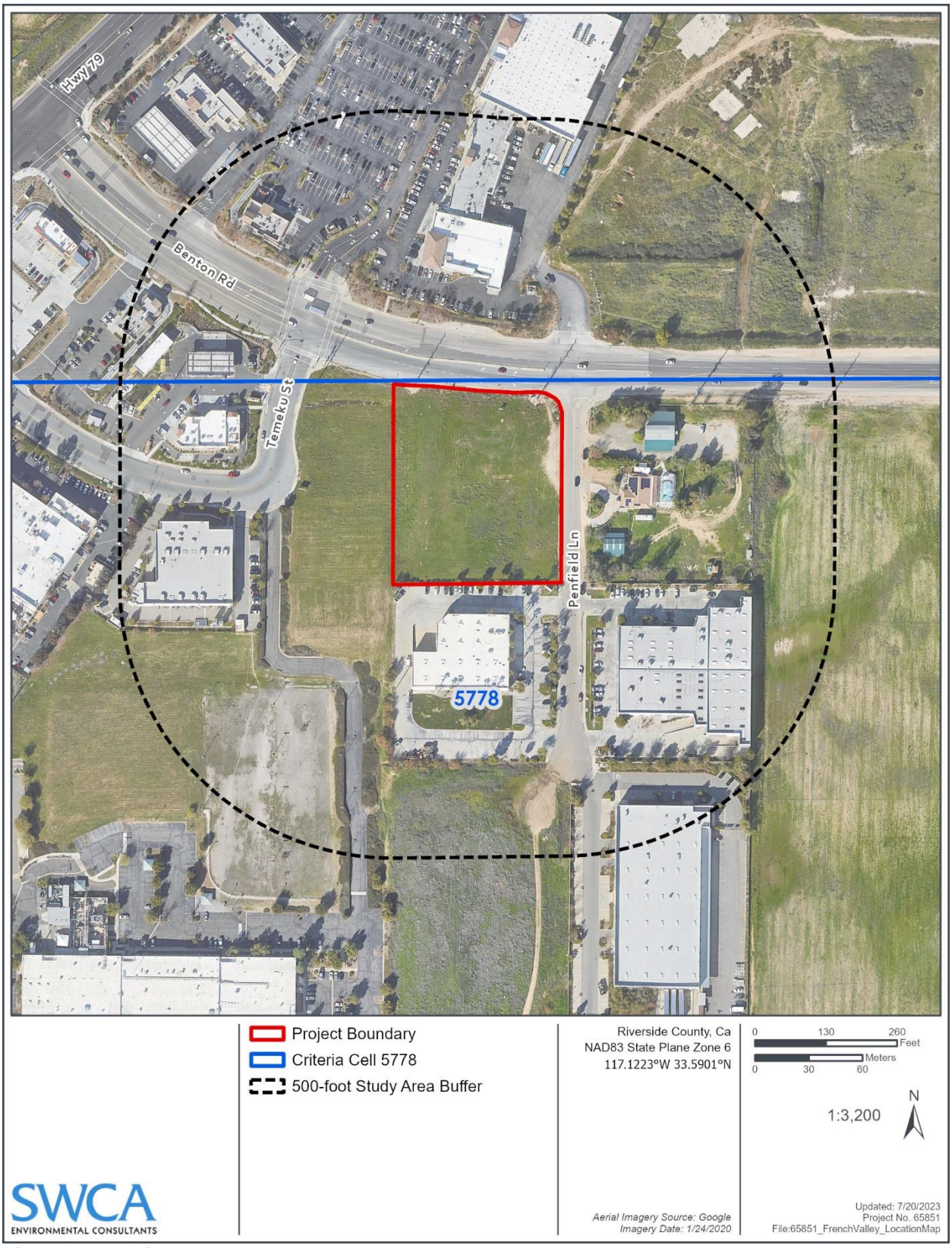

Figure 2. Location map.

3.1 Federal Regulations

3.1.1 *Federal Endangered Species Act*

The federal Endangered Species Act (FESA) protects endangered and threatened species (federally listed species). The FESA operates in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend, as well as the species themselves. Under the FESA, a species listed as federally endangered is one facing extinction throughout all or a significant portion of its geographic range. A species listed as threatened is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Section 9 of the FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 United States Code [USC] 1532 [19]). "Harm" is defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 Code of Federal Regulations [CFR] 17.3). "Harassment" is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR 17.3). Actions that result in take can result in civil or criminal penalties.

The U.S. Fish and Wildlife Service (USFWS) is authorized under the FESA to issue permits under Sections 7 and 10. Section 7 mandates that all federal agencies consult with the USFWS for terrestrial species and/or National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) for marine species to ensure that federal agency actions do not jeopardize the continued existence of a listed species or adversely modify critical habitat for listed species. Any anticipated adverse effects require preparation of a biological assessment to determine potential effects of a proposed project on listed species and critical habitat. "Critical habitat" is defined in the FESA as specific geographic areas that contain features essential to the conservation of an endangered or threatened species. If a project adversely affects a listed species or its habitat, the USFWS or NOAA Fisheries prepares a Biological Opinion, which may recommend "reasonable and prudent alternatives" to the project to avoid jeopardizing or adversely modifying habitat including take limits.

The FESA defines critical habitat as habitat deemed essential to the survival of a federally listed species. The FESA requires the federal government to designate critical habitat for any species it lists under the FESA. Under Section 7, all federal agencies must ensure that any actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. Critical habitat requirements do not apply to activities on private land that do not involve a federal nexus.

Section 10 of the FESA includes provisions to authorize take that is incidental to, but not the purpose of, activities that are otherwise lawful. Under Section 10(a)(1)(B), the USFWS may issue incidental take permits for take of FESA-listed species if the take is incidental and does not jeopardize the survival and recovery of the species.

3.1.2 *Clean Water Act*

The Federal Water Pollution Control Act, known as the Clean Water Act (33 USC sections 1251 et seq.), is the principal federal statute for water quality protection. The Clean Water Act requires each state to adopt water quality standards and to submit those standards for approval by the U.S. Environmental Protection Agency (USEPA). For point source discharges to surface water, the Clean Water Act authorizes the USEPA and/or approved states to administer the National Pollutant Discharge Elimination System program (NPDES). Clean Water Act Section 303(d) requires states to list surface waters not

attaining (or not expected to attain) water quality standards after the application of technology-based effluent limits. Typically, states must prepare and implement a Total Maximum Daily Load (TMDL) for all waters on the Clean Water Act Section 303(d) list of impaired waters.

3.1.3 *Migratory Bird Treaty Act*

The federal Migratory Bird Treaty Act (MBTA) of 1918 prohibits any person, unless permitted by regulations, to " . . . pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatsoever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention . . . for the protection of migratory birds . . . or any part, nest, or egg of any such bird" (16 USC 703). The list of migratory birds includes nearly all bird species native to the United States. The Migratory Bird Treaty Reform Act of 2004 further defined species protected under the act and excluded all non-native species. The statute was extended in 1974 to include parts of birds, as well as eggs and nests. Thus, it is illegal under the MBTA to directly kill or destroy a nest of nearly any native bird species, not just endangered species. Activities that result in removal or destruction of an active nest (a nest with eggs or young being attended by one or more adults) would violate the MBTA. Removal of unoccupied nests, and bird mortality resulting indirectly from disturbance activities, are not considered violations of the MBTA.

3.1.4 *Bald and Golden Eagle Protection Act*

The Bald and Golden Eagle Protection Act (BGEPA) (16 USC 668–668c) prohibits anyone from "taking" bald eagles (*Haliaeetus leucocephalus*), including their parts, nests, or eggs without a permit issued by the Secretary of the Interior. In 1962 Congress amended the act to cover golden eagles (*Aquila chrysaetos*). The act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle . . . [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The BGEPA defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The 1962 amendments included a specific exemption for possession of eagles for religious purposes of Native American tribes; however, an Indian Religious Permit is required.

On November 10, 2009, the USFWS implemented new rules under the existing BGEPA, requiring USFWS permits for all activities that may disturb or incidentally take an eagle or its nest as a result of an otherwise legal activity. Under USFWS rules (16 USC 22.3; 72 *Federal Register* 31,132, June 5, 2007), "disturb" means "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment.

3.2 State Regulations

3.2.1 *California Endangered Species Act*

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA), which states that "all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved." The CESA prohibits the "taking" of listed species except as otherwise provided in state law. Section 86 of the California Fish and Game Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Under certain circumstances, the CESA applies these take prohibitions to candidates for listing. Under the CESA, state lead agencies (defined in California Environmental Quality Act (CEQA) Code Section 21067 are required to consult with the CDFW to ensure that any action or project is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat. Additionally, the CDFW encourages informal consultation on any proposed project that may impact a candidate species. The CESA requires the CDFW to maintain a list of threatened and endangered species. The CDFW also maintains a list of candidates for listing under the CESA and of Species of Special Concern (SSC) (or watch list species).

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy, a threatened species as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management, and a rare species as one present in such small numbers throughout its range that it may become endangered if its present environment worsens. Rare species apply primarily to California native plants.

3.2.2 *Native Plant Protection Act*

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code Section 1900–1913) directed the California Department of Fish and Game (CDFG; now known as CDFW) to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protected endangered and rare plants from take. The NPPA thus includes measures to preserve, protect, and enhance rare and endangered native plants.

CESA has largely superseded NPPA for all plants designated as endangered by the NPPA. The NPPA nevertheless provides limitations on take of rare and endangered species as follows: ". . . no person will import into this state, or take, possess, or sell within this State" any rare or endangered native plant, except in compliance with provisions of the CESA. Individual landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

3.2.3 *California Desert Native Plants Act*

The California Desert Native Plants Act protects non-listed California desert native plants from unlawful harvesting on public and private lands in the counties of Riverside, San Bernardino, Imperial, Inyo, Kern, Los Angeles, Mono, and San Diego (California Food and Agriculture Code, Sections 80001–80006, Division 23). A wide range of desert plants is protected under this act, including all species in the agave and cactus families. Harvest, transport, sale, or possession of specific native desert plants is prohibited

without a valid permit or wood receipt and the required tags and seals. Species listed as rare, endangered, or threatened under federal or state law or regulations are excluded from this provision.

3.2.4 *California Fish and Game Code*

3.2.4.1 FULLY PROTECTED SPECIES ACT

The California Fish and Game Code provides protection from take for a variety of species, referred to as fully protected species. Except for take related to scientific research, all take of fully protected species is prohibited. Section 5050 lists protected amphibians and reptiles and Section 3515 prohibits take of fully protected fish species. Eggs and nests of fully protected birds are under Section 3511. Migratory nongame birds are protected under Section 3800 and mammals are protected under Section 4700.

3.2.4.2 NESTING BIRDS AND RAPTORS

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 specifically provides protection for all birds of prey, including their eggs and nests.

3.2.4.3 MIGRATORY BIRD PROTECTION

Take or possession of any migratory non-game bird as designated in the MBTA is prohibited by Section 3513 of the California Fish and Game Code.

3.2.4.4 NESTING BIRDS AND RAPTORS

California Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 specifically provides protection for all birds of prey, including their eggs and nests.

3.2.4.5 BATS

California Fish and Game Code Section 4150 prohibits the take of bats, regardless of their listing status.

3.2.4.6 LAKES AND STREAMBEDS

Sections 1601–1607 prohibit alteration of any lake or streambed under CDFW jurisdiction, including intermittent and seasonal channels and many artificial channels, without execution of a Lake and Streambed Alteration Agreement (LSA) through the CDFW. This applies to any channel modifications that would be required to meet drainage, transportation, or flood control objectives.

3.2.5 *Inventory of Rare and Endangered Plants*

Operating under a Memorandum of Understanding with the CDFW, the California Native Plant Society (CNPS) maintains an inventory of plants believed or known to be rare in California. This list includes species not protected under federal or state endangered species legislation. Plants in the inventory are assigned a Rare Plant Rank (RPR). The major categories of plants under the CNPS scheme are:

- List 1A: Plants presumed extinct
- List 1B: Plants that are rare, threatened, or endangered in California and elsewhere
- List 2: Plants that are rare, threatened, or endangered in California, but more numerous elsewhere
- List 3: A review list of plants for which the CNPS requires more information
- List 4: A watch list of plants of limited distribution

Plants on CNPS List 1 or 2 generally meet the CEQA Section 15380 definitions of rare or endangered. These plants also meet the definitions of CESA and, as such, are eligible for state listing.

3.2.6 *California Environmental Quality Act*

CEQA was adopted in 1970 and applies to discretionary actions directly undertaken, financed, or permitted by state or local government lead agencies. CEQA requires that a project's effects on environmental resources must be analyzed and assessed using criteria determined by the lead agency. CEQA defines a rare species in a broader sense than the definitions of threatened, endangered, or California SSC. Under this definition, the CDFW can request additional consideration of species not otherwise protected.

3.2.6.1 CEQA SIGNIFICANCE CRITERIA

Section 15064.7 of the State CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency will use in determining the significance of environmental effects caused by projects or actions under its review. Appendix G of the State CEQA Guidelines provides thresholds to evaluate impacts that would normally be considered significant. Based on these guidelines, impacts to biological resources would normally be considered significant if the project:

a) Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

b) Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service;

c) Has a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

d) Interferes 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;

e) Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

f) Conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

An evaluation of whether an impact to biological resources would be significant must consider both the resource itself and how that resource fits into a regional or local context. Significant impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would

obviously conflict with federal, state, or local resource conservation plans, goals, or regulations. The evaluation of impacts considers direct, indirect, and cumulative impacts, as well as temporary and permanent impacts.

3.3 Local Regulations

3.3.1 *County of Riverside*

The County of Riverside (County) Environmental Programs Department (EPD) is responsible for overseeing implementation programs for three regional habitat conservation plans and ensuring consistency with the County's existing land development process. EPD staff work closely with federal, state, or local entities to develop and implement regional environmental procedures. EPD staff also review and approve habitat assessments, focused surveys, and biological reports for environmental impact reports.

3.3.2 *Western Riverside County Multiple Species Habitat Conservation Plan*

The WRMSHCP is a comprehensive, multi-jurisdictional plan that addresses biological and ecological diversity by conserving species and associated habitats, while allowing approval of development in western Riverside County (County of Riverside 2003). It is administered by the Regional Conservation Authority Western Riverside County (RCA).

The Project Site is located in WRMSHCP Criteria Cell 5778 in Subunit 5: French Valley/Lower Sedco Hills. Within this cell, the WRMSHCP specifies the Narrow Endemic Plant Species and the Criteria Area Wildlife Species that may require specialized surveys (where suitable habitat is present), requires site assessment for riverine/riparian and/or vernal pool features, and states that a wildland–urban interface (WUI) analysis must be prepared. The WRMSHCP also states that this criteria cell is not within survey areas for amphibians, mammals, or invertebrates. When suitable habitat is present on a project site, the WRMSHCP requires focused surveys and/or habitat assessment.

The Project Site is located on the northern boundary of the Criteria Cell. Table 3-16, Criteria for Southwest Area Plan, provides the following criteria:

> "Areas conserved within this Cell will be connected to grassland habitat and agricultural land proposed for conservation in Cell Group B to the west. Conservation within this Cell will be approximately 5% of the Cell focusing in the southwestern portion of the Cell."

The subject property is not in the southwestern portion of the cell and as such is not described for conservation.

Both a Habitat Assessment and Negotiation Strategy (HANS) and a Joint Project Review (JPR) are required for projects located in criteria cells. This process is initiated by the property owner with the County. This report provides the information needed to complete the HANS form.

4 RESERVE ASSEMBLY ANALYSIS

The WRMSHCP Preliminary Reserve Assembly Analysis (Analysis) is a required part of the MSHCP Consistency Analysis only when a proposed project is located in a Criteria Area and potentially targeted for long-term conservation (i.e., within a Criteria Cell/Cell Group) as Additional Reserve Lands (ARL).[1]; [2] The Analysis is completed as part of the HANS[3] and JPR[4] processes. This section provides the results of the required Analysis for the Project Site.

4.1 Southwest Area Plan

The Project Site is located in the northern portion of the Southwest Area Plan (SAP). The target conservation acreage range for the SAP is between 58,295–72,155 acres, composed of approximately 35,795 acres of existing Public/Quasi-Public Lands and 22,500–36,360 acres of ARL. The target conservation range consists of an estimated 22,500–36,360 acres on ARL for the entire SAP.

4.1.1 *Subunits*

The SAP is divided into seven Subunits. For each Subunit, target conservation acreages are established along with a description of the Planning Species, Biological Issues and Considerations, and Criteria for each Subunit. The Project Site is located within the southeastern portion of Subunit 5: French Valley/Lower Sedco Hills (SU5). The target ARL for SU5 is between 4,360-7,395 acres. The planning species and biological issues and considerations for SU5 according to the WRMSHCP are presented below.

Planning Species:[5]

- Bell's sage sparrow (*Amphispiza belli belli*)
- California horned lark (*Eremophila alpestris actia*)
- Coastal California gnatcatcher (*Polioptila californica californica*)
- Swainson's hawk (*Buteo swainsoni*)
- Grasshopper sparrow (*Ammodramus savannarum*)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- Quino checkerspot butterfly (*Euphydryas editha quino*)
- Bobcat (*Lynx rufus*)
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)

[1] Conserved Habitat totaling approximately 153,000-acres that are needed to meet the goals and objectives of the WRMSHCP and comprised of approximately 56,000-acres of State and federal acquisition and mitigation for State Permittees, and approximately 97,000-acres contributed by Local Permittees.

[2] Acquisition and Conservation of Additional Reserve Lands.

[3] The HANS Process applies to property which may be needed for inclusion in the WRMSHCP Conservation Area or subject to other MSHCP Criteria.

[4] The Joint Project Review Process allows the Regional Conservation Authority (RCA) to monitor implementation of the WRMSHCP.

[5] Subsets of Covered Species that are identified to provide guidance for Reserve Assembly in Cores and Linkages and/or Area Plans.

- Western pond turtle (*Emys marmorata*)
- Long-spined spine flower (*Chorizanthe polygonoides* var. *longispina*)
- Munz's onion (*Allium munzii*)
- Palmer's grapplinghook (*Harpagonella palmeri*)

Biological Issues and Considerations:[6]

- Conserve a large block of habitat generally east of I-215 and south of Scott Road for narrow endemic species.
- Provide connection to the Southwestern Riverside County Multi Species Reserve.
- Conserve clay soils supporting long-spined spine flower, Munz's onion and Palmer's grapplinghook.
- Maintain Core and Linkage Habitat for bobcat.
- Determine presence of potential Core Area for Los Angeles pocket mouse along Warm Springs Creek.
- Maintain Core and Linkage Habitat for Quino checkerspot butterfly.
- Maintain Core Area for western pond turtle.
- Maintain Core Area for Riverside fairy shrimp.

4.1.2 *Criteria Cell/Cell Group Conservation Criteria*

The Project Site does not fall within a Cell Group; however, it is located within Criteria Cell 5778. As outlined in Table 3-16 of the WRMSHCP, the conservation criteria for Criteria Cell 5778 includes the following:

> "Conservation within this Cell will contribute to assembly of Proposed Core 2. Conservation within this Cell will focus on grassland habitat. Areas conserved within this Cell will be connected to grassland habitat and agricultural land proposed for conservation in Cell Group B to the west. Conservation within this Cell will be approximately 5% of the Cell focusing in the southwestern portion of the Cell."

4.1.2.1 PROPOSED CORE 2

Criteria Cell 5778 is located within a portion of Proposed Core 2. The purpose of assembling a Core Area is to form "a block of Habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more Covered Species" (County of Riverside, 2003), The primary goal of the approximately 5,05-acre Proposed Core Area 2 is to provide habitat for the following Planning Species:

- Quino checkerspot butterfly
- Western pond turtle
- Southern California rufous-crowned sparrow
- Grasshopper sparrow

[6] A list of biological factors to be used by the Plan Participants in assembly of the WRMSHCP Conservation Area.

- Bell's sage sparrow
- Swainson's hawk
- California horned lark
- Coastal California gnatcatcher
- Bobcat
- Los Angeles pocket mouse
- Munz's onion (*Allium munzii*)
- San Diego ambrosia (*Ambrosia pumila*)
- Spreading navarretia (*Navarretia fossalis*)
- California Orcutt grass (*Orcuttia californica*)

4.2 Reserve Assembly Analysis Methods

The Reserve Assembly Analysis is the first step in the MSHCP Consistency Analysis. The purpose of the Reserve Assembly Analysis is to ensure that Assembly goals (such as acreages and function) are still achievable with the development of a project site. If there are anticipated issues, it is helpful to coordinate early with the Permittee, RCA, and the Wildlife Agencies (i.e., California Department of Fish and Wildlife [CDFW] and U. S. Fish and Wildlife Service [USFWS]).

To perform the Reserve Assembly Analysis, the following acreages are obtained to determine if a proposed project is consistent with the Reserve Assembly goals for a particular Criteria Cell, Cell Group and/or Subunit:

- Cell or Cell Group (whichever is applicable)
- Described Conservation- If range is listed, then the mid-range goal is used (i.e., 30%-40%; then 35% is used)
- Proposed Project
- Existing and Approved Pending Development (currently active JPRs obtained from RCA)
    - Existing development is any developed area within the Cell/Cell Group such as single-family home, subdivisions, commercial or industrial buildings, roads or other improved public facilities (fire stations, flood control channel etc.). It may in some cases be appropriate to exclude as developed the undeveloped portion of single-family homes on large lots (> 1 acre) if the undeveloped portion of the lot may contribute to Reserve Assembly. Existing homes, generally on large lots, may specifically be described for conservation as part of a linkage/constrained linkage with no other viable route; therefore, a portion of these large lots may be able to be categorized as "Potential Conservation".
- Covered Roads (existing and proposed)- Covered roads not yet built are counted as future development.
- Existing and Pending Conservation- Existing WRMSHCP ARL acres are counted towards Cell/Cell Group Reserve Assembly goals. Conservation planned through a completed JPR but not yet conveyed to the RCA is counted as pending conservation.

- Note that Public/Quasi-Public (PQP) acreage (already included in the baseline 347,000-acre existing conserved lands inventory) does not count towards the described ARL goal (153,000-acres) in the Cell or Cell Group, whichever is applicable. Cell/Cell Group acreage goals describe new conservation (ARL) acres beyond the PQP baseline. In some cases, the RCA may allow the PQP to be included as existing conservation, but this will need to be handled on a case-by-case basis, and in coordination with the Wildlife Agencies.
- Avoidance Areas- must be protected by, or proposed to be protected by, deed restriction, and should not include vegetation management or fuel modification zones.
- Undeveloped Areas Potentially Available for Future Conservation - Existing disturbed/developed areas, such as agricultural lands, that may still be potentially available for acquisition as future conservation may also be considered in this category. These areas should be labeled using their current land use. All of these areas that are "undeveloped" or "existing disturbed/developed" that are being considered as potentially available must be located in the area that can functionally contribute to the Reserve, specifically the Reserve feature (Core and/or Linkage) that is the focus of the Cell or Cell Group criteria.

4.2.1 *Criteria Cell 5778*

Criteria Cell 5778 totals approximately 163.90 acres (County of Riverside, 2003). The conservation target within Criteria Cell 5778 is approximately 5% of the Cell, focusing on the southwestern portion and totaling about 8.20 acres. The most prevalent land use within Criteria Cell 5778 consists of developed/disturbed (refer to Figure 3).

Figure 3 – Criteria Cell 5778 Reserve Assembly Analysis depicts the areas that remain for ARL (i.e., based on aerial photography of native vegetation communities, WRMSHCP targets, connectivity), existing developed areas (i.e., commercial development and major roads), the Property, and the Project Site (County of Riverside, 2003). No ARL or PQP lands have currently been acquired, nor are any PQP lands mapped in Criteria Cell 5778. The acreage results of the Analysis are presented in Table 1 below and are estimates based on GIS files.

Table 1. Criteria Cell 5778 Reserve Assembly Analysis Acreages

Cell Group Size (Acres)	Target ARL: 5% (Acres)	Project Site (Acres)	Existing Development (Acres)	Potential ARL	Goal ARL[7]
163.90	8.20	2.47	86.48	77.42	66.22

4.3 Reserve Assembly Analysis Results

Currently, the Project Site is surrounded by existing development to the north, south, and east. Criteria Cell 5778 has land available to meet the 5% (8.20-acre) target ARL goal to support acquisition of the Project Site. This should be confirmed prior to a final determination, working closely with the EPD, However, the Project Site does not fall within the focused ARL conservation goal area (e.g., within the southwestern portion of the Cell or within the SE ¼ section of USGS Section 06).

[7] A positive number indicates the available land for ARL exceeds the 5% targeted goal, and a negative number indicates there is not enough "suitable land" available to meet the ARL goal.

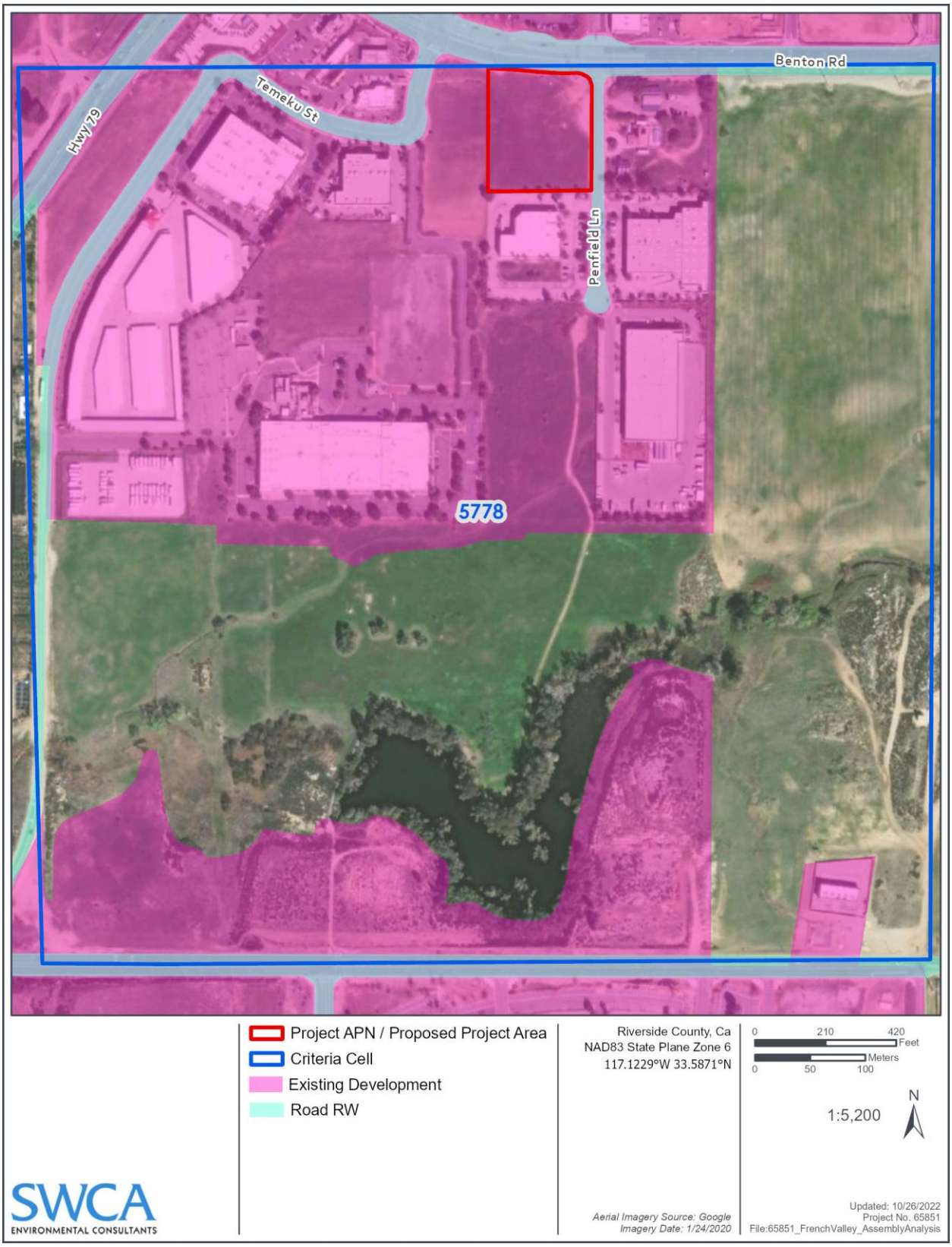

Figure 3. Criteria Cell 5778 Reserve Assembly Analysis.

5 METHODOLOGY

5.1 Database and Literature Review

SWCA biologists conducted a desktop review of published literature to identify previously reported special-status species and habitats know to occur within a nine-quadrangle search area encompassing the Project Site and the surrounding USGS 7.5-minute topographic quadrangles: Bachelor Mountain (site location), Romoland, Winchester, Hemet, Murrieta, Sage, Temecula, Pechanga, and Vail Lake.

The reported occurrences of special status flora, fauna, and plant communities were discovered from searches of the CDFW California Natural Diversity Database (CNDDB) RareFind 5 (CDFW 2021a) and the CNPS Online Inventory of Rare and Endangered Plants (CNPS 2021c).

Current and historical aerial imagery (Google Earth) was studied to discern site conditions, specifically searching for historic ponding.

Additional reference sources included the following:

- State and Federally Listed Endangered, Threatened Animals and California Species of Special Concern (CDFW 2021c)
- State and Federally Listed Endangered, Threatened and Rare Plants of California (CDFW 2021d)
- USFWS web-based Critical Habitat Portal (USFWS 2021)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2021c)
- CDFW CNDDB RAREFIND 5 (CDFW 2021a)
- Natural Resources Conservation Service soils mapping and data (NRCS 2021)

5.2 Field Survey

A reconnaissance-level flora and fauna survey and habitat suitability assessment of the Project Site and adjacent vacant land was completed by SWCA botanist and wildlife biologist Ryan Myers on April 8, 2021. Existing biological conditions were noted, and comprehensive lists of identified plant and wildlife species were compiled.

Particular emphasis was given to the identification of Narrow Endemic Plant Species and the Criteria Area Wildlife Species and Riparian/Riverine and Vernal Pool features; however focused rare plant surveys were not conducted for WRCMSHCP Section 6.1.3 or Section 6.3.2 plants based on the field determination as described in Section 6.1 of this report. A 500-foot buffer zone was included in the Survey Area where vacant land was present. Conditions were favorable for the survey, with temperatures around 70^0F, winds calm at about 1-7 mph, and cloud cover of approximately 10 percent.

5.2.1 *Definition of Special-Status Species*

Special-status species are plants and animals in one or more of the following categories:

- Species listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.12 [listed plants], 50 CFR 17.11 [listed animals], and various notices in the *Federal Register* [proposed species])
- Species that are candidates for possible future listing as threatened or endangered under the FESA (67 *Federal Register* 40657, June 13, 2002)
- Species listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 California Code of Regulations [CCR] 670.5)
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines Section 15380)
- Plants listed as rare under the California NPPA (California Fish and Game Code Section 1900 et seq.)
- Plants considered by the CNPS to be "rare, threatened, or endangered in California" (Lists 1B and 2) on the most current CDFW "Special Vascular Plants, Bryophytes, and Lichens List" (CDFW 2021d)
- Animals fully protected in California (California Fish and Game Code Sections 3511 [birds], 4700 [mammals], 5050 [amphibians and reptiles], and 5515 [fish])
- Animals listed on the on the most current CDFW Special Animals List such as Species of Special Concern, Fully Protected, and for invertebrates, all species regardless of the reason for inclusion (CDFW 2021c)
- Species included on other lists, such as County lists and the WRMSHCP

5.2.2 *Assessment of Special-Status Species Potential*

The potential occurrence of special-status plant and animal species identified during the literature search was ranked based on the site-specific conditions found on the Project Site during the April 2021 field survey.

The relative occurrence potential is based on habitat suitability, current natural resource conditions of the project site, general knowledge of the project region, distance to known CNDDB and CNPS observation records, and the age of the records. Each occurrence potential rating is defined as follows:

- Present: Species has recently been documented on-site.
- High: Species has been documented on-site or adjacent to the project boundaries, habitat is suitable in the project area, and records are recent (within 20 years).
- Moderate: Project area is within known range of the species, habitat is suitable in the project area, and records are non-historic (within 40 years).
- Low: Project area is within known range of the species, habitat is marginal, records are distant, or known records are older (within 75 years).
- Unlikely: Project area is outside of known range of the species, records are distant, and/or there is no suitable habitat in the project area.
- Absent: Species has been extirpated, records are historic (greater than 75 years), or there is no suitable habitat.

5.2.3 *WRMSHCP Narrow Endemic Plant Species*

The WRMSHCP states that a Habitat Suitability Assessment may be conducted to ascertain if focused surveys will be required for the Narrow Endemic Plant Species listed below (WRMSHCP, Sections 6.1.3 and 6.3.2):

- Munz's onion; coastal sage scrub, valley grassland
- *San Diego ambrosia; vernal pool endemic
- *Parish's brittlescale (*Atriplex parishii*); vernal pool endemic
- *Davidson saltscale (*Atriplex serenana* var. *davidsonii*); vernal pool endemic
- Thread-leaved brodiaea (*Brodiaea filifolia*); equally likely to occur in wetlands or non-wetlands
- Round-leaved filaree (*California* [*Erodium*] *macrophyllum*); note current nomenclature. This species is no longer listed or tracked by CNDDB/CNPS. Occurs in grasslands, foothill woodland communities.
- Smooth tarplant (*Centromadia pungens laevis*); equally likely to occur in wetlands or non-wetlands. Occurs in shadscale scrub, alkali sink, valley grasslands, and disturbed areas.
- Many-stemmed dudleya (*Dudleya multicaulis*); coastal sage scrub, chaparral, valley grassland
- *Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*); vernal pool endemic
- *Little mousetail (*Myosurus minimus*); vernal pool endemic
- *Mud nama (*Nama stenocarpa*); vernal pool endemic
- *Spreading navarretia; vernal pool endemic
- *California Orcutt grass; vernal pool endemic
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*); usually occurs in wetlands; occasionally in non-wetlands. May be detectable without normal rainfall.

Although surveys for most species may be conducted year-round, the MSHCP states that surveys for the vernal pool endemic species listed above must be conducted during or immediately following the rainy season with at least normal rainfall amounts. Vernal pool endemic plants (noted with an asterisk in the list above) require sufficient seasonal rainfall combined with sufficient duration of soil saturation to grow and flower. Many plants, including hydrophytes (wetland plants), remain identifiable at least to the genus level even after desiccation. Examples include plants in the rush (*Juncus*) and sedge (*Scirpus*) genera and grasses, such as Orcutt grass. It is important to note that the presence of vernal pools is indicated by a variety of factors, including micro- and macro-geomorphic features as well as the general distribution of plant species indicating micro-hydrology. Hydrophytic plants would be found at the lowest and wettest point, with plants less tolerant or intolerant of saturated conditions indicating hydromorphic boundaries moving away from the wettest areas. Well-developed vernal pools are well known for this characteristic feature of concentric rings of plants. Even when dried out, vernal pools are typically visible year-round.

The WRMSHCP states that focused surveys for rare plants must be conducted during the blooming period for each species and during years with at least normal rainfall (WRMSHCP Section 6.1.3). Average (normal) rainfall for French Valley is 12 inches. Rainfall in the 2020–2021 rainfall season (July 2020 to the present) in nearby Murrieta (8 miles to the southwest) was approximately 4.55 inches (Riverside County Flood Control and Water Conservation District 2021), well below normal.

5.2.4 *WRMSHCP Criteria Area Wildlife Species*

The WRMSHCP states that specialized (protocol/focused) surveys may be required for the following special-status wildlife species when suitable habitat is present, including riparian/riverine and vernal pool features:

- Least Bell's vireo (*Vireo bellii pusillus*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- Santa Rosa Plateau fairy Shrimp (*Linderiella santarosae*)
- Vernal Pool fairy shrimp (*Branchinecta lynchi*)

6 HABITAT SUITABILITY ASSESSMENT

6.1 Existing Conditions

The Project Site is relatively level, with a slight slope bounding the western portion of the parcel. Elevation is approximately between 1,352 and 1,360 feet (~412-414 meters) above mean seal level. The Project Site is dominated by non-native forbs and grasses with a few disturbance-tolerant native species intermixed. Very few shrubs were observed on site.

The subject property is highly disturbed by repeated, ongoing clearing via disking, assumed to be for fire safety (fuel removal/modification). Review of historic aerial photography shows disking since at least January 2006. The action of disking turns soil over, exposing seeds, plant roots, and geophytes (bulbs) to desiccation, degrading and/or destroying the soil seed bank and disrupting soil microhabitats that support flora and fauna. Regular disturbance favors pioneer plants species such as annual graminoids and forbs, often non-native and invasive species, many of which are known to out-compete native species. Further evidence of the subject property's disturbed condition is that lack of native vegetation communities.

The area surrounding the Project Site to the north, south, and east are developed with commercial land uses. The parcel to the west is vacant and vegetated with primarily non-native annual plants; it is bordered by paved roads and commercial development beginning approximately 175 feet west of the subject parcel (see Figure 2). The vicinity is urbanized, with large commercial developments and major roadways, and provides minimal biological habitat for sensitive and special-status species. There are no large trees or shrubs on or near the Project Site, with the exception of a few ornamental shrubs along the southern perimeter.

6.1.1 *Soils*

Based on the NRCS on-line web soil series mapping, two soil types occur on the project site, as illustrated on Figure 4.[8] Auld clay is mapped over approximately 56% of the southeastern half of the property and Monserate sandy loam shown on about 44% of the northwestern half. Loam and clay soils were noted during the field survey. Evidence of heavy and/or vertic clay soils were not found, such as expansive soils evidenced by churning (heavy, deep cracking).

[8] https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Neither of these soil series are listed as hydric by the NRCS. The information below is from the NRCS data. Appendix B provides the full description of both mapped units.

Auld clay, 2-8% slopes[9]

Hydric soil rating: No
H1 = 0-28" clay
H2 = 28-44" loam
H3 = 44-48" weathered bedrock

Drainage class = well drained
Runoff class = very high
Capacity of the most limiting layer to transmit water: Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Not listed on the State Soil Data Access (SDA) Hydric Soils List 9
https://www.nrcs.usda.gov/publications/query-by-state.html).

"…deep, well drained soils formed in residuum from basic igneous rocks."
https://soilseries.sc.egov.usda.gov/OSD_Docs/A/AULD.html

Monserate sandy loam, 0-5% slopes[10]

Hydric soil rating: No
H1 = 0-10" sandy loam
H2 = 10-28" sand clay loam
H3 = 28-45" indurated
H4 = 45-57" cemented
H5 = 57-70" loamy coarse sand
Drainage class = well drained
Runoff class = medium
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

6.1.2 *Vegetation*

Because the Project Site is within the WRMSHCP, this report uses the Holland vegetation classifications as defined in the Plan to provide consistency (Holland 1986). The entirety of the site is classified as Non-Native Grassland (42200; Holland 1986). The crosswalk to *A Manual of California Vegetation. Second Edition* (MCV2) (Sawyer et al. 2009) indicates the Project Site would be classified as red brome (*Bromus rubens* ssp. *madritensis*) or Mediterranean grass grasslands (*Bromus rubens – Schismus* [*S. arabicus, S. barbatus*]) Herbaceous Semi-Natural Alliance. Appendix C includes a list of all plants identified during the April 2021 field survey. Approximately 72 percent of plants found on-site are non-native species.

[9] NRCS Web Soil Survey. Map Unit Description: Auld clay, 2 to 8 percent slopes – Western Riverside Area, California. Accessed July 2023.
[10] NRCS Web Soil Survey. Map Unit Description: Monserate sandy loam, 0 to 5 percent slopes---Western Riverside Area, California. Accessed July 2023.

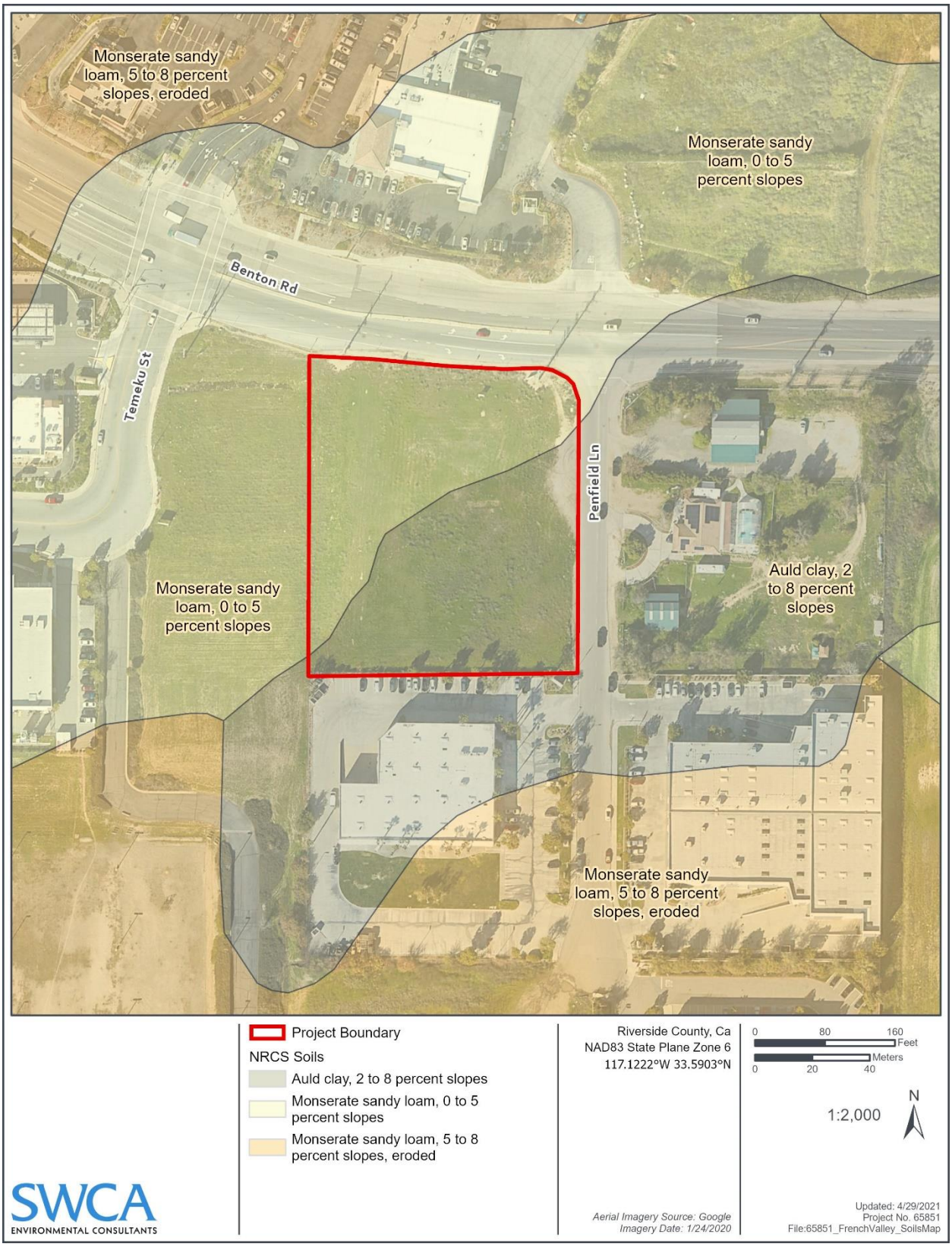

Figure 4. Soils map.

A review of historic aerial photos indicates on-going disking of the subject property since at least January 2006 (prior aerials are not clear to determine disturbance). Additional disturbance is evident including debris and tire tracks apparently unrelated to disking. Such continuous disturbance removes and/or suppresses plant growth.

6.1.2.1 NON-NATIVE GRASSLAND (42200)

Non-Native Grassland is characterized by spare to dense cover of annual grasses in sites with past disturbances. The community is often associated with numerous species of native annual forbs, especially in years of favorable rainfall. The presence of oats (*Avena* spp.), bromes (*Bromus* spp.), filarees (*Erodium* spp.), and mustards (*Brassica* spp.) are common indicators of this community. Vegetation on the subject parcel is a monoculture dominated by non-native species (62%), such as red brome, red stemmed filaree (*Erodium cicutarium*), and foxtail barley (*Hordeum murinum*). Characteristic native annuals observed were common fiddleneck (*Amsinckia intermedia*), arroyo lupine (*Lupinus succulentus*), and valley popcorn flower (*Plagiobothrys canescens*). A vegetation map is not included due to the uniformity of the non-native grassland.

The WRMSHCP maps the entire parcel as Developed/Disturbed, which correlates with the ruderal condition of the site (County of Riverside, 2003).

6.1.3 *Wildlife*

The Project Site offers little habitat for most wildlife, given the dominance of low-growing non-native species and lack of arboreal habitat. Species tolerant of urban land uses that may be found on-site include common birds, such as American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), and Eurasian collared dove (*Columba livia*), all sighted during the field survey. Mammals that may use or pass through the property include California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), mice and voles, and coyote (*Canis latrans*); evidence of Project Site use by gopher and coyote were found. One reptile was discovered, a western fence lizard (*Sceloporus occidentalis*). Appendix C provides a list of all wildlife found on-site or flying overhead during the April 2021 field survey.

6.1.3.1 WILDLIFE MOVEMENT CORRIDORS

The subject property currently provides unrestricted wildlife movement across the parcel to adjacent undeveloped land to the south and west. However, source habitat for wildlife and access to this parcel is diminished by commercial development to north, south and southeast, graded/disced land immediately to the west, and by Benton Road (45 mph) immediately north. Commercial and retail businesses along Benton Road and Hwy 79 (Winchester Rd – four-lane, 45- mph) include a shopping mall and other businesses. The roadways and existing development are barriers to wildlife movement. No natural lands abut this property, and the site does not provide "live-in" habitat nor linkage to core habitat areas.

6.1.4 *Special-Status Species*

Appendix D lists the special-status plants and wildlife identified within the nine-quadrangle search area. Habitat requirements are described for each species and occurrence potential is ranked based on a consideration of existing conditions. No special-status species were found during the April 2021 field survey.

6.1.4.1 SPECIAL STATUS PLANTS

A review of the CNDDB and CNPS Rare Plant Inventory discovered 63 plant species within the search area. The Project Site does not provide suitable habitat for these plants, and as such all were considered to have a low to unlikely occurrence potential.

These findings are based on the current conditions of the Project Site and review of aerial photos dating back to 2006. The photos reveal ongoing mowing and/or disking, negating survival of plants other than ruderal species tolerant of frequent disturbance.

6.1.4.2 SPECIAL STATUS WILDLIFE

The CNDDB review found 14 species of wildlife in the search area. Of these, only burrowing owl (*Athene cunicularia*) was considered to have a moderate potential for occurrence on the Project Site. No evidence of Project Site use by these owls or potentially suitable burrows was found during the April 2021 field survey. However, this species is common in the Project region.

None of the Criteria Area Wildlife Species were found, nor are they expected to occur on the Project Site due to lack of suitable habitat.

6.1.4.2.1 Nesting/Breeding Birds

The Project Site offers little to no suitable habitat for nesting birds. However, active nesting in the Project vicinity could be adversely impacted by construction activity (e.g., noise, dust, human and equipment activity, etc.).

7 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS

Section 6.1.2 of the WRMSHCP provides for protection for riparian/riverine areas, vernal pools, and associated species of plants and animals. Additional WRMSHCP objectives reviewed for consistency during the survey included Section 6.1.2. Riparian/Riverine Areas and Vernal Pools.

7.1 Riparian/Riverine

As defined by Section 6.1.2 of the WRMSHCP, riparian/riverine areas are "lands which contain habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens, which occur close to, or which depend upon, soil moisture from a nearby fresh water source; or areas with freshwater flow during all or a portion of the year."

7.1.1 *Methods*

The proposed project limits of work were assessed for the presence of riparian/riverine areas concurrently with vegetation mapping conducted during desktop analysis and the field survey.

7.1.2 *Existing Conditions and Results*

No riparian/riverine areas suitable habitat to support riparian-associated birds is present on site.

7.1.3 *Impacts*

Since suitable riparian/riverine habitat areas are not present within the limits of work, the proposed project would not impact riparian/riverine areas.

7.1.4 *Mitigation*

Because there are no impacts to riparian/riverine areas, no mitigation measures are proposed.

7.2 Vernal Pools

As defined by Section 6.1.2 of the WRMSHCP, vernal pools are "seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season."

7.2.1 *Methods*

Prior to the field survey, historic aerial photos were reviewed to search for ponding. During the field survey, I proposed project limits of work were assessed for the presence of vernal pools concurrently with vegetation mapping conducted during desktop analysis and the field survey.

7.2.2 *Existing Conditions and Results*

No evidence of vernal pools, hydrophytic plants, prolonged inundation, depressions, tectonic swales/earth slump basins, or inundation conducive to ponding, or other wetland features were recorded on site during the April 8, 2021 field survey or found on historic aerial photos. Google Earth aerial photos of the project and vicinity were scrutinized, with clear color images going back to 2003. Ponded water is visible on the property immediately east of 36580-36600 Penfield Lane over subsequent years while no ponding is visible on the subject property.

Vernal pools are depressions in areas where a hard underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime the water gradually evaporates away, until the pools become completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (the amount of sand, sill, and day particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (lacking oxygen or air) develop. None of these conditions (i.e., no depressions, hydric soils, hydrophytic plants, etc.) were observed on site and neither of the two soils mapped by NRCS for the site are hydric. The Auld soil series, which contains clay in the upper horizons, is noted as well drained with high runoff (refer to Section 6.1.1). No standing water or other sign of areas that pond water (e.g., mud cracks, drainages) were recorded. Tire ruts were noted but did not contain evidence of ponded or standing water. Of note is an aerial photo dated March 2011 which clearly shows ponding on a parcel east of the project site (30951 Benton Road; APN 963070024), while no ponding is visible on the subject property.

7.2.3 *Impacts*

Since vernal pools are not present within the limits of work, the proposed project would not impact vernal pool habitat.

7.2.4 *Mitigation*

Since there are no impacts to vernal pool areas, no mitigation measures are proposed.

7.3 Fairy Shrimp

Section 6.1.2 of the WRMSHCP requires an assessment of suitable habitat for Riverside fairy shrimp, Santa Rosa Plateau fairy shrimp, and vernal pool fairy shrimp.

7.3.1 *Methods*

The project limits of work were assessed for the presence of ponding features (e.g., road ruts, depressions) that may support vernal pool branchiopods (i.e., fairy shrimp) concurrently with vegetation mapping conducted during desktop analysis and the field survey.

7.3.2 *Existing Conditions and Results*

No evidence of ponding, potential ponding features, or features that would support fairy shrimp were observed within the proposed project limits of work (refer to Section 7.2.2 for discussion). The closest record fairy shrimp is a report from 2006 of Riverside fairy shrimp about 0.5-mile northeast of the Project Site.

Fairy shrimp are known to occur in many conditions, including highly ephemeral ponded areas (such as tire ruts). However, such areas do not provide the correct environmental conditions (saturation of sufficient duration and at the correct temperature) to allow maturation of eggs (cysts) to adulthood.

7.3.3 *Impacts*

Since suitable fairy shrimp habitat is not present within the limits of work, the proposed project would not impact fairy shrimp.

7.3.4 *Mitigation*

Since the proposed project would not impact fairy shrimp, no mitigation measures are proposed.

7.4 Riparian Birds

Section 6.1.2 of the WRMSHCP requires an assessment of suitable habitat for riparian bird species, including least Bell’s vireo, southwestern willow flycatcher, and western yellow-billed cuckoo.

7.4.1 *Methods*

The proposed project limits of work were assessed for the presence of suitable habitat to support riparian bird species listed in the WRMSHCP.

7.4.2 *Existing Conditions and Results*

No riparian or riverine habitat is present on-site. The species listed above in Section 7.4 are obligate riparian birds that required high-quality, contiguous riparian habitat comprised of dense shrubs and trees such as willows (*Salix* spp.), cottonwood (*Populus* sp.) and understory plants, typically along streams with surface water. No such plant community is present on or near the Project Site.

7.4.3 *Impacts*

Suitable riparian habitat is not present within the limits of work; therefore, the proposed project would not impact riparian bird species.

7.4.4 *Mitigation*

No mitigation measures are proposed.

7.5 Protection of Narrow Endemic Plant Species

The proposed project is located within the survey area for the following Narrow Endemic Plant Species: Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, and Wright's trichocoronis.

As noted above under Section 7.2.2, Vernal Pools, aerial photos of the project and vicinity were scrutinized back to 2003. Ponded water is visible on the property immediately east of 36580-36600 Penfield Lane over the years while no ponding is visible on the subject property during the same years.

7.5.1 *Methods*

The proposed project limits of work were assessed for the presence of suitable habitat appropriate for the Narrow Endemic Plant Species concurrently with vegetation mapping conducted during desktop analysis and the field survey.

7.5.2 *Existing Conditions and Results*

None of the noted Narrow Endemic Plant Species were observed during the habitat assessment. Suitable habitat for the noted Narrow Endemic Plant Species was absent from the Project Site. This determination was based on the combination of poor-quality habitat, lack of evidence of vernal pool conditions and/or other specific required habitat requirements of each species. Refer to Sections 6.1 and 7.2 for discussion of existing site conditions.

7.5.2.1 MUNZ'S ONION

According to Jepson (2023), this perennial bulb occurs in grassy openings in coastal-sage scrub. CalFlora lists the general habitat as chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland/mesic areas on heavy clay soils. Additionally, the MSHCP notes this onion occurring on "mesic exposures or seasonally moist microsites" in the plant communities mentioned above on clay and cobbly clay soils. Such conditions were not observed on-site, thus lacking suitable habitat for this onion.

Although clay soil is mapped over about half the project site (refer to Figure 4), the field survey found clay-loam rather than heavy clay. No onion species were found.

There are no CNDDB records within five miles of the project site which are less than 20 years old. The closest record is from 1986, approximately 2.1 miles southeast of the project.

7.5.2.2 SAN DIEGO AMBROSIA

This plant is found in open floodplain terraces or the margins of vernal pools where disturbance has been superficial in chaparral, coastal scrub, valley and foothill grasslands on sandy loam or clay soil; sometimes alkaline (Jepson, 2023; CalFlora, 2023; MSHCP). Suitable floodplain terrace and vernal pools habitats are not present on-site, and this species is absent. No plants in this genus were found. The most recent report is from 2006, approximately 2.95 miles south of the Project Site.

7.5.2.3 MANY-STEMMED DUDLEYA

This distinctive succulent occurs in rocky habitats within coastal scrub, coastal bluff scrub, chaparral, cismontane woodland. Although a portion of the site is mapped as Auld (clay) soils, suitable habitat such as clay soils in barrens, rocky places, ridgelines, and thinly vegetated openings is absent from the subject property Dudleyas are distinctive plants which are easily identified nearly year-round; no dudleya species were found on-site.

7.5.2.4 SPREADING NAVARRETIA

Spreading navarretia is restricted to vernal pools, chenopod scrub, marshes and swamps, playas. Suitable habitat is not present on-site.

7.5.2.5 CALIFORNIA ORCUTT GRASS

This grass is restricted to vernal pools. Suitable habitat is not present on-site.

7.5.2.6 WRIGHT'S TRICHOCORONIS

This species is restricted to marshes and swamps, riparian forest, meadows and seeps, and vernal pools. No suitable habitat is present on the subject property.

7.5.3 *Impacts*

Since suitable habitat for Narrow Endemic Plant Species is not present within the limits of work, the proposed project would not impact Narrow Endemic Plant Species.

7.5.4 *Mitigation*

None of the Narrow Endemic Plant Species listed in the WRMSHCP for the Criteria Cell where the Project Site occurs were found, nor was suitable habitat to support them, such as Riparian/Riverine and Vernal Pool features. Based on these findings, focused surveys for Narrow Endemic or other special-status plant species are not warranted.

8 ADDITIONAL SURVEY NEEDS AND PROCEDURES

The Project Site is not within a survey area for amphibians, mammals, or Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). The proposed project is located in a burrowing owl survey area and within the survey area for Criteria Species. This is further discussed in the sections below.

8.1 Criteria Species

The Project Site is within the survey area for the following eight Criteria Species: Parish's brittlescale, Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea, round-leaved filaree, smooth tarplant, Coulter's goldfields, little mousetail, and mud nama.

8.1.1 *Methods*

The Project Site was assessed for the presence of and/or suitable habitat appropriate for the Criteria Species listed above concurrently with vegetation mapping conducted during desktop analysis and the field survey.

8.1.2 *Existing Conditions and Results*

None of the noted Criteria Species were observed during the habitat assessment. Additionally, suitable habitat for the noted Criteria Area Plant Species was absent from the Project Site.

8.1.2.1 PARISH'S BRITTLESCALE

Suitable habitat is absent for this vernal pool endemic and suitable habitat is absent.

8.1.2.2 THREAD-LEAVED BRODIAEA

Thread-leaved brodiaea primarily occurs in vernal pools and wetland-riparian areas, as well as mesic coastal sage scrub. Such conditions were not found on-site. There are no records for this geophyte on the Bachelor Mountain quadrangle where the site is located.

8.1.2.3 DAVIDSON'S SALTSCALE

This saltscale is restricted to alkali floodplains in association with Willows, Domino and Traver soils (MSHCP). NRCS soil mapping does not include these soil series nor alkaline soils, instead indicating clay and sandy loam over the Project Site (refer to Figure 4, Soils). As such, habitat is absent from this subject property. No species in the *Atriplex* genus were found.

8.1.2.4 ROUND-LEAVED FILAREE

The MSHCP states this species is restricted to open cismontane woodland and valley and foothill grassland between 15 and 1200 m, principally on clay soils. Jepson (2023) notes the plant’s ecology as vertic clay in scrub, open sites, and grassland. Potentially suitable clay soils are mapped over about half the project site (refer to Figure 4, Soils). However, vertic (heavy) clay was not encountered and this distinctive plant, though small, was not found. Note: this species is no longer tracked by listed in the CDFW *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW, 2022; 2023).

8.1.2.5 SMOOTH TARPLANT

This annual plant typically occurs on mesic, alkali soils, which are not mapped for the subject property (refer to Figure 4, Soils). Site conditions were not mesic, and no tarplant species were identified. No suitable habitat is present on-site. The closest record is from 1991, over one mile west of the Project Site.

8.1.2.6 COULTER'S GOLDFIELDS

Coulter's goldfields is a vernal pool endemic that is found in vernal pools or mesic alkaline grassland These habitats are not present on-site.

8.1.2.7 LITTLE MOUSETAIL

This perennial herb is a vernal pool endemic that is occurs in vernal pools or mesic alkaline grassland; habitats absent from the subject property.

8.1.2.8 MUD NAMA

Mud nama is restricted to the margins of freshwater aquatic habitats, such as ponds, lakes, and riverbanks. Suitable habitat is not present on the Project Site.

8.1.3 *Impacts*

Since suitable habitat for Criteria Species is not present within the limits of work, no impact is expected to result to these species from project implementation.

8.1.4 *Mitigation*

None of the Criteria Species defined for Criteria Cell 5778 where the Project Site occurs were found, nor is suitable habitat present to support them. Therefore, focused surveys for Narrow Endemic or other special-status plant species are not warranted.

8.2 Burrowing Owl

Burrowing owl, also called western burrowing owl, is a CDFW Special-Status Species that occupies open areas of the desert and high desert and is frequently encountered in Imperial County. This small owl occurs in a wide range of mostly open habitats in California, including grasslands, shrub-steppe, deserts, pastures, and agricultural areas.

The California range of this species extends from Redding south to San Diego, east through the Mojave Desert, and west to San Francisco and Monterey. The key characteristics of suitable habitat are moderately low and sparse vegetation, a prey base of small mammals during nesting, and burrows or similar sites for shelter. This species occurs at low densities throughout Riverside County, where it is present during both the breeding and non-breeding seasons, as recorded in the CNDDB.

8.2.1 *Methods*

The Project Site occurs within a WRMSHCP burrowing owl survey area. A habitat assessment was conducted for the species to ensure compliance with WRMSHCP guidelines for the species, described below. The WRMSHCP Burrowing Owl Survey Instructions (RCA, 2006) define a two-step survey

protocol; Step I – Habitat Assessment and Step II – Locating Burrows and Burrowing Owls. Both Step I and Step IIA were completed in April 2021.

8.2.2 *Step I and Step IIA Results*

The Step 1 and Step IIA surveys were completed by SWCA biologist Ryan Myers during the April 2021 field survey. Upon arrival at the Project Site and prior to initiating the assessment survey, the biologist used binoculars to scan the Survey Area (subject property and 500-foot buffer area where adjacent vacant land occurs). All potentially suitable habitats on and adjacent to the property was assessed for owl presence, including perch locations, debris piles, dirt mounds, mammal burrow entrances, etc. The Survey Area was then surveyed by slowly walking transects, checking for suitable vegetative cover and existing small mammal burrows or other substrates typically used by these owls for roosting and nesting, such as pipes, culverts, and debris piles with interstitial spaces creating artificial burrows. Burrowing owls are often found within, under, or in close proximity to man-made structures.

No burrowing owls or active burrows were observed during the habitat assessment. However, results from the habitat assessment indicate that suitable resources for burrowing owl may be present throughout the Project Site. Inactive small mammal burrows less than about four-inches diameter were seen (too small for burrowing owl), low to sparse vegetation is present, and ground squirrels were noted in the project vicinity, potentially providing prey and burrow sites. However, no active small mammal burrows were noted. Four recent (within 20 years) records of burrowing owls within 1.5 miles of the subject property are reported in the CNDDB between 2006 and 2009 (14–17-year-old records).

8.2.3 *Impacts*

Burrowing owls and their habitat may be directly impacted by the proposed project. Temporary impacts such as noise, dust and the presence of humans and equipment during construction may indirectly impact burrowing owl on adjacent properties, if present.

8.2.4 *Mitigation - Pre-construction Surveys*

Project sites containing burrows or suitable habitat (based on Step I Habitat Assessment) whether owls were found or not, require pre-construction surveys that shall be conducted within 30 days prior to ground disturbance to avoid direct take of burrowing owls (RCA, 2006). Because suitable burrowing owl habitat may be present within the Project Site and this species has been documented in the project vicinity, a 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (e.g. vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Wildlife Agencies and the RCA and will need to coordinate further with RCA and the Wildlife Agencies. This may include the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. Additionally, if a burrow is determined to be occupied, the burrow will be flagged and a buffer established (160-foot buffer during the non-breeding season and 250-foot buffer during the breeding season).

If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

9 WILDLAND–URBAN INTERFACE ANALYSIS

The WRMSHCP provides guidelines for development in proximity to WRMSHCP Conservation Areas (Section 6.1.4). Specific indirect effects of development identified in the WRMSHCP that could impact sensitive biological resources include drainage, toxics, lighting, noise, invasive landscape species, barriers, and grading/land development.

The WRMSHCP acknowledges that CEQA and local plans and regulations typically address these potential impacts and require appropriate measures to reduce or avoid impact. For the Project Site, the *County of Riverside General Plan* (County of Riverside 2015) and building ordinances contain such policies.

Although the Project Site is located within a Criteria Cell of the WRMSHCP, it is also surrounded on three sides by urban development. The subject property does not contain sensitive biological resources, such as riparian/riverine or vernal pool habitats. No special-status plants or wildlife, Narrow Endemic Plant Species, or Criteria Area Wildlife Species were found, and none are expected to occur due to the lack of suitable habitat.

10 RECOMMENDATIONS

Implementation of the measures described below would reduce potential impacts to less-than-significant levels.

10.1.1 *Burrowing Owl Surveys*

Results of the April 2021 field survey indicate the presence of potentially suitable resources for burrowing owls. Therefore, a 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (e.g., vegetation clearing, grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Wildlife Agencies and the Regional Conservation Authority (RCA), and will need to coordinate further with RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

No more than 30 days prior to the commencement of initial ground-disturbing activities, the applicant shall implement focused preconstruction surveys for burrowing owls. Surveys shall be conducted prior to the initiation of ground disturbance and by a qualified biologist(s) approved by the County. Surveys for burrowing owls shall be conducted in conformance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). Surveys shall be completed within all areas proposed for ground disturbance and vegetation clearing/trimming along with a 160-foot buffer during the non-breeding season and 250-foot buffer during the breeding season.

- **Non-breeding Season (September 1–January 31):**
    - **Occupied Burrows:** For burrowing owls present during the non-breeding season (generally September 1 through January 31), a 50-foot buffer zone shall be maintained around the occupied burrow(s).

- **Unoccupied Burrows:** Once a burrow has been determined by a qualified wildlife biologist to be unoccupied by burrowing owls, the biologist shall excavate the burrow using hand tools. Sections of flexible plastic pipe or burlap bag shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. One-way doors shall be installed at the entrance to the active burrow and other potentially active burrows within 100 feet of the active burrow and monitored for at least 48 hours after installation.

- **Breeding Season (February 1–August 31):**
  - The following avoidance measures shall be implemented for all burrows identified during surveys:
    - Occupied burrows shall not be disturbed during the nesting season (February 1–August 31) unless a qualified biologist verifies through non-invasive methods that either the birds have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Burrowing owls present on-site after February 1 shall be assumed to be nesting unless evidence indicates otherwise.
    - A 100-foot buffer shall be maintained between Project activities and nesting burrowing owls. No activity or entry by personnel or equipment will be allowed within the buffer area.
    - Physical (temporary fencing) and visual (hay bales or similar) barriers shall be installed to delineate the buffer zone. Installation of the exclusionary material will be completed by construction personnel under the supervision of a qualified biologist prior to initiation of construction activities.
    - The buffer shall be maintained until August 31 or until the young owls are foraging independently or the nest is no longer active, based on monitoring evidence.
    - If there is danger that owls will be injured or killed as a result of construction activity, the birds may be passively relocated but only during the non-breeding season; relocation shall require coordination with and approval from the CDFW prior to relocation activities. Relocation of owls during the non-breeding season will be performed by a qualified biologist in coordination with CDFW.
    - Any damaged or collapsed active burrowing owl burrows will be replaced with artificial burrows in adjacent habitat at a 2:1 ratio.

10.1.2 *Nesting Bird Surveys*

If activities associated with vegetation removal, construction, or grading are planned during the bird nesting/breeding season (generally February 1 through August 31; January 1 for raptors), a qualified biologist shall conduct surveys for active nests. Preconstruction nesting bird surveys should be conducted weekly beginning 14 days prior to initiation of ground-disturbing activities, with the last survey conducted no more than 3 days prior to the start of clearance/construction work. If ground-disturbing activities are delayed, additional preconstruction surveys should be conducted so that no more than 3 days have elapsed between the survey and ground-disturbing activities.

Active nests found within 100 feet of the construction zone shall be delineated with highly visible construction fencing or other exclusionary material that would inhibit entry by personnel or equipment into the buffer zone. Installation of the exclusionary material will be completed by construction personnel under the supervision of a qualified biologist prior to initiation of construction activities. The buffer zone shall remain intact and maintained while the nest is active (i.e., occupied or being constructed by at least

one adult bird) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist. The barrier shall be removed by construction personnel at the direction of the biologist.

10.1.3 *Wildland–Urban Interface Measures*

Measures typically required for commercial development should sufficiently address potential edge effects to adjacent Conservation Areas caused by Project construction and operation. Standard Best Management Practices (BMPs) should be incorporated into Project planning to contain construction and operational runoff, including toxics, on the Project Site. Night lighting should be shaded to reduce night-time light pollution.

Landscaping should avoid use of invasive plant species identified in the WRMSHCP (Section 6.1.4, Table 6-2) and those listed by the California Exotic Pest Plant Council (information available at https://www.cal-ipc.org/).

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APPENDIX A

Site Photos

Figure A-1. Viewing north toward Benton Road from southeast corner of Project Site; Penfield Lane on right. Photo taken April 8, 2021.

Figure A-2. Viewing northeast from southwest corner of Project Site, toward intersection of Benton Road and Penfield Lane. Photo taken April 8, 2021.

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APPENDIX B

Soils

Western Riverside Area, California

AuC—Auld clay, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: hcr8
Elevation: 300 to 2,700 feet
Mean annual precipitation: 14 inches
Mean annual air temperature: 63 degrees F
Frost-free period: 200 to 330 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Auld and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Auld

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from gabbro

Typical profile

H1 - 0 to 28 inches: clay
H2 - 28 to 44 inches: loam
H3 - 44 to 48 inches: weathered bedrock

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C
Ecological site: R019XD001CA - CLAYEY
Hydric soil rating: No

Minor Components

Cajalco
Percent of map unit: 5 percent
Hydric soil rating: No

Las posas
Percent of map unit: 5 percent
Hydric soil rating: No

Temescal
Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 15, Sep 6, 2022

Western Riverside Area, California

MmB—Monserate sandy loam, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: hcx4
Elevation: 700 to 2,500 feet
Mean annual precipitation: 10 to 18 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 220 to 280 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Monserate and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monserate

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 10 inches: sandy loam
H2 - 10 to 28 inches: sandy clay loam
H3 - 28 to 45 inches: indurated
H4 - 45 to 57 inches: cemented
H5 - 57 to 70 inches: loamy coarse sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: 20 to 39 inches to duripan
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R019XD029CA - LOAMY
Hydric soil rating: No

Minor Components

Greenfield
Percent of map unit: 5 percent
Hydric soil rating: No

Tujunga
Percent of map unit: 5 percent
Hydric soil rating: No

Hanford
Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 15, Sep 6, 2022

APPENDIX C

Flora and Fauna Observed On-Site

Table C-1. Flora Identified on the French Valley Project Site on April 8, 2021

Scientific Name	Common Name	Origin*
Amsinckia intermedia	fiddleneck	N
Baccharis salicina	willow baccharis	N
Bromus diandrus	ripgut brome	I
Bromus rubens	red brome	I
Bromus tectorum	cheat grass; downy brome	I
Convolvulus arvensis	field bindweed	I
Corethrogyne filaginifolia	common sandaster	N
Croton setiger	turkey mullein	N
Erigeron canadensis	Canada horseweed	N
Erodium botrys	broad leaf filaree	I
Erodium cicutarium	coastal heron's bill	I
Euphorbia albomarginata	rattlesnake sandmat	N
Festuca myuros	rat tail fescue	I
Heterotheca grandiflora	telegraph weed	N
Hirschfeldia incana	Mediterranean hoary mustard	I
Hordeum murinum	foxtail barley	I
Hypochaeris glabra	smooth cat's ear	I
Isocoma menziesii var. *vernonioides*	gold leaved dune goldenbush	N
Lactuca serriola	prickly lettuce	I
Lupinus bicolor	annual lupine, bicolored lupine	N
Lupinus succulentus	arroyo lupine	N
Lysimachia [Anagallis] arvensis	scarlet pimpernel	I
Matricaria discoidea	pineapple weed	N
Medicago polymorpha	bur clover	I
Melilotus indicus	sweet clover	I
Oncosiphon pilulifer	stinknet	I
Parkinsonia aculeata	Jerusalem thorn	I
Plagiobothrys canescens	valley popcorn	N
Rumex crispus	curly dock	I
Salsola sp.	tumbleweed	I
Schismus barbatus	Mediterranean grass	I
Senecio vulgaris	common groundsel	I
Sonchus asper ssp. *asper*	pricky sow thistle	I
Tamarix ramosissima	tamarisk	I
Trichostema lanceolatum	vinegarweed	N

*N = native; I = introduced

Table C-2. Wildlife Identified on the French Valley Project Site on April 8, 2021

Scientific Name	**Common Name**	**Notes**
Birds		
Columba livia	Eurasian collared dove	Non-native
Corvus brachyrhynchos	American crow	Fly-over
Calypte anna	Anna's hummingbird	
Sayornis nigricans	black phoebe	
Euphagus cyanocephalus	Brewer’s blackbird	Fly-over
Melozone crissalis	California towhee	
Tyrannus vociferans	Cassin’s kingbird	Fly-over
Corvus corax	common raven	Fly-over
Sturnus vulgaris	European Starling	Non-native
Haemorhous mexicanus	house finch	
Mimus polyglottos	Northern mockingbird	
Zonotrichia leucophrys	white-crowned sparrow	
Reptiles		
Sceloporus occidentalis	western fence lizard	
Mammals		
Thomomys bottae	Botta's pocket gopher	Burrows
Canis latrans	coyote	Scat

APPENDIX D

Special-Status Species with Potential to Occur

Table B-1. Plant Species Recorded in the California Natural Diversity Database or California Native Plant Society Rare Plant Inventory and Preliminary Potential Occurrence in Study Area*

Common Name *Scientific Name*	Status[1]	Habitat Description	Elevation Range Life Form Flowering Period	Occurrence Potential
chaparral sand-verbena *Abronia villosa* var. *aurita*	1B.1	Chaparral, coastal scrub, desert dunes/sandy	75-1600 m AH Jan-Sep	**None.** Suitable habitat is not present on-site; no *Abronia* species were found.
Yucaipa onion *Allium marvinii*	1B.2	Chaparral (clay openings)	850-1070 m PH April-May	**None.** Suitable habitat (clay soils) is present on-site; however, no onion species were found.
Munz's onion *Allium munzii*	FE; ST; 1B.1 MSHCP narrow endemic	Mesic exposures, seasonally moist microsites in grassy openings in chaparral, coastal scrub, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland/mesic, heavy clay soils and rocky outcrops	375-800 m PH March-May	**None.** Mesic exposures, seasonally moist microsites, heavy clay soils or rocky outcrops are not present on-site.
alkali marsh aster *Almutaster pauciflorus*	2B.2	Meadows and seeps (alkaline)	240-1040 m PH June-Oct	**None.** Suitable mesic/aquatic habitat are not present.
San Diego ambrosia *Ambrosia pumila*	FE; 1B.1 MSHCP narrow endemic	Open floodplain terraces or margins or vernal pools where disturbance has been superficial in chaparral, coastal scrub, valley and foothill grassland, Microhabitat: sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial.	3-580 m PH April-Oct	**None.** Suitable floodplain terrace or vernal pool margins habitat are absent on-site. No plants in this genus were found. Two reports from 2017 were approximately 2.25 miles southeast & 3 miles south of the project site. Designated Critical Habitat is mapped about 2 miles to the southeast.
rainbow manzanita *Arctostaphylos rainbowensis*	1B.1	Gabbro soils in chaparral	205-670 m S Dec-March	**None.** Suitable habitat is not present on-site.
Jaeger's milk-vetch *Astragalus pachypus* var. *jaegeri*	1B.1	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland (sandy or rocky).	365-1040 m S Dec-June	**None.** Suitable habitat is not present on-site.
San Jacinto Valley crownscale *Atriplex coronata* var. *notatior*	FE; 1B.1	Playas, valley and foothill grassland, vernal pools.	35-460 m AH April-Aug	**None.** Suitable habitat is not present on-site. One report from 2015 is about 11 miles NNE of site.

Common Name ***Scientific Name***	**Status**[1]	**Habitat Description**	**Elevation Range** **Life Form** **Flowering Period**	**Occurrence Potential**
South Coast saltscale *Atriplex pacifica*	1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas	0-300 m S March-Oct	**None.** Suitable habitat is not present on-site.
Parish's brittlescale *Atriplex parishii*	1B.1 MSHCP criteria area plant	Vernal pools, chenopod scrub, playas.	4-1420 m AH June-Oct	**None.** Suitable habitat is not present on-site. One report from 2006 is about 11 miles NNE of site.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	1B.2 MSHCP criteria area plant	Coastal bluff scrub, coastal scrub/alkaline. Alkali sink scrub and grassland; strongly saline alkaline soil.	0-480 m AH April-Oct	**None.** Suitable habitat (saline/alkaline soil) is not present.
Nevin's barberry *Berberis nevinii*	FE; SE; 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	90-1590 m S March-June	**None.** Suitable habitat is not present on-site.
thread-leaved brodiaea *Brodiaea filifolia*	FT; SE; 1B.1 MSHCP criteria area plant	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools.	15-1030 m PH March-June	**None.** Suitable mesic/vernal pool habitat is not present on-site.
Orcutt's brodiaea *Brodiaea orcuttii*	1B.1	Vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows and seeps	30-1615 m PH May-July	**None.** Vernal pool or mesic habitats are not present in on-site.
Santa Rosa Basalt brodiaea *Brodiaea santarosae*	1B.2	Valley and foothill grassland (soils derived from Santa Rosa Basalt).	585-1045 m PH May-June	**None.** Suitable soils are not present on-site.
round-leaved filaree *California [Erodium] macrophylla*	MSHCP criteria area plant. No longer listed or tracked by CNDDB/CNPS	cismontane woodland, valley and foothill grasslands vertic clay.	15-1200 m AH March-July	**None.** Suitable habitat is not present on-site. Soils encountered were not vertic (heavy cracked) clay. This plant has been re-assessed/categorized and is no longer tracked by CNPS or CNDDB.
Plummer's mariposa-lily *Calochortus plummerae*	4.2 MSHCP covered species	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest/granitic, rocky/sandy sites, usually granitic or alluvial.	60-2500 m PH May-July	**None.** Suitable soils are not present on-site. Observed in 1994 about 6.4 miles ESE of site.
intermediate mariposa-lily	1B.2	Coastal scrub, chaparral, valley and foothill grassland/rocky.	60-1575 m	**None.** Suitable habitat is not present on-site.

Common Name ***Scientific Name***	**Status[1]**	**Habitat Description**	**Elevation Range** **Life Form** **Flowering Period**	**Occurrence Potential**
Calochortus weedii var. *intermedius*			PH May-July	
Payson's jewelflower *Caulanthus simulans*	4.2 MSHCP covered species	Chaparral, coastal scrub/sandy, granitic.	90-2200 m AH March-May	**None.** Suitable habitat is not present on-site. Reported in study area about 14 miles SW of site in 1982.
lakeside ceanothus *Ceanothus cyaneus*	1B.2	Closed-cone coniferous forest, Chaparral/slopes	45-1050 m S April-June	**None.** Suitable habitat is not present on-site.
Vail Lake ceanothus *Ceanothus ophiochilus*	FT; SE; 1B.1	Chaparral (gabbroic or pyroxenite-rich outcrops).	620-915 m S March-April	**None.** Suitable habitat is not present on-site.
smooth tarplant *Centromadia pungens* ssp. *laevis*	1B.1 MSHCP criteria area plant	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Microhabitat: alkali meadow, alkali scrub; disturbed places.	5-1170 m AH April-Sept	**None.** Suitable mesic habitat is not present on-site. Reported in study area about 6 miles SW of site in 2017; 6.3 miles NW in 2016; 1 mile NE in 2011.
Orcutt's pincushion *Chaenactis glabriuscula* var. *orcuttiana*	1B.1	Coastal bluff scrub, coastal dunes/sandy	3-80 m AH Jan-Aug	**None.** Suitable habitat is not present on-site.
Parish's chaenactis *Chaenactis parishii*	1B.3	Chaparral (rocky)	670-2135 m PH May-July	**None.** Suitable habitat is not present on-site.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	1B.1	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland/sandy or rocky openings.	90-1220 m AH April-June	**None.** Suitable habitat is not present on-site.
long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	1B.2	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools/often clay.	30-1630 m AH April-July	**None.** Suitable habitat is not present on-site.
delicate clarkia *Clarkia delicata*	1B.2	Cismontane woodland, chaparral/gabbro soils.	95-1800 m AH April-May	**None.** Suitable habitat is not present on-site.

Common Name ***Scientific Name***	**Status**[1]	**Habitat Description**	**Elevation Range** **Life Form** **Flowering Period**	**Occurrence Potential**
San Miguel savory *Clinopodium chandleri*	1B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland/rocky.	120-975 m S March-July	**None.** Suitable habitat is not present on-site.
Wiggins' cryptantha *Cryptantha wigginsii*	1B.2	Coastal scrub (clay).	45-110 m AH Feb-June	**None.** Suitable habitat is not present on-site.
Mojave tarplant *Deinandra mohavensis*	SE; 1B.3	Riparian scrub, coastal scrub, chaparral/mesic	640-1645 m AH May-Jan	**None.** Suitable mesic habitat is not present on-site.
slender-horned spineflower *Dodecahema leptoceras*	FE; SE; 1B.1	Chaparral, cismontane woodland, coastal scrub (sand or gravel).	200-765 m AH April-June	**None.** Suitable habitat is not present on-site.
many-stemmed dudleya *Dudleya multicaulis*	1B.2 MSHCP narrow endemic	Thinly vegetated openings in chaparral, coastal scrub, valley and foothill (southern needlegrass) grassland on heavy clay, rocky outcrops, clay soil barrens, rocky places, ridgelines.	1-190 m PH May-June	**None.** Suitable habitat is not present on-site. Only one record in search area (Vail Lake quad) which states the identification was not confirmed.
sticky dudleya *Dudleya viscida*	1B.2	Coastal scrub, coastal bluff scrub, chaparral, cismontane woodland/rocky	20-870 m PH May-June	**None.** Suitable habitat is not present on-site.
San Diego button-celery *Eryngium aristulatum* var. *parishii*	FE; SE; 1B.1	Vernal pools, coastal scrub, valley and foothill grassland/mesic	180-705 m A/PH April-June	**None.** Suitable mesic habitat is not present on-site.
Tecate cypress *Hesperocyparis forbesii*	1B.1	Closed-cone coniferous forest, Chaparral	450-1500 m T N/A	**None.** Suitable habitat is not present on-site.
mesa horkelia *Horkelia cuneata* var. *puberula*	1B.1	Chaparral, cismontane woodland, coastal scrub/sandy or gravelly	15-1645 m PH Feb-June	**None.** Suitable habitat is not present on-site.
San Diego sunflower *Hulsea californica*	1B.3	Chaparral, lower montane coniferous forest, upper montane coniferous forest/open sites	365-1860 m PH May-Aug	**None.** Suitable habitat is not present on-site.

Common Name ***Scientific Name***	**Status**[1]	**Habitat Description**	**Elevation Range** **Life Form** **Flowering Period**	**Occurrence Potential**
Santa Lucia dwarf rush *Juncus luciensis*	1B.2	Vernal pools, meadows and seeps, lower montane coniferous forest, chaparral, Great Basin scrub/mesic	280-2035 m AH April-Aug	**None.** Mesic and/or vernal pool habitats are not present on-site.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	1B.1 MSHCP criteria area plant	Coastal salt marshes, playas, vernal pools/alkaline. Microhabitat: usually found on alkaline soils in playas, sinks, and grasslands.	1-1375 m AH Feb-June	**None.** Suitable marsh, vernal pool or mesic alkaline grassland habitats are not present on-site.
heart-leaved pitcher sage *Lepechinia cardiophylla*	1B.2	Closed-cone coniferous forest, chaparral, cismontane woodland.	115-1345 m S April-July	**None.** Suitable habitat is not present on-site.
Orcutt's linanthus *Linanthus orcuttii*	1B.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland/openings	1100-2150 m AH May-June	**None.** Suitable habitat is not present on-site.
Shevock's copper moss *Mielichhoferia shevockii*	1B.2	Cismontane woodland (metamorphic, rock, mesic).	365-1110 m Bryophyte N/A	**None.** Suitable habitat is not present on-site.
intermediate Monardella *Monardella hypoleuca* ssp. *intermedia*	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest/dry slopes.	195-1675 m PH April-Sept	**None.** Suitable habitat is not present on-site.
felt-leaved Monardella *Monardella hypoleuca* ssp. *lanata*	1B.2	Chaparral, Cismontane woodland/rocky	300-1500 m PH June-Aug	**None.** Suitable habitat is not present on-site.
Hall's monardella *Monardella macrantha* ssp. *hallii*	1B.3	Chaparral and woodland on dry slopes and ridges.	700-1800 m PH June-Oct	**None** Suitable habitat is absent; site is below elevational range.
little mousetail *Myosurus minimus* ssp. *apus*	3.1 MSHCP criteria area plant	Vernal pools, valley and foothill grassland/alkaline	20-640 m AH April-Jun	**None.** Suitable marsh, vernal pool or mesic alkaline grassland habitats are not present on-site.
mud nama *Nama stenocarpa*	2B.2 MSHCP criteria area plant	Marshes and swamps (lake margins, riverbanks).	15-815 m A/PH March-Oct	**None.** Suitable aquatic habitat is not present on-site.

Common Name ***Scientific Name***	**Status**[1]	**Habitat Description**	**Elevation Range** **Life Form** **Flowering Period**	**Occurrence Potential**
spreading navarretia *Navarretia fossalis*	FT; 1B.1 MSHCP narrow endemic	Vernal pools, chenopod scrub, marshes and swamps, playas, ditches	15-850 m AH April-June	**None.** Suitable marsh and vernal pool habitat are not present in on-site.
prostrate vernal pool navarretia *Navarretia prostrata*	1B.2	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps/ Mesic, alkaline sites	3-1235 m AH April-July	**None.** Suitable mesic habitat is not present on-site.
chaparral nolina *Nolina cismontana*	1B.2	Chaparral, coastal scrub (sandstone or gabbro)	1140-1100 m S May-July	**None.** Suitable habitat is not present in on-site.
California Orcutt grass *Orcuttia californica*	FE; SE; 1B.1 MSHCP narrow endemic	Vernal pools.	10-660 m AH May-July	**None.** Vernal pool habitat is not present on-site.
Gander's ragwort *Packera ganderi*	R; 1B.2	Chaparral (burns, gabbroic outcrops).	485-1070 m PH April-May	**None.** Suitable habitat is not present on-site.
California beardtongue *Penstemon californicus*	1B.2	Chaparral, lower montane coniferous forest, pinyon and juniper woodland/sandy.	240-2290 m PH May-June	**None.** Suitable habitat is not present on-site.
Santiago Peak phacelia *Phacelia keckii*	1B.3	Closed-cone coniferous forest, chaparral/openings.	545–1525 m AH May-Sept	**None.** Suitable habitat is not present on-site; site is below elevational range (highest point on-site is about 1354 m).
white rabbit-tobacco *Pseudognaphalium leucocephalum*	2B.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral/sandy or gravelly.	35–515 m PH July-Oct	**None.** Suitable habitat is not present on-site.
Latimer's woodland-gilia *Saltugilia latimeri*	1B.2	Chaparral, Mojavean desert scrub, pinyon and juniper woodland/rocky or sandy.	120–2220 m AH March-Jun	**None.** Suitable habitat is not present on-site.
southern mountains skullcap *Scutellaria bolanderi* ssp. *austromontana*	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest/mesic	425–2000 m PH June-July	**None.** Suitable habitat is not present on-site.

Common Name ***Scientific Name***	**Status[1]**	**Habitat Description**	**Elevation Range** **Life Form** **Flowering Period**	**Occurrence Potential**
chaparral ragwort *Senecio aphanactis*	2B.2	Chaparral, cismontane woodland, coastal scrub/alkaline.	20-1020 m AH Jan-April	**None.** Suitable habitat is not present on-site.
salt spring checkerbloom *Sidalcea neomexicana*	2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub/alkali	3-2380 m PH March-June	**None.** Suitable habitat is not present on-site.
San Bernardino aster *Symphyotrichum defoliatum*	1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland/disturbed places.	3-2045 m PH July-Nov	**None.** Suitable mesic habitat is not present on-site.
Parry's tetracoccus *Tetracoccus dioicus*	1B.2	Chaparral, coastal scrub/dry slope.	133-705 m S April-May	**None.** Suitable habitat is not present on-site.
California screw moss *Tortula californica*	1B.2	Chenopod scrub, valley and foothill grassland/sandy soil.	45-750 m Bryophyte N/A	**None.** Suitable habitat is not present on-site.
Wright's trichocoronis *Trichocoronis wrightii var. wrightii*	2B.1 MSHCP narrow endemic	Marshes and swamps, riparian forest, meadows and seeps, vernal pools.	5-435 m S May-Sept	**None.** Suitable marsh habitat is not present in on-site.

*Study Area encompasses a nine-quad search area included: Bachelor Mountain (site location); Romoland; Winchester; Hemet; Murrieta; Sage; Temecula; Pechanga; and Vail Lake.

[1]Status:

E =:	Endangered	CNPS	Rare Plant Rank	AH	Annual Herb
T =:	Threatened	1A	Plants presumed extirpated in California and either rare or extinct elsewhere	AG	Annual Grass
PE =:	Proposed Endangered	1B	Plants rare, threatened, or endangered in California and elsewhere	PG	Perennial Grass
PT =:	Proposed Threatened	2A	Plants presumed extirpated in California, but more common elsewhere	PH	Perennial Herb
C =:	Candidate	2B	Plants rare, threatened, or endangered in California but more common elsewhere	PC	Perennial Cactus
R =	Rare		Threat Rank	S	Shrub
		0.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)	Ss	Subshrub
		0.2	Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)	T	Tree
		0.3	Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)		

Table B-2. Wildlife Species Recorded in the California Natural Diversity Database and Preliminary Potential Occurrence in the Study Area*

Common Name *Scientific Name*	Status[1]	Habitat Description	Occurrence Potential
Birds			
southwestern willow flycatcher *Empidonax traillii extimus*	FE; SE	Riparian woodlands in Southern California.	**Unlikely.** Suitable habitat is not present on-site.
least Bell's vireo *Vireo bellii pusillus*	FE; SE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	**Unlikely.** Suitable habitat is not present on-site.
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT; SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	**Unlikely.** Suitable habitat is not present on-site. One report from "the 1950's" per CNDDB.
coastal California gnatcatcher *Polioptila californica* ssp. *californica*	FT; SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	**Unlikely.** Suitable habitat is not present on-site.
bald eagle *Haliaeetus leucocephalus*	SE; FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	**Unlikely.** Suitable habitat is not present on-site.
tricolored blackbird *Agelaius tricolor*	ST; SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**Unlikely.** Suitable habitat is not present on-site.
Swainson's hawk *Buteo swainsoni*	ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	**Absent.** Considered extirpated as breeder from area; record is from 1948.
burrowing owl *Athene cunicularia*	SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	**Moderate.** Suitable habitat is present on-site, and this owl is common in the vicinity. However, no burrows or potential burrow sites were found during the April 8, 2021 field survey.
Bell's sage sparrow *Artemisiospiza belli* ssp. *belli*	WL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	**Unlikely.** Suitable habitat is not present on-site.
Crustaceans			
Riverside fairy shrimp *Streptocephalus woottoni*	FE	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub.	**Absent.** Suitable vernal pool habitat is absent from on-site.

Common Name ***Scientific Name***	**Status[1]**	**Habitat Description**	**Occurrence Potential**
Invertebrates			
Quino checkerspot butterfly *Euphydryas editha quino*	FE	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties. Adults may nectar on a variety of plants, but will only deposit eggs on larval food plants, primarily dwarf plantain (Plantago erecta); white snapdragon (Anterrhinum coulterianum), woolly plantain (Plantago patagonica), and Chinese houses (Collinsia concolor).	**Unlikely.** No suitable nectar or larval food plants are present on-site. Reported for quad where site is location with restricted locational data. Designated Critical Habitat is located about 2.15 miles to the southeast; 2.7 miles to the east.
Crotch bumble bee *Bombus crotchii*	SC	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	**Unlikely.** Suitable habitat is not present on-site. None of the food plants are present. Most recent record in study area in about 9 miles NW of site from 2001.
Mammals			
San Bernardino kangaroo rat *Dipodomys merriami parvus*	FE; SC; SSC	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	**Unlikely.** Small area of marginal habitat on-site. Recent occurrence within 1.2 miles of on-site.
Stephens' kangaroo rat *Dipodomys stephensi*	FE; ST	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover. Microhabitat: prefers buckwheat, chamise, brome grass and filaree; will burrow into firm soil.	**Low.** Suitable general habitat is present, but microhabitat is absent. Most recent sighting in nine-quadrangle search area was in 2002, about 9 miles to SE.

**Study Area encompasses a nine-quad search area included: Bachelor Mountain (site location); Romoland; Winchester; Hemet; Murrieta; Sage; Temecula; Pechanga; and Vail Lake.

[1]Status Key

Federal (USFWS) Status

FE: Federally Endangered
FT: Federally Threatened

State (CDFW) Status

SE: State Endangered ST: State Threatened
SC: State Candidate SSC: Species of Special Concern
FP: Fully Protected WL: Watch List