

GENERAL BIOLOGICAL ASSESSMENT REPORT FOR THE MENIFEE ARES INDUSTRIAL DEVELOPMENT

ASSESSORS PARCEL NUMBERS

330-570-001 through 33-570-033, 330-560-001 through 330-560-040, 330-571-001 through 330-571-005, and 330-210-062, 330-210-010, 330-210-011 and 330-210-013

RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

EPD Solutions, Inc. 2030 Main Street, Suite 1200 Irvine, CA 92614

Prepared by:

Hernandez Environmental Services 29376 North Lake Drive Lake Elsinore, CA 92530

TABLE OF CONTENTS

| 1.0 | Introduction | 3 |
|-----|--|---|
| 1.1 | Project Site Location | 3 |
| 1.2 | Project Description | 3 |
| 2.0 | Methodology | 3 |
| 2.1 | Literature Review | 3 |
| 2. | 1.1 Western Riverside County MSHCP | 4 |
| 2. | 1.2 Project Relationship to the Western Riverside County MSHCP | 4 |
| 2.2 | Field Survey | |
| 3.0 | Existing Conditions and Results | |
| 3.1 | Environmental Setting | |
| 3.2 | Soils | |
| 3.3 | Plant and Habitat Communities | |
| 3. | 3.1 Ruderal Habitat | 6 |
| 3. | 3.2 Disturbed Areas | 6 |
| 3. | 3.3 Ruderal Storm Drain | |
| 3.4 | Wildlife | |
| 3.5 | Regional Connectivity/Wildlife Movement | |
| 4.0 | Sensitive Biological Resources | |
| 4.1 | Threatened and Endangered Species | |
| | 1.1 Threatened and Endangered Plants | |
| | 1.2 Threatened and Endangered Animals | |
| 4.2 | Nesting Birds | |
| 4.3 | Jurisdictional Waters | |
| 5.0 | Project Impacts | |
| 5.1 | Impacts to Existing Habitats | |
| 5.2 | Impacts to Sensitive Species | |
| 5.3 | Impacts to Nesting Birds | |
| 5.4 | Impacts to Critical Habitat | |
| 5.5 | State and Federal Drainages | |
| 5.6 | Impacts to Wildlife Movement Corridors | |
| 5.7 | Conflict with Local Policies or Ordinances Protecting Biological Resources | |

| 5.8 | Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community | |
|-----|---|----|
| Con | servation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan | 15 |
| 6.0 | Western Riverside County MSHCP Consistency Analysis | 15 |
| 6.1 | MSHCP Requirements | 15 |
| 7.0 | Recommendations | 17 |
| 8.0 | Certification | 19 |
| 9.0 | References | 20 |

FIGURES

Figure 1 – Location Map

Figure 2 – Vicinity Map

Figure 3 – Project Plans

Figure 4 – Habitat Map

APPENDICES

Appendix A – Species List

Appendix B – Probability List

Appendix C – Site Photos

Appendix D – Soils Map

Appendix E – Focused Burrowing Owl Survey Report

Appendix F – Botanical Survey Report

1.0 Introduction

Hernandez Environmental Services (HES) was contracted to prepare a General Biological Assessment (GBA) and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) habitat assessment for the Menifee Ares Industrial Development located in the City of Menifee, Riverside County, California.

1.1 Project Site Location

The approximate 31.5-acre project site is located west of Murrieta Road and south of Ethanac Road and Floyd Avenue in the City of Menifee, Riverside County, California (Figures 1 and 2). The 31.5-acre project site consists of Riverside County APNs 330-570-001 through 330-570-033, 330-560-001 through 330-560-040, 330-571-001 through 330-571-005, and 330-210-062, 330-210-010, 330-210-011 and 330-210-013 (29.7 acres of onsite area) and a portion of Geary Street between McLaughlin Road and Ethanac Road (1.8 acres of offsite areas). Specifically, the project site is located within Township 5 South, Range 3 West in Section 17 of the *Romoland* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude coordinates for the project site are 33°44'17.2339" North and 117°12'30.1666" West.

1.2 Project Description

The project includes the construction of an approximately 603,680 square foot industrial warehouse building with office space on approximately 29.7 acres. The project includes the construction of associated parking, landscaping, and utility improvements to serve the site. The project also includes the improvement of a portion of Geary Street between McLaughlin Road and Ethanac Road, totaling approximately 1.8 acres of offsite areas.

2.0 Methodology

2.1 Literature Review

HES conducted a literature review and reviewed aerial photographs and topographic maps of the project site and surrounding areas. A five-mile radius was used to identify sensitive species with the California Natural Diversity Data Base (CNDDB), the U.S. Fish and Wildlife Service (USFWS) Endangered Species Lists, and the California Native Plant Society (CNPS) rare plant lists to obtain species information for the project area. The CNDDB and USFWS critical habitat databases were utilized, together with Geographic Information System (GIS) software, to locate the previously recorded locations of sensitive plant and wildlife occurrences and designated critical habitat and determine the distance from the project site. Additionally, the Western Riverside County MSHCP was reviewed for information on known occurrences of sensitive species within Riverside County.

2.1.1 Western Riverside County MSHCP

The Western Riverside County MSHCP is a comprehensive, multijurisdictional habitat conservation planning program for western Riverside County, California. The purpose of the Western Riverside County MSHCP is to preserve native habitats, and to this end, the plan focuses upon the habitat needs of multiple species rather than one species at a time. The Western Riverside County MSHCP provides coverage/take authorization for some species listed under the federal or state Endangered Species Act (ESA) as well as non-listed special-status plant and wildlife species. It also provides mitigation for impacts to special-status species and their associated habitats.

Through agreements with the USFWS and California Department of Fish and Wildlife (CDFW), 146 listed and special-status plant and animal species receive some level of coverage under the Western Riverside County MSHCP. Of the 146 covered species, the majority have no additional survey needs or conservation requirements. Furthermore, the Western Riverside County MSHCP provides mitigation for project-specific impacts to these species, thereby reducing the degree of impact to below a level of significance, pursuant to the California Environmental Quality Act (CEQA).

Several of the species covered under the Western Riverside County MSHCP have additional survey requirements. These include the riparian communities and associated species addressed in Section 6.1.2 of the Western Riverside County MSHCP document ("Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools"), plants identified in Section 6.1.3 ("Narrow Endemic Plant Species"); and plants and animal species addressed in Section 6.3.2 ("Additional Survey Needs and Procedures").

2.1.2 Project Relationship to the Western Riverside County MSHCP

The project area is located within the Western Riverside County MSHCP boundaries. The City of Menifee, acting as the lead agency for the proposed project, is a permittee under the Western Riverside County MSHCP and, therefore, is afforded coverage under the state or federal ESAs for impacts to listed species covered by the plan. The City is required to document consistency with the Western Riverside County MSHCP in conjunction with any discretionary approvals for the project. As such, this report was prepared to provide all necessary information required to determine project consistency with the Western Riverside County MSHCP.

The project area is located within Western Riverside County MSHCP Sun City/ Menifee Valley Area Plan of the Western Riverside County MSHCP. The project site is not located within a Criteria Cell or Cell Group, within plan-defined areas requiring surveys for criteria area species. The project site is not located within plan-defined areas requiring surveys for amphibian species, or mammalian species. However, the project site is within the Western Riverside County MSHCP burrowing owl (*Athene cunicularia*) survey area. A habitat assessment conducted on the site determined that suitable habitat is present within the onsite project area; however, suitable habitat is not present within the offsite project areas. Therefore,

focused surveys were conducted over the 29.7-acre onsite area and 500-foot buffer. During the focused surveys for burrowing owl, no burrowing owl or burrowing owl sign were found on site, and it was determined that the project site is not currently in use by burrowing owl (Appendix E). The project site is also within a survey area for the following narrow endemic plant species: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wrights's trichocoronis. None of these species were found during botanical surveys (Appendix F).

Additionally, the project area does not contain any habitat that would be considered riparian/riverine areas as defined in Section 6.1.2 of the Western Riverside MSHCP. Further, no vernal pools were observed within the project boundaries.

2.2 Field Survey

On March 7, 2023, HES biologists conducted a field survey of the approximate 31.5-acre project site. The ambient temperature at 6:30 a.m. was 41 degrees Fahrenheit, 10% cloud cover, with winds ranging from zero to two miles per hour from the east. The purpose of the field survey was to document the existing habitat conditions, obtain plant and animal species information, view the surrounding land uses, assess the potential for state and federal waters, assess the potential for wildlife movement corridors, and assess the presence of constituent elements for critical habitat, if present.

Linear transects spaced approximately 50 to 100 feet apart were walked across the project site for 100 percent coverage. All species observed were recorded. Global Positioning System (GPS) waypoints were taken to delineate specific habitat types, species locations, state or federal waters, and any other information that would be useful for the assessment of the project site. A comprehensive list of all plant and wildlife species that were detected during the field survey within the project site is included in Appendix A. Sensitive plant and wildlife species with the potential to occur within the project area are listed in Appendix B. Representative site photographs were taken and are included within Appendix C.

3.0 Existing Conditions and Results

3.1 Environmental Setting

The onsite project area consists of a mix of residential uses and vacant, disturbed lands with evidence of mowing and tilling for weed abatement. The project site is relatively flat with elevation ranges from 1,417 feet above mean sea-level (AMSL) to 1,447 feet AMSL. The project site is characterized by ruderal habitat dominated by non-native vegetation and disturbed areas. The ruderal habitat appears to be continuously disturbed for weed abatement purposes. Surrounding land uses include commercial/industrial developments and vacant land to the east, residential uses and vacant land to the south, vacant land to the west, and residential uses to the north. The offsite project areas consist of the existing Geart Street right of way characterized by disturbed, dirt roadway.

3.2 Soils

Two soil classifications have historically been mapped on the project site by the USDA Web Soil Survey (Appendix D). Onsite mapped soils are described in Table 1.

Table 1
Onsite Soil Types

| Unit Name | Unit Symbol | Slope |
|------------------|-------------|--|
| Auld clay | AuC | 2 to 8 percent slopes |
| Porterville clay | PsC | Moderately deep, 2 to 8 percent slopes |

3.3 Plant and Habitat Communities

The 29.7 acres of onsite project area contains approximately 25 acres of ruderal habitat, 4.68 acres of disturbed areas, and 0.02 acre of ruderal storm drain. The 1.8 acres of offsite project area consists of disturbed areas. Refer to Figure 4.

3.3.1 Ruderal Habitat

The ruderal habitat found on the project site is heavily disturbed with evidence of mowing and tilling for weed abatement. These areas are dominated by non-native plant species; however, some native species are present. Dominant species found in this habitat type include common wall barley (*Hordeum murinum*), cheatgrass (*Bromus tectorum*), slender oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), shortpod mustard (*Hirschfeldia incana*) and prickly lettuce (*Latuca serriola*).

3.3.2 Disturbed Areas

The disturbed areas found within the onsite and offsite project areas are characterized by primarily unvegetated areas disturbed by previous development, paved areas, and dirt roads.

3.3.3 Ruderal Storm Drain

The onsite project area contains 0.02-acre of a ruderal storm drain that runs along the eastern border of the project site. The storm drain is approximately 1.5 feet wide and collects urban runoff from Murrieta Road. These areas are dominated by non-native plant species; however, some native species are present. Dominant species found in this habitat type include common sunflower (*Helianthus annus*), wall barley (*Hordeum murinum*), slim oats, narrow leaved plantain (*Plantago lanceolata*), and Maltese star thistle (*Centaurea melitensis*).

3.4 Wildlife

General wildlife species documented on the project site or within the vicinity of the site include mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), northern harrier (*Circus cyaneus*), Say's Phoebe (*Sayornis saya*), coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), and California ground squirrel (*Spermophilus beecheyi*). The complete list of species observed is included in Appendix A.

3.5 Regional Connectivity/Wildlife Movement

Wildlife movement corridors can be local or regional in scale; their functions may vary temporally and spatially based on conditions and species present. Wildlife corridors represent areas where wildlife movement is concentrated due to natural or anthropogenic constraints. Local corridors provide access to resources such as food, water, and shelter. Animals use these corridors, which are often hillsides or riparian areas, to move between different habitats. Regional corridors provide these functions and link two or more large habitat areas. They provide avenues for wildlife dispersal, migration, and contact between otherwise distinct populations.

The project site is not located within a designated wildlife corridor or linkage. The project area was evaluated for its function as a wildlife corridor that species use to move between wildlife habitat zones. The project site consists of flat, disturbed land characterized by ruderal and disturbed areas. Further, the project site is surrounded by urban development such as residential uses and industrial uses and disturbed lands. No wildlife movement corridors were found to be present on the project site.

4.0 Sensitive Biological Resources

4.1 Threatened and Endangered Species

A total of 53 sensitive species of plants and 61 sensitive species of animals has the potential to occur on or within the vicinity of the project location. These include those species listed or candidates for listing by the USFWS, California Department of Fish and Wildlife (CDFW) and CNPS. All habitats with the potential to be used by sensitive species were evaluated during the site visit and a determination has been made for the presence or probability of presence within this report. This section will address those species listed as Candidate, Rare, Threatened, or Endangered under the state and federal endangered species laws or directed to be evaluated under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Sensitive species which have a potential to occur will also be discussed in this section. Other special status species are addressed within Appendix B.

4.1.1 Threatened and Endangered Plants

A total of 18 plant species are listed as state and/or federal Threatened, Endangered, or Candidate species; are required to be reviewed under the Narrow Endemic Plant section of the Western Riverside MSHCP; or are 1B.1 listed plants on the CNPS Rare Plan Inventory. Below are descriptions of these species:

Chaparral sand-verbena

Chaparral sand-verbena (*Abronia villosa var. aurita*) is ranked 1B.1 in the CNPS Rare Plant Inventory. It is found in sandy areas of chaparral, coastal scrub, and desert dunes habitats. No habitat for this species is present on the project site. **This species is not present.**

Munz's onion

Munz's onion (*Allium munzii*) is a federally Endangered, state Threatened, and CNPS 1B.1 listed plant species. It is found in chaparral, coastal scrub, valley and foothill grasslands, cismontane woodland, and pinyon and juniper woodland. No habitat for this species is present on the project site. **This species is not present.**

San Diego ambrosia

San Diego ambrosia (*Ambrosia pumila*) is listed as federally Endangered and 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes wetlands in chaparral, coastal sage scrub, valley and foothill grassland. Marginally suitable habitat for this species is present on the project site; however, this species was not observed during focused botanical surveys (Appendix F). **This species is not present.**

Rainbow Manzanita

Rainbow Manzanita (Arctostaphylos rainbowensis) is ranked 1B.1 in the CNPS Rare Plant Inventory. It is usually found in gabbro chaparral habitat. No habitat for this species is present on the project site. **This species is not present.**

Jaeger's milk-vetch

Jaeger's milk-vetch (Astragalus pachypus var. jaegeri) is ranked 1B.1 in the CNPS Rare Plant Inventory. It is often found in dry ridges and valleys, and open sandy slopes. Its habitat includes coastal scrub, chaparral, valley and foothill grassland, and cismontane woodland. No habitat for this species is present on the project site. **This species is not present.**

San Jacinto Valley crownscale

San Jacinto Valley crownscale (*Atriplex coronata var. notatior*) is a federally Endangered Species and is ranked 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes playas, valley and foothill grassland, and vernal pools in alkaline areas in the San Jacinto River Valley. No habitat for this species is present on the project site. **This species is not present.**

Parish's brittlescale

Parish's brittlescale (*Atriplex parishii*) is ranked 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes shadescale scrub, alkali sink, riparian, playas, vernal pools and wetland. No habitat for this species is present on the project site. **This species is not present.**

Thread-leaved brodiaea

The thread-leaved brodiaea (*brodiaea filifolia*) is a federally Threatened, state Endangered Species, and a CNPS 1B.1 listed plant. It is found in chaparral, cismontane woodlands, coastal sage scrub, valley and foothill grasslands, vernal pools and wetland. This species has been previously documented within the vicinity of the project area. However, suitable habitat for this species is not present on the project site. Further, this species was not observed during focused botanical surveys (Appendix F). **This species is not present.**

Smooth tarplant

Smooth tarplant (*Centromadia pungens ssp. laevis*) is ranked 1B.1 in the CNPS Rare Plant Inventory. The species habitats include alkali playa, chenopod scrub, meadows and seeps, riparian woodlands, wetlands, and valley and foothill grasslands. Potentially suitable habitat for this species is present on the project site; however, this species was not observed during focused botanical surveys (Appendix F). **This species is not present.**

Parry's spineflower

Parry's spineflower (*Chorizanthe parryi var. parryi*) is ranked 1B.1 in the CNPS Rare Plant Inventory. The species occurs in dry, sandy soils on dry slopes and flats, sometimes at the interface of two vegetations types, such as chaparral and oak woodland. Its habitat includes coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Marginally suitable habitat for this species is present on the project site; however, this species was not observed during focused botanical surveys (Appendix F). **This species is not present**.

Slender-horned spineflower

Slender - horned spineflower (*Dodecahema leptoceras*) is a federally and state listed Endangered Species and is ranked 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes chaparral, cismontane woodland, and coastal scrub (alluvial fan sage scrub). No habitat for this species exists on the project site.

This species is not present.

San Diego button-celery

San Diego button-celery (Eryngium aristulatum var. parishii) is a federally and state listed Endangered species and is ranked 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes coastal scrub, valley & foothill grasslands, vernal pools, and wetlands. Its flowering period is from May to June. No habitat for this species is present on the project site. **This species is not present.**

Campbell's liverwort

Campbell's liverwort (Geothallus tuberosus) is ranked 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes coastal scrub, and vernal pools on mesic soils. No habitat for this species is present on the project site. **This species is not present.**

Tecate cypress

Tecate cypress (Hesperocyparis forbesii) is ranked 1B.1 in the CNPS Rare Plant Inventory. It is found on clay or gabbro, primarily on north-facing slopes and in groves often associated with chaparral habitat. Its habitat includes closed-cone coniferous forest, and chaparral. No habitat for this species is present on the project site. **This species is not present.**

Coulter's goldfields

Coulter's goldfields (*Lasthenia glabrata ssp.coulteri*) is ranked 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes alkali playas, marsh, swamp, salt marsh, vernal pool, and wetland. No habitat for this species is present on the project site. **This species is not present.**

Parish's meadowfoam

Parish's measowfoam (Limnanthes alba ssp. parishii) is a state listed Endangered species. It is ranked 1B.2 in the CNPS Rare Plant Inventory. This species is typically found in vernally moist areas and temporary seeps of highland meadows and plateaus. They are also often found bordering lakes and streams. It is found in lower montane coniferous forest, meadows and seeps, wetland, and vernal pools. No habitat for this species exists on the project site. **This species is not present.**

Spreading navarretia

Spreading navarretia (*Navarretia fossalis*) is a federally listed Threatened Species and is ranked 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes alkali playa, chenopod scrub, marsh and swamp, vernal pools, and wetlands. This species is typically found in swales and vernal pools, often surrounded by other habitat types. No habitat for this species is present on the project site. **This species is not present.**

California Orcutt grass

California Orcutt grass (*Orcuttia californica*) is a federal and state Endangered species. It is ranked 1B.1 in the CNPS Rare Plant Inventory. It is found in vernal pools. No habitat for this species is present on the project site. **This species is not present.**

4.1.2 Threatened and Endangered Animals

A total of 15 animal species are listed as state and/or federal Threatened, Endangered, Candidate will be reviewed in this section. Sensitive species which have a potential to occur will also be discussed in this

section. All sensitive species within a 5-mile radius of project area were reviewed and a complete list of those species are discussed within Appendix B. Below are descriptions of these species:

Tricolored blackbird

Tricolored blackbird (*Agelaius tricolor*) is state listed as Threatened and listed by the CDFW as a Species of Special Concern. The species occupies freshwater marshes with canopies of willows and other riparian trees. This species requires open accessible water and suitable foraging space. There is no suitable habitat for this species on the project site. **The species is not present.**

Arroyo Toad

Arroyo Toad (Anaxyrus californicus) is a federally listed Endangered species and a CDFW Species of Special Concern. The most favorable breeding habitat for this species consists of slow-moving shallow pools, nearby sandbars, and adjacent stream terraces. Its habitat includes desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. There is no habitat for this species on the project site. **This species is not present.**

Burrowing owl

Burrowing owl (*Athene cunicularia*) is a CDFW Species of Special Concern. Its habitat includes coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojave desert scrub, Sonoran desert scrub, and valley and foothill grassland. This species is typically found in open and dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is a subterranean nester and is dependent upon burrowing mammals, most notably the California ground squirrel. Potential habitat for this species is present on the project site. Focused surveys for this species were conducted on the project site (Appendix E). Although suitable habitat occurs on the project site, this species was not observed during focused surveys. **This species is not present.**

Crotch bumble bee

Crotch bumble bee (*Bombus crotchii*) is a state listed Candidate Endangered species. This species typically lives in coastal California east to the Sierra Cascade crest and south into Mexico. Its food plant genera include *Antirrhinum* sp., *Phacelia* sp., *Clarkia* sp., *Dendromecon* sp., *Eschscholzia* sp., and *Eriogonum* sp. There is no suitable habitat for this species present on the project site. **This species is not present.**

Vernal pool fairy shrimp

Vernal pool fairy shrimp (Branchinecta lynchi) is a federally listed Threatened species. This species is found in seasonal pools of water in valley and foothill grasslands. This species typically inhabits small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools. The project site does not contain suitable habitat for this species. **This species is not present.**

San Diego fairy shrimp

San Diego fairy shrimp (Branchinecta sandiegonensis) is a federally listed Endangered species. This species is found in chaparral, coastal scrub, vernal pool, and wetland habitats. It is endemic to San Diego and Orange County mesas. There is no habitat for this species on the project site. **This species is not present.**

Swainson's hawk

Swainson's hawk (*Buteo swainsoni*) is a state listed Threatened species. This species favors open grasslands for foraging but also occurs in agricultural settings. It relies on scattered stands of trees near agricultural fields and grasslands for nesting sites. Its habitats include great basin grassland, riparian forest, riparian woodland, and valley and foothill grassland. The project site does not contain suitable habitat for this species. **This species is not present.**

Western snowy plover

Western snowy plover (*Charadrius alexandrines nivosus*) is federally listed Threatened. This species typically nests in sandy, gravelly or friable soils. It is commonly found in great basin standing waters, sand shores and wetland habitats. The project site does not contain suitable habitat for this species. **This species is not present**.

San Bernardino kangaroo rat

San Bernardino kangaroo rat (*Dipodomys merriami parvus*) is a federally listed Endangered species, state listed Candidate Endangered, and a CDFW Species of Special Concern. It is found in coastal scrub habitat. This species is found in alluvial scrub vegetation on sandy loam substrates, characteristic of alluvial fans and flood plains. It needs early to intermediate seral stages. The project site does not contain suitable habitat for this species. **This species is not present.**

Stephens' kangaroo rat

Stephens' kangaroo rat (*Dipodomys stephensi*) is a federally listed Endangered and state listed Threatened species. This species is found in coastal sage scrub with sparse vegetation cover, and in valley and foothill grasslands. This species prefers buckwheat, chamise, brome grass, and filaree and will burrow into firm soil. The project site does not contain suitable habitat for this species. **This species is not present.**

Quino checkerspot butterfly

Quino checkerspot butterfly (*Euphydryas editha quino*) is a federally listed Endangered species. It is found in chaparral and coastal sage scrub. This species requires high densities of food plants, including *Plantago erecta*, *P. insularis*, and *Orthocarpus purpurescens*. The project site does not contain suitable habitat for this species. **This species is not present.**

Bald eagle

Bald eagle (*Haliaeetus leucocephalus*) is a state listed Endangered and CDFW Fully Protected Species. This species is found in lower montane coniferous forest and old-growth. They nest in large old-growth or tress with open branches, especially ponderosa pine. The project site does not contain suitable habitat for this species. **This species is not present.**

Coastal California gnatcatcher

Coastal California gnatcatcher (*Polioptila californica californica*) is a federally listed Threatened species and CDFW Species of Special Concern. This species is found in coastal bluff scrub and coastal scrub habitat. This species is typically found in low, coastal sage scrub in arid washes, on mesas and slopes. The project site does not contain suitable habitat for this species. **This species is not present.**

California red-legged frog

California red-legged frog (Rana draytonii) is a federally listed Threatened species and a CDFW Species of Special Concern. Its habitat includes aquatic, artificial flowing waters, artificial standing waters, freshwater marsh, marsh and swamp, riparian forest, riparian scrub, riparian woodland, Sacramento and San Juaquin flowing and standing waters, and south coast. It requires 11 to 20 weeks for larval development and must have access to estivation habitat. It is most commonly found in lowlands and foothills, in or near permanent sources of deep water, with dense, shrubby, or emergent riparian vegetation. The project site does not contain suitable habitat for this species. **This species is not present.**

Riverside fairy shrimp

Riverside fairy shrimp (*Streptocephalus woottoni*) is a federally listed Endangered species. This species is found in coastal scrub, valley and foothill grassland, vernal pool, and wetland habitat. This species typically inhabits seasonally a tatic pools filled by winter/spring rains. The project site does not contain suitable habitat for this species. **This species is not present.**

Least Bell's vireo

Least Bell's vireo (*Vireo bellii pusillus*) is a federal and state listed Endangered species. This species is found in riparian forest, riparian scrub, and riparian woodland. Nesting habitat of this species is restricted to willow and/or mulefat dominated riparian scrub along permanent or nearly permanent streams. No suitable habitat for this species is present on the project site. **This species is not present.**

4.2 **Nesting Birds**

Migratory non-game native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. The project site contains shrubs that can be utilized by nesting birds during the nesting bird season of February 1 through September 15.

4.3 Jurisdictional Waters

The project area does not contain any streams or drainages or riparian habitat. There are no CDFW, United States Army Corps of Engineers (USACE), or Regional Water Quality Control Board (RWQCB) jurisdictional waters within the project boundaries. Further, the project area does not contain any wetlands or vernal pools.

5.0 Project Impacts

5.1 Impacts to Existing Habitats

The development of the proposed project will impact the entire 31.5 acres of the project site, including approximately 25 acres of ruderal habitat, 4.68 acres of onsite disturbed areas, 0.02 acre of ruderal storm drain, and 1.8 acres of offsite disturbed areas. Refer to Figure 5.

5.2 Impacts to Sensitive Species

There is suitable burrowing owl habitat present on site. Although there is suitable habitat present on site focused burrowing owl surveys determined that no burrowing owl are present on site at this time. Implementation of the measures identified in the Recommendations section of this report will ensure no impacts to this species will occur.

5.3 Impacts to Nesting Birds

If the project will remove shrubs or trees between February 1 and September 15, the project will have a potential to impact nesting birds. Implementation of the measures identified in the Recommendations section of this report will ensure that potential impacts to nesting birds are less than significant.

5.4 Impacts to Critical Habitat

The project site is not located within designated federal critical habitat. No impact to critical habitat would occur.

5.5 State and Federal Drainages

The project area does not contain any state or federal jurisdictional drainages; therefore, no impacts will result from project implementation.

5.6 Impacts to Wildlife Movement Corridors

No wildlife movement corridors were found to be present on the project site. No impacts to wildlife movement corridors are expected.

5.7 Conflict with Local Policies or Ordinances Protecting Biological Resources

Any project activities that have the potential to impact onsite trees will require a survey of oak and native trees to comply with Riverside County Ordinance 559. No oak or native trees are located on the project site. Therefore, development of the project site would not conflict with local policies or ordinances protecting biological resources.

5.8 Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan

The site is located within the boundaries of the Western Riverside MSHCP. If Western Riverside MSHCP guidelines and requirements are followed, no conflicts are expected.

6.0 Western Riverside County MSHCP Consistency Analysis

6.1 MSHCP Requirements

The project area is located within the Sun City/ Menifee Valley Area Plan of the Western Riverside County MSHCP. The project site is not located within a Criteria Cell or Cell Group. A discussion of the applicable Western Riverside County MSHCP requirements follows:

Section 6.1.2 Species Associated with Riparian/Riverine Habitat and Vernal Pools

The project site does not contain habitat that may be considered riparian/riverine areas as defined in Section 6.1.2 of the Western Riverside County MSHCP. Due to the lack of suitable riparian habitat on the project site, focused surveys for riparian/riverine bird species listed in Section 6.1.2 of the MSHCP are not warranted.

Vernal pools are seasonal depressional wetlands that occur under Mediterranean climate conditions of the west coast and in glaciated conditions of northeastern and midwestern states. They are covered by shallow water for variable periods from winter to spring but may be completely dry most of the summer and fall. Vernal pools are usually associated with hard clay layers or bedrock, which helps keep water in the pools. Vernal pools and seasonal depressions usually are dominated by hydrophytic plans, hydric soils, and evidence of hydrology.

The entire site was evaluated for the presence of habitat capable of supporting branchiopods. The site was evaluated as described in the USFWS Survey Guidelines for the Listed Large Branchiopods (May 31, 2016). The project area is disturbed and dominated by non-native plant species, no hydrophytic plants were found on site. The onsite soils do not qualify as hydric. No vernal pools, swales, or vernal pool mimics such as ditches, borrow pits, cattle troughs, or cement culverts with signs of pooling water were found on the site. The onsite ruderal storm drain did not exhibit any signs of inundation or flow, and no

riparian or wetland plants communities were found to occur within or adjacent to the storm drain. In addition, the site does not contain areas that showed signs of ponding water, hydrophytic vegetation, or soils typical of vernal pools that would be suitable for large branchiopods.

Section 6.1.3 Sensitive Plant Species

The project site is located within the Western Riverside County MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) pursuant to Section 6.1.3 of the MSHCP. These plant species include Munz's onion, San Diego ambrosia (*Ambrosia pumila*), Many-stemmed dudleya (*Dudleya multicaulis*), Spreading navarretia, California Orcutt grass, and Wright's trichocoronis (*Trichocoronis wrightii var. wrightii*). The project site is heavily disturbed and dominated by non-native plant species. The project site contains marginally suitable habitat for San Diego Ambrosia; however, none of the NEPSSA species of concern were observed during focused botanical surveys (Appendix F).

Section 6.1.4 Urban/Wildlands Interface Guidelines

The project site is not located within or adjacent to a Western Riverside County MSHCP Conservation Area; therefore, the project site is not required to address Section 6.1.4 of the Western Riverside County MSHCP.

Section 6.3.2 Additional Surveys and Procedures

The project site is not located within the Western Riverside County MSHCP Additional survey areas for amphibians, mammals, or any special linkage areas. In addition, the project site is not located within the Western Riverside County MSHCP Criteria Area Plant Species Survey Area (CAPSSA) pursuant to Section 6.3.2 of the Western Riverside County MSHCP. However, the project site is located within the Western Riverside County MSHCP Additional survey area for burrowing owl.

A habitat assessment conducted on the project site determined that suitable habitat is present within the onsite project area; however, suitable habitat is not present within the offsite project areas. Therefore, focused surveys were conducted over the 29.7-acre onsite area and 500-foot buffer in March and April of 2023 (Appendix E). Well-drained soils, piles of compacted dirt, debris piles, and evidence of fossorial mammals were observed on the site. Approximately 12 suitable burrows were identified and recorded. However, burrowing owl signs such as molted feathers, pellets, prey remains, or whitewash were not found. Further, no burrowing owl were observed on the project site. Based on the absence of burrowing owl and burrowing owl evidence within the study area, it can be concluded that the study area is not currently in use by burrowing owl.

However, due to the fact that the project site is located within the Western Riverside County MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of project 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 project activities. If burrowing owl are found to have colonized the project site prior to the initiation of construction, the project proponent

will immediately inform RCA and the Wildlife Agencies and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA and the Wildlife Agencies 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.

7.0 Recommendations

Implementation of the following measures will mitigate any potential impacts resulting from project activities.

Burrowing Owl

- No burrowing owl or burrowing owl sign was found on site during the focused surveys. However, due to the fact that the project site is located within the Western Riverside County MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of project 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 project activities.
- If burrowing owl are found to have colonized the project site prior to the initiation of construction, the project proponent will immediately inform RCA and the Wildlife Agencies and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA and the Wildlife Agencies prior to initiating ground disturbance.
- If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a preconstruction 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.

Nesting Birds

- It is recommended that vegetation removal be conducted during the non-nesting season for migratory birds to avoid direct impacts. The non-nesting season is between February 1 and September 15.
- If vegetation removal will occur during the migratory bird nesting season, between February 1 and September 15, it is recommended that pre-construction nesting bird surveys be performed within three days prior to vegetation removal.

- If active nests are found during nesting bird surveys, they shall be flagged and a 200-foot buffer shall be fenced around the nests.
- A biological monitor shall visit the site once a week during ground disturbing activities to ensure all fencing is in place and no sensitive species are being impacted

8.0 Certification

ASSOCIATE BIOLOGIST

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

| Date | 10-18-2023 | Signed | Shewn fa | Stehel Ffernander | | | | |
|---------|-------------------------|--------|-------------|-------------------|--|--|--|--|
| | | | PROJECT MAN | AGER | | | | |
| Fieldw | Fieldwork Performed By: | | | | | | | |
| Elizabe | eth Gonzalez | | | | | | | |
| SENIO | R BIOLOGIST | | | | | | | |
| Sarah V | Vasquez | | | | | | | |

9.0 References

California Department of Fish and Wildlife (CDFW), Natural Diversity Database (CNDDB). Accessed July 2023. California Department of Fish and Wildlife, Sacramento, California.

Garrett, K. and J. Dunn, 1981. Birds of Southern California. Los Angeles Audubon Society. The Artisan Press, Los Angeles, California.

Grenfell, W. E., M. D. Parisi, and D. McGriff, 2003. A Check-list of the Amphibians, Reptiles, Birds and Mammals of California. California Wildlife Habitat Relationship System, California Department of Fish and Game, Sacramento, California.

Grinnell, J., 1933. Review of the Recent Mammal Fauna of California. University of California Publications in Zoology, 40:71-234.

Hall, E. R., 1981. The Mammals of North America, Volumes I and II. John Wiley and Sons, New York, New York.

Hickman, J. C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press.

Hickman, J. C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press.

Ingles, L. G., 1965. Mammals of the Pacific States. Stanford University Press, Stanford, California.

Jameson, jr., E. W. and H. J. Peters. California Mammals. University of California Press, Berkeley, Los Angeles, London. 403 pp.

List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September 2010.

Munz, P.A., 1974. A Flora of Southern California. University of California Press, Berkeley, California.

Peterson, R. 1990 A Field Guide to Western Birds. Houghton Mifflin Company, Boston, MA.

Riverside County Integrated Project (RCIP) 2003 Final Multiple Species Habitat Conservation Plan (MSHCP). Riverside, CA.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens 2009 *A Manual of California Vegetation, 2nd edition*. California Native Plant Society Press, Sacramento, CA.

U.S Fish and Wildlife Service, 2014. Endangered and Threatened Wildlife and Plants. https://www.fws.gov/endangered/species/us-species.html. Accessed July 2023.

USGS (United States Geological Survey). 2021. Romoland, California, Quadrangle. 7.5 Minute Series (topographic map).

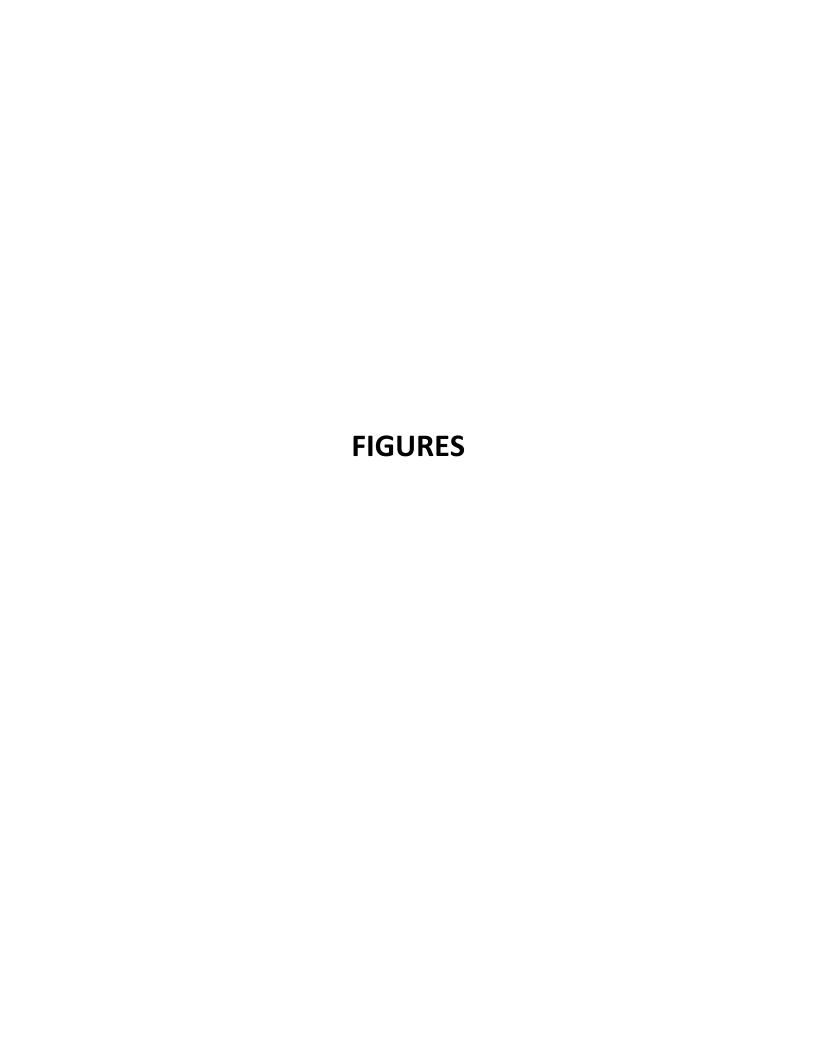
Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed August 2023.

Western Riverside County Multiple Species Habitat Conservation Plan. Burrowing Owl Instructions for Western Riverside Multiple Species Habitat Conservation Plan.

Western Riverside County Multiple Species Habitat Conservation Plan. Section 6.0 MSHCP Implementing Structure.

WRCRCA (Western Riverside County Regional Conservation Authority). 2021a. WRCRCA MSHCP Information Tool. Accessed from: https://www.wrc-rca.org/rcamaps/. Accessed May 2023.

WRCRCA. 2021b. Western Riverside County Multiple Species Habitat Conservation Plan. Accessed online at: http://www.wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/. Accessed August 2023.



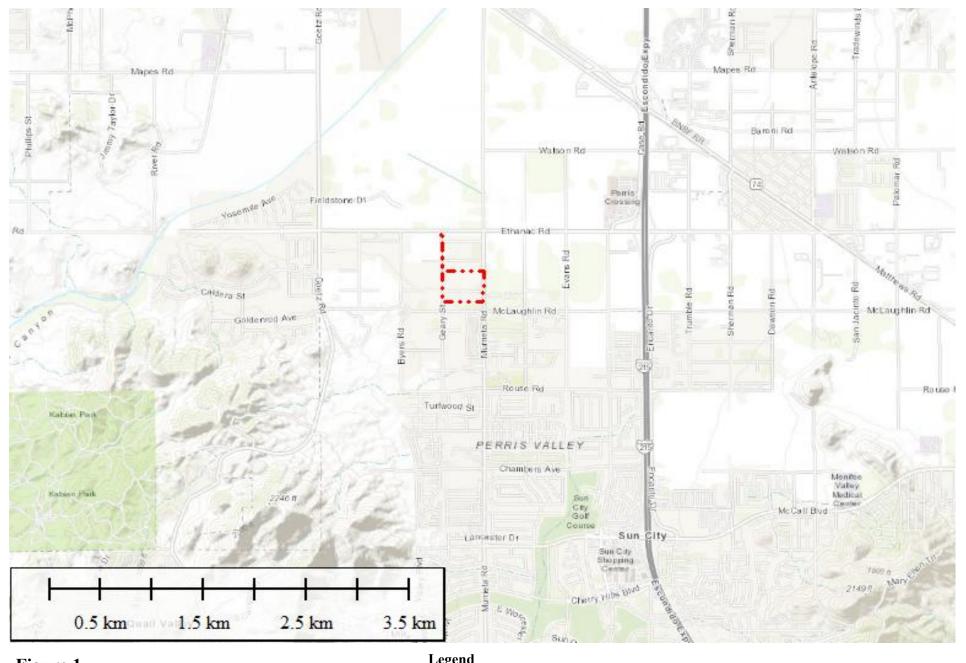


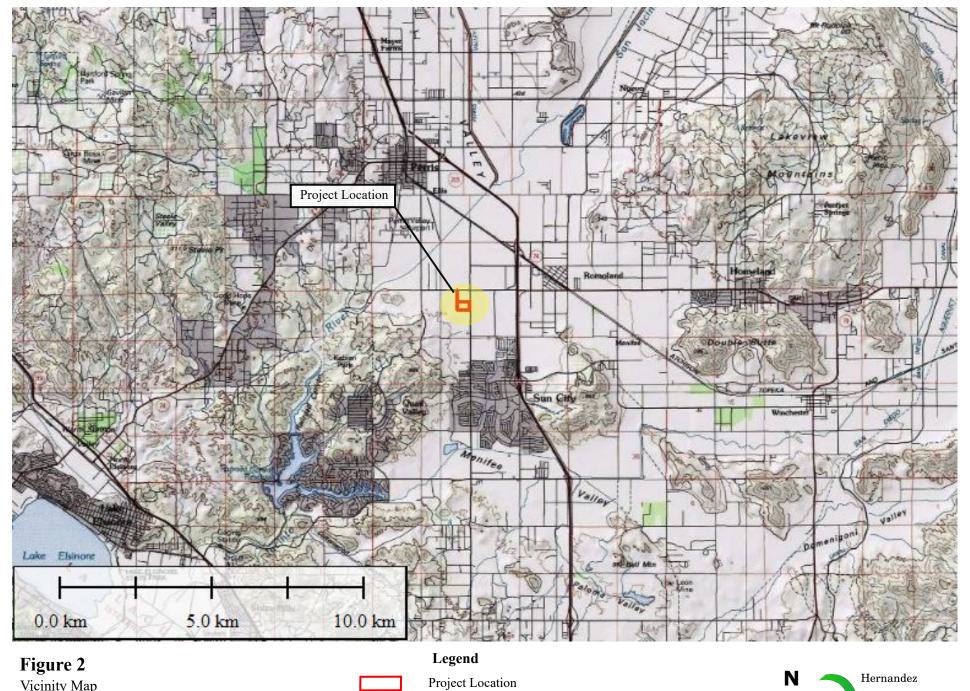
Figure 1 Location Map Menifee Ares City of Menifee, Riverside County, California

Legend

Project Location



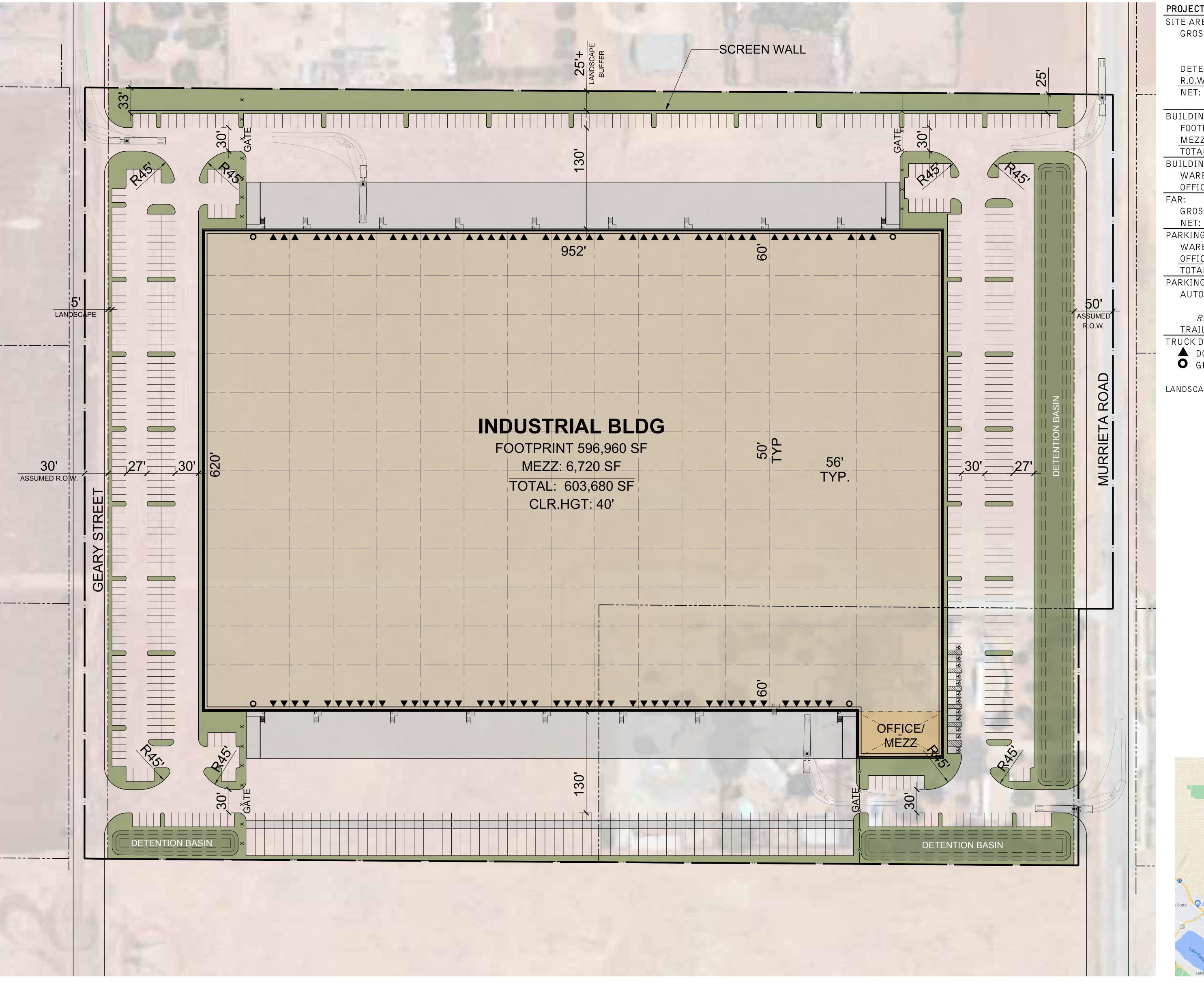
Hernandez Environmental Services



Vicinity Map
Menifee Ares
City of Menifee, Riverside County, California



Iernandez Environmental Services



PROJECT DATA: SITE AREA: GROSS: 29.69 AC 1,293,421 SF DETENTION: @ 4% 48,043 SF R.O.W. EASEMENTS: 64,959 SF NET: 27.10 AC _1,180,419 SF BUILDING AREA: FOOTPRINT: 596,960 SF MEZZANINE: 6,720 SF TOTAL BUILDING AREA: 603,680 SF BUILDING USE: 590,240 SF WAREHOUSE OFFICE @ 2% 13,440 SF GROSS: 0.47 PARKING REQUIRED: 1/1000 SF 590 STALLS WAREHOUSE 1/300 SF 45 STALLS OFFICE TOTAL 635 STALLS PARKING PROVIDED: 635 STALLS AUTO: @1.05/1000 SF REQ. ACCESSIBLE 13 STALLS 65 STALLS TRAILER: NOTES: TRUCK DOCKS: ▲ DOCK-HIGH DOORS • GRADE-LEVEL DOORS 95,054 SF | 3 LANDSCAPE PROVIDED

DEVELOPMENT STANDARDS: ZONING: EDC-NG MAX. F.A.R.: MAX. HEIGHT: 100 FT BUILDING SETBACKS: FRONT: 25 FT REAR: 10 FT LANDSCAPE SETBACKS: LANDSCAPE REQ.: OFF-STREET PARKING: STANDARD: DRIVE AISLE: 24 FT TREE WELL: REQ. PARKING RATIO BY USE: WAREHOUSE: 1/1000 SF

MANUF

1 25 adjacent to residential.

2 Minimum parking lot shading requirements.

a) 30% for parking lots with 5-25 stalls b) 40% for parking lots with 24-29 stalls c) 50% for parking lots with more than 50 stalls

1.00

0 FT

5 FT

5 FT

5 FT

10%

9X18

5 FT

1/2000 SF

1/300 SF

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

Stormwater Management Design: AVERAGE REGIONAL REQUIRED PROVIDED

Boundary Source: PDF ALTA SURVEY

1111

Conceptual Site Plan

Menifee, CA 92585

Murrieta Road & Ethanac Road

scheme: 03a

SHEET

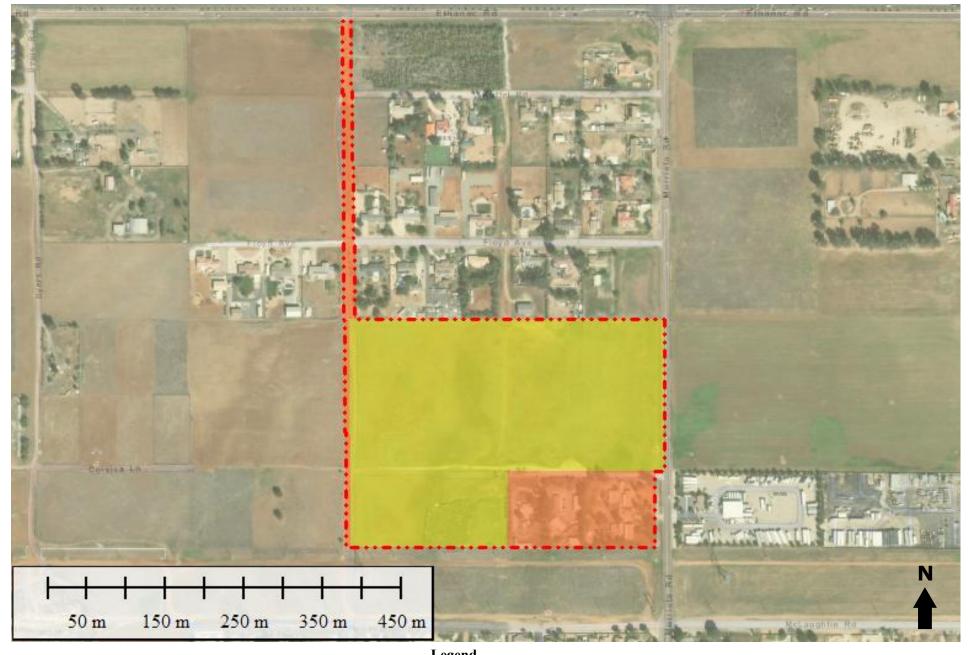


Figure 4
Habitat Map
Menifee Ares
City of Menifee, Riverside County, California

Legend

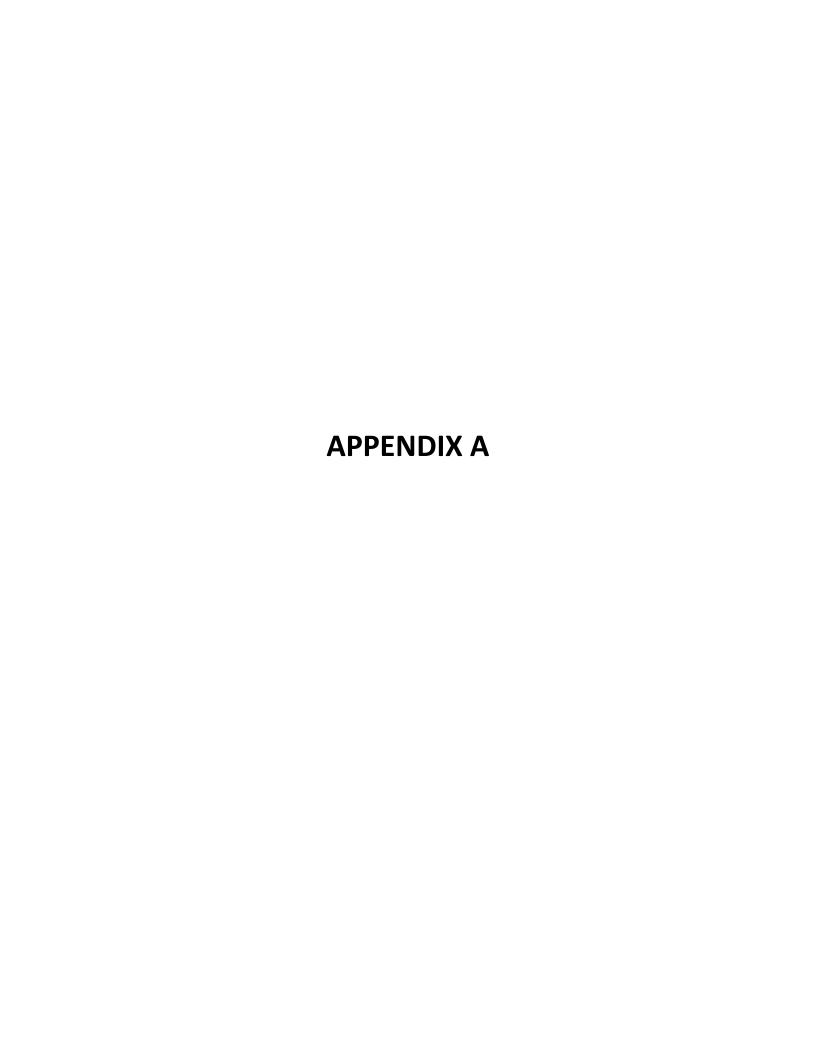
Project Site (31.5 Ac

Ruderal Habitat (29 Ac)

Disturbed Habitat (6.48 Ac - 4.68 Ac Onsite + 1.8 Ac Offsite)

Ruderal Storm Drain (0.02 Ac)

Hernandez
Environmental
Services



Species List

Plant List

Amsinckia intermedia Common fiddleneck

Artemisia californica California sagebrush

Avena barbata Slender oat

Bromus diandrus Ripgut brome

Bromus tectorum Cheatgrass

Centaurea melitensis Maltese star thistle

Centromadia pungens Common tarweed

Datura stramonium Jimson weed

Euphorbia albomardinata Rattlesnake sandmat

Helianthus annus Common sunflower

Heliotropium curassavicum Salt heliotrope

Hirschfeldia incana Shortpod mustard

Hordeum murinum Foxtail barley

Isocoma menziesii Menzies' Goldenbush

Lasthenia californica Common goldfields

Latuca serriola Prickly Lettuce

Layia platyglossa Coastal tidytips

Lepidium densiflorum Common pepper grass

Lupinus bicolor Miniature lupine

Malva parviflora Cheeseweed mallow

Onvosiphon piluliferum Stink net

Plantago erecta Dot-seed plantain

Plantago lanceolata Narrow leaved plantain

Salsola tragus Tumbleweed

Sisymbrium irio London rocket

Uropappus lindleyi Silver puffs

Animal List

Canis latrans Coyote

Circus cyaneus Northern harrier

Corvus brachyrhynchos American crow

Corvus corax Common Raven

Euphagus cyanocephalus Brewer's blackbird

Hirundo rustica Barn swallow

Otospermophilus beecheyi California ground squirrel

Passer domesticus House sparrow

Sayornis nigricans Black Phoebe

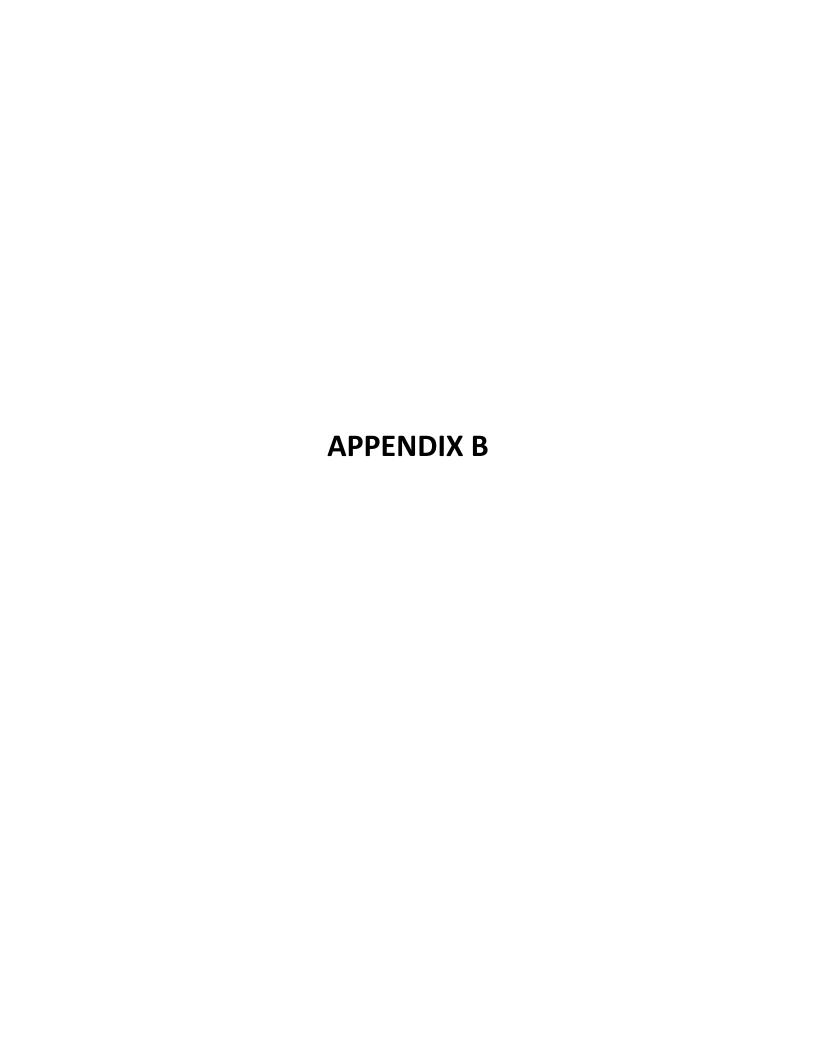
Sayornis saya Say's Phoebe

Sturnella neglecta Western Meadowlark

Sylvilagus audubonii Desert cottontail

Tyrannus verticalis Western kingbird

Zenaida macroura Mourning dove



| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--------------------------------|----------------------------|-------------|--------------|------------|-----------------------|---|--|--|--|
| Abronia villosa var. aurita | chaparral sand- verbena | Dicots | None | None | 1B.1 | Chaparral Coastal scrub Desert dunes | Chaparral, coastal scrub, desert dunes. | Sandy areas60- 1570 m. | No suitable habitat is present on site. This species is not present. |
| Allium marvinii | Yucaipa onion | Monocots | None | None | 1B.2 | Chaparral | Chaparral. | In openings on clay soils. 850-1070 m. | No suitable habitat is present on site. This species is not present. |
| Allium munzii | Munz's onion | Monocots | Endangered | Threatened | 1B.1 | Chaparral Cismontane woodland Coastal scrub Pinon & juniper woodlands Valley & foothill grassland | Chaparral, coastal scrub, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. | Heavy clay soils; grows in grasslands & openings within shrublands or woodlands. 375- 1040 m. | No suitable habitat is present on site. This species is not present. |
| Almutaster pauciflorus | alkali marsh aster | Dicots | None | None | 2B.2 | Meadow & seep | Meadow and seeps. | Alkaline. 60-765 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|-------------------------------------|-------------|--------------|------------|-----------------------|---|---|---|--|
| Ambrosia pumila | San Diego ambrosia | Dicots | Endangered | None | 18.1 | Chaparral Coastal scrub Valley & foothill grassland | Chaparral, coastal scrub, valley and foothill grassland. | Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3-580 m. | Marginally suitable habitat is present on site. However, the species was not observed during focused surveys. This species is not present. |
| Arctostaphylos rainbowensis | Rainbow manzanita | Dicots | None | None | 1B.1 | Chaparral Ultramafic | Chaparral. | Usually found in gabbro chaparral. 100-870 m. | No suitable habitat is present on site. This species is not present. |
| Astragalus pachypus var. jaegeri | Jaeger's milk- vetch | Dicots | None | None | 1B.1 | Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland | Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland. | Dry ridges and valleys and open sandy slopes; often in grassland and oakchaparral. 365-1040 m. | No suitable habitat is present on site. This species is not present. |
| Atriplex coronata var. notatior | San Jacinto Valley crownscale | Dicots | Endangered | None | 1B.1 | Alkali playa Valley & foothill grassland Vernal pool Wetland | Playas, valley and foothill grassland, vernal pools. | Alkaline areas in the San Jacinto River Valley. 35-460 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|---|---------------------------|-------------|--------------|------------|-----------------------|---|--|---|--|
| Atriplex parishii | Parish's brittlescale | Dicots | None | None | 1B.1 | Alkali playa Chenopod scrub Meadow & seep Vernal pool Wetland | Vernal pools, chenopod scrub, playas. | Usually on drying alkali flats with fine soils. 4-1420 m. | No suitable habitat is present on site. This species is not present. |
| Atriplex serenana var. davidsonii | Davidson's saltscale | Dicots | None | None | 1B.2 | Coastal bluff scrub Coastal scrub | Coastal bluff scrub, coastal scrub. | Alkaline soil. 0-480 m. | No suitable habitat is present on site. This species is not present. |
| Ayenia compacta | California ayenia | Dicots | None | None | 2B.3 | Desert wash Mojavean desert scrub Sonoran desert scrub | Mojavean desert scrub, Sonoran desert scrub. | Sandy and gravelly washes in the desert; dry desert canyons. 60-1830 m. | No suitable habitat is present on site. This species is not present. |
| Brodiaea filifolia | thread-leaved brodiaea | Monocots | Threatened | Endangered | 1B.1 | Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland Vernal pool Wetland | Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. | Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. 15-1030 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|---|-------------------------------|-------------|--------------|------------|-----------------------|---|--|--|--|
| Brodiaea santarosae | Santa Rosa Basalt brodiaea | Monocots | None | None | 1B.2 | Valley & foothill grassland | Valley and foothill grassland. | Santa Rosa Basalt. 585-1045 m. | No suitable habitat is present on site. This species is not present. |
| Calochortus plummerae | Plummer's mariposa-lily | Monocots | None | None | 4.2 | Chaparral Cismontane woodland Coastal scrub Lower montane coniferous forest Valley & foothill grassland | Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. | Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m. | No suitable habitat is present on site. This species is not present. |
| Calochortus weedii var. intermedius | intermediate mariposa-lily | Monocots | None | None | 1B.2 | Chaparral Coastal scrub Valley & foothill grassland | Coastal scrub, chaparral, valley and foothill grassland. | Dry, rocky calcareous slopes and rock outcrops. 60-1575 m. | No suitable habitat is present on site. This species is not present. |
| Caulanthus simulans | Payson's jewelflower | Dicots | None | None | 4.2 | Chaparral Coastal scrub | Chaparral, coastal scrub. | Frequently in burned areas, or in disturbed sites such as streambeds; also on rocky, steep slopes. Sandy, granitic soils. 90-2200 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|----------------------------|-------------|--------------|------------|-----------------------|--|--|--|--|
| Centromadia pungens ssp. laevis | smooth tarplant | Dicots | None | None | 1B.1 | Alkali playa Chenopod scrub Meadow & seep Riparian woodland Valley & foothill grassland Wetland | Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. | Alkali meadow, alkali scrub; also in disturbed places. 5- 1170 m. | No suitable habitat is present on site. This species is not present. |
| Chorizanthe parryi var. parryi | Parry's spineflower | Dicots | None | None | 1B.1 | Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland | Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. | Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90- 1220 m. | Marginally suitable habitat is present on site. However, the species was not observed during focused surveys. This species is not present. |
| Chorizanthe polygonoides var. longispina | long-spined spineflower | Dicots | None | None | 1B.2 | Chaparral Coastal scrub Meadow & seep Ultramafic Valley & foothill grassland Vernal pool | Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools. | Gabbroic clay. 30- 1630 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--------------------------|-------------------------------|-------------|--------------|------------|-----------------------|--|--|---|--|
| Clinopodium chandleri | San Miguel savory | Dicots | None | None | 1B.2 | Chaparral Cismontane woodland Coastal scrub Riparian woodland Ultramafic Valley & foothill grassland | Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. | Rocky, gabbroic or metavolcanic substrate. 120-975 m. | No suitable habitat is present on site. This species is not present. |
| Cryptantha wigginsii | Wiggins' cryptantha | Dicots | None | None | 1B.2 | Coastal scrub | Coastal scrub. | Often on clay soils. 45-110 m. | No suitable habitat is present on site. This species is not present. |
| Dodecahema leptoceras | slender-horned spineflower | Dicots | Endangered | Endangered | 1B.1 | Chaparral Cismontane woodland Coastal scrub | Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). | Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m. | No suitable habitat is present on site. This species is not present. |
| Dudleya multicaulis | many-stemmed dudleya | Dicots | None | None | 1B.2 | Chaparral Coastal scrub Valley & foothill grassland | Chaparral, coastal scrub, valley and foothill grassland. | In heavy, often clayey soils or grassy slopes. 1-910 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|----------------------------|-------------|--------------|------------|-----------------------|--|--|---|---|
| Eryngium aristulatum var. parishii | San Diego button-celery | Dicots | Endangered | Endangered | 1B.1 | Coastal scrub Valley & foothill grassland Vernal pool Wetland | Vernal pools, coastal scrub, valley and foothill grassland. | San Diego mesa hardpan & claypan vernal pools & southern interior basalt flow vernal pools; usually surrounded by scrub. 15-880 m. | No suitable habitat is present on site. This species is not present. |
| Geothallus tuberosus | Campbell's liverwort | Bryophytes | None | None | 1B.1 | Coastal scrub Vernal pool Wetland | Coastal scrub, vernal pools. | Liverwort known from mesic soil. 60- 610 m. | No suitable habitat is present on site. This species is not present. |
| Harpagonella palmeri | Palmer's grapplinghook | Dicots | None | None | 4.2 | Chaparral Coastal scrub Valley & foothill grassland | Chaparral, coastal scrub, valley and foothill grassland. | Clay soils; open grassy areas within shrubland. 20-955 m. | Suitable habitat is present on site. However, the species was not observed during focused surveys. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|---|----------------------------|-----------------|--------------|------------|-----------------------|--|--|--|---|
| Hesperocypari s forbesii | Tecate cypress | Gymnosperm s | None | None | 18.1 | Chaparral Closed- cone coniferous forest | Closed-cone coniferous forest, chaparral. | Primarily on north- facing slopes; groves often associated with chaparral. On clay or gabbro. 60- 1650 m. | No suitable habitat is present on site. This species is not present. |
| Juncus Iuciensis | Santa Lucia dwarf rush | Monocots | None | None | 1B.2 | Chaparral Great Basin scrub Lower montane coniferous forest Meadow & seep Vernal pool Wetland | Vernal pools, meadows and seeps, lower montane coniferous forest, chaparral, Great Basin scrub. | Vernal pools, ephemeral drainages, wet meadow habitats and streamsides. 280-2035 m. | No suitable habitat is present on site. This species is not present. |
| Lasthenia glabrata ssp. coulteri | Coulter's goldfields | Dicots | None | None | 1B.1 | Alkali playa Marsh & swamp Salt marsh Vernal pool Wetland | Coastal salt marshes, playas, vernal pools. | Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m. | No suitable habitat is present on site. This species is not present. |
| Lepidium virginicum var. robinsonii | Robinson's pepper-grass | Dicots | None | None | 4.3 | Chaparral Coastal scrub | Chaparral, coastal scrub. | Dry soils, shrubland. 4-1435 m. | Suitable habitat is present on site. However, the species was not observed during focused surveys. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|----------------------------|-------------|--------------|------------|-----------------------|---|---|--|--|
| Lilium parryi | lemon lily | Monocots | None | None | 1B.2 | Lower montane coniferous forest Meadow & seep Riparian forest Upper montane coniferous forest Wetland | Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. | Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows & seeps. 625-2930 m. | No suitable habitat is present on site. This species is not present. |
| Limnanthes alba ssp. parishii | Parish's meadowfoam | Dicots | None | Endangered | 1B.2 | Lower montane coniferous forest Meadow & seep Vernal pool Wetland | Lower montane coniferous forest, meadows and seeps, vernal pools. | Vernally moist areas and temporary seeps of highland meadows and plateaus; often bordering lakes and streams. 605-1805 m. | No suitable habitat is present on site. This species is not present. |
| Monardella hypoleuca ssp. intermedia | intermediate monardella | Dicots | None | None | 1B.3 | Chaparral Cismontane woodland Lower montane coniferous forest | Chaparral, cismontane woodland, lower montane coniferous forest (sometimes). | Often in steep, brushy areas. 195- 1675 m. | No suitable habitat is present on site. This species is not present. |
| Myosurus minimus ssp. apus | little mousetail | Dicots | None | None | 3.1 | Valley & foothill grassland Vernal pool Wetland | Vernal pools, valley and foothill grassland. | Alkaline soils. 20-640 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-------------------------|-------------------------------------|-------------|--------------|------------|-----------------------|---|--|---|--|
| Nama stenocarpa | mud nama | Dicots | None | None | 2B.2 | Marsh & swamp Wetland | Marshes and swamps. | Lake shores, river banks, intermittently wet areas. 15-815 m. | No suitable habitat is present on site. This species is not present. |
| Navarretia fossalis | spreading navarretia | Dicots | Threatened | None | 18.1 | Alkali playa Chenopod scrub Marsh & swamp Vernal pool Wetland | Vernal pools, chenopod scrub, marshes and swamps, playas. | San Diego hardpan and San Diego claypan vernal pools; in swales & vernal pools, often surrouded by other habitat types. 15- 850 m. | No suitable habitat is present on site. This species is not present. |
| Navarretia prostrata | prostrate vernal pool navarretia | Dicots | None | None | 1B.2 | Coastal scrub Meadow & seep Valley & foothill grassland Vernal pool Wetland | Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps. | Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m. | No suitable habitat is present on site. This species is not present. |
| Orcuttia californica | California Orcutt grass | Monocots | Endangered | Endangered | 1B.1 | Vernal pool Wetland | Vernal pools. | 10-660 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|---|-------------|--------------|------------|-----------------------|--|---|--|--|
| Pseudognapha lium leucocephalu m | white rabbit- tobacco | Dicots | None | None | 2B.2 | Chaparral Cismontane woodland Coastal scrub Riparian woodland | Riparian woodland, cismontane woodland, coastal scrub, chaparral. | Sandy, gravelly sites. 35-515 m. | No suitable habitat is present on site. This species is not present. |
| Scutellaria bolanderi ssp. austromontan a | southern mountains skullcap | Dicots | None | None | 1B.2 | Chaparral Cismontane woodland Lower montane coniferous forest | Chaparral, cismontane woodland, lower montane coniferous forest. | In gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425- 2000 m. | No suitable habitat is present on site. This species is not present. |
| Sibaropsis hammittii | Hammitt's clay- cress | Dicots | None | None | 1B.2 | Chaparral Valley & foothill grassland | Valley and foothill grassland, chaparral. | Mesic microsites in open areas on clay soils in Stipa grassland. Often surrounded by Adenostoma chaparral. 715-1040 m. | No suitable habitat is present on site. This species is not present. |
| Sidalcea neomexicana | salt spring checkerbloom | Dicots | None | None | 2B.2 | Alkali playa Chaparral Coastal scrub Lower montane coniferous forest Mojavean desert scrub Wetland | Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. | Alkali springs and marshes. 3-2380 m. | No suitable habitat is present on site. This species is not present. |
| Southern Coast Live Oak Riparian Forest | Southern Coast Live Oak Riparian Forest | Riparian | None | None | | Riparian forest | | | Not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|---|-------------|--------------|------------|-----------------------|------------------------------|------------------------------|--|--|
| Southern Cottonwood Willow Riparian Forest | Southern Cottonwood Willow Riparian Forest | Riparian | None | None | | Riparian forest | | | Not present. |
| Southern Interior Basalt Flow Vernal Pool | Southern Interior Basalt Flow Vernal Pool | Herbaceous | None | None | | Vernal pool Wetland | | | Not present. |
| Southern Riparian Scrub | Southern Riparian Scrub | Riparian | None | None | | Riparian scrub | | | Not present. |
| Southern Sycamore Alder Riparian Woodland | Southern Sycamore Alder Riparian Woodland | Riparian | None | None | | Riparian woodland | | | Not present. |
| Sphaerocarpos drewiae | bottle liverwort | Bryophytes | None | None | 1B.1 | Chaparral Coastal scrub | Chaparral, coastal scrub. | Liverwort in openings; on soil. 60- 585 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-------------------------------|--------------------------|-------------|--------------|------------|-----------------------|---|--|--|--|
| Symphyotrich um defoliatum | San Bernardino aster | Dicots | None | None | 1B.2 | Cismontane woodland Coastal scrub Lower montane coniferous forest Marsh & swamp Meadow & seep Valley & foothill grassland | Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. | Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m. | No suitable habitat is present on site. This species is not present. |
| Texosporium sancti-jacobi | woven-spored lichen | Lichens | None | None | 3 | Chaparral | Chaparral. | Open sites; in California with Adenostoma fasciculatum, Eriogonum, Selaginella. Found on soil, small mammal pellets, dead twigs, and on Selaginella. 60-870 m. | No suitable habitat is present on site. This species is not present. |
| Tortula californica | California screw moss | Bryophytes | None | None | 1B.2 | Chenopod scrub Valley & foothill grassland | Chenopod scrub, valley and foothill grassland. | Moss growing on sandy soil. 45-750 m. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Rare Plant Rank | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|------------------------------------|-------------|--------------|------------|-----------------------|---|---|---|--|
| Trichocoronis wrightii var. wrightii | Wright's trichocoronis | Dicots | None | None | 2B.1 | Marsh & swamp Meadow & seep Riparian forest Vernal pool Wetland | Marshes and swamps, riparian forest, meadows and seeps, vernal pools. | Mud flats of vernal lakes, drying river beds, alkali meadows. 5-435 m. | No suitable habitat is present on site. This species is not present. |
| Valley Needlegrass Grassland | Valley Needlegrass Grassland | Herbaceous | None | None | | Valley & foothill grassland | | | Not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|------------------------------------|---|-------------|--------------|------------|---|--|---|--|--|
| Accipiter cooperii | Cooper's hawk | Birds | None | None | CDFW_WL-Watch List IUCN_LC- Least Concern | Cismontane woodland Riparian forest Riparian woodland Upper montane coniferous forest | Woodland, chiefly of open, interrupted or marginal type. | Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks. | No suitable habitat is present on site. This species is not present. |
| Agelaius tricolor | tricolored blackbird | Birds | None | Threatened | BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_EN- Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern | Freshwater marsh Marsh & swamp Swamp Wetland | 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. | No suitable habitat is present on site. This species is not present. |
| Aimophila ruficeps canescens | southern California rufous- crowned sparrow | Birds | None | None | CDFW_WL-Watch List | Chaparral Coastal scrub | Resident in Southern California coastal sage scrub and sparse mixed chaparral. | Frequents relatively steep, often rocky hillsides with grass and forb patches. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--------------------------|--|-------------|--------------|------------|--|---|---|---|--|
| Anaxyrus californicus | arroyo toad | Amphibians | Endangered | None | CDFW_SSC- Species of Special Concern IUCN_EN- Endangered | Desert wash Riparian scrub Riparian woodland South coast flowing waters South coast standing waters | Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. | Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range. | No suitable habitat is present on site. This species is not present. |
| Anniella stebbinsi | Southern California legless lizard | Reptiles | None | None | CDFW_SSC- Species of Special Concern USFS_S- Sensitive | Broadleaved upland forest Chaparral Coastal dunes Coastal scrub | Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. | Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|---------------------------------|----------------------------|-------------|--------------|------------|---|---|--|---|--|
| Aquila chrysaetos | golden eagle | Birds | None | None | BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC- Least Concern USFWS_BCC-Birds of Conservation Concern | Broadleaved upland forest Cismontane woodland Coastal prairie Great Basin grassland Great Basin scrub Lower montane coniferous forest Pinon & juniper woodlands Upper montane coniferous forest Valley & foothill grassland | Rolling foothills, mountain areas, sage-juniper flats, and desert. | Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas. | No suitable habitat is present on site. This species is not present. |
| Arizona elegans occidentalis | California glossy snake | Reptiles | None | None | CDFW_SSC- Species of Special Concern | | Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. | Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-------------------------------|---------------------------------|-------------|--------------|------------|---|---|---|--|--|
| Artemisiospiza belli belli | Bell's sage sparrow | Birds | None | None | CDFW_WL-Watch List USFWS_BCC- Birds of Conservation Concern | Chaparral Coastal scrub | Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. | Nest located on the ground beneath a shrub or in a shrub 6- 18 inches above ground. Territories about 50 yds apart. | No suitable habitat is present on site. This species is not present. |
| Asio otus | long-eared owl | Birds | None | None | CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern | Cismontane woodland Great Basin scrub Riparian forest Riparian woodland Upper montane coniferous forest | Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. | Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding. | No suitable habitat is present on site. This species is not present. |
| Aspidoscelis hyperythra | orange- throated whiptail | Reptiles | None | None | CDFW_WL-Watch List IUCN_LC- Least Concern USFS_S-Sensitive | Chaparral Cismontane woodland Coastal scrub | Inhabits low- elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. | Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-----------------------------------|----------------------|-------------|--------------|-------------------------|--|--|--|---|--|
| Aspidoscelis tigris stejnegeri | coastal whiptail | Reptiles | None | None | CDFW_SSC- Species of Special Concern | | Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. | Ground may be firm soil, sandy, or rocky. | No suitable habitat is present on site. This species is not present. |
| Athene cunicularia | burrowing owl | Birds | None | None | BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern | Coastal prairie Coastal scrub Great Basin grassland Great Basin scrub Mojavean desert scrub Sonoran desert scrub Valley & foothill grassland | Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. | Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. | Suitable habitat is present on site. However, this species was found to not be present during focused surveys. |
| Bombus crotchii | Crotch bumble bee | Insects | None | Candidate Endangered | | | Coastal California east to the Sierra- Cascade crest and south into Mexico. | Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-----------------------------|-----------------------------|-------------|--------------|------------|---|---|--|--|--|
| Branchinecta lynchi | vernal pool fairy shrimp | Crustaceans | Threatened | None | IUCN_VU- Vulnerable | Valley & foothill grassland Vernal pool Wetland | Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. | Inhabit small, clear-water sandstone- depression pools and grassed swale, earth slump, or basalt- flow depression pools. | No suitable habitat is present on site. This species is not present. |
| Branchinecta sandiegonensis | San Diego fairy shrimp | Crustaceans | Endangered | None | IUCN_EN- Endangered | Chaparral Coastal scrub Vernal pool Wetland | Endemic to San Diego and Orange County mesas. | Vernal pools. | No suitable habitat is present on site. This species is not present. |
| Buteo regalis | ferruginous hawk | Birds | None | None | CDFW_WL-Watch List IUCN_LC- Least Concern USFWS_BCC-Birds of Conservation Concern | Great Basin grassland Great Basin scrub Pinon & juniper woodlands Valley & foothill grassland | Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. | Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|----------------------------|-------------|--------------|------------|--|--|--|---|--|
| Buteo swainsoni | Swainson's hawk | Birds | None | Threatened | BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern | Great Basin grassland Riparian forest Riparian woodland Valley & foothill grassland | Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. | Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. | No suitable habitat is present on site. This species is not present. |
| Campylorhynch us brunneicapillus sandiegensis | coastal cactus wren | Birds | None | None | CDFW_SSC- Species of Special Concern USFS_S- Sensitive USFWS_BCC-Birds of Conservation Concern | Coastal scrub | Southern California coastal sage scrub. | Wrens require tall opuntia cactus for nesting and roosting. | No suitable habitat is present on site. This species is not present. |
| Chaetodipus californicus femoralis | Dulzura pocket mouse | Mammals | None | None | CDFW_SSC- Species of Special Concern | Chaparral Coastal scrub Valley & foothill grassland | Variety of habitats including coastal scrub, chaparral & grassland in San Diego County. | Attracted to grass-chaparral edges. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-------------------------------|--|-------------|--------------|------------|--|---|--|--|--|
| Chaetodipus fallax fallax | northwestern San Diego pocket mouse | Mammals | None | None | CDFW_SSC- Species of Special Concern | Chaparral Coastal scrub | Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. | Sandy, herbaceous areas, usually in association with rocks or coarse gravel. | No suitable habitat is present on site. This species is not present. |
| Charadrius nivosus nivosus | western snowy plover | Birds | Threatened | None | CDFW_SSC- Species of Special Concern NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern | Great Basin standing waters Sand shore Wetland | Sandy beaches, salt pond levees & shores of large alkali lakes. | Needs sandy, gravelly or friable soils for nesting. | No suitable habitat is present on site. This species is not present. |
| Cicindela senilis frosti | senile tiger beetle | Insects | None | None | | Mud shore/flats Wetland | Inhabits marine shoreline, from Central California coast south to salt marshes of San Diego. Also found at Lake Elsinore | Inhabits dark- colored mud in the lower zone and dried salt pans in the upper zone. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-----------------------------------|------------------------------|-------------|--------------|------------|--|--|--|--|--|
| Circus hudsonius | northern harrier | Birds | None | None | CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern | Coastal scrub Great Basin grassland Marsh & swamp Riparian scrub Valley & foothill grassland Wetland | Coastal salt & freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. | Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas. | No suitable habitat is present on site. This species is not present. |
| Coleonyx variegatus abbotti | San Diego banded gecko | Reptiles | None | None | CDFW_SSC- Species of Special Concern | Chaparral Coastal scrub | Coastal & cismontane Southern California. | Found in granite or rocky outcrops in coastal scrub and chaparral habitats. | No suitable habitat is present on site. This species is not present. |
| Crotalus ruber | red-diamond rattlesnake | Reptiles | None | None | CDFW_SSC- Species of Special Concern USFS_S- Sensitive | Chaparral Mojavean desert scrub Sonoran desert scrub | Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains. | Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|------------------------------------|--|-------------|--------------|-------------------------|--|---|---|---|--|
| Diadophis punctatus modestus | San Bernardino ringneck snake | Reptiles | None | None | USFS_S-Sensitive | | Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams. | Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous veg. | No suitable habitat is present on site. This species is not present. |
| Dipodomys merriami parvus | San Bernardino kangaroo rat | Mammals | Endangered | Candidate Endangered | CDFW_SSC- Species of Special Concern | Coastal scrub | Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. | Needs early to intermediate seral stages. | No suitable habitat is present on site. This species is not present. |
| Dipodomys stephensi | Stephens' kangaroo rat | Mammals | Endangered | Threatened | IUCN_EN- Endangered | Coastal scrub Valley & foothill grassland | Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover. | Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-------------------|------------------------|-------------|--------------|------------|---|---|--|--|--|
| Elanus leucurus | white-tailed kite | Birds | None | None | BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern | Cismontane woodland Marsh & swamp Riparian woodland Valley & foothill grassland Wetland | Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. | Open grasslands, meadows, or marshes for foraging close to isolated, dense- topped trees for nesting and perching. | No suitable habitat is present on site. This species is not present. |
| Emys marmorata | western pond turtle | Reptiles | None | None | BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_VU- Vulnerable USFS_S-Sensitive | Aquatic Artificial flowing waters Klamath/North coast flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast stan | A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. | Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--------------------------------|-----------------------------------|-------------|--------------|------------|---|--|---|---|--|
| Eremophila alpestris actia | California horned lark | Birds | None | None | CDFW_WL-Watch List IUCN_LC- Least Concern | Marine intertidal & splash zone communities Meadow & seep | Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. | meadows, open | No suitable habitat is present on site. This species is not present. |
| Eumops perotis californicus | western mastiff bat | Mammals | None | None | BLM_S-Sensitive CDFW_SSC- Species of Special Concern WBWG_H-High Priority | Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland | Many open, semiarid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. | Roosts in crevices in cliff faces, high buildings, trees and tunnels. | No suitable habitat is present on site. This species is not present. |
| Euphydryas editha quino | quino checkerspot butterfly | Insects | Endangered | None | | Chaparral Coastal scrub | Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties. | Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-----------------------------|----------------|-------------|--------------|------------|---|---|--|---|--|
| Gila orcuttii | arroyo chub | Fish | None | None | AFS_VU- Vulnerable CDFW_SSC- Species of Special Concern USFS_S- Sensitive | Aquatic South coast flowing waters | Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins. | Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates. | No suitable habitat is present on site. This species is not present. |
| Haliaeetus leucocephalus | bald eagle | Birds | Delisted | Endangered | BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S- Sensitive USFWS_BCC-Birds of Conservation Concern | Lower montane coniferous forest Oldgrowth | Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. | Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|------------------------|--------------------------|-------------|--------------|------------|---|---|--|--|--|
| Icteria virens | yellow- breasted chat | Birds | None | None | CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern | Riparian forest Riparian scrub Riparian woodland | Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. | Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground. | No suitable habitat is present on site. This species is not present. |
| Lanius Iudovicianus | loggerhead shrike | Birds | None | None | CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern | Broadleaved upland forest Desert wash Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands Riparian woodland Sonoran desert | Broken woodlands, savannah, pinyon- juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. | Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting. | No suitable habitat is present on site. This species is not present. |
| Lasiurus xanthinus | western yellow bat | Mammals | None | None | CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority | Desert wash | Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. | Roosts in trees, particularly palms. Forages over water and among trees. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|------------------------------------|---|-------------|--------------|------------|--|---------------|---|---|--|
| Lepus californicus bennettii | San Diego black-tailed jackrabbit | Mammals | None | None | CDFW_SSC- Species of Special Concern | Coastal scrub | Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. | Coastal sage scrub habitats in Southern California. | No suitable habitat is present on site. This species is not present. |
| Linderiella occidentalis | California linderiella | Crustaceans | None | None | IUCN_NT-Near Threatened | Vernal pool | Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. | Water in the pools has very low alkalinity, conductivity, and total dissolved solids. | No suitable habitat is present on site. This species is not present. |
| Linderiella santarosae | Santa Rosa Plateau fairy shrimp | Crustaceans | None | None | | Vernal pool | Found only in the vernal pools on Santa Rosa Plateau in Riverside County. | Southern basalt flow vernal pools. | No suitable habitat is present on site. This species is not present. |
| Neolarra alba | white cuckoo bee | Insects | None | None | | | Known only from localities in Southern California. | Cleptoparasitic in the nests of perdita bees. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|------------------------------|----------------------------------|-------------|--------------|------------|--|--|--|--|--|
| Neotoma lepida intermedia | San Diego desert woodrat | Mammals | None | None | CDFW_SSC- Species of Special Concern | Coastal scrub | Coastal scrub of Southern California from San Diego County to San Luis Obispo County. | Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes. | No suitable habitat is present on site. This species is not present. |
| Nyctinomops femorosaccus | pocketed free-tailed bat | Mammals | None | None | CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern WBWG_M- Medium Priority | Joshua tree woodland Pinon & juniper woodlands Riparian scrub Sonoran desert scrub | Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. | Rocky areas with high cliffs. | No suitable habitat is present on site. This species is not present. |
| Onychomys torridus ramona | southern grasshopper mouse | Mammals | None | None | CDFW_SSC- Species of Special Concern | Chenopod scrub | Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. | Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|--------------------------------|-------------|--------------|------------|--|--|---|--|--|
| Perognathus longimembris brevinasus | Los Angeles pocket mouse | Mammals | None | None | CDFW_SSC- Species of Special Concern | Coastal scrub | Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. | Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead. | No suitable habitat is present on site. This species is not present. |
| Perognathus longimembris internationalis | Jacumba pocket mouse | Mammals | None | None | CDFW_SSC- Species of Special Concern | Coastal scrub Desert wash Sonoran desert scrub | Desert riparian, desert scrub, desert wash, coastal scrub and sagebrush. | Rarely found on rocky sites; uses all canopy coverages. | No suitable habitat is present on site. This species is not present. |
| Phrynosoma blainvillii | coast horned lizard | Reptiles | None | None | BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern | Chaparral Cismontane woodland Coastal bluff scrub Coastal scrub Desert wash Pinon & juniper woodlands Riparian scrub Riparian woodland Valley & foothill grassland | habitats, most common in lowlands along sandy washes with scattered | Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|--|--------------------------------------|-------------|--------------|------------|---|--|--|---|--|
| Plegadis chihi | white-faced ibis | Birds | None | None | CDFW_WL-Watch List IUCN_LC- Least Concern | Iviarsh & swamp | Shallow freshwater marsh. | Dense tule thickets for nesting, interspersed with areas of shallow water for foraging. | No suitable habitat is present on site. This species is not present. |
| Polioptila californica californica | coastal California gnatcatcher | Birds | Threatened | None | CDFW_SSC- Species of Special Concern NABCI_YWL- Yellow Watch List | Coastal bluff scrub Coastal scrub | Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. | Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied. | No suitable habitat is present on site. This species is not present. |

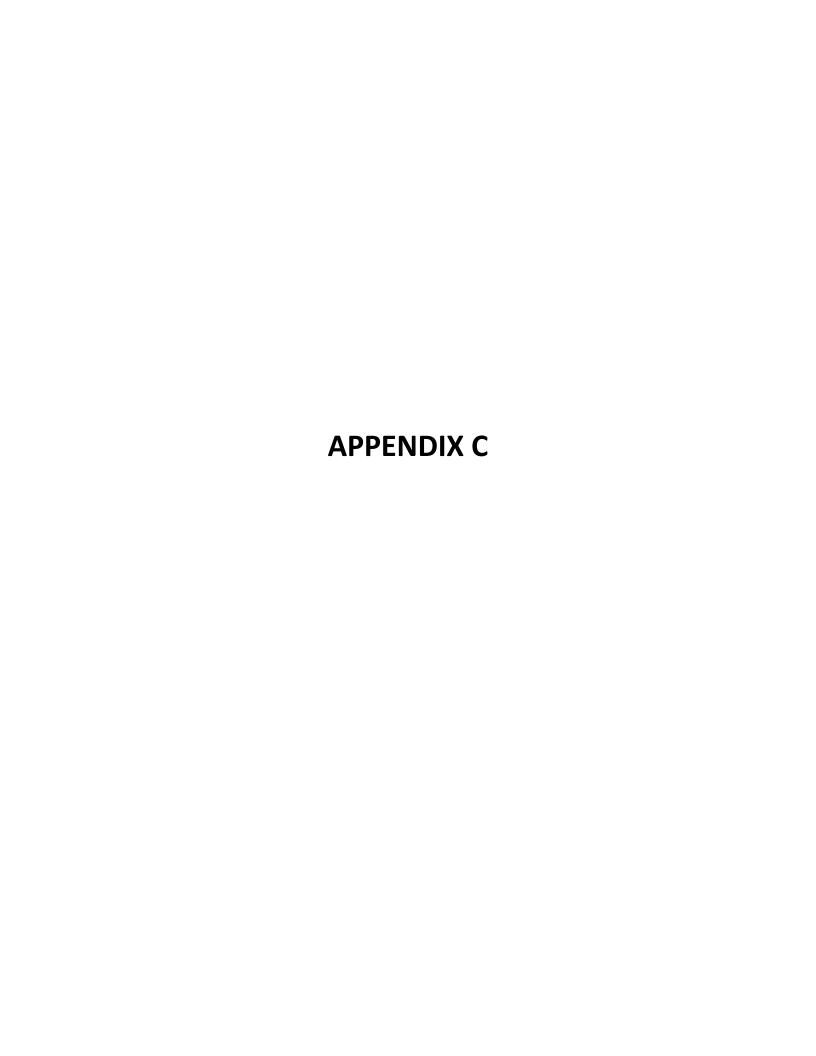
| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-------------------------------------|--------------------------------|-------------|--------------|------------|--|---|--|---|--|
| Rana draytonii | California red- legged frog | Amphibians | Threatened | None | CDFW_SSC- Species of Special Concern IUCN_VU- Vulnerable | Aquatic Artificial flowing waters Artificial standing waters Freshwater marsh Marsh & swamp Riparian forest Riparian scrub Riparian woodland Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowi | Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. | Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat. | No suitable habitat is present on site. This species is not present. |
| Salvadora hexalepis virgultea | coast patch- nosed snake | Reptiles | None | None | CDFW_SSC- Species of Special Concern | Coastal scrub | Brushy or shrubby vegetation in coastal Southern California. | Require small mammal burrows for refuge and overwintering sites. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|---------------------------|---------------------------------------|-------------|--------------|------------|---|--|---|--|--|
| Setophaga petechia | yellow warbler | Birds | None | None | CDFW_SSC- Species of Special Concern USFWS_BCC-Birds of Conservation Concern | Riparian forest Riparian scrub Riparian woodland | Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. | Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders. | No suitable habitat is |
| Socalchemmis icenoglei | Icenogle's socalchemmi s spider | Arachnids | None | None | | Coastal scrub | Known only from the type locality in the vicinity of Winchester, Riverside County. | | No suitable habitat is present on site. This species is not present. |
| Spea hammondii | western spadefoot | Amphibians | None | None | BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_NT-Near Threatened | Cismontane woodland Coastal scrub Valley & foothill grassland Vernal pool Wetland | Occurs primarily in grassland habitats, but can be found in valley- foothill hardwood woodlands. | Vernal pools are essential for breeding and egg laying. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-----------------------------|---------------------------|-------------|--------------|------------|--|--|--|---|--|
| Streptocephalus woottoni | Riverside fairy shrimp | Crustaceans | Endangered | None | IUCN_EN- Endangered | Coastal scrub Valley & foothill grassland Vernal pool Wetland | Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. | Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season. | No suitable habitat is present on site. This species is not present. |
| Taricha torosa | Coast Range newt | Amphibians | None | None | CDFW_SSC- Species of Special Concern | | Coastal drainages from Mendocino County to San Diego County. | Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|-------------------------|----------------------------|-------------|--------------|------------|--|---|---|--|--|
| Taxidea taxus | American badger | Mammals | None | None | CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern | Alkali marsh Alkali playa Alpine Alpine dwarf scrub Bog & fen Brackish marsh Broadleaved upland forest Chaparral Chenopod scrub Cismontane woodland Closed-cone coniferous forest Coastal bluff scrub Coastal dunes Coastal prairie | Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. | Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows. | |
| Thamnophis hammondii | two-striped gartersnake | Reptiles | None | None | BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern USFS_S- Sensitive | Marsh & swamp Riparian scrub Riparian woodland Wetland | Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. | Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth. | No suitable habitat is present on site. This species is not present. |

| Scientific Name | Common Name | Taxon Group | Federal List | State List | Other Status | Habitats | General Habitat | Micro Habitat | Presence/ Absence |
|----------------------------------|--------------------------------|-------------|--------------|------------|--|--|---|--|---------------------------|
| Vireo bellii pusillus | least Bell's vireo | Birds | Endangered | Endangered | IUCN_NT-Near Threatened NABCI_YWL- Yellow Watch List | Riparian forest Riparian scrub Riparian woodland | Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. | Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite. | No suitable habitat is |
| Xanthocephalus xanthocephalus | yellow- headed blackbird | Birds | None | None | CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern | Marsh & swamp Wetland | Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. | Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects. | No suitable |





View of ruderal habitat where impacts will occur followed by residential developmen in the distance. View looking north.



View of ruderal habitat on site. View looking east.



View of ruderal vegetation on site including London rocket (Sisymbrium irio) and cheeseweed mallow (Malva parviflora). View looking north.

Hernandez
Environmental
Services



View of disturbed area on site. View looking south.

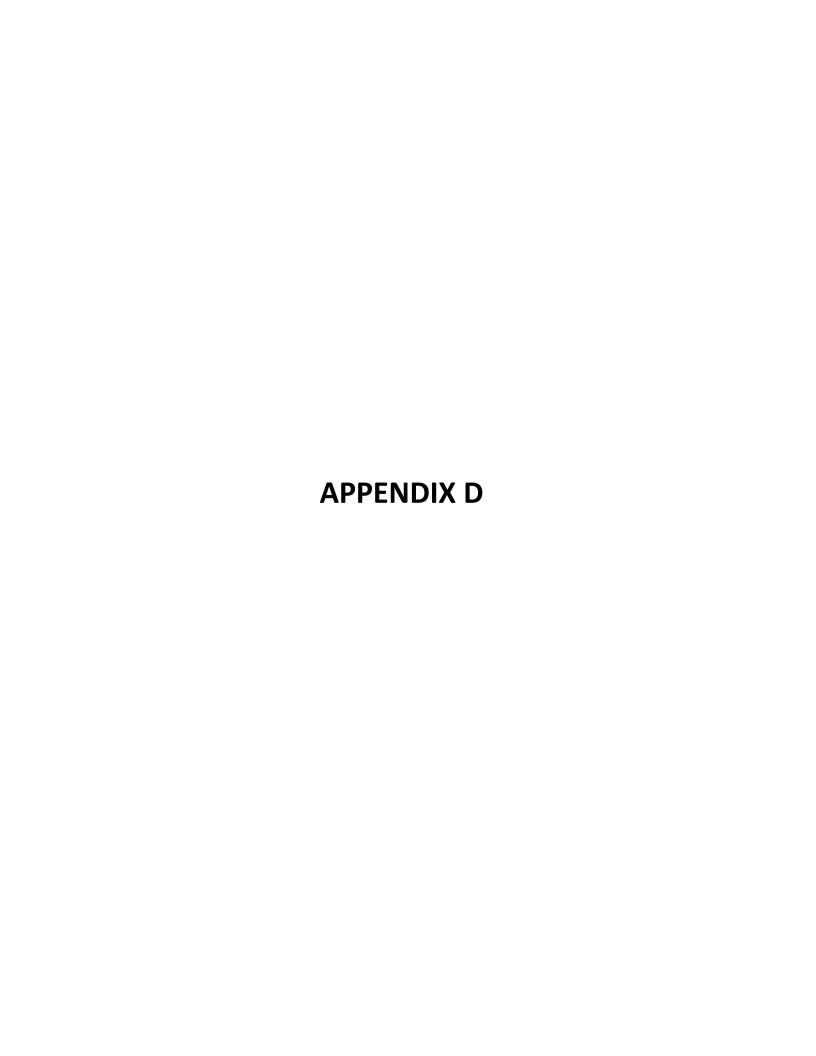


View of ruderal storm drain feature along Murrieta Road. View looking south.



View of disturbed path leading to residentic area to the north. View looking northeast.

Hernandez
Environmental
Services





MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

Special Point Features

Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15.800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California Survey Area Data: Version 16, Aug 30, 2023

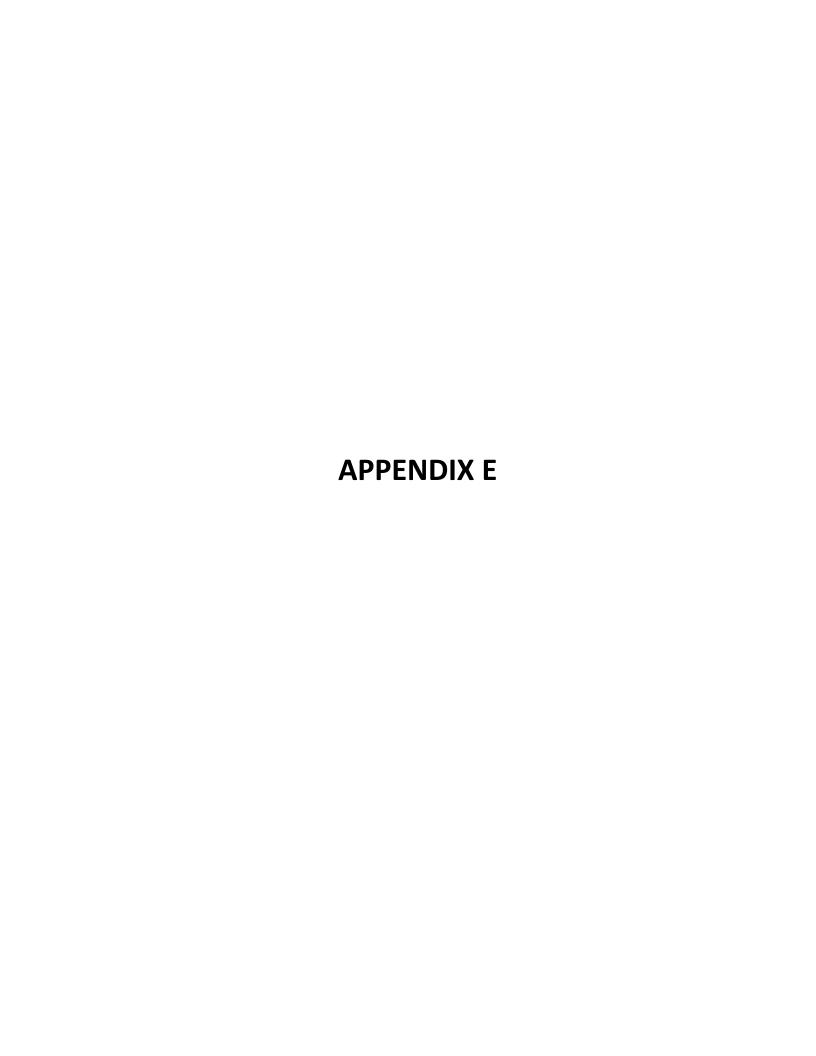
Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Mar 14, 2022—Mar 17. 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|-----------------------------|--|--------------|----------------|
| AuC | Auld clay, 2 to 8 percent slopes | 27.7 | 88.1% |
| PsC | Porterville clay, moderately deep, 2 to 8 percent slopes | 3.7 | 11.9% |
| Totals for Area of Interest | ' | 31.4 | 100.0% |





Memorandum

Date: October 6, 2023

To: Jeremy Krout, EPD Solutions, Inc.

From: Juan J. Hernandez, Principal Biologist

Subject: Focused Burrowing Owl Survey Report for the Menifee Ares Industrial

Development in the city of Menifee, Riverside County, California.

This memorandum provides the methods and results of a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) burrowing owl (*Athene cunicularia*) (BUOW) survey for the Menifee Ares Industrial Development located in the city of Menifee, Riverside County, California. The project includes the construction of an approximately 603,680 square foot industrial warehouse building with office space on approximately 29.7 acres. The project includes the construction of associated parking, landscaping, and utility improvements to serve the site. The project also includes the improvement of a portion of Geary Street between McLaughlin Road and Ethanac Road, totaling approximately 1.8 acres of offsite areas.

Project Location

The approximate 31.5-acre project site is located west of Murrieta Road and south of Ethanac Road and Floyd Avenue in the City of Menifee, Riverside County, California (Figures 1 and 2). The 31.5-acre project site consists of Riverside County APNs 330-570-001 through 330-570-033, 330-560-001 through 330-560-040, 330-571-001 through 330-571-005, and 330-210-062, 330-210-010, 330-210-011 and 330-210-013 (29.7 acres of onsite area) and a portion of Geary Street between McLaughlin Road and Ethanac Road (1.8 acres of offsite areas). Specifically, the project site is located within Township 5 South, Range 3 West in Section 17 of the Romoland United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude coordinates for the project site are 33°44'17.2339" North and 117°12'30.1666" West.

A habitat assessment conducted on the site determined that suitable habitat is present within the onsite project area; however, suitable habitat is not present within the offsite project areas. Therefore, the study area included APNs 330-570-001 through 33-570-033, 330-560-001 through 330-560-040, 330-571-001 through 330-571-005, and 330-210-062, 330-210-010, 330-210-011 and 330-210-013 and a 150-meter (500-foot) buffer around the site, where accessible (Figure 4).

Project Contact Information

Owner/Applicant: Jeremy Krout, EPD Solutions, Inc.

2030 Main Street, Suite 1200

Irvine, CA 92614

Principal Investigator: Juan J. Hernandez

Hernandez Environmental Services

17037 Lakeshore Drive Lake Elsinore, CA 92530

(909) 772-9009

Field Survey Methods

HES implemented the three steps as described in the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area*. The "General Biological Assessment and Western Riverside MSHCP Consistency Analysis" prepared for the project, determined that suitable habitat is present within the onsite project area; however, suitable habitat is not present within the offsite project areas. Therefore, focused surveys for BUOW would be required on for the onsite project area due to recorded historic observations near the site and the presence of suitable habitat documented during the March 7, 2023 habitat assessment. In accordance with the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area*, focused burrow and focused BUOW surveys (Part A and Part B, respectively) were conducted on four separate days during the breeding season: March 7, April 5, April 14, and April 25, 2023. Survey times, weather, and sunrise/sunset information is described in Table 1 below.

Table 1. Survey Information

| Survey | Date | Survey Start Time | Survey End Time | Sunrise/Sunset | Weather |
|--------|----------------|-------------------|-----------------|--------------------------|--|
| 1 | March 7, 2023 | 0630 hours | O730 hours | 0608 hours 1750 hours | 41 degrees Fahrenheit, partly cloudy, winds 0-2 miles per hour to the east |
| 2 | April 5, 2023 | 0730 hours | O820 hours | 0629 hours 1912 hours | 42 degrees Fahrenheit, clear, winds 0-3 miles per hour to the southwest |
| 3 | April 14, 2023 | O715 hours | O800 hours | 0618 hours 1918 hours | 48 degrees Fahrenheit, cloudy, winds 0-5 miles per hour to the north. |
| 4 | April 25, 2023 | O700 hours | O740 hours | 0605 hours 1927 hours | 53 degrees Fahrenheit, cloudy, winds 0-3 miles per hour to the north. |

Surveys were conducted from one hour before sunrise to two hours after sunrise or two hours before sunset to one hour after sunset and during weather that was conducive to observing owls outside their burrows and detecting BUOW sign. The surveys were not conducted during rain, high winds (> 20 miles per hour), dense fog, or temperatures above 90 degrees Fahrenheit. Surveys involved walking through potentially suitable habitat within the survey area. The pedestrian survey transects were spaced approximately 30 to 50 feet apart to allow 100 percent visual coverage of the ground surface. Special attention was paid to those habitat areas that appeared to provide suitable habitat for BUOW. Where permission to access the buffer areas could not be obtained, the biologist visually inspects adjacent habitats with binoculars.

All encountered burrows or structure entrances were checked for the presence of BUOW, molted feathers, cast pellets, prey remains, eggshell fragments, tracks, or excrement. Natural or manmade structures and debris piles that could support BUOW were also surveyed. The locations of all suitable BUOW habitat, potential burrows, BUOW sign, and any BUOW observed was recorded and mapped with a handheld Global Positioning System (GPS) unit.

All wildlife species encountered visually or audibly during the field survey were identified and recorded in field notes. Binoculars were used to aid in the identification of observed wildlife. Photographs were taken to document existing conditions within the survey area.

Results

The project site contains two different habitat types: ruderal and developed. Soils at the project site are classified Auld clay (AuC),2 to 8 percent slopes, and Porterville clay (PsC), 2 to 8 percent slopes. The project site is flat with elevation ranges from 1,417 feet above mean sea-level (AMSL) to 1,447 feet AMSL. The project site is characterized by ruderal habitat dominated by non-native vegetation and disturbed areas. The ruderal habitat appears to be continuously disturbed for weed abatement purposes.

The habitat assessment conducted on March 7, 2023 found that the project site does provide suitable burrows/nesting opportunities for BUOW. Evidence of ground squirrels and ground squirrel activities was observed, piles of debris and concrete occur on site, and approximately 10 suitable burrows were identified and recorded on the project site. BUOW signs such as molted feathers, cast pellets, and excrement found on rock outcroppings were not found. No BUOW were observed on the project site.

Based on the absence of BUOW and BUOW evidence (i.e., scat, pellets, and feathers) within the study area, it can be concluded that the study area is not in use by BUOW.

Recommendations

It is recommended that the following measures be implemented to ensure that potential impacts to BUOW are less than significant:

- No burrowing owl or burrowing owl sign was found on site during the focused surveys.
 However, due to the fact that the project site is located within the Western Riverside County
 MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the
 commencement of project 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 project activities.
- If burrowing owl are found to have colonized the project site prior to the initiation of
 construction, the project proponent will immediately inform RCA and the Wildlife Agencies
 and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA
 and the Wildlife Agencies 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.

Certification

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

Date: August 31, 2023

Juan J. Hernandez Principal Biologist

Enclosures:

Figure 1: Project Location Map

Figure 2: Project Vicinity Map

Figure 3: Project Plans

Figure 4: Survey Area Map

Figure 5: Results Map

Appendix A: Site Photographs

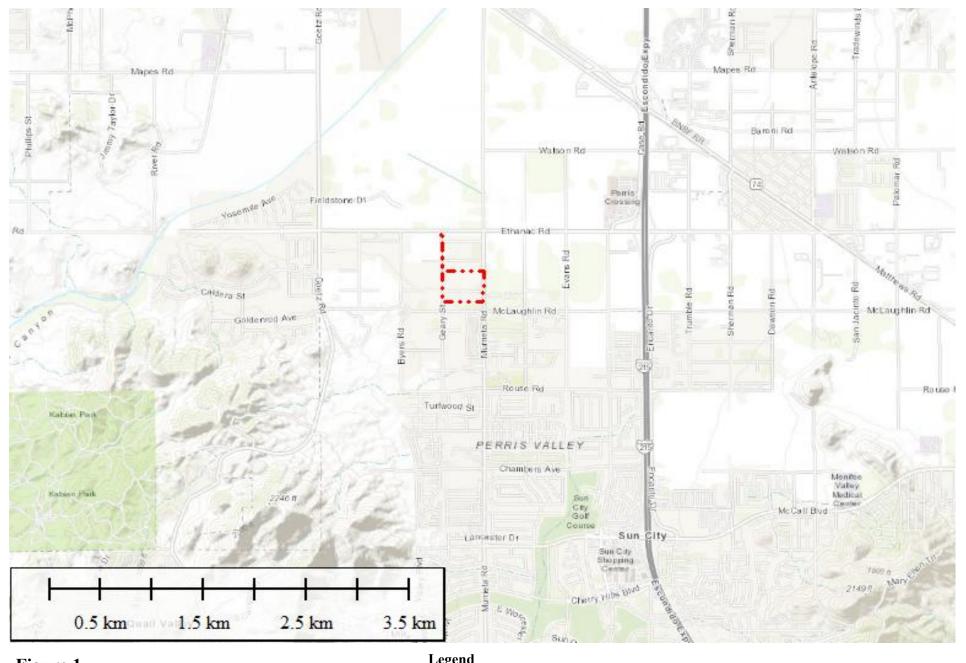
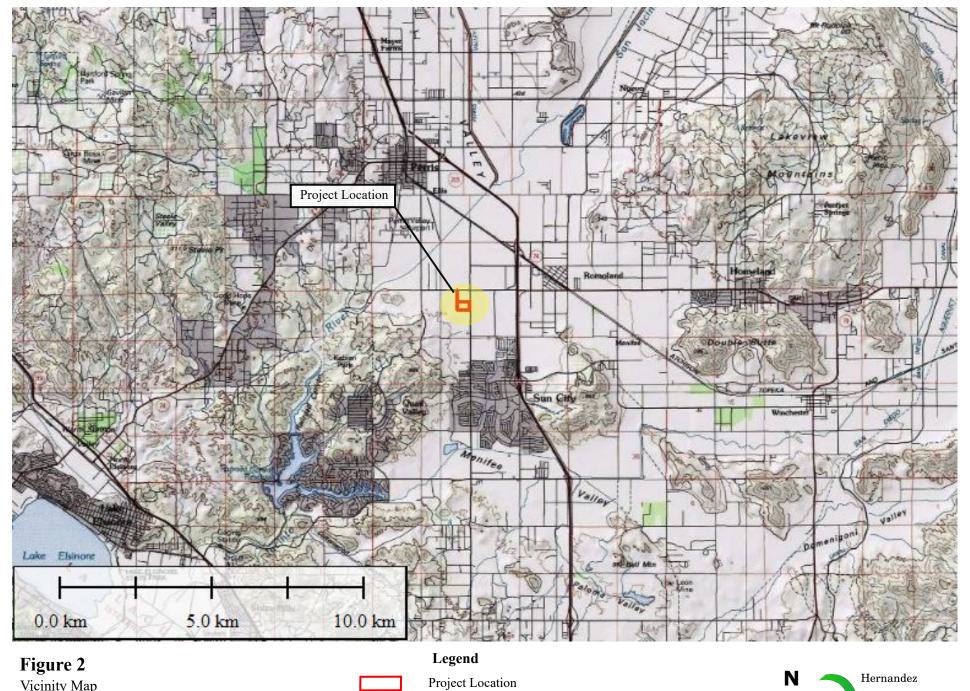


Figure 1 Location Map Menifee Ares City of Menifee, Riverside County, California

Legend

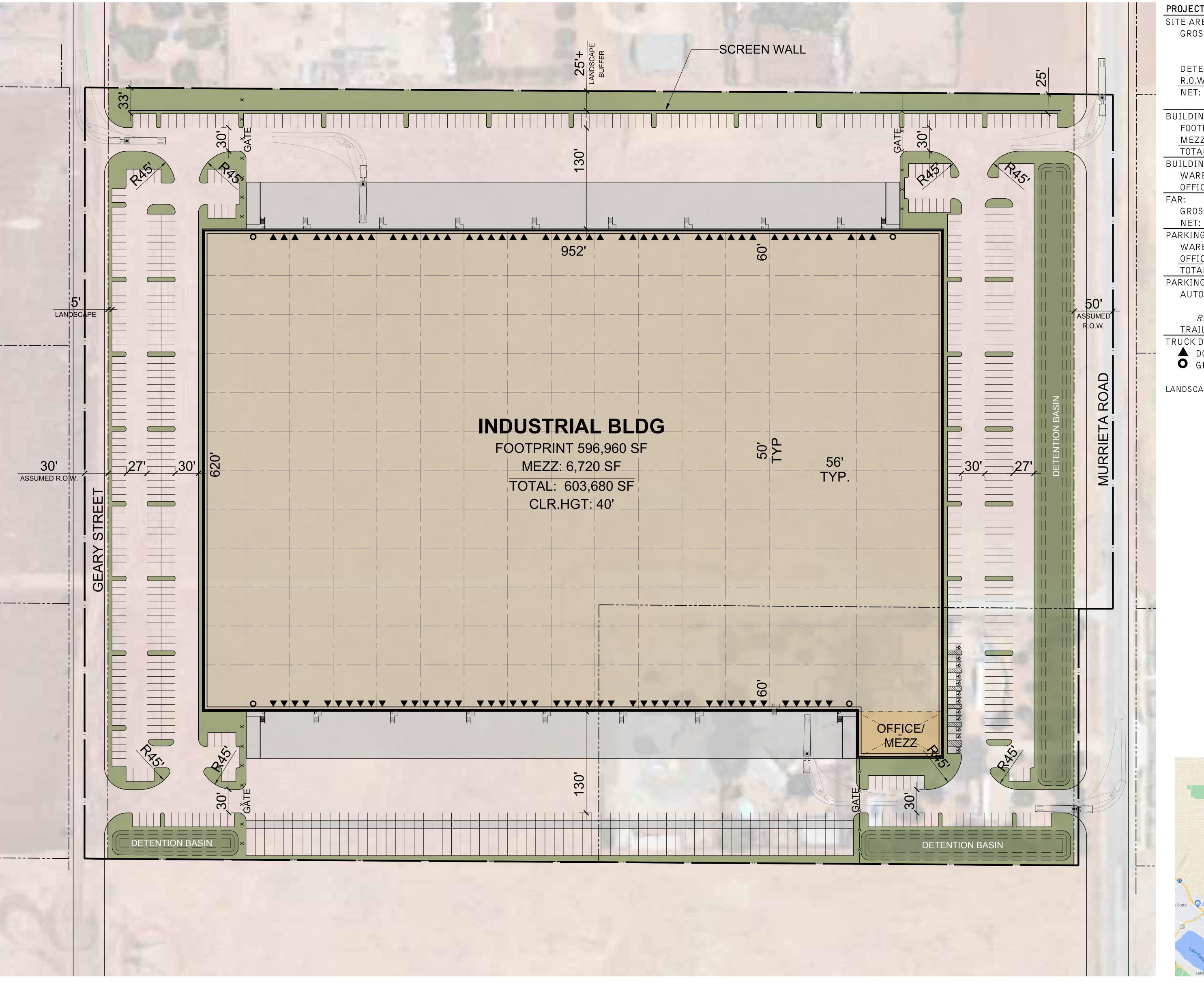
Project Location





Vicinity Map
Menifee Ares
City of Menifee, Riverside County, California





PROJECT DATA: SITE AREA: GROSS: 29.69 AC 1,293,421 SF DETENTION: @ 4% 48,043 SF R.O.W. EASEMENTS: 64,959 SF NET: 27.10 AC _1,180,419 SF BUILDING AREA: FOOTPRINT: 596,960 SF MEZZANINE: 6,720 SF TOTAL BUILDING AREA: 603,680 SF BUILDING USE: 590,240 SF WAREHOUSE OFFICE @ 2% 13,440 SF GROSS: 0.47 PARKING REQUIRED: 1/1000 SF 590 STALLS WAREHOUSE 1/300 SF 45 STALLS OFFICE TOTAL 635 STALLS PARKING PROVIDED: 635 STALLS AUTO: @1.05/1000 SF REQ. ACCESSIBLE 13 STALLS 65 STALLS TRAILER: NOTES: TRUCK DOCKS: ▲ DOCK-HIGH DOORS • GRADE-LEVEL DOORS 95,054 SF | 3 LANDSCAPE PROVIDED

DEVELOPMENT STANDARDS: ZONING: EDC-NG MAX. F.A.R.: MAX. HEIGHT: 100 FT BUILDING SETBACKS: FRONT: 25 FT REAR: 10 FT LANDSCAPE SETBACKS: LANDSCAPE REQ.: OFF-STREET PARKING: STANDARD: DRIVE AISLE: 24 FT TREE WELL: REQ. PARKING RATIO BY USE: WAREHOUSE: 1/1000 SF

MANUF

1 25 adjacent to residential.

2 Minimum parking lot shading requirements.

a) 30% for parking lots with 5-25 stalls b) 40% for parking lots with 24-29 stalls c) 50% for parking lots with more than 50 stalls

1.00

0 FT

5 FT

5 FT

5 FT

10%

9X18

5 FT

1/2000 SF

1/300 SF

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

Stormwater Management Design: AVERAGE REGIONAL REQUIRED PROVIDED

Boundary Source: PDF ALTA SURVEY

1111

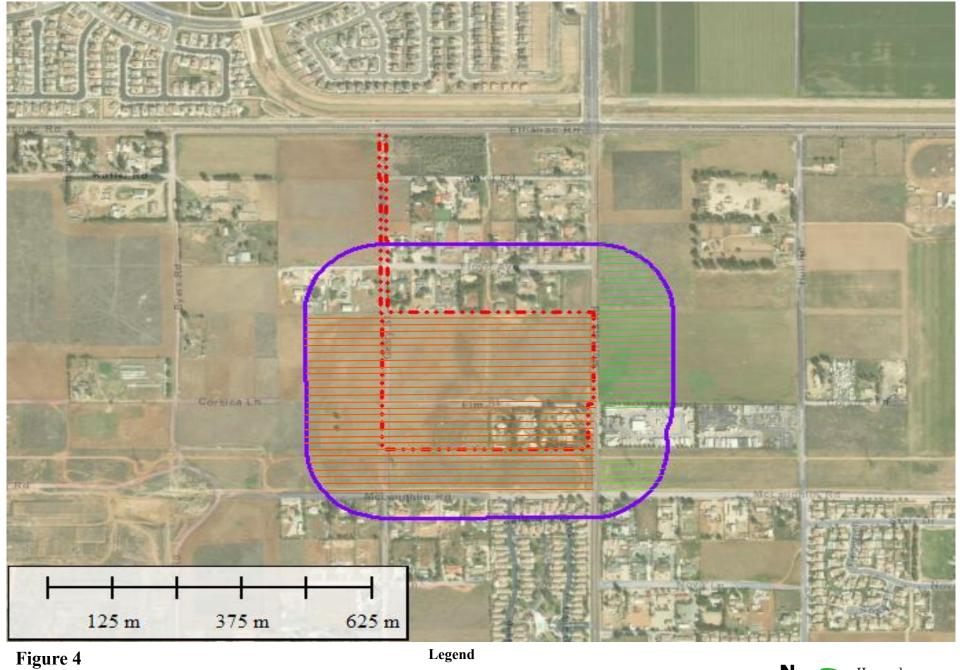
Conceptual Site Plan

Menifee, CA 92585

Murrieta Road & Ethanac Road

scheme: 03a

SHEET



BUOW Survey Map
Menifee Ares
City of Menifee, Riverside County, California

Project Location 500-Foot Buffer

Transect
Viewed with binoculars



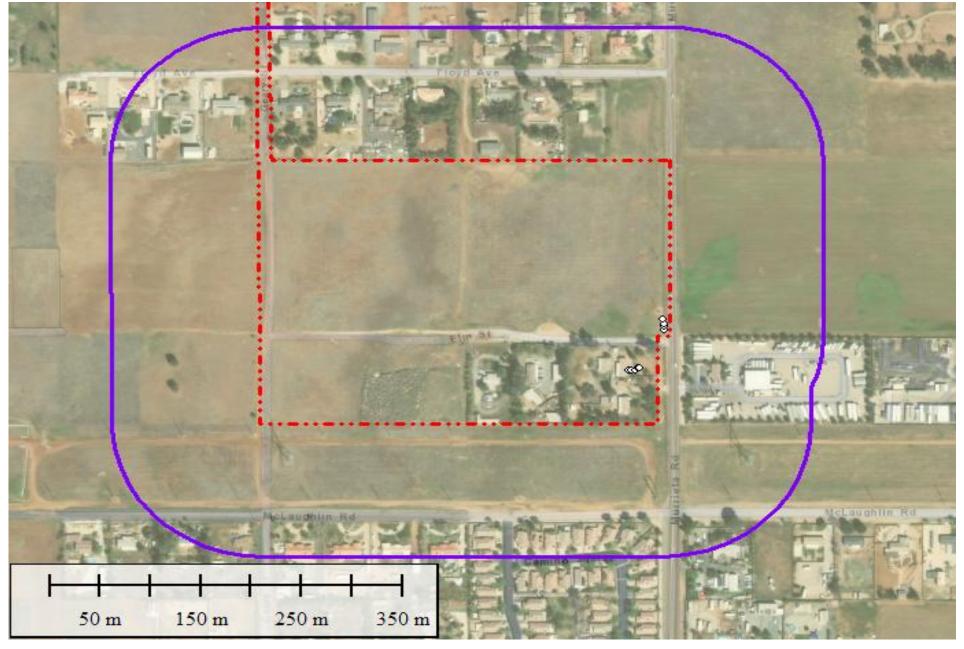


Figure 5
BUOW Survey Results Map
Menifee Ares
City of Menifee, Riverside County, California

Legend



Project Location

Suitable Burrow

500-Foot Buffer





View of ruderal habitat where impacts will occur followed by residential developmen in the distance. View looking north.



View of ruderal habitat on site. View lookinç east.



View of ruderal vegetation on site including London rocket (Sisymbrium irio) and cheeseweed mallow (Malva parviflora). View looking north.



View of disturbed area on site. View looking south.

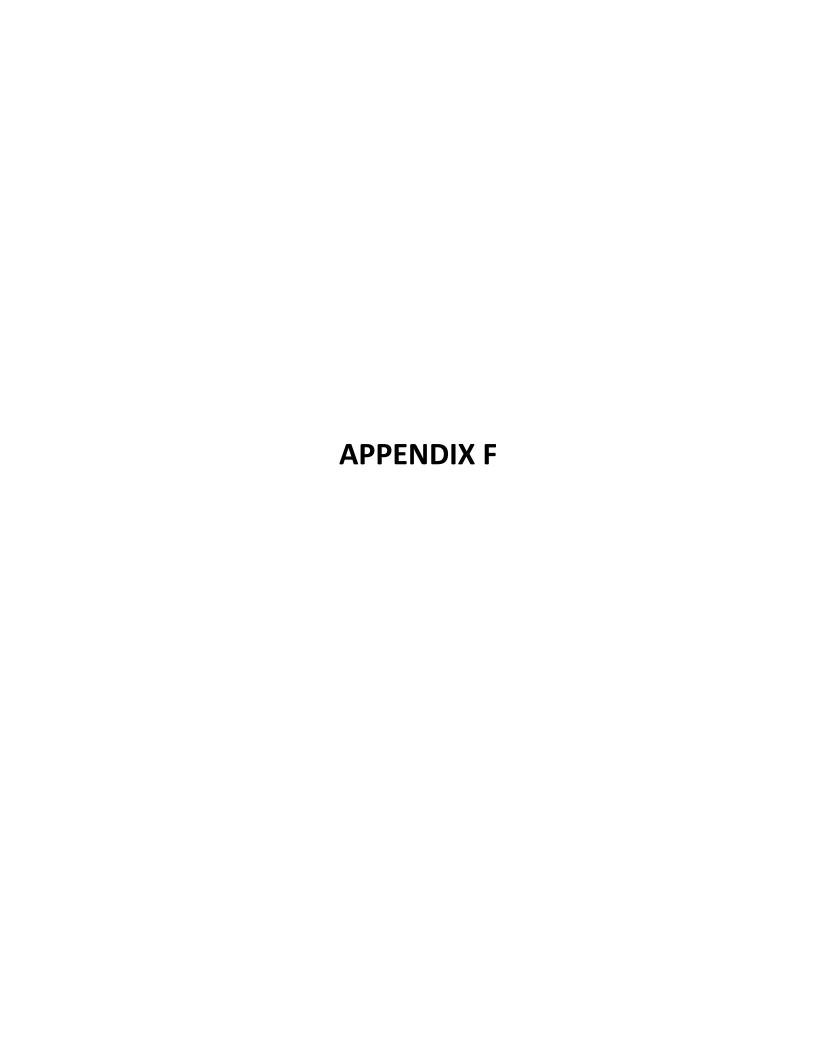


View of potentially suitable burrow onsite



View of debris piles on the site.

Hernandez
Environmental
Services





Botanical Surveys for a Property on Murrieta Road, City of Menifee Riverside County, California

APNs: 330-210-003, 330-210-004, 330-210-005,330-210-008, 330-210-010, 330-210-011, 330-210-013, 330-210-062,



July 2023

626-921-6282 WWW.BIOCULTURAL.NET P.O. BOX # 92796 PASADENA, CA 91109

BOTANICAL SURVEYS FOR A PROPERTY IN MENIFEE, CALIFORNIA

July 2023

Prepared For:

Hernandez Environmental Services 17037 Lakeshore Drive Lake Elsinore, CA 92530

Prepared by:

BioCultural LLC

TABLE OF CONTENTS

| 1 | Intro | oduction | 1 |
|----|-----------|--|----|
| | 1.1 | Property Description | 1 |
| | 1.1.1 | L Geographic Setting | 1 |
| | 1.1.2 | 2 Adjacent Lands | 2 |
| | 1.1.3 | Geology, Hydrology, Soils and Climate | 5 |
| 2 | Met | hods | 5 |
| | 2.1 | Background Analysis | 5 |
| | 2.2 | Field Surveys | 7 |
| 3 | Resu | ılts | 8 |
| | 3.1 | Preliminary Analysis | 8 |
| | 3.1.1 | Summary of Rare Plant Findings | 13 |
| | 3.2 | The following section discusses the occurrence possibility for Field Surveys | 13 |
| | 3.2.1 | l Vegetation | 13 |
| | 3.2.2 | 2 Rare Plants | 14 |
| 4 | Refe | rences | 16 |
| | | | |
| | | Table of Tables | |
| Τá | able 1. S | Soils on the Property | 5 |
| Τá | able 2. I | Rainfall totals in inches for Water Year 2022-2023 | 7 |
| Τā | able 3. I | Preliminary Analysis Results Summary | 14 |
| Τá | able 4. I | Field Survey Results Summary | 14 |

Table of Figures

| Figure 1. Location and Vicinity Map | 3 |
|--|----|
| | |
| Figure 2. Topography | 4 |
| | |
| Figure 3. Soils Map | 6 |
| Figure 4. Rare Species | 9 |
| | |
| Figure 5. Aerial Image and Photo Locations | 15 |

Appendices

Appendix A. Flora Observed

Appendix B. Site Photographs

CERTIFICATION

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

| J.M. | | |
|-----------------|------|--|
| Ricardo Montijo | | |
| BioCultural LLC | Date | |
| | | |
| | | |
| | | |

1 INTRODUCTION

Hernandez Environmental Services (HES) was retained to conduct biological surveys and studies that support the development of a Property in Menifee, Riverside County, California (Figure 1). The 29.7-acre project site is located west of Murrieta Road, east of Geary Street, south of Floyd Avenue, and north of McLaughlin Road (Figure 2). Specifically, the project site is located within Township 5 South, Range 3 West in Section 17 of the Romoland United States Geological Survey (USGS) 7.5-minute topographic quadrangle.

Due to its location, the project is outside of an MSHCP Criteria Cell but is subject to the stipulations of the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP). Approved in 2004, the MSHCP was developed by the Riverside Conservation Authority to plan for planning, development, and conservation in the region. It covers 146 plant and animal species, of which 26 are federally listed.

The stipulations of the plan include required surveys in certain portions of its 1.26-million-acre area. Among the studies required for this property is a focused botanical survey for the special status plant species that follow:

Munz's onion

Allium munzii

San Diego ambrosia

Many-stemmed dudleya

Dudleya multicaulis

Spreading navarretia

Navarretia fossalis

California Orcutt grass

Orcuttia californica

Wright's trichocoronis

Trichocoronis wrightii

1.1 Property Description

1.1.1 Geographic Setting

The approximate 29.7-acre project site is comprised of eight parcels located west of Murrieta Road, east of Geary Street, south of Floyd Avenue, and north of McLaughlin Road in the City of Menifee, Riverside County, California (Figure 2). Specifically, the project site is located within Township 5 South, Range 3 West in Section 17 of the Romoland United States Geological Survey (USGS) 7.5' topographic quadrangle (Figure 3). The center point latitude and longitude coordinates for the project site are 33°44'17.2339"

North and 117°12'30.1666" West. The parcel is level but has a shallow channel that collects water during the wettest years.

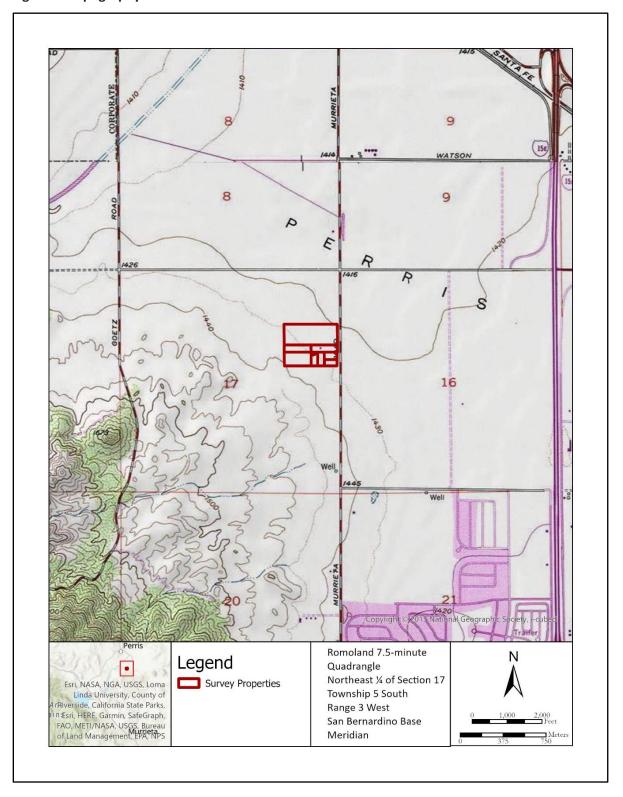
1.1.2 Adjacent Lands

The property is situated in the northernmost portion of Menifee.

Figure 1. Location and Vicinity Map



Figure 2. Topography



1.1.3 Geology, Hydrology, Soils and Climate

The project site is located on the Perris Block, which is the center of three major fault-bound blocks of the northern part of the Peninsular Ranges. Located between the Santa Ana Block to the west and the San Jacinto Block to the east the city of Perris lies near the center of the Perris block. The rocks therein are comprised of eroded materials from the ranges of mountains and hills that surround the Perris Valley. The low bedrock mountains, hills and bedrock plains have intervening sediment-filled valleys, of the Plio - Pleistocene era (Morton et al. 1989). The project site is located 0.5-mile southeast of the San Jacinto River (Figure 2).

The site consists of a flat and level site, but there are no discernable drainages to or within it, only depressions that collect nuisance water. These are <u>not</u> reminiscent of vernal pools. The elevation average is 1,400 feet.

According to the Natural Resources Conservation Service (NRCS), there are two soil types on the property listed in Table 1. The soil distribution on the property is shown in Figure 3. This region gets 15 inches of rain per year and the number of days with any measurable precipitation is 22, which is consistent with comparable areas in Southern California. There are 276 sunny days per year. The July high is around 93 degrees Fahrenheit. The January low is 42 degrees.

Table 1. Soils on the Property

| Row Labels | Soils Map Unit | Acres in AOI | Percent of AOI |
|---------------|--|--------------|----------------|
| AuC | Auld clay, 2 to 8 percent slopes | 26.6 | 92.6% |
| PsC | Porterville clay, moderately deep, 2 to 8 percent slopes | 2.1 | 7.4% |

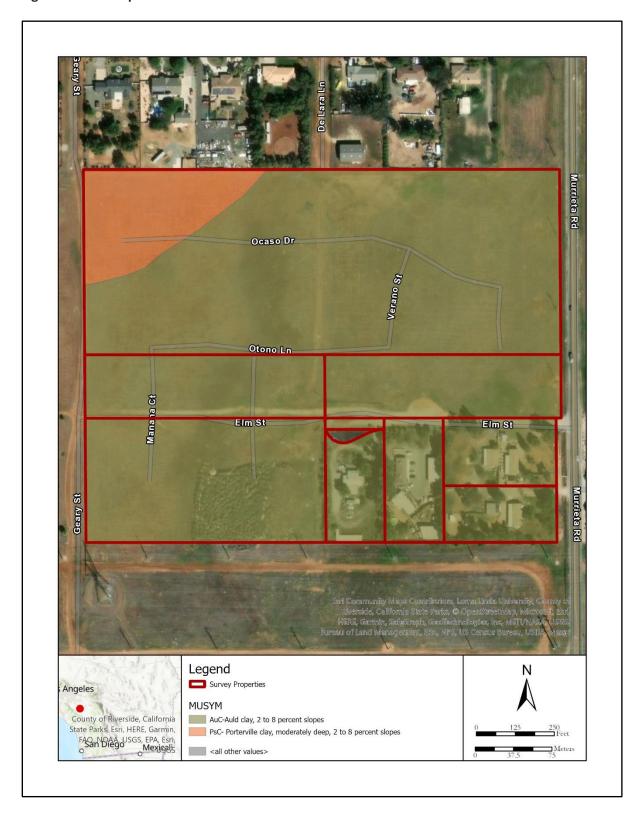
2 METHODS

2.1 Background Analysis

Pertinent plant records were reviewed prior to undertaking field surveys. The analysis included a review of records from the following sources:

 A review of collection records from participating herbaria in California available through the Consortium of California Herbaria, 2023;

Figure 3. Soils Map



- Documented rare plant occurrences compiled in the California Natural Diversity Data Base (CNDDB) by the California Department of Fish and Wildlife, 2023;
- A review of documented occurrences of common and rare plants for California in Calflora, 2023;
- Species descriptions from the Jepson Online Interchange, 2023;
- Geological maps available from the US Geological Survey (i.e., Morton et al. 1989);
- Soils data from the Natural Resources Conservation Service and available from the Web Soil Survey, 2023; and,
- Aerial photographs from Google Earth, ESRI, Digital Globe, GeoEye, US Department of Agriculture, US Geological Survey, i-cubed, Aerogrid, and Getmapping.

The background analysis yielded data that were compiled in a Geographic Information System (GIS) ArcGIS Pro 3.1. These data were available for field surveys via ESRI Field Maps for Android.

2.2 Field Surveys

Biologist Ricardo Montijo conducted botanical surveys on four non-consecutive days (1 and 22 April, 11 May, and 26 June 2023) during the 2023 growing season. Season totals ended below 10 inches at all active stations, with most locations receiving barely half of the season averages. In Temecula, where precipitation records date back to 2000, the 2022-2023 rainy season ended at 125% above normal (Table 2).

Table 2. Rainfall totals in inches for Water Year 2022-2023¹

| 0.07 | | 550 | | | | 155 | | Water Year | Percent Average | Percent Total |
|------|------|------|------|------|------|------|------|------------|--------------------|---------------|
| ОСТ | NOV | DEC | JAN | FEB | MAR | APR | MAY | to Date | to Date | of Water Year |
| 0.53 | 1.11 | 1.24 | 4.26 | 2.34 | 5.34 | 0.00 | 0.26 | 15.08 | 125 | 119 |

Biologist Ricardo Montijo conducted the botanical surveys. The surveyor noted weather and site conditions and recorded plants detected. Plants not readily identified in the field were collected and

¹ WY = Water year. The water year starts on October 1 of the previous reference year and ends on September 30 of the reference year.

pressed for subsequent identification using taxonomic keys or the assistance of the University of Riverside herbarium staff.

The days varied from clear and sunny to partly cloudy. The biologist performed the initial survey on 1 April 2023, under cloudy and cool (high of 60° F) conditions. He then performed subsequent surveys on 22 April 2023 and 11 May 2023, under partially cloudy and hazy skies, respectively. The final survey was performed under hazy sunshine with a high of 86° F. The property was systematically surveyed by walking all accessible portions ensuring that all habitats were afforded sufficient coverage to be defensible and properly inventoried. The biologist walked parallel transects, spaced 10 to 12 meters apart since many of these areas were devoid of vegetation and dominated by invasive grasses and weedy forbs noting plants observed.

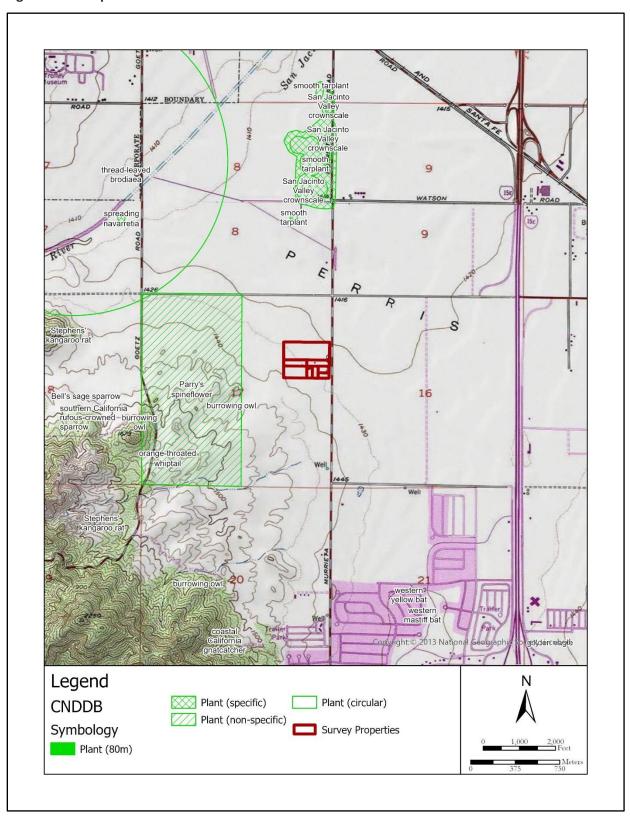
A complete list of plants observed is included in Appendix A of this report. All plant nomenclature in this report follows Baldwin *et al.* (2012).

3 RESULTS

3.1 Preliminary Analysis

The preliminary analysis of known and documented occurrences of the species evaluated in the study revealed populations of several sensitive plants near the project site (Figure 4), also known as the property. The soil phase on the property is derived from parent materials that occasionally support narrowly endemic plants, but the site is largely cleared of native vegetation (as discussed in vegetation below); however, none of the phases matched suitable conditions for criteria area vernal pool and alkaline soil plants such as Davidson's saltscale, Parish's brittlescale, Coulter's goldfields and little mousetail. Shadscale scrub, valley grasslands and vernal pools and playas with alkaline soils that smooth tarplant prefers are similarly absent. Suitable habitat for narrow endemics such as California Orcutt grass and Wright's trichocoronis is also absent from the project site. Mud nama is known from Mystic Lake and a yet-unidentified location in "Perris" where John Roos collected the plant in 1952. Although conceivable, this collection location is not precisely mapped, but seems unlikely to occur given the absence of suitable growing conditions. The following are descriptions of plants compiled from distribution and biological data that were used to evaluate the potential presence of the species during the preliminary analysis. Table 4 summarizes the results of this analysis.

Figure 4. Rare Species



Thread-leaved Brodiaea

Thread-leaved brodiaea (*Brodiaea filifolia*) is a perennial herb endemic to southern California that grows from corms or, underground bulb-like storage stems (US Fish and Wildlife Service 1998; Beacham et al. 2001; Baldwin et al. 2012). It flowers in May producing saucer-shaped violet-colored flowers on a loose umbel. The California Natural Diversity Data Base (CNDDB) and Consortium of California Herbaria report fewer than 80 disjunct occurrences of this species from the San Gabriel Mountain foothills, east to the San Bernardino Mountains, and south to San Diego County (US Fish and Wildlife Service 2009, Consortium of California Herbaria 2022, California Department of Fish and Wildlife 2022). Declines in the species attributable to development, land conversion, and other incompatible uses have prompted federal and state agencies to afford it protection under their respective endangered species acts (California Department of Fish and Wildlife 2018).

In its 2009 Five-year Review, the U.S. Fish and Wildlife Service cites published and unpublished literature to describe *B. filifolia* site preferences. According to that document, it occurs in mesic grasslands on gentle hillsides, floodplains, and valleys, in clay, loamy sand, or alkaline silty-clay substrates (US Fish and Wildlife Service 2009). Importantly, it grows in interstitial areas, where other vegetation such as coastal sage scrub surrounds the preferred grassland type (US Fish and Wildlife Service 2009).

Site conditions are not suitable for this species and the nearest confirmed record is 1.5 miles northeast of the project site (Figure 3). The author notes that this plant was in flower elsewhere during the 2023 site surveys (Appendix B: Photograph 1).

Round-leaved Filaree

(California macrophylla)

Round-leaved filaree is an annual herb that is found in chaparral, cismontane woodland, coastal sage scrub, riparian scrub; on steep north-facing slopes or in low- grade sandy washes at elevations below 1,200 meters (4,000 feet). It occurs from Northern California to northern Mexico, and it flowers from March to July. It is not state- or federally- listed but is designated a List 1B.2 (rare, threatened, or endangered in California and elsewhere) species according to the CNPS Inventory.

According to the California Consortium of Herbaria (2023) round-leaved filaree has not been documented and collected in Perris. The preliminary analysis determined that this species is unlikely to occur.

Munz's Onion

(Allium munzii)

Munz's onion is a perennial herb that grows from an underground bulb. It occurs on clay soils in valley and foothill grasslands, pinyon and juniper woodland, coastal scrub, cismontane woodland, and chaparral. It grows primarily on clay soils, usually in mesic conditions. Munz's onion flowers from March to May at elevations from 297 to 1070 meters (975 to 3500 feet).

Threats to Munz's onion include agriculture (farming and ranching), clay mining, conversion of habitat to development, and competition by non-native weeds. Munz's onion is listed as endangered by the USFWS and threatened by the CDFW. It is on List 1B.1 of the CNPS Inventory.

Site conditions are unsuitable for this species, which is typically found on slopes with clay soils in the region.

San Diego Ambrosia

(Ambrosia pumila)

San Diego ambrosia is a perennial herb that grows from an underground rhizome. It is found on sandy loam or clay, sometimes on alkaline soils. It is found in chaparral, coastal sage scrub, valley and foothill grassland, and around vernal pools. It can occur in lightly disturbed areas if conditions are right.

The closest populations are approximately eight (8) miles west of the project near Lake Elsinore (see Figure 3). San Diego ambrosia flowers from April through October at elevations from 20 to 415 meters (65 to 1400 feet).

Threats to the species include loss of habitat to agriculture and farming, as well as development, road improvement and competition with non-native plant species. San Diego ambrosia is listed as endangered by the USFWS and is on List 1B.1 of the CNPS Inventory. It is not listed by the CDFW.

No San Diego ambrosia was found during the survey.

Many-stemmed Dudleya

(Dudleya multicaulis)

Many-stemmed dudleya is a perennial succulent plant found in chaparral, coastal scrub, valley, and foothill grassland. It is normally found in heavy, often clay soils or grassy slopes from sea level to below

900 meters (3,000 feet). It is also known to grow in sandstone outcrops. This species normally blooms from April to June. There are no nearby records of this species and site conditions do not match those preferred by the species.

Smooth Tarplant

Smooth tarplant (*Centromadia pungens* ssp. *laevis*) is an annual herb that grows in shadscale scrub, valley grasslands and vernal pools and playas with alkaline soils. It occurs from the central valley down to Baja California at elevation ranges from 90 to 500 meters (270 to 1640 feet). Smooth tarplant blooms from April through September. It is not listed by the USFWS or the CDFW. It is designated a List 1B.1 (rare, threatened, or endangered in California and elsewhere) species according to the CNPS Inventory. This species may occur on the property even though the site is disturbed and covered in invasive plants. The species was found flowering on other properties in Riverside during the project survey period (Appendix B: Photograph 2)

Other Plants of Concern

Parry's Spineflower

Parry's spineflower (*Chorizanthe parryi* var. *parryi*) is a tiny annual herb that grows in openings within chaparral and coastal sage scrub. It has been collected at elevations from 900 to 3,600 feet in dry sandy soils.

This species occurs in a wide variety of conditions and has been previously reported and collected from sites near the property (see Figure 4). The preliminary analysis determined that this species had some probability of occurring on the property given the proximity of known populations.

Long-spined Spineflower

Long-spined Spineflower (*Chorizanthe polygonoides* var. *longispina*) occurs in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. It is often associated with clay soil from 100 to 5,000 feet. This species has not been found on the property. No suitable conditions occur on the property.

Palmer's Grappling Hook

Palmer's grappling hook (*Harpagonella palmeri*) is an annual plant that occurs on dry slopes and mesas to 1,500. It occurs in chaparral, coastal sage scrub, and grasslands in cismontane Southern California,

Baja California, Sonora, and Santa Catalina Island. This diminutive plant is distinguished from similar looking plants in the Borage Family by the fruit that resembles "grappling" hooks. The preliminary analysis determined that this species had a probability of occurring on the property given the proximity of known populations.

Robinson's Peppergrass

Robinson's Peppergrass (*Lepidium virginicum* var. *robinsonii*) is an annual herb with densely hairy stems that grows from three to six feet tall. This species occurs in dry soils in chaparral and coastal sage scrub below 1,600 feet in elevation. This plant occurs on dry soils in open areas, and sometimes on coarse alluvium and rocky slopes. Although it is considered uncommon within its range, it has been found in disturbed places and may occur on the project site.

Mud Nama

Mud nama (*Nama stenocarpa*) is an annual herb that occurs in muddy places in the Central and Imperial Valleys, Los Angeles, Orange, Riverside and San Diego counties and into Baja California. The species' range extends from the Colorado Desert to Texas. It grows from near sea level to over 1600 feet. The largest extant population in Riverside County is at Mystic Lake, where it grows on drying alkali pools, flowering from March to October. The location of a record from John Roos in 1952 is given as "Perris," but has never been confirmed. Given the plant's preferred growing conditions and the absence of such conditions on the Greer Property, it is unlikely to occur.

3.1.1 Summary of Rare Plant Findings

3.2 The following section discusses the occurrence possibility for Field Surveys

3.2.1 Vegetation

Vegetation on the property has been cleared of native plants in the past and at least since 1985. The site is now comprised of invasive species as shown in Appendix A: Photographs 3 through 18. Figure 5 shows locations that correspond to individual photographs.

 Table 3. Preliminary Analysis Results Summary

| Species | Likelihood of Occurrence |
|-------------------------|---|
| Thread-leaved Brodiaea | Past sightings suggest that suitable conditions exist on or near the project site for this species. |
| Round-leaved filaree | This species is unlikely to occur due to the absence of suitable growing conditions on the site. |
| Munz's onion | This species is unlikely to occur due to the absence of suitable growing conditions on the site. |
| San Diego Ambrosia | Marginally suitable conditions exist for this species. |
| Smooth tarweed | Suitable conditions exist for this species. |
| Many-stemmed Dudleya | Unlikely to occur. |
| Parry's spineflower | Marginally suitable conditions exist for this species. |
| Long spined spineflower | This species is unlikely to occur due to the absence of suitable growing conditions on the site. |
| Palmer's grapplinghook | Suitable conditions exist for this species. |
| Robinson's Peppergrass | Suitable conditions exist for this species. |
| Mud Nama | Unlikely to occur. |

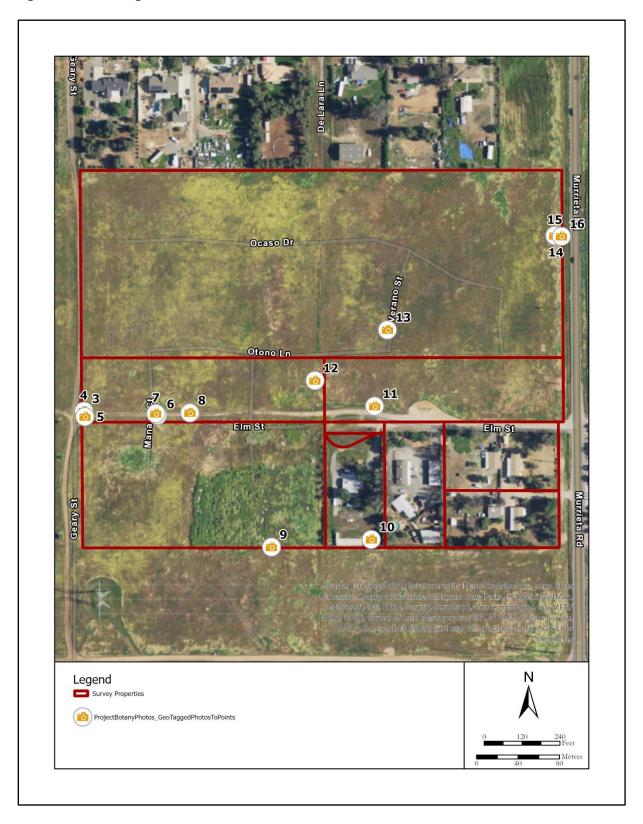
3.2.2 Rare Plants

No rare species were detected during the botanical surveys.

 Table 4. Field Survey Results Summary

| Species | Likelihood of Occurrence |
|-------------------------|----------------------------------|
| Thread-leaved Brodiaea | Not observed during 2023 surveys |
| Round-leaved filaree | Not observed during 2023 surveys |
| Munz's onion | Not observed during 2023surveys |
| San Diego ambrosia | Not observed during 2023 surveys |
| Smooth tarweed | Not observed during 2023 surveys |
| Many-stemmed dudleya | Does not occur |
| Parry's spineflower | Not observed during 2023 surveys |
| Long spined spineflower | Not observed during 2023 surveys |
| Palmer's grapplinghook | Not observed during 2023surveys |
| Robinson's peppergrass | Not observed during 2023 surveys |
| Mud nama | Does not occur |

Figure 5. Aerial Image and Photo Locations



4 REFRENCES

- Baldwin, B.G., D.H. Goldman, and L.A. Vorobik. 2012. The Jepson Manual: Vascular Plants of California.

 University of California Press, Berkeley.
- California Department of Fish and Wildlife. 2023. California Natural Diversity Data Base (Rarefind). Data available by subscription.
- California Geological Survey. 2002. California Geomorphic Provinces. Note 36.
- California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines.
- California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org Accessed 26 March 2018.
- Chase, M.W., J.L. Reveal, and M.F. Fay. 2009. A subfamilial classification for the expanded asparagalean families amaryllidaceae, asparagaceae and xanthorrhoeaceae. Botanical Journal of the Linnean Society, 161(2):132-132.
- Consortium of California Herbaria. 2023. Species Voucher Data. Available online at: http://ucjeps.berkeley.edu/consortium/. Accessed on March 20, 2018.
- Fay, M. F. and M.W. Chase, M. W. 1996. Resurrection of themidaceae for the brodiaea alliance, and recircumscription of alliaceae, amaryllidaceae and agapanthoideae. Taxon, 45(3): 441-451.
- Kennedy, M.P., and D.M. Morton. 2003 Preliminary Geologic Map of the Murrieta 7.5 Quadrangle,
 Riverside County, California. U.S. Geological Survey Open-File Report 03-189. Washington, D.C.
- Mistretta, O., and W.J. Brown. 1989. Species Management Guide for *Mahonia nevinii* (Gray) Fedde.

 Technical Report No. 4. Rancho Santa Ana Botanic Garden. Claremont, California.
- Morton, D.M. and Matti, J.C.. 1989. A vanished late Pliocene to early Pleistocene alluvial-fan complex in the northern Perris block, Southern California. In Conglomerates in Basin Analysis: A Symposium Dedicated to A.O. Woodford, (I.P. Colburn, P.L. Abbott and J. Minch, eds.), Pacific Section S.E.P.M., Vol. 62, p. 73-80.
- Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California vegetation. Second edition.

 Calif. Native Plant Society Press, in collaboration with Calif. Fish and Game. Sacramento.

- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture [a].

 Soil Survey Geographic (SSURGO) Database for [French Valley, California]. Available online at:

 http://www.arcgis.com/apps/OnePane/basicviewer/index.html?appid=a23eb436f6ec4ad69820

 00dbaddea5ea. Accessed: May 20, 2023.
- University of Idaho. 2008. Northwest GAP Analysis Project: California Land Cover. Available online at http://gap.uidaho.edu/index.php/california-land-cover/. Accessed March 15, 2018.
- U.S. Fish and Wildlife Service. 1998. Endangered and threatened wildlife and plants; determination of endangered or threatened status for four southwestern California plants from vernal wetlands and clay soils. Federal Register 63:54975-54994.
- U.S. Fish and Wildlife Service. 2009. Brodiaea filifolia (thread-leaved brodiaea); 5 Year Review:

 Summary and Evaluation. U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, Carlsbad,

 California August 13, 2009.

APPENDIX A

FLORAL COMPENDIUM

| DICOTYLEDONS EUDICOTS | |
|---|------------------------|
| AMARANTHACEAE | AMARANTHUS FAMILY |
| Amaranthus albus L. | Tumbleweed |
| APIACEAE | CELERY FAMILY |
| Daucus pusillus Michx. | Wild carrot |
| ASTERACEAE | SUNFLOWER FAMILY |
| Anthemis cotula * L. | Dog fennel |
| Artemisia californica Less. | California sagebrush |
| Centaurea melitensis * L. | Tocalote |
| Corethrogyne filaginifolia (Hook. & Arn.) Nutt. var. filaginifolia | Southern morning glory |
| Deinandra fasciculata DC | Clustered tarweed |
| Lactuca serriola *L. | Prickly lettuce |
| Lasthenia gracilis (DC.) Greene | Needle goldfields |
| Layia platyglossa (Fisch. & C.A. Mey.) A. Gray | Tidy tips |
| Helianthus annuus L. | Common sunflower |
| Matricaria discoidea DC | Pineapple weed |
| Oncosiphon pilulifer * (L.f.) Källersjö | Stinknet |
| Rafinesquia californica Nutt. | California chicory |
| Senecio vulgaris * L. | Common groundsel |
| Uropappus lindleyi (DC.) Nutt. | Silver puffs |
| BORAGINACEAE | BORAGE FAMILY |
| Amsinckia intermedia Fisch. & C.A. Mey. | Common fiddleneck |
| Amsinckia menziesii (Lehm.) A. Nelson & J.F. Machr. | Fiddleneck |
| Cryptantha intermedia (A. Gray) Greene | Common cryptanth |
| Heliotropium curassavicum L. | Chinese parsley |
| Pectocarya linearis (Ruiz & Pav.) DC. subsp. ferocula (I.M. Johnst.) Thorne | Sagebrush combseed |
| BRASSICACEAE | SUNFLOWER FAMILY |
| Brassica nigra * (L.) W.D.J. Koch | Black mustard |
| Capsella bursa-pastoris * (L.) Medik. | Shepherd's purse |

| Hirschfeldia incana * (L.) LagrFossat | Mustard |
|--|-----------------------|
| Sisymbrium irio * L | London rocket |
| Tropidocarpum gracile Hook. | Slender tropidocarpum |
| CHENOPODIACEAE | GOOSEFOOT FAMILY |
| Salsola tragus * L. | Russian thistle |
| CONVULVULACEAE | BINDWEED FAMILY |
| Calystegia macrostegia (Greene) Brummitt ssp. arida (Greene) Brummitt | Sand pygmy weed |
| CRASSULACEAE | STONECROP FAMILY |
| Crassula connata (Ruiz & Pav.) A. Berger | Sand pygmy weed |
| CUCURBITACEAE | CUCUMBER FAMILY |
| Cucurbita palmata S. Watson | Coyote melon |
| EUPHORBIACEAE | SPURGE FAMILY |
| Croton setiger Hook | Doveweed |
| Euphorbia alhomarginata Torr. & A. Gray | Rattlesnake sandmat |
| Euphorbia polycarpa Benth | Smallseed sandmat |
| FABACEAE | PEA FAMILY |
| Acmispon brachycarpus (Benth.) D.D. Sokoloff | Short-podded lotus |
| Asmispon strigosus (Nutt.) Brouillet | Strigose lotus |
| Lupinus bicolor Lindl | Lupine |
| Medicago polymorpha * L. | California burclover |
| Parkinsonia aculeata L. | Jerusalem thorn |
| Trifolium albopurpureum Torr. & A. Gray | Indian clover |
| GERANIACEAE | GERANIUM FAMILY |
| Erodium brachycarpum * (Godr.) Thell. | White stemmed filaree |
| Erodium cicutarium * (L.) L'Hér. ex Aiton | Coastal heron's bill |
| LAMIACEAE | MINT FAMILY |
| Trichostema lanceolatum Benth. | Vinegarweed |
| MALVACEAE | MALLOW FAMILY |
| Malva parviflora * L. | Cheeseweed |
| MORACEAE | MULBERRY FAMILY |
| Ficus carica * L. | Edible fig |
| PLANTAGINACEAE | PLANTAIN FAMILY |

| Plantago erecta E. Morris | California plantain | |
|---|------------------------------|--|
| MONOCOTYLEDONS | | |
| MONOCOTS | | |
| ARECACEAE | PALM FAMILY | |
| Washingtonia robusta * H. Wendl. | Mexican Fan Palm | |
| POACEAE | GRASS FAMILY | |
| Avena barbata * Pott ex Link | Slim oat | |
| Avena fatua * L. | Wildoats | |
| Bromus diandrus Roth. | Ripgut Brome | |
| Bromus hordeaceus *L | Soft chess | |
| Bromus madritensis *L | Foxtail chess, foxtail brome | |
| Bromus rubens * L. | Red brome | |
| Distichlis spicata (L.) Greene | Salt grass | |
| Festuca microstachys Nutt. | | |
| Festuca perennis * (L.) Columbus & J.P. Sm. | Italian rye grass | |
| Hordeum murinum *L. | Foxtail barley | |
| Phalaris paradoxa *L | Hood canarygrass | |
| Schismus barbatus * (L.) Thell. | Old han schismus | |

+nonnative species

^{**}rare species

APPENDIX B

Site Photographs



Photograph 1. A thread-leaved brodiaea blooming on 5 May 2023. The surveys were conducted during the flowering season for MSHCP plant species known to overlap or occur near the site.



Photograph 2. A smooth Tarplant (*Centromadia pungens* ssp. *laevis*) blooming on 20 June 2023; the species was in flower at a site approximately 5 miles south of the project parcel.



Photograph 3. The above photograph, taken facing east shows the dominant invasive grasses and forbs on the alignment south of the property.



Photograph 4. This photograph oriented facing west from Geary Street shows predominant non-native grasses and developed adjacent lands.



Photograph 5. The above photograph illustrates dominant vegetation of weedy forbs and grasses on the project site. Image faces north/northeast.



Photograph 6. This east-facing image shows a residential area located west in the distance.



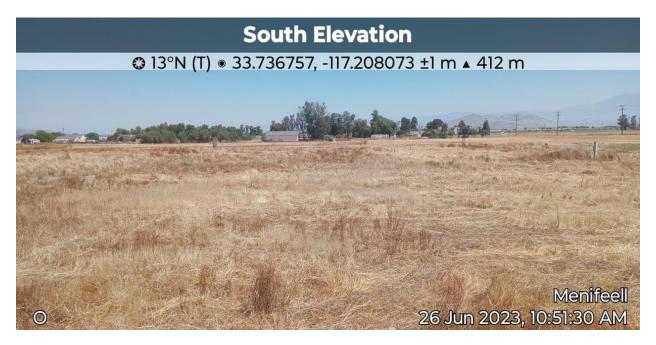
Photograph 7. In the foreground are slender oats (Avena barbata). This image faces south.



Photograph 8. This south-facing photograph shows the weedy dense vegetation on the southern property boundary.



Photograph 9. This image shows the vegetation on the ground near the western limits of the property.



Photograph 10. This photograph was taken from mid-property and faces south, and the development located south of the parcel.



Photograph 11. The property as it appeared in late June 2023 is shown above. The photograph is facing east.



Photograph 12. This image faces east from the southern parcel boundary (note the mountains in the background).



Photograph 13. This image faces east from the northern parcel.



Photograph 14. This image faces west from the northern parcel.



Photograph 15. This image faces southwest from the west middle portion of the northernmost parcel.



Photograph 16. This image faces east from the northern parcel.