

## GENERAL BIOLOGICAL ASSESSMENT REPORT FOR ASSESSORS PARCEL NUMBER 486-240-010

# CITY OF MORENO VALLEY RIVERSIDE COUNTY, CALIFORNIA

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### 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	3
2.	1.2 Project Relationship to the Western Riverside County MSHCP	4
2.2	Field Survey	5
3.0	Existing Conditions and Results	5
3.1	Environmental Setting	5
3.2	Soils	5
3.3	Plant and Habitat Communities	6
3.4	Wildlife	6
3.5	Regional Connectivity/Wildlife Movement	7
4.0	Sensitive Biological Resources	7
4.1	Threatened and Endangered Species	7
4.	1.1 Threatened and Endangered Plants	7
4.	1.2 Threatened and Endangered Animals	10
4.2	Nesting Birds	13
4.3	Jurisdictional Waters	13
5.0	Project Impacts	14
5.1	Impacts to Existing Habitats	14
5.2	Impacts to Sensitive Species	14
5.3	Impacts to Nesting Birds	14
5.4	Impacts to Critical Habitat	.14
5.5	State and Federal Drainages	. 14
5.6	Impacts to Wildlife Movement Corridors	.14
5.7	Conflict with Local Policies or Ordinances Protecting Biological Resources	14

5.8	Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community	1
Cor	nservation 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	16
8.0	Certification	18
9.0	References	19

#### **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 – Jurisdictional Delineation 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 Assessor's Parcel Number (APN) 486-240-010 located in the city of Moreno Valley, Riverside County, California.

#### 1.1 Project Site Location

The approximate 8.77-acre project site is located northeast of the intersection of Brodiaea Avenue and Oliver Street in the city of Moreno Valley, Riverside County, California (Figures 1 and 2). The site consists of Riverside County APN 486-240-010. Specifically, the project site is located within Township 3 South, Range 3 West in Section 15 of the *Sunnymead* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude coordinates for the project site are 33°54'52.8184" North and 117°10'53.9480" West.

#### 1.2 Project Description

The proposed project includes the construction of 67 single-family residential units. The project also includes landscaping, a park, internal private streets, a water quality basin, and infrastructure improvements the installation of related parking lots, access driveways, private streets, and open space for recreational land use (Figure 3). The project will result in impacts to the entire 8.77-acre site.

#### 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 Moreno Valley, 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 Reche Canyon/Badlands Area Plan of the Western Riverside County MSHCP. The project site is not located within a Criteria Cell or Cell Group. The project site is not located within plan-defined areas requiring surveys for amphibian species, mammalian species, narrow endemic plant species, criteria area species, or burrowing owl (*Athene cunicularia*). Furthermore, a habitat assessment conducted on the site determined that suitable habitat for burrowing owl is not present on the project site.

The project area does contain an upland vegetated ephemeral stream and associated willow scrub habitat that would be considered riparian/riverine areas as defined in Section 6.1.2 of the Western Riverside MSHCP. No vernal pools were observed within the project boundaries.

#### 2.2 Field Survey

On July 30, 2021, HES biologists conducted a field survey of the approximate 8.77-acre project site. The ambient temperature at 7:15 a.m. was 73 degrees Fahrenheit, with 15 percent cloud coverage and winds ranging from zero to one mile per hour from the west. 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 project site consists of vacant, disturbed lands with evidence of frequent tilling for weed management. The project site is relatively flat with onsite elevations ranging from 1,553 feet above mean sea-level (AMSL) to 1,566 feet AMSL. The project site is characterized by ruderal habitat dominated by non-native vegetation, with sparse patches of willow scrub habitat. One non-continuous ephemeral stream was found onsite and generally flows north to southeast across the northeast corner of the site. Surrounding land uses include Discovery Christian Church to the north, vacant undeveloped land to the east, Oliver Street and vacant land to the west, and Brodiaea Avenue and single-family residences to the south.

#### 3.2 Soils

Three 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
Greenfield sandy loam	GyC2	2 to 8 percent slopes, eroded
Hanford coarse sandy loam	НсС	2 to 8 percent slopes

Pachappa fine sandy loam	PaC2	2 to 8 percent slopes, eroded

#### 3.3 Plant and Habitat Communities

The 8.77-acre project site contains approximately 7.52-acres of ruderal habitat, 0.05-acre of ephemeral stream, and 0.13 acre of willow scrub habitat (Figure 4). Approximately 0.10-acre of the willow scrub habitat on site is associated with the onsite ephemeral stream.

#### 3.3.1 Ruderal Habitat

The project site contains 7.52-acres of ruderal habitat. The ruderal areas found on the site are heavily disturbed with evidence of tilling. These areas are dominated by non-native plant species; however, some native species are present. Dominant species found in this habitat type include tumbleweed (*Salsola tragus*), common sunflower (*Helianthus annuus*), Johnsongrass (*Sorghum halepense*), silverleaf nightshade (*Solanum elaeagnifolium*), shortpod mustard (*Hirschfeldia incana*), and prickly lettuce (*Lactuca serriola*). Ornamental Brazilian pepper trees (*Schinus terebinthifolia*) are present along the western and southern site boundaries.

#### 3.3.2 Ephemeral Stream Habitat

The project site contains 0.05-acre of upland vegetated ephemeral stream habitat. The ephemeral stream enters the northern project site boundary via a culvert that directs the urban runoff from the parking lot to the north of the project site onto the site. The stream generally flows north to southeast across the northeast corner of the site. The banks of the stream are dominated by Johnsongrass, common sunflower and shortpod mustard.

#### 3.3.3 Willow Scrub Habitat

The project site contains 0.13-acre of patches of willow scrub habitat. Dominant species found in this habitat type include Goodding's willow (*Salix gooddingii*), red willow (*Salix laevigata*), and mulefat (*Baccharis salicifolia*).

#### 3.4 Wildlife

General wildlife species documented on the project site or within the vicinity of the site include guinea fowl (*Numida meleagris*), cottontail rabbit (*Sylvilagus audubonii*), California towhee (*Melozone crissalis*), house finch (*Haemorhous mexicanus*), and barn swallow (*Hirundo rustica*). 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 is fenced and consists of flat land characterized by ruderal habitat that appears to be continually disturbed for weed abatement purposes. Further, the project site is surrounded by urban development such as busy roads, residential uses, and commercial uses to the north, west, and south. The vacant land to the east is also bordered by urban development east. The ephemeral stream onsite is non-continuous and the associated willow scrub habitat is sparse and patchy. 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 55 sensitive species of plants and 63 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 (*Allim munzii*) is federally listed as Endangered, and State listed as Threatened; the species rank is 1B.1 in the CNPS Rare Plant Inventory. The species is found in grassy openings in coastal-sage scrub vegetation at elevations ranging from 300-900m. Its blooming period is from April to May. No suitable habitat for this species is present on site. **This species is not present.** 

#### Marsh sandwort

Marsh sandwort (*Arenaria paludicola*) is on both the federal and state Endangered Species lists and is ranked 1B.1 in the CNPS Rare Plant Inventory. Habitats it is found in include freshwater marsh, marsh and swamp, and wetland. No habitat for this species is present on the project site. **This species is not present.** 

#### Horn's Milk-Vetch

Horn's milk-vetch (*Astragalus hornii var. hornii*) is ranked 1B.1 in the CNPS Rare Plant Inventory. It is typically found in alkali playa, meadow, seep, and wetland habitats. 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 typically found in meadows and seeps, playas. No habitat for this species is present on the project site. **This species is not present.** 

#### San Jacinto Valley Crownscale

The San Jacinto Valley crownscale (*Atriplex coronata* var *notaitor*) is federally listed Endangered and rank 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes alkali playas and vernal pools. There is no habitat for this species on the project site. **This species is not present.** 

#### Parish's brittlescale

Parish's brittlescale (*Atriplex parishii*) is federally listed Endangered and rank 1B.1 in the CNPS Rare Plant Inventory. Its habitats include alkali playas and vernal pools. There is no habitat for this species on the project site. **This species is not present.** 

#### Nevin's barberry

Nevin's barberry (*Berberis nevinii*) is a federal and state Endangered Species and is ranked 1B.1 in the CNPS Rare Plant Inventory. It is typically found on steep, north facing slopes or in low grade sandy

washes. Its habitat includes chaparral, cismontane woodland, coastal scrub, and riparian scrub. 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. No habitat for this species is present on the project site. **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. No habitat for this species is present on the project site. **This species is not present.** 

#### Salt marsh bird's-beak

Salt marsh bird's -beak (*Chloropyron maritimum*) is a federal and state listed Endangered Species. Habitats it is found in include coastal dunes, marsh and swamps, salt marsh, and wetland. It is limited to the higher zones of salt marsh habitat. No habitat for this species is present on the project site. **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. No habitat for this species is present on the project site. **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.** 

#### Santa Ana River Woolystar

Santa Ana River woollystar (*Eriastrum densifolium ssp. sanctorum*) is a federally and state listed Endangered Species and is ranked 1B.1 in the CNPS Rare Plant Inventory. It is typically found in sandy soils on river floodplains or terraced fluvial deposits. Its habitat includes chaparral and coastal scrub. No habitat for this species is present on the project site. **This species is not present.** 

#### Mesa horkelia

Mesa horkelia (*Horkelia cuneata var. puberula*) is ranked 1B.1 in the CNPS Rare Plant Inventory. Its habitat includes chaparral, cismontane woodland, and coastal scrub. 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.** 

#### Gambel's water cress

Gambel's water cress (*Nasturtium gambelii*) is federally listed Endangered Species, a state listed Threatened species, and is ranked 1B.1 in the CNPS Rare Plant Inventory. It is found in freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Its habitat includes brackish marsh, freshwater marsh, marsh and swamp, and wetland. No marshes or swamps are present on the project site. **This species is not present.** 

#### Spreading navarretia

Spreading navarretia (*Navarretia fossalis*) is a state listed Threatened Species and is ranked 1B.1 in the CNPS Rare Plant Inventory. It is found in vernal pools, chenopod scrub, marshes and swamps, playas. No marshes or swamps are present on the project site. 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 18 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 Candidate Endangered 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.** 

#### 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. A habitat assessment determined that no suitable habitat for this species is present on the project site. The project site is heavily disturbed with sandy soils that are not suitable for burrowing. Further, no suitable burrows or ground squirrel activity were noted during the habitat assessment. **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 includes *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.** 

#### 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.** 

#### Santa Ana sucker

Santa Ana sucker (*Catostomus santaanae*) is a federally listed Threatened Species. Its habitat includes aquatic and south coast flowing waters. This species prefers sand-rubble-boulder bottoms, cool and clear water, and algae. It is endemic to Los Angeles Basin south coastal streams. The project site does not contain suitable habitat for this species. **This species is not present.** 

#### Western yellow-billed cuckoo

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is federally listed Threatened, and state listed Endangered Species. This species typically nests in riparian jungles of willows, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape. It is found in riparian forest habitat. 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 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.** 

#### Southwestern willow flycatcher

Southwestern willow flycatcher (*Empidonax traillii extimus*) is a federally and state listed Endangered Species. It is found in riparian woodland habitat in southern California. 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 (*Halieaeetus leucocephalus*) is state listed as Endangered and has been delisted as a federal Endangered Species. The species is fully protected under the regulations of the CDFW. It is found around wetlands, open water areas with an abundance of fish. It nests and roosts in large trees. There is no nesting habitat for this species on the project site. **The species is not present.** 

#### California black rail

California black rail (*Laterallus jamaicensis coturniculus*) is a state listed Threatened Species and is a CDFW Fully Protected Species. It inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. This species needs water depths of about one inch that do not fluctuate throughout the year and dense vegetation for nesting habitat. Its habitat includes brackish marsh, freshwater marsh, marsh and swamp, salt marsh, and wetland. The project site does not have suitable habitat for this species. **This species is not present.** 

#### Steelhead-southern California DPS

Steelhead-southern California DPS (*Oncorhynchus mykiss irideus pop. 10*) is a federally listed Endangered Species. This species is likely to have greater physiological tolerances to warmer water and more variable conditions. Its habitats include aquatic and south coast flowing waters. The project site does not have 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.** 

#### Southern mountain yellow-legged frog

Southern mountain yellow-legged frog (*Rana muscosa*) is a federally and state listed Endangered Species. It is found in aquatic habitat. This species is always encountered within a few feet of water. Tadpoles may require two to four years to complete their aquatic development. The project site does not contain suitable habitat for this species. **This species is not present.** 

#### Delhi Sands flower-loving fly

Delhi Sands flower-loving fly (*Rhaphiomidas terminates abdominalis*) is a federally listed Endangered Species. It requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation. It is found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties. This species is found in interior dune habitat. The project site does not have 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 trees and shrubs that can be utilized by nesting birds and raptors during the nesting bird season of February 1 through September 15.

#### 4.3 Jurisdictional Waters

The project site contains approximately 0.15 acre of ephemeral stream and associated riparian areas that would be considered CDFW jurisdictional and subject to Fish and Game Code Section 1602. Further, the approximately 0.05 acre (329 linear feet) of onsite ephemeral stream would be considered waters of the State under the Porter-Cologne Water Quality Control Act by the Regional Water Quality Control Board

(RWQCB). No vernal pools, wetlands, or United States Army Corps of Engineers (USACE) jurisdictional waters occur on site.

#### 5.0 Project Impacts

#### 5.1 Impacts to Existing Habitats

The development of the proposed project will impact the entire 8.77-acre project site, including approximately 7.52-acres of ruderal habitat, 0.05-acre of ephemeral stream, and 0.13-acre of willow scrub habitat.

#### 5.2 Impacts to Sensitive Species

No sensitive species have a potential to occur on the project site; therefore, no sensitive species will be impacted by this project.

#### 5.3 Impacts to Nesting Birds

If the project will remove shrubs 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 proposed residential development will result in impacts to approximately 0.15 acre (329 linear feet) of CDFW jurisdiction, including 0.05 acre of upland vegetated ephemeral stream and 0.10 acre of associated willow scrub habitat. In addition, the proposed project will result in impacts to approximately 0.05 acre of onsite waters of the State.

#### 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 Reche Canyon/Badlands 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 contains approximately 0.15 acre of habitat, including 0.05 acre of upland vegetated ephemeral stream and 0.10 acre of associated willow scrub habitat, that would be considered riparian/riverine areas as defined in Section 6.1.2 of the Western Riverside County MSHCP. While the onsite ephemeral drainage feature and associated willow scrub riparian habitat meet the definition of a riparian/riverine area according to the MSHCP, the drainage and sparse patches of willow scrub habitat do not support suitable riparian habitat with the potential to support riparian/riverine bird species. Further, none of the riparian/riverine bird species listed in Section 6.1.2 of the MSHCP were found within the project site. 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.

Implementation of the proposed project will result in impacts to approximately 0.15 acre of riparian/riverine resources, including 0.05 acre of upland vegetated ephemeral stream and 0.10 acre of associated willow scrub habitat. Offsite mitigation for impacts to 0.15 acres of upland vegetated ephemeral channel and associated riparian habitat would be provided at a 2:1 ratio. An MSHCP Determination of Biologically Equivalent or Superior Preservation (DBESP) will be prepared for impacts to 0.15 acre of riverine resources.

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 primarily comprised of sandy loams. The onsite soils do not allow for water pooling on the site for any significant length of time after rain events. 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. 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 not located within the Western Riverside County MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) pursuant to Section 6.1.3 of the MSHCP. Therefore, the NEPSSA requirements are not applicable to the project.

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, burrowing owls, 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.

#### 7.0 Recommendations

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

#### **Nesting Birds**

• It is recommended that vegetation removal be conducted during the non-nesting season for migratory birds to avoid direct impacts. The 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.

#### State Drainages

- CDFW jurisdiction and waters of the State are regulated by state governments under a no-net-loss policy. All impacts are considered significant and should be avoided to the greatest extent possible. Unavoidable and authorized impacts would require mitigation through habitat creation, restoration or enhancement as determined through consultation with the regulatory agencies during the permitting process.
- The proposed impacts to 0.15 acres of CDFW jurisdiction would require a 1602 Streambed Alteration Agreement from the CDFW. The proposed 0.05 acres of impacts to waters of the State would require waste discharge requirements (WDR) under Porter-Cologne from the Santa Ana RWQCB.
- Implementation of the proposed project will result in impacts to approximately 0.15 acres of MSHCP riverine resources. An MSHCP DBESP will be prepared for impacts to 0.15 acre of riverine resources.

#### 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	09-18-2021	Signed	Shown fatchel flumander	
			PROJECT MANAGER	
Fieldw	ork Performed By:			
Hallie	Hernandez			
ASSO	CIATE BIOLOGIST			
Elizab	eth Gonzalez			

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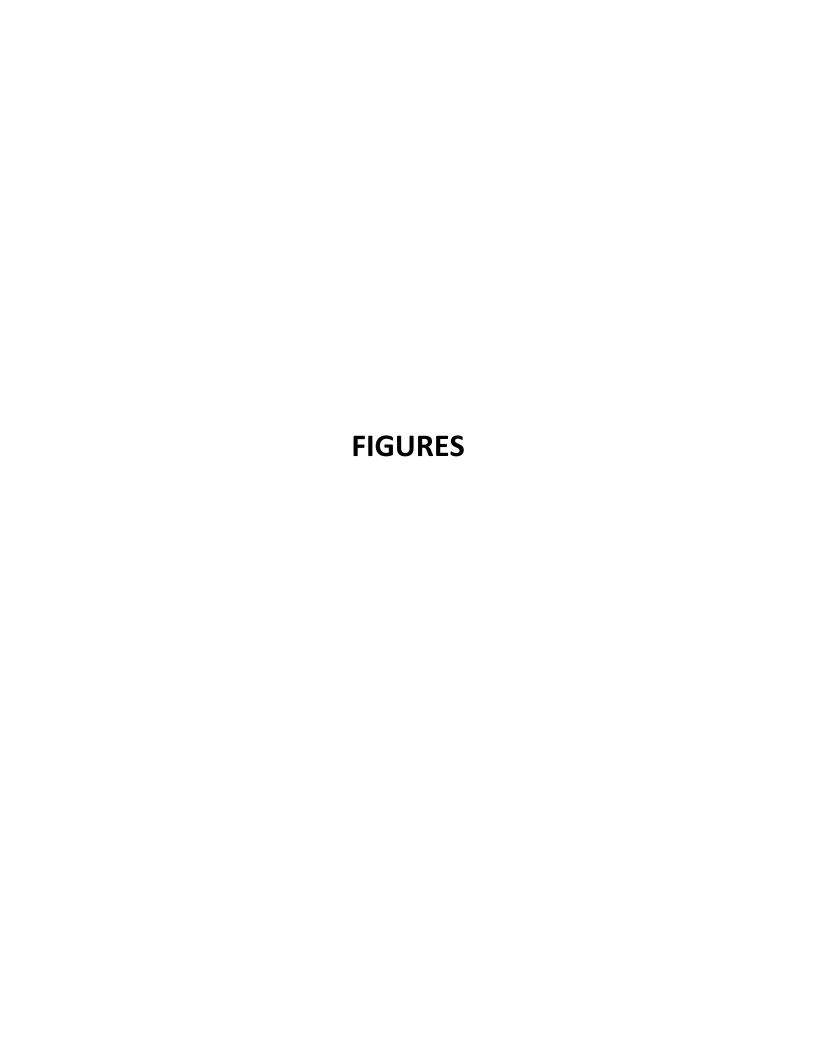
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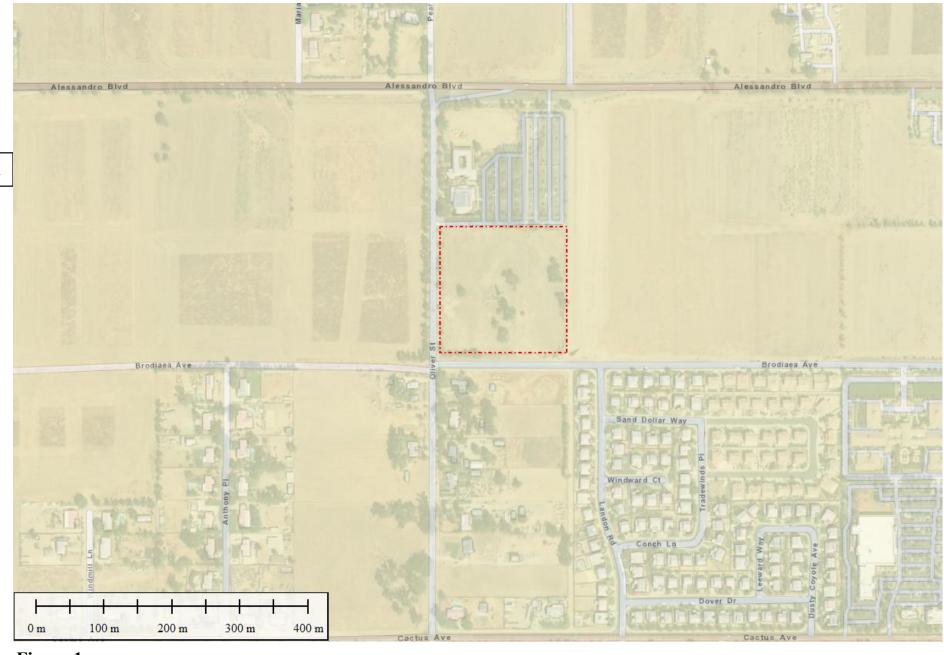


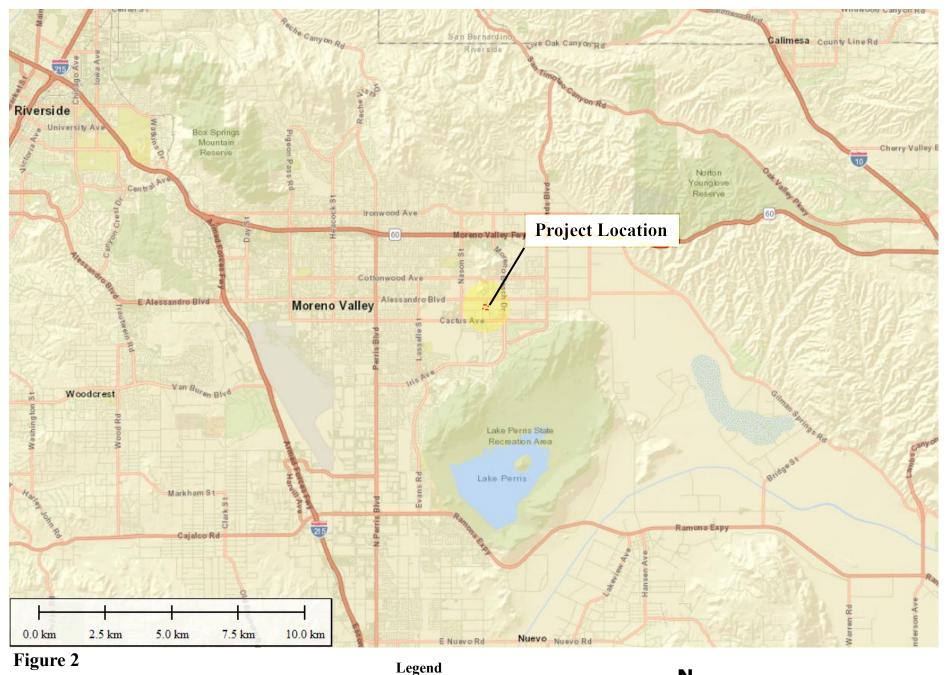
Figure 1
Location Map
APN 486-240-010
City of Moreno Valley
Riverside County, California

Legend



Project Site Boundary

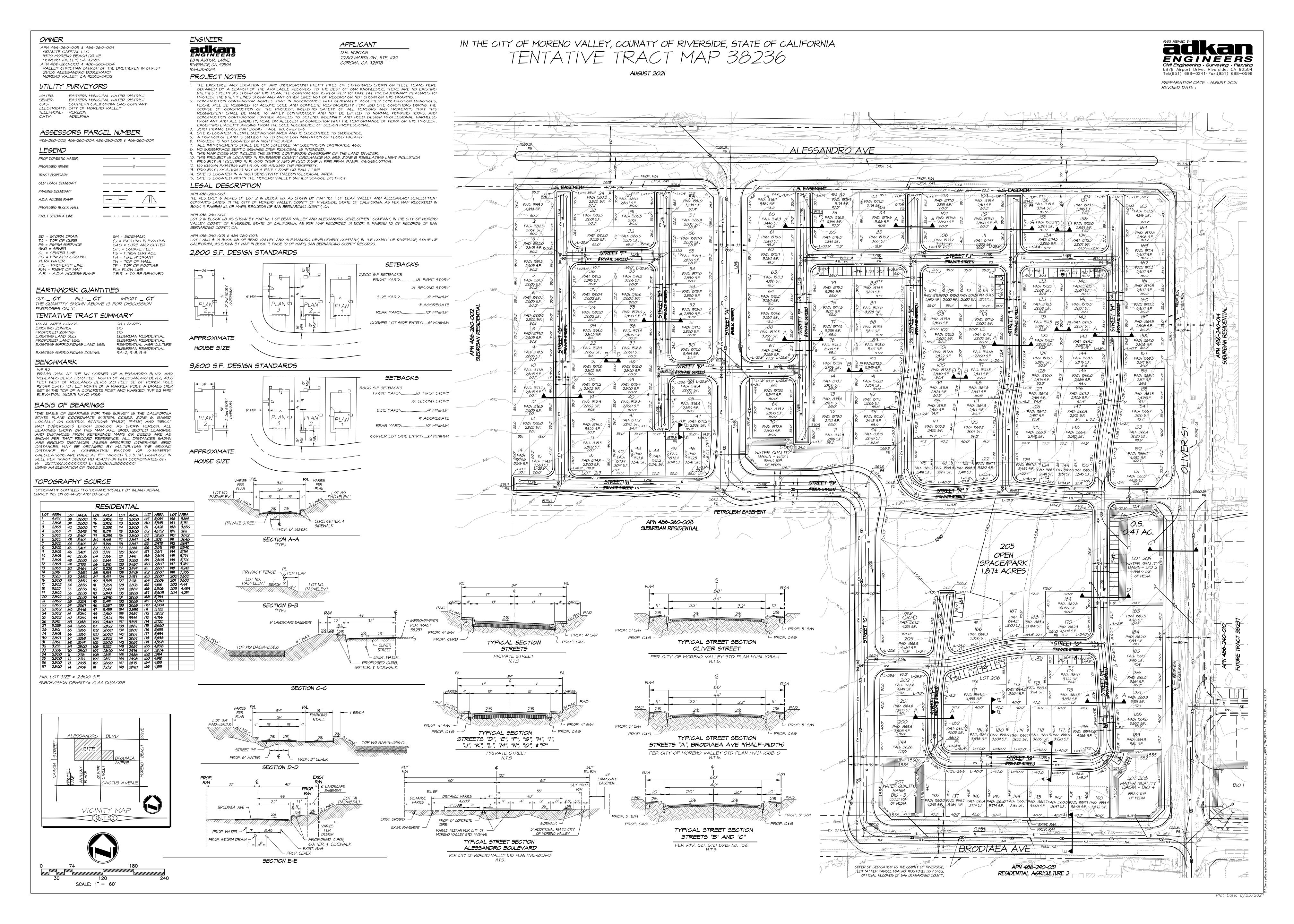




Vicinity Map
APN 486-240-010
City of Moreno Valley
Riverside County, California

Project Site Boundary

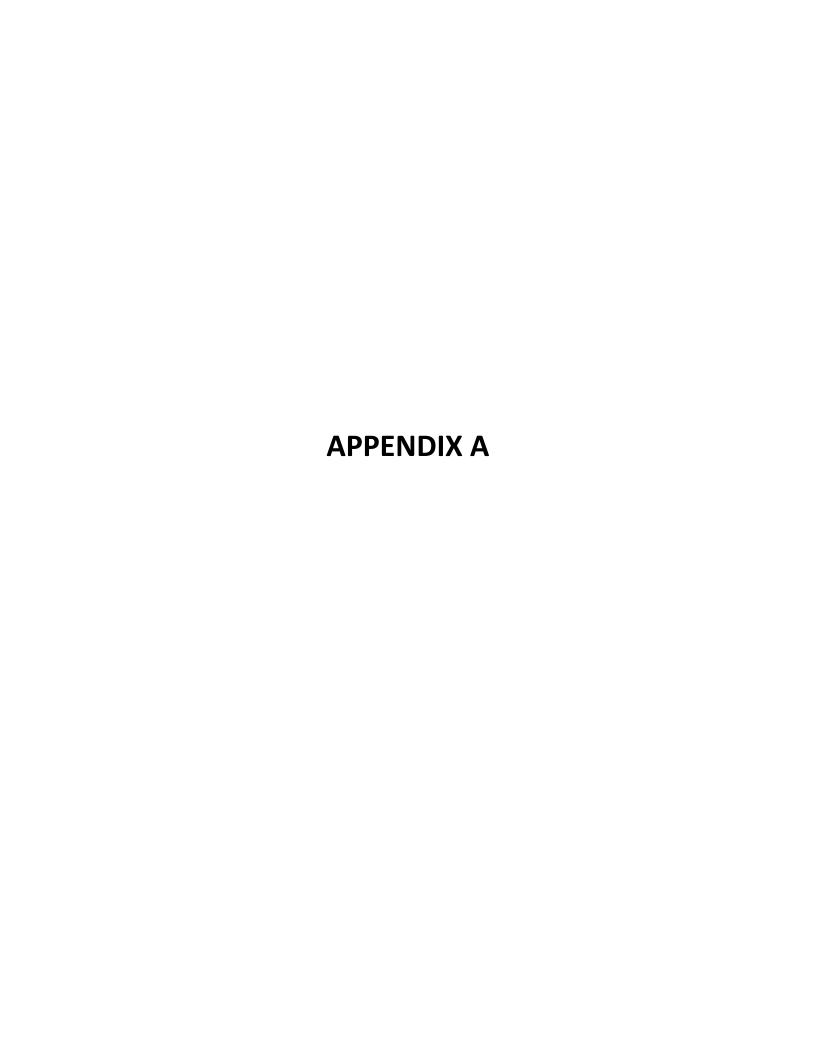






Habitat Map
APN 486-240-010
City of Moreno Valley
Riverside County, California

Legend
Willow Scrub Habitat (0.13 Acre)
Willow Scrub Habitat (0.13 Acre)
Upland Vegetated Ephemeral Stream (0.05 Acre)



# **Species List**

#### **Plant List**

Baccharis salicifolia Mulefat

Chenopodium album White goosefoot

Convolvulus arvensis Field bindweed

Datura stramonium Jimsonweed

Descurainia sophia Flixweed

Erigeron canadensis Canadian horseweed

Helianthus annuus Common sunflower

Heterotheca grandiflora Telegraph weed

Hirschfeldia incana Shortpod mustard

Lactuca serriola Prickly lettuce

Malosma laurina Laurel sumac

Melilotus albus White sweet clover

Nicotiana glauca Tree tobacco

Oncosiphon pilulifer Stinknet

Ricinus communis Castor bean

Salix gooddingii Goodding's willow

Salix laevigata Red willow

Salsola tragus Tumbleweed

Sambucus nigra Black elderberry

Schinus terebinthifolia Brazilian pepper tree

Solanum elaeagnifolium Silverleaf nightshade

Sorghum halepense Johnsongrass

# **Animal List**

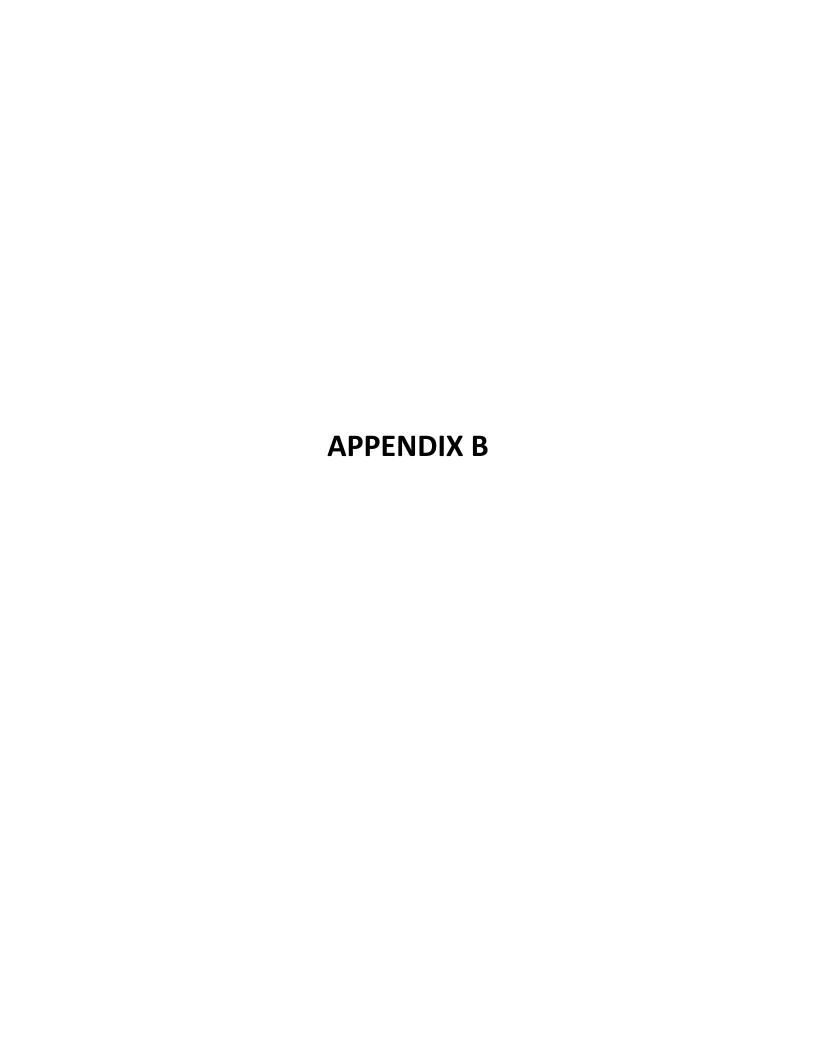
Numida meleagris Guinea fowl

Sylvilagus floridanus Cottontail rabbit

Melozone crissalis California towhee

Haemorhous mexicanus House finch

Hirundo rustica Barn swallow



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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Arenaria paludicola	marsh sandwort	Dicots	Endangered	Endangered	1B.1	Freshwater marsh   Marsh & swamp   Wetland	Marshes and swamps.	Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	No suitable habitat is present on site. This species is not present.
Astragalus hornii var. hornii	Horn's milk- vetch	Dicots	None	None	1B.1	Alkali playa   Meadow & seep   Wetland	Meadows and seeps, playas.	Lake margins, alkaline sites. 75- 350 m.	No suitable habitat is present on site. This species is not present.
Astragalus pachypus var. jaegeri	Jaeger's milk- vetch	Dicots	None	None	18.1	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 oak- chaparral. 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.
Berberis nevinii	Nevin's barberry	Dicots	Endangered	Endangered	1B.1	Chaparral   Cismontane woodland   Coastal scrub   Riparian scrub	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, N- facing slopes or in low grade sandy washes. 90-1590 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 filifolia	thread-leaved brodiaea	Monocots	Threatened	Endangered	18.1	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.
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Canyon Live Oak Ravine Forest	Canyon Live Oak Ravine Forest	Riparian	None	None		Riparian forest			No suitable habitat is present on site. This species is not present.
Carex comosa	bristly sedge	Monocots	None	None	2B.1	Coastal prairie   Freshwater marsh   Marsh & swamp   Valley & foothill grassland   Wetland	Marshes and swamps, coastal prairie, valley and foothill grassland.	Lake margins, wet places; site below sea level is on a Delta island. -5-1010 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
Centromadi a pungens ssp. laevis	smooth tarplant	Dicots	None	None	1B.1	Alkali playa   Chenopod scrub	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.
Chloropyron maritimum ssp. maritimum	salt marsh bird's- beak	Dicots	Endangered	Endangered	1B.2	Coastal dunes   Marsh & swamp   Salt marsh   Wetland	Marshes and swamps, coastal dunes.	Limited to the higher zones of salt marsh habitat. 0-10 m.	No suitable habitat is present on site. This species is not present.
Chorizanthe parryi var. parryi	Parry's spineflower	Dicots	None	None	18.1	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.	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
Chorizanthe polygonoide s 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.
Chorizanthe xanti var. leucotheca	white-bracted spineflower	Dicots	None	None	1B.2	Coastal scrub   Mojavean desert scrub   Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans).	Sandy or gravelly places. 365-1830 m.	No suitable habitat is present on site. This species is not present.
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Dicots	None	None	2B.2	Marsh & swamp   Wetland	Marshes and swamps (freshwater).	Freshwater marsh. 15-280 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
Dodecahem a 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.
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Dicots	Endangered	Endangered	1B.1	Chaparral   Coastal scrub	Coastal scrub, chaparral.	In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	No suitable habitat is present on site. This species is not present.
Galium californicum ssp. primum	Alvin Meadow bedstraw	Dicots	None	None	1B.2	Chaparral   Lower montane coniferous forest	Chaparral, lower montane coniferous forest.	Grows in shade of trees and shrubs at the lower edge of the pine belt, in pine forest-chaparral ecotone. Granitic, sandy soils. 1460-1830 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
Harpagonell a 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.	No suitable habitat is present on site. This species is not present.
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Dicots	None	None	1A	Freshwater marsh   Marsh & swamp   Salt marsh   Wetland	Marshes and swamps (coastal salt and freshwater).	35-1525 m.	No suitable habitat is present on site. This species is not present.
Horkelia cuneata var. puberula	mesa horkelia	Dicots	None	None	1B.1	Chaparral   Cismontane woodland   Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 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
Imperata brevifolia	California satintail	Monocots	None	None	2B.1	Chaparral   Coastal scrub   Meadow & seep   Mojavean desert scrub   Riparian scrub   Wetland	Coastal scrub, chaparral, riparian scrub, mojavean desert scrub, meadows and seeps (alkali), riparian scrub.	Mesic sites, alkali seeps, riparian areas. 3-1495 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.	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
Lycium parishii	Parish's desert- thorn	Dicots	None	None	2B.3	Coastal scrub   Sonoran desert scrub	Coastal scrub, Sonoran desert scrub.	-3-570 m.	No suitable habitat is present on site. This species is not present.
Malacotham nus parishii	Parish's bush- mallow	Dicots	None	None	1A	Chaparral   Coastal scrub	Chaparral, coastal sage scrub.	In a wash. 305- 455 m.	No suitable habitat is present on site. This species is not present.
Monardella macrantha ssp. hallii	Hall's monardella	Dicots	None	None	1B.3	Broadleaved upland forest   Chaparral   Cismontane woodland   Lower montane coniferous forest   Valley & foothill grassland	Broadleafed upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland.	Dry slopes and ridges in openings. 700-1800 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
Monardella pringlei	Pringle's monardella	Dicots	None	None	1A	Coastal scrub	Coastal scrub.	Sandy hills. 300- 400 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.
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.
Nasturtium gambelii	Gambel's water cress	Dicots	Endangered	Threatened	1B.1	Brackish marsh   Freshwater marsh   Marsh & swamp   Wetland	Marshes and swamps.	Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-305 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
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.
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	None	None	1A	Riparian woodland	Riparian woodland.	Salix swales in riparian habitats. 65-300 m.	No suitable habitat is present on site. This species is not present.
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	Scrub	None	None		Coastal scrub			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
Senecio aphanactis	chaparral ragwort	Dicots	None	None	2B.2	Chaparral   Cismontane woodland   Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Drying alkaline flats. 20-1020 m.	No suitable habitat is present on site. This species is not present.
Sidalcea hickmanii ssp. parishii	Parish's checkerbloom	Dicots	None	Rare	1B.2	Chaparral   Cismontane woodland   Lower montane coniferous forest	Chaparral, cismontane woodland, lower montane coniferous forest.	Disturbed burned or cleared areas on dry, rocky slopes, in fuel breaks & fire roads along the mountain summits. 1095-2135 m.	No suitable habitat is present on site. This species is not present.
Sidalcea neomexican a	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	None	None		Riparian forest			No suitable habitat is present on site. This species is not present.
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Riparian	None	None		Riparian forest			No suitable habitat is present on site. This species is not present.
Southern Riparian Forest	Southern Riparian Forest	Riparian	None	None		Riparian forest			No suitable habitat is present on site. This species is not present.
Southern Riparian Scrub	Southern Riparian Scrub	Riparian	None	None		Riparian scrub			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
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	None	None		Riparian woodland			No suitable habitat is present on site. This species is not present.
Southern Willow Scrub	Southern Willow Scrub	Riparian	None	None		Riparian scrub			No suitable habitat is present on site. This species is not present.
Sphenopholi s obtusata	prairie wedge grass	Monocots	None	None	2B.2	Cismontane woodland   Meadow & seep   Wetland	Cismontane woodland, meadows and seeps.	Open moist sites, along rivers and springs, alkaline desert seeps. 15- 2625 m.	No suitable habitat is present on site. This species is not present.
Streptanthu s campestris	southern jewelflower	Dicots	None	None	1B.3	Chaparral   Lower montane coniferous forest   Pinon & juniper woodlands	coniferous	Open, rocky areas. 605-2590 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
Symphyotric hum 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.
Texosporiu m 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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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.
Trichocoroni s 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.

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.	habitat is present on site. This
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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.
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
Antrozous pallidus	pallid bat	Mammals	None	None	BLM_S- Sensitive   CDFW_SSC- Species of Special Concern   IUCN_LC-Least Concern   USFS_S- Sensitive   WBWG_H-High Priority	woodland   Sonoran desert scrub   Upper	Deserts, grasslands, shrublands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting 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
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.	present on

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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.
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.	site. This species is

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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.	habitat is

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-	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	present on site <b>This</b>

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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.
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, junipersage 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.	present on site. This species is
Campylorhync hus 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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Catostomus santaanae	Santa Ana sucker	Fish	Threatened	None	AFS_TH- Threatened   IUCN_VU- Vulnerable	Aquatic   South coast flowing waters	Endemic to Los Angeles Basin south coastal streams.	Habitat generalists, but prefer sand- rubble-boulder bottoms, cool, clear water, and algae.	No suitable habitat is present on site. This species is not present.
Ceratochrysis Iongimala	Desert cuckoo wasp	Insects	None	None					No suitable habitat is present on site. This species is not present.
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered	BLM_S- Sensitive   NABCI_RWL- Red Watch List	Riparian forest	Riparian forest nester, along the broad, lower flood- bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	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.
Diplectrona californica	California diplectronan caddisfly	Insects	None	None		Aquatic			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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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.	l site <b>This</b> l
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.	habitat is present on site. This
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered	NABCI_RWL- Red Watch List	Riparian woodland	Riparian woodlands in Southern California.		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
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/Sa n Joaquin flowing waters   Sacramento/Sa n 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.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	No suitable habitat is present on site. This species is not present.
Eugnosta busckana	Busck's gallmoth	Insects	None	None		Coastal dunes   Coastal scrub			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
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, semi-arid 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
Falco columbarius	merlin	Birds	None	None	CDFW_WL- Watch List   IUCN_LC-Least Concern	Estuary   Great Basin grassland   Valley & foothill grassland	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches.	Clumps of trees or windbreaks are required for roosting in open country.	No suitable habitat is present on site. This species is not present.
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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	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.
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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 scrub	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		Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.		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
Laterallus jamaicensis coturniculus	California black rail	Birds	None	Threatened	BLM_S- Sensitive   CDFW_FP-Fully Protected   IUCN_NT-Near Threatened   NABCI_RWL- Red Watch List   USFWS_BCC- Birds of Conservation Concern	Brackish marsh   Freshwater marsh   Marsh & swamp   Salt	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays.	Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	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
Leptonycteris yerbabuenae	lesser long- nosed bat	Mammals	Delisted	None	CDFW_SSC- Species of Special Concern   IUCN_VU- Vulnerable   WBWG_H-High Priority	Mojavean desert scrub   Sonoran desert scrub   Upper Sonoran scrub	grasslands and shrub land. Suitable day roosts (caves & mines) and suitable concentrations of food plants (columnar	roosts. Caves, mines, rock	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.
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.
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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.
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	Fish	Endangered	None	AFS_EN- Endangered	Aquatic   South coast flowing waters	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).	Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	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
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.
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.	present on site. This species is

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	habitat is
Plegadis chihi	white-faced ibis	Birds	None	None	CDFW_WL- Watch List   IUCN_LC-Least Concern	Marsh & swamp   Wetland	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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.
Rana muscosa	southern mountain yellow-legged frog	Amphibian s	Endangered	Endangered	CDFW_WL- Watch List   IUCN_EN- Endangered   USFS_S- Sensitive	Aquatic	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, Apr 2014, effective Jun 30, 2014.	Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	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
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	Insects	Endangered	None		Interior dunes	Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties.	Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. shade.	No suitable habitat is present on site. This species is not present.
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	Fish	None	None	AFS_TH- Threatened   CDFW_SSC- Species of Special Concern   USFS_S- Sensitive	Aquatic   South coast flowing waters	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.	Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	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.

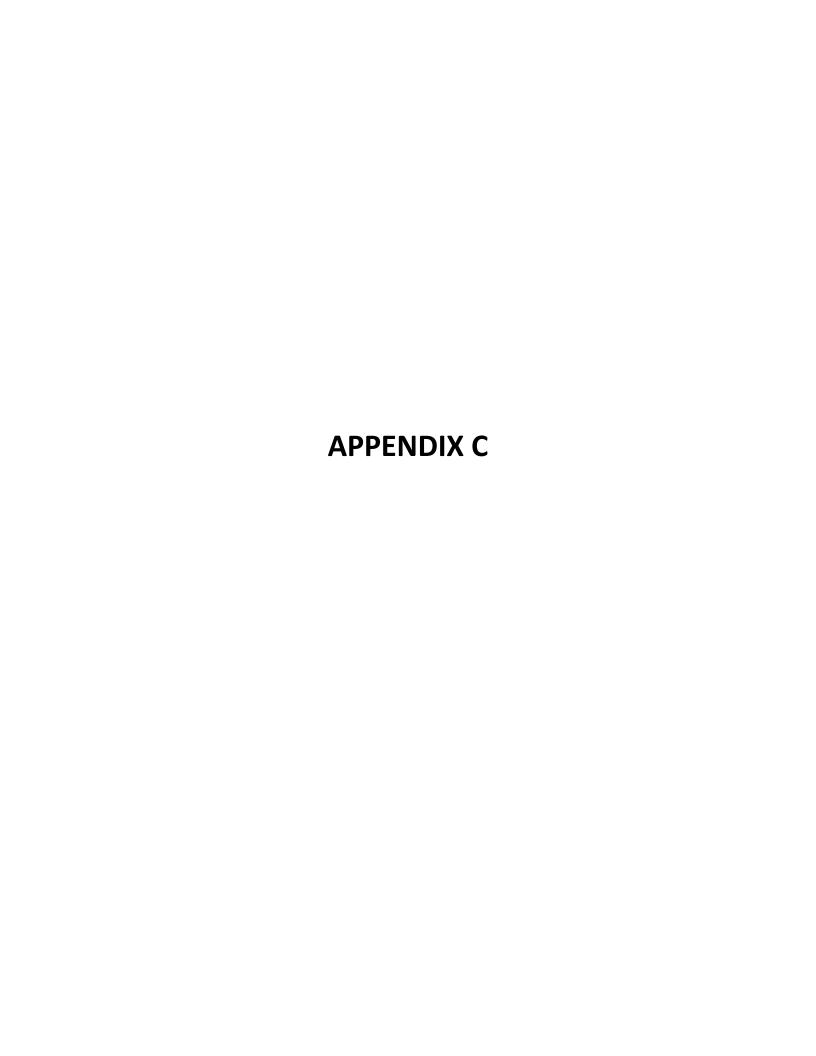
Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Setophaga petechia	yellow warbler	Birds	None	None	CDFW_SSC- Species of Special Concern   USFWS_BCC- Birds of Conservation Concern	Riparian forest   Riparian scrub   Riparian 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 present on site. This species is not present.
Spea hammondii	western spadefoot	Amphibian S	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
Spinus lawrencei	Lawrence's goldfinch	Birds	None	None	IUCN_LC-Least Concern   NABCI_YWL- Yellow Watch List   USFWS_BCC- Birds of Conservation Concern	Broadleaved upland forest   Chaparral   Pinon & juniper woodlands   Riparian woodland	Nests in open oak or other arid woodland and chaparral, near water.  Nearby herbaceous habitats used for feeding.	Closely associated with oaks.	No suitable habitat is present on site. This species is not present.
Streptocephalu s woottoni	Riverside fairy shrimp	Crustacean s	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.

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.	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
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.	with rocky beds	No suitable habitat is present on site. This species is not present.
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 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
Xanthocephalu s xanthocephalu s	yellow-headed	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 habitat is present on site. This species is not present.





View of ruderal habitat on site.



View of ruderal habitat from southern border of site facing north.



View of ruderal habitat on southeast corner of site.

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View of ruderal habitat and willow scrub habitat along eastern border of the site.



View of upland vegetated ephemeral stream habitat.



View of start of ephemeral stream at northern border of site.

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View of southernmost portion of the upland vegetated ephemeral stream habitat near eastern border of the site from the north.

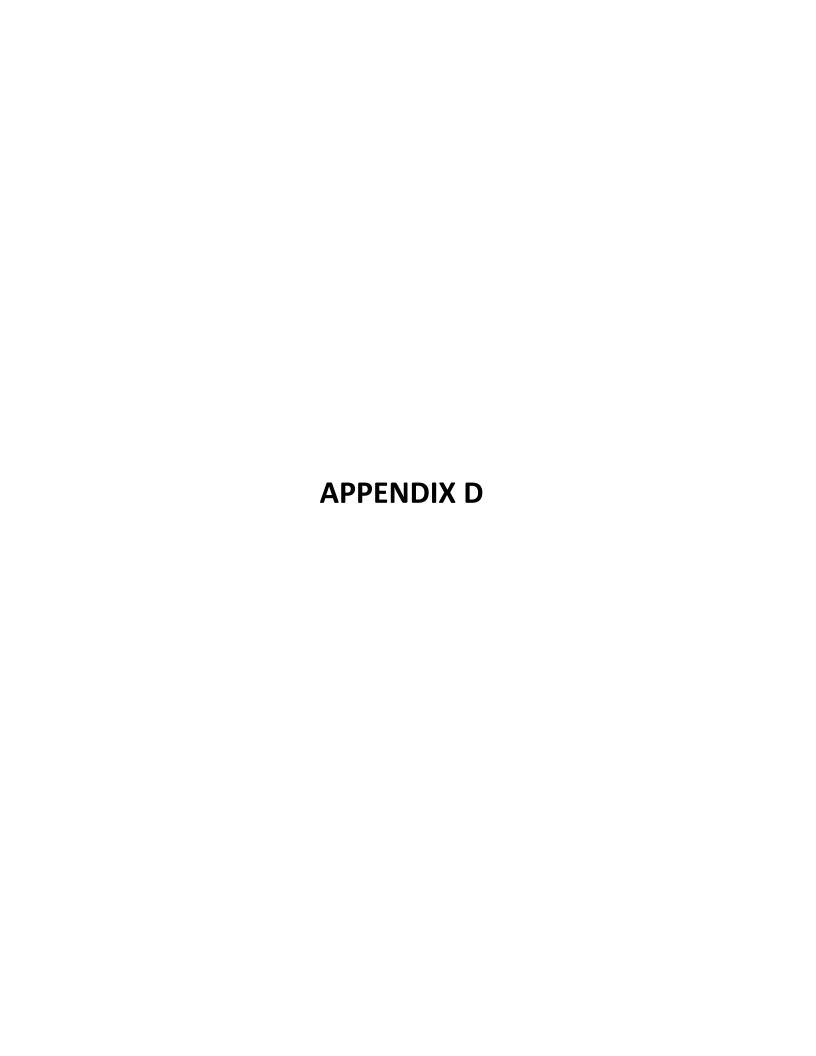


View of southernmost portion of the upland vegetated ephemeral stream habitat near eastern border of the site from the south.



View of ruderal habitat on northern portion of site from the eastern border.

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#### MAP LEGEND

## Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Points

#### Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Walsh or swall

Mine or Quarry

Miscellaneous Water

Perennial Water

→ Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

#### ,

Stony Spot

Very Stony Spot

Spoil Area

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 scale

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 13, May 27, 2020

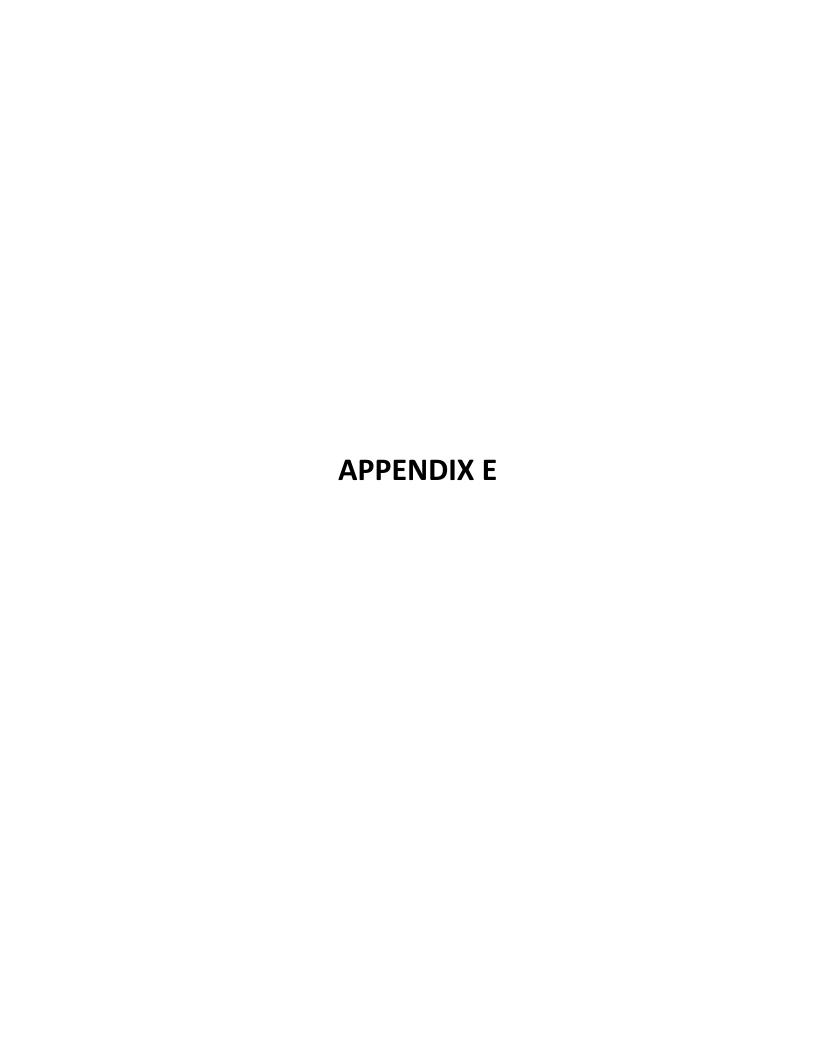
Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: May 25, 2019—Jun 25, 2019

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
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	2.9	33.4%
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	2.7	32.1%
PaC2	Pachappa fine sandy loam, 2 to 8 percent slopes, eroded	3.0	34.5%
Totals for Area of Interest		8.6	100.0%





## JURISDICTIONAL DELINEATION FOR ASSESSOR PARCEL NUMBER 486-240-010

# CITY OF MORENO VALLEY COUNTY OF RIVERSIDE, CALIFORNIA

Prepared for: EPD Solutions, Inc. 2 Park Plaza Suite 1120 Irvine, CA 92614

Prepared by: Hernandez Environmental Services 17037 Lakeshore Drive Lake Elsinore, CA 92530

## **Table of Contents**

1.0	Introduction	3
1.1	Purpose	3
1.2	Site Location	3
1.3	Project Description	3
2.0	Regulatory Background	3
2.1	CDFW Lake and Streambed Alteration Agreement	3
2.2	United States Army Corps of Engineers Clean Water Act 404 Permit	4
2.3	Regional Water Quality Control Board Clean Water Act /Porter-Cologne Act	6
3.0	Methodology	8
3.1	Literature Review	8
3.2	Field Survey	8
4.0	Results	9
4.1	Environmental Setting	9
4.2	Existing Hydrological Features	9
4.3	Soils	9
4.4	Vegetation	9
4.5	Hydrology	10
4.6	Existing Wetlands	10
4.7	California Department of Fish and Wildlife Jurisdiction	10
4.8	Waters of the United States	10
4.9	Regional Water Quality Control Board Jurisdiction	10
5.0	Recommendation	11
6.0	Certification	12
7.0	References	13

#### **FIGURES**

Figure 1 – Location Map

Figure 2 – Vicinity Map

Figure 3 – Site Plans Figure 4 – CDFW Jurisdiction Map

Figure 5 – Waters of the State Map

Figure 6 – CDFW Jurisdiction Impacts Map

Figure 7 – Waters of the State Impacts Map

#### **APPENDICES**

Appendix A – Site Photos

Appendix B – Soils Map

#### 1.0 Introduction

Hernandez Environmental Services (HES) was contracted to prepare a Jurisdictional Delineation (JD) for Tentative Tract Map (TTM) 38237, an approximately 8.77-acre project site (APN 486-240-010). The property is located at the Brodiaea Avenue and Oliver Street within the city of Moreno Valley, Riverside County, California.

## 1.1 Purpose

The purpose of this JD is to:

- Determine if any state or federal jurisdictional waters are present within the project site boundaries;
- Quantify any impacts to jurisdictional waters due to the proposed project, if possible;
- Determine if the project will require state or federal permits for impacts to jurisdictional waters; and,
- Recommend mitigation measures to offset impacts to state or federal jurisdictional waters.

#### 1.2 Site Location

The approximate 8.77-acre project site is located northeast of the intersection of Brodiaea Avenue and Oliver Street in city of Moreno Valley, Riverside County, California (Figures 1 and 2, *Location and Vicinity Map*). The site consists of Riverside County APN 486-240-010. Specifically, the project site is located within Township 3 South, Range 3 West in Section 15 of the *Sunnymead* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude coordinates for the project site are 33°54'52.8184" North and 117°10'53.9480" West.

## 1.3 Project Description

The proposed project includes the construction of 67 single-family residential units. The project also includes landscaping, a park, internal private streets, a water quality basin, and infrastructure improvements the installation of related parking lots, access driveways, private streets, and open space for recreational land use (Figure 3, *Site Plans*). The project will result in impacts to the entire 8.77-acre site.

## 2.0 Regulatory Background

# 2.1 California Department of Fish and Wildlife Lake and Streambed Alteration Agreement

The California Department of Fish and Wildlife (CDFW) is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the California Fish and Game Code (F&GC), requires that the CDFW be consulted if a proposed development project has the potential to detrimentally effect a stream and thereby wildlife resources that depend on a stream for continued viability (F&GC Division 2, Chapter 5, section

1600-1616). A Section 1602 Lake or Streambed Alteration Agreement is required, should the CDFW determine that the proposed project may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream or lake;
- Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
- Deposit debris, waste or other materials that could pass into any river, stream or lake.

For the purposes of clarification, a stream is defined by CDFW as "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators." The historic hydrologic regime is defined as circa 1800 to the present (CDFW 2010).

## 2.2 United States Army Corps of Engineers Clean Water Act 404 Permit

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under Section 404 of the CWA, the United States Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into WUS, including wetlands. Section 404 requires a permit from the USACE or authorized state for the discharge of dredged or fill material into WUS, including wetlands.

On April 21, 2020, U.S. Environmental Protection Agency (EPA) and the USACE published the Navigable Waters Protection Rule in the Federal Register to finalize a revised definition of WUS under the CWA. The rule became effective on June 22, 2020. In this final rule, the agencies interpret the term WUS to encompass the following:

- The territorial seas and traditional navigable waters;
- perennial and intermittent tributaries that contribute surface water flow to such waters;
- certain lakes, ponds, and impoundments of jurisdictional waters; and,
- wetlands adjacent to other jurisdictional waters.

The final rule specifically clarifies that "waters of the United States" do not include the following:

- Groundwater, including groundwater drained through subsurface drainage systems;
- ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- diffuse stormwater runoff and directional sheet flow over upland;

- ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- prior converted cropland;
- artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
- water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
- groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- waste treatment systems.

For purposes of Section 404 of the CWA, the lateral limits of jurisdiction over non-tidal WUS extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. Under 33 CFR 328.3(e), the USACE defines the term OHWM as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

According to the EPA and USACE, "wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Water saturation (hydrology) largely determines how the soil develops and the types of plant and animal communities living in and on the soil. Wetlands may support both aquatic and terrestrial species. The prolonged presence of water creates conditions that favor the growth of specially adapted plants (hydrophytes) and promote the development of characteristic wetland (hydric) soils. The EPA and the Corps use the 1987 Corps of Engineers Wetlands Delineation Manual and Regional Supplements to define wetlands for the CWA Section 404 permit program. To qualify for wetlands status, vegetation, soils, and hydrologic parameters must all be met.

For the purposes of this section, the term "fill" is defined as material placed in waters of the United States where the material has the effect of:

- Replacing any portion of a WUS with dry land; or
- Changing the bottom elevation of any portion of a WUS.

Examples of such fill material include, but are not limited to rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in the WUS. The term fill material does not include trash or garbage.

The definition of "discharge of dredged material" is defined as any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the WUS. The term includes, but is not limited to, the following:

- The addition of dredged material to a specified discharge site located in WUS;
- The runoff or overflow, associated with a dredging operation, from a contained land or water disposal area; and
- Any addition, including redeposit other than incidental fallback, of dredged material, including excavated material, into WUS which is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation.

The term discharge of dredged material does not include the following:

- Discharges of pollutants into WUS resulting from the onshore subsequent processing of dredged material that is extracted for any commercial use (other than fill). These discharges are subject to section 402 of the CWA even though the extraction and deposit of such material may require a permit from the Corps or applicable State.
- Activities that involve only the cutting or removing of vegetation above the ground (e.g., mowing, rotary cutting, and chain-sawing) where the activity neither substantially disturbs the root system nor involves mechanized pushing, dragging, or other similar activities that redeposit excavated soil material.
- Incidental fallback.

## 2.3 Regional Water Quality Control Board Clean Water Act /Porter-Cologne Act

The State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (RWQCB) (collectively Water Boards) have the authority to regulate discharges of dredged or fill material to waters of the state under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne). CWA Section 401 water quality certifications are issued to applicants for a federal license or permit for activities that may result in a discharge into WUS, including but not limited to the discharge or dredged or fill material (as

defined in Section 2.2 above). Waste discharge requirements under Porter-Cologne are issued for discharges of dredged or fill material to waters of the state.

In accordance with Porter-Cologne (Water Code, § 13000 et seq.), the Water Boards are authorized to regulate discharges of waste, which includes discharges of dredged or fill material, that may affect the quality of waters of the state. The Water Code defines waters of the state broadly to include "any surface water or groundwater, including saline waters, within the boundaries of the state." Waters of the state includes all WUS. On April 2, 2019, the State Water Board adopted State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), which contained a wetland definition and wetland delineation procedures. The Procedures state that "an area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation." The following wetlands are waters of the state:

- 1. Natural wetlands;
- 2. Wetlands created by modification of a surface water of the state;
- 3. Artificial wetlands that meet any of the following criteria:
  - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
  - b. Specifically identified in a water quality control plan as a wetland or other water of the state;
  - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape;
  - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):
    - i. Industrial or municipal wastewater treatment or disposal,
    - ii. Settling of sediment,
    - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,

- iv. Treatment of surface waters,
- v. Agricultural crop irrigation or stock watering,
- vi. Fire suppression,
- vii. Industrial processing or cooling,
- viii. Active surface mining even if the site is managed for interim wetlands functions and values,
  - ix. Log storage,
  - x. Treatment, storage, or distribution of recycled water, or
  - xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits);
- xii. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

## 3.0 Methodology

#### 3.1 Literature Review

Prior to the site visit, a literature review was conducted to aid in determining the potential for the presence of drainages, wetlands and riparian vegetation on the project site. Project background documents, topographic maps, satellite imaging, soils maps, and land use maps were examined to establish an accurate project site location, project description, potential for onsite drainages and wetlands, records of on-site vegetation, watershed, soils, and surrounding land uses.

#### 3.2 Field Survey

On July 30, 2021, HES conducted a field survey of the approximately 8.77-acre project site. Field surveys were conducted to delineate jurisdictional drainages and wetland resources associated with jurisdictional drainages. Global Positioning System (GPS) waypoints were taken to delineate specific state or federal waters and any other information that would be useful for the assessment of the project site.

Jurisdictional drainages were identified by looking for features such as a bed, bank or channel. Where riparian vegetation was present, the drip line of the outer edge of the vegetation was used as the measuring criteria. Furthermore, the presence of an OHWM was recorded. Where the presence of an OHWM was evident, a measurement was taken for the width of the OHWM and the measurement was recorded. Where changes in plant community composition were apparent,

the area was examined for the possibility of wetlands. Whether or not adjacent to WUS, the potential wetland area was evaluated for the presence of the three wetland indicators: hydrology, hydric soils and hydrophytic vegetation.

#### 4.0 Results

#### 4.1 Environmental Setting

The proposed 8.77-acre project site consists of undeveloped disturbed land. The project site is relatively flat and characterized by ruderal habitat dominated by non-native vegetation, with sparse patches of willow scrub habitat. Elevations on the site range from approximately 1,553 to 1,566 feet above mean sea level. One non-continuous ephemeral stream was found onsite and generally flows north to southeast across the northeast corner of the site. Surrounding land uses include Discovery Christian Church to the north, vacant undeveloped land to the east, Oliver Street and vacant land to the west, and Brodiaea Avenue and single-family residences to the south.

## 4.2 Existing Hydrological Features

The 8.77-acre project area contains one unnamed ephemeral stream dominated by upland plant species with associated riparian habitat comprised of patches of willow scrub habitat located east of the ephemeral stream. The ephemeral stream enters the northern project site boundary via a culvert that directs the urban runoff from the parking lot to the north of the project site onto the site. The stream flows from north to southeast for approximately 288 linear feet where it stops and a bed, bank, and channel are not present and cannot be delineated. The ephemeral stream continues approximately 115 feet south for another 41 linear feet. In total the onsite ephemeral stream measures approximately 329 linear feet in length.

#### 4.3 Soils

The U.S. Department of Agriculture Natural Resources Conservation District's Web Soil Survey was consulted and indicates that the project site contains three soil types, Greenfield sandy loam (GyC2), 2 to 8 percent slopes, eroded; Hanford coarse sandy loam (HcC), 2 to 8 percent slopes; Pachappa fine sandy loam (PaC2), 20 to 8 percent slopes, eroded. Refer to Appendix A, *Soils Map*.

No soils classified as hydric were found to occur on the project site area.

## 4.4 Vegetation

The onsite ephemeral stream is dominated by upland vegetation. The dominant species observed within and along the banks of the stream include Johnsongrass, common sunflower and short-pod mustard. Associated riparian habitat comprised of patches of willow scrub habitat dominated by Goodding's willow lies adjacent to the eastern bank of the stream.

## 4.5 Hydrology

The ephemeral stream is located within the Santa Ana River Basin, the San Jacinto Valley Hydrologic Unit, Perris Hydrologic Area, and Perris Valley Subarea (4802.11). The project area contains an unnamed ephemeral stream does not connect to any jurisdictional stream upstream or downstream, and is an isolated drainage feature.

## 4.6 Existing Wetlands

The project site contains no wetlands or vernal pools as defined by the 1987 Corps of Engineers Wetland Delineation Manual.

## 4.7 California Department of Fish and Wildlife Jurisdiction

The project site contains approximately 0.15 acre (329 linear feet) of ephemeral stream and associated riparian areas that would be considered CDFW jurisdictional (Figure 4, *CDFW Jurisdiction Map*). The banks of the drainage are dominated by Johnsongrass and common sunflower. The associated willow scrub habitat is dominated by Goodding's willow.

The proposed residential development will result in impacts to approximately 0.15 acre (329 linear feet) of CDFW jurisdiction, including 0.05 acre of upland vegetated ephemeral stream and 0.10 acre of associated willow scrub habitat (Figure 6, *CDFW Jurisdiction Impacts Map*). Impacts to the onsite drainage feature and associated riparian habitat will require the submittal of a Notification of Lake of Streambed Alteration pursuant to Fish and Game Code Section 1602.

#### 4.8 Waters of the United States

A tributary, lake, pond, or impoundment of a jurisdictional water meets the definition of a WUS if it contributes surface water flow directly or indirectly to a traditional navigable water or territorial sea in a typical year. For a surface water channel like a river, stream, or ditch to meet the definition of WUS, the channel must be perennial or intermittent (i.e., flowing continuously year-round or flowing continuously during certain times of the year and more than in direct response to a single precipitation event) in a typical year. Under the Navigable Waters Protection Rule, ephemeral features and other excluded artificial and natural features are not jurisdictional and do not become jurisdictional even if they episodically convey surface water from upstream relatively permanent jurisdictional waters to downstream jurisdictional waters in a typical year, and thereby help maintain the jurisdictional status of the upstream waters.

Based upon this guidance, the onsite ephemeral stream is not considered jurisdictional WUS, which are regulated by the USACE Sections 404 and 401 of the CWA.

#### 4.9 Regional Water Quality Control Board Jurisdiction

The project site contains approximately 0.05 acre (329 linear feet) of ephemeral stream that would be considered waters of the state subject to Porter-Cologne (Figure 5, *Waters of the State Map*).

The proposed residential development will result in impacts to approximately 0.05 acre (329 linear feet) of waters of the state located on the site (Figure 7, *Waters of the State Impacts Map*). Impacts to this drainage feature will require the application for waste discharge requirements (WDR) under Porter-Cologne from the Santa Ana RWQCB.

## 5.0 Recommendation

The proposed project will impact approximately 0.15 acres of CDFW jurisdiction and 0.05 acres of waters of the state. These impacts will require the project to obtain a Section 1602 Streambed Alteration Agreement from CDFW and a WDR from the Santa Ana Regional Water Quality Control Board.

The project will mitigate 0.15 acres of impacts to CDFW jurisdictional waters and 0.05 acres of impacts to waters of the State by the purchase of mitigation at a 2:1 ratio from an agency-approved mitigation bank.

## 6.0 Certification

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

DATE	09-18-2021	SIGNED	
			Project Manager
Fieldwo	rk Performed By:		
Hallie H	ernandez		
Associat	te Biologist		
Elizabet	h Gonzalez		
Associat	te Biologist		

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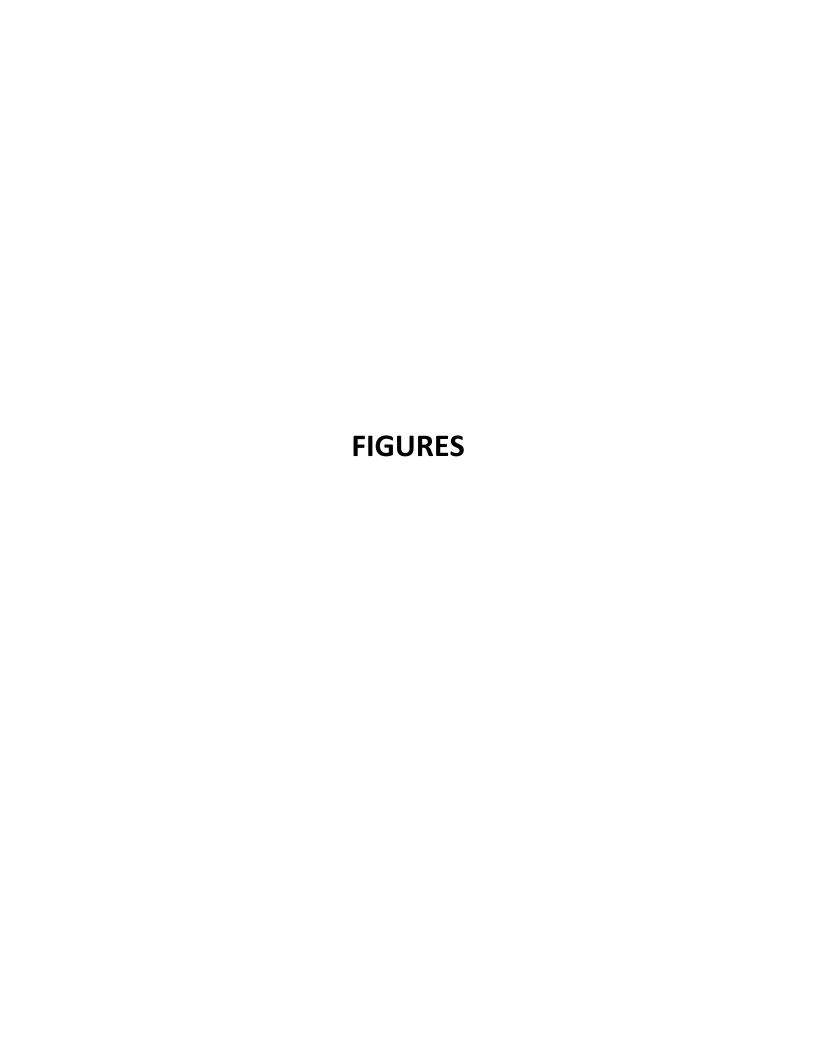
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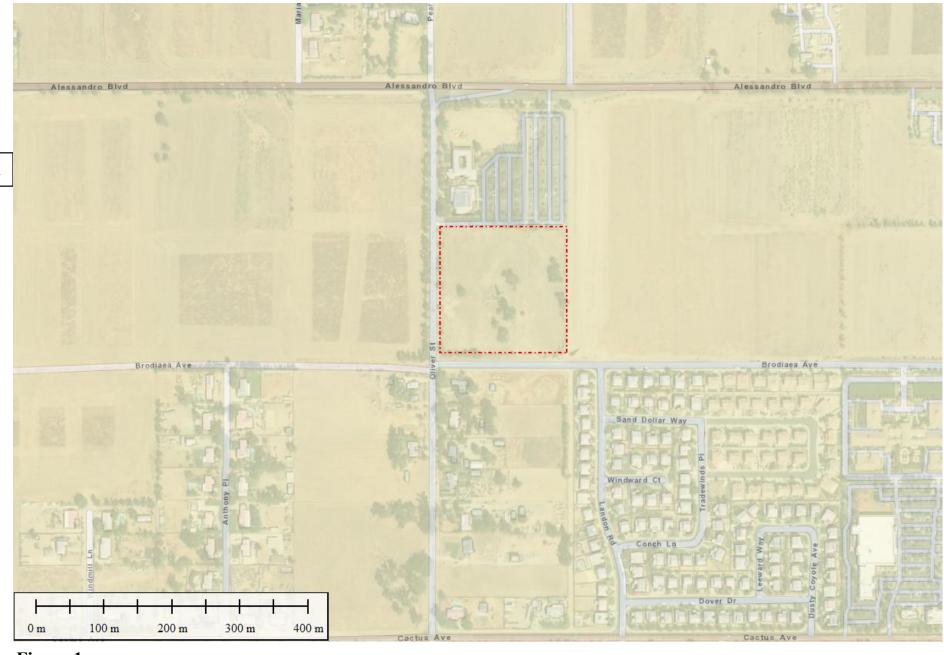


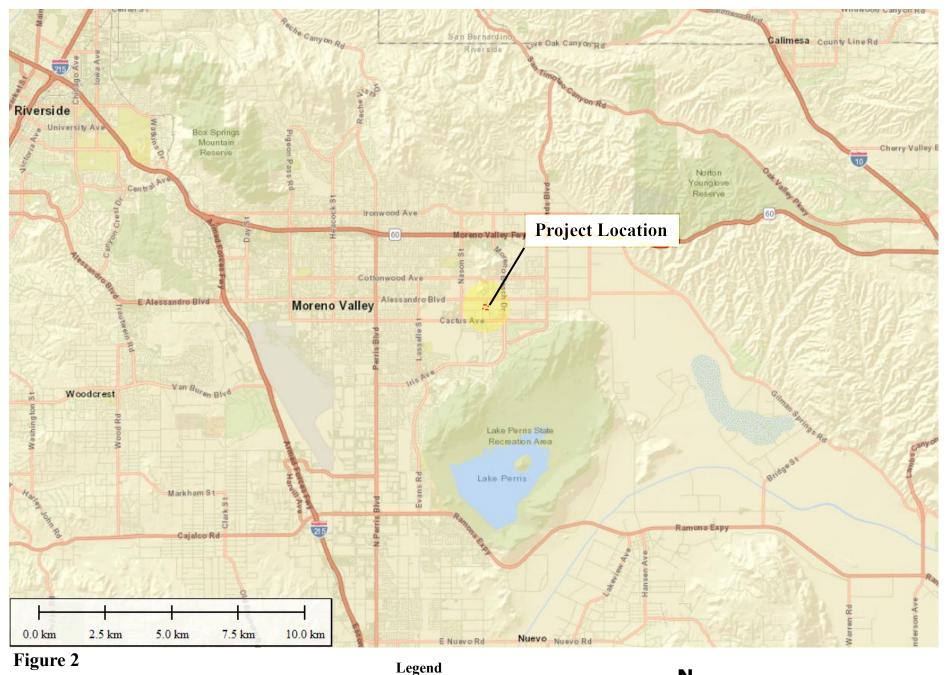
Figure 1
Location Map
APN 486-240-010
City of Moreno Valley
Riverside County, California

Legend



Project Site Boundary





Vicinity Map
APN 486-240-010
City of Moreno Valley
Riverside County, California

Project Site Boundary



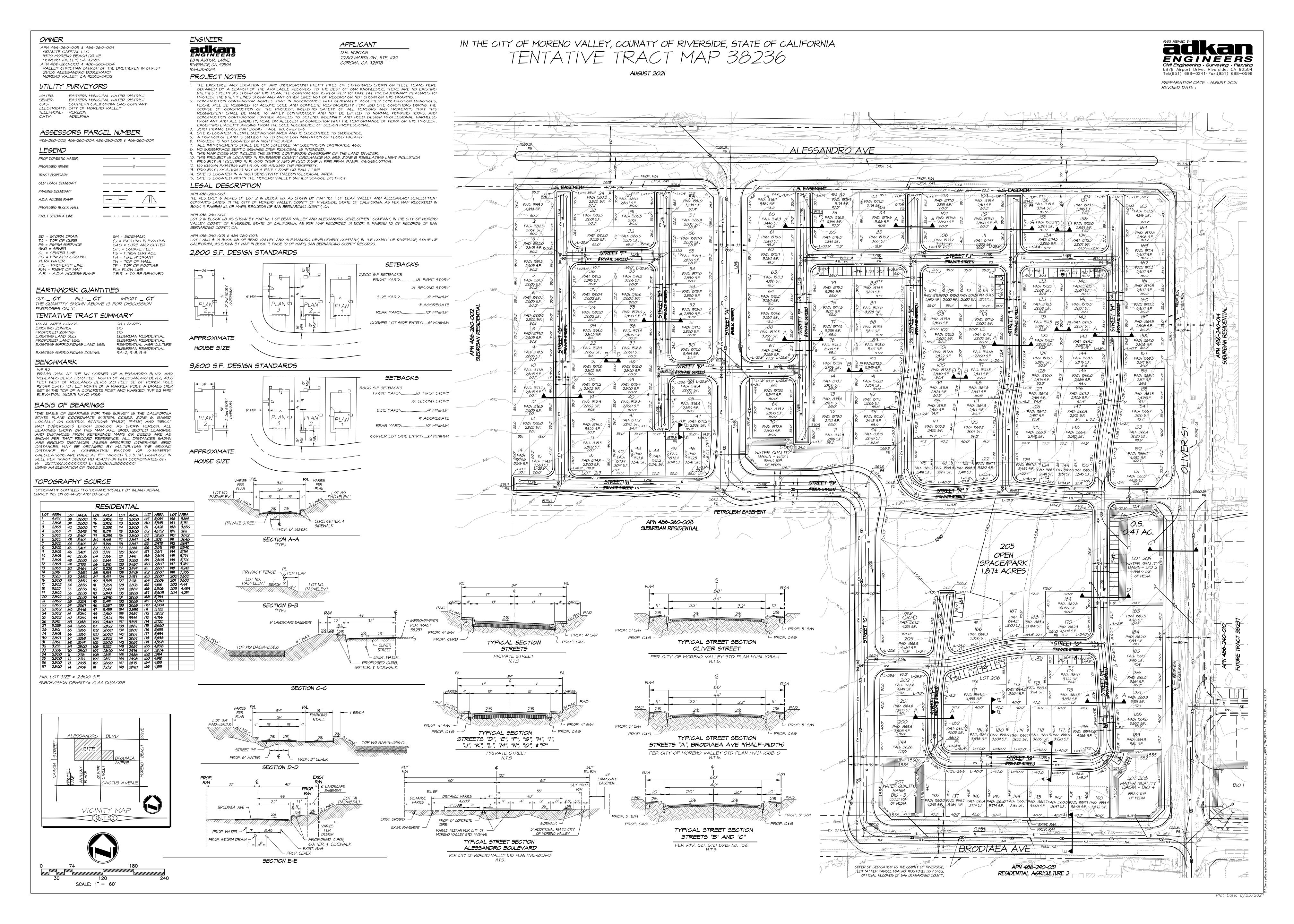




Figure 4
CDFW Jurisdiction Map
APN 486-240-010
City of Moreno Valley
Riverside County, California

# Legend Project Site Boundary Upland Vegetated Ephemeral Stream (0.05Acre) Willow Scrub Habitat (0.10Acre)





Figure 5 Waters of State Map APN 486-240-010 City of Moreno Valley Riverside County, California

# Legend Project Site Boundary

Upland Vegetated Ephemeral Stream (0.05Acre)



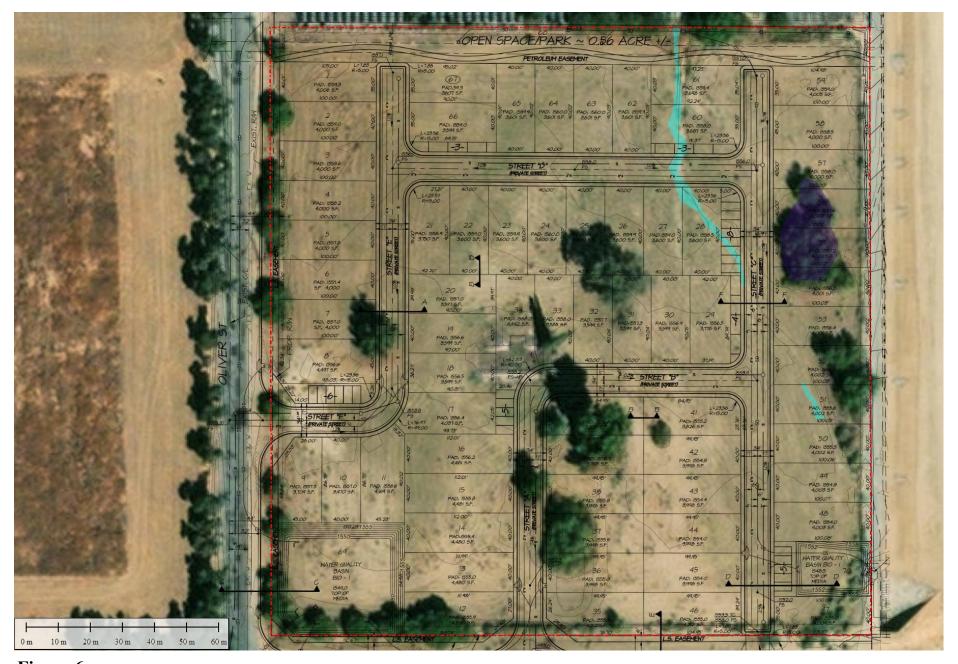
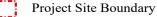
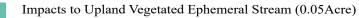


Figure 6
CDFW Jurisdiction Impacts Map
APN 486-240-010
City of Moreno Valley
Riverside County, California

## Legend





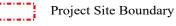
Impacts to Willow Scrub Habitat (0.10Acre)





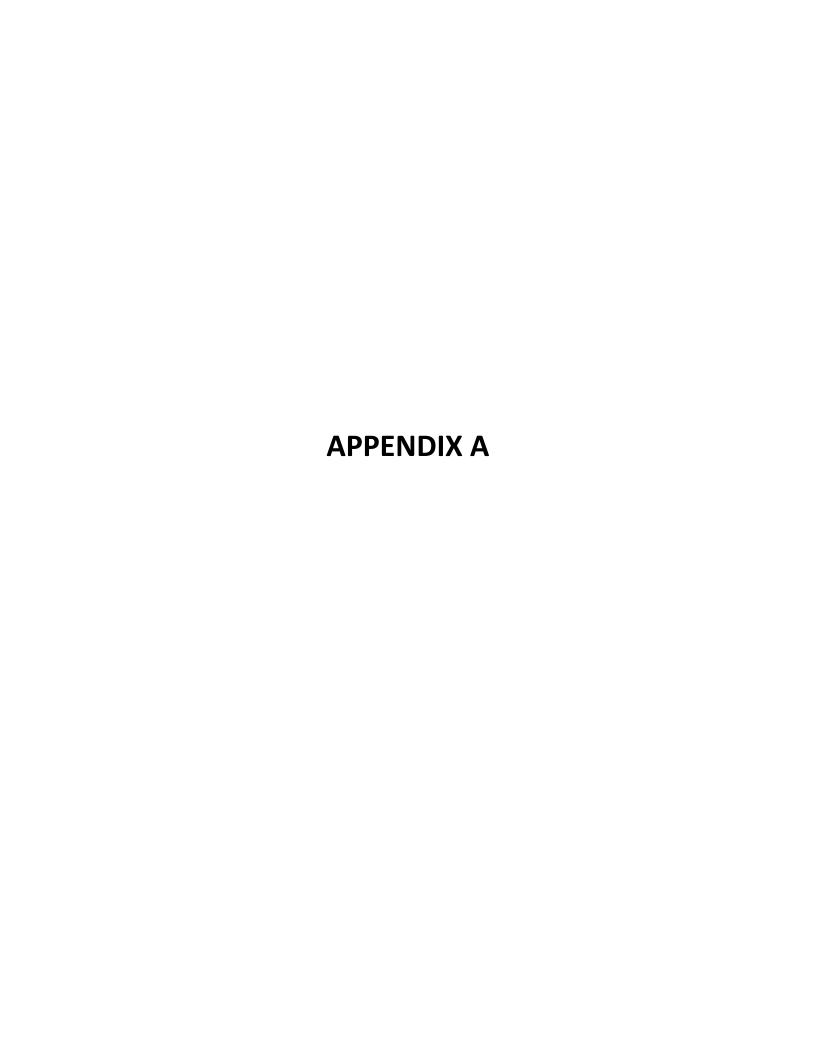
Figure 7
Waters of State Impacts Map
APN 486-240-010
City of Moreno Valley
Riverside County, California

# Legend



Impacts to Upland Vegetated Ephemeral Stream (0.05Acre)







View of southernmost portion of the upland vegetated ephemeral stream habitat near eastern border of the site from the north.



View of southernmost portion of the upland vegetated ephemeral stream habitat near eastern border of the site from the south.



View of ruderal habitat separating ephemeral streams on site.

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View of willow scrub habitat near eastern border of the site from the north.



View of beginning of upland vegetated ephemeral stream on northern border of site.



View of parking lot north of the project site.

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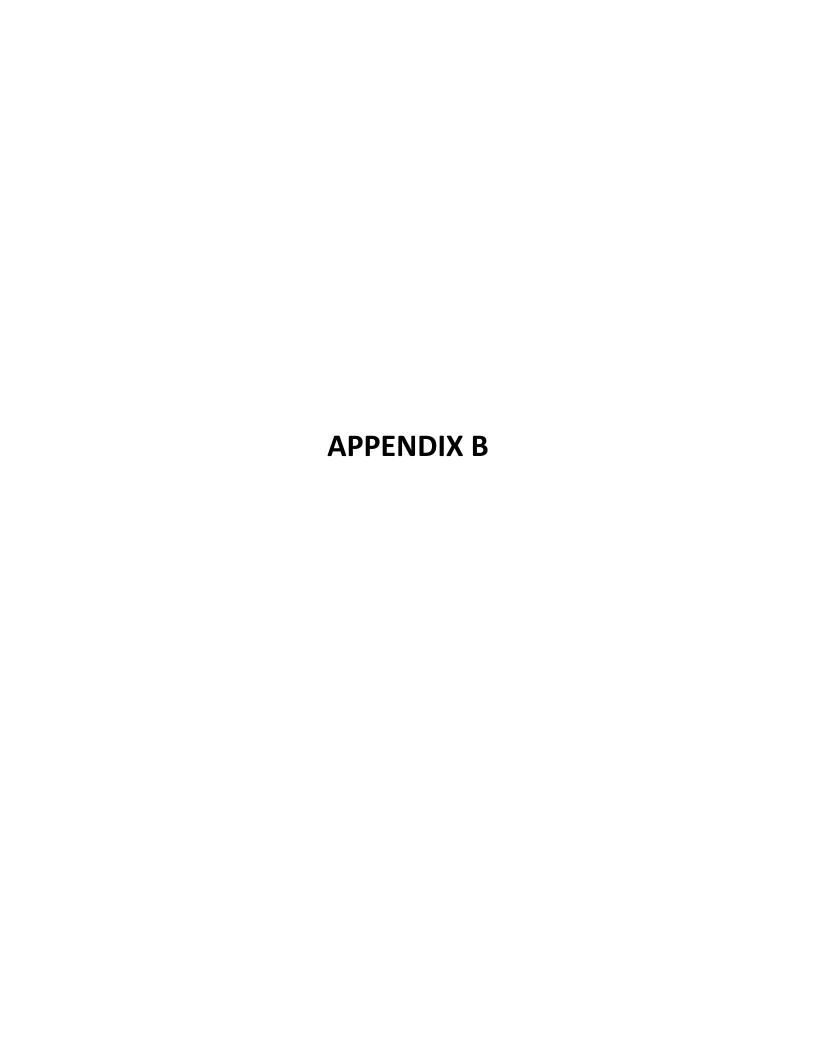


View of flows entering the site from the parking lot to the north.



View of Johnsongrass along upland vegetated ephemeral stream.

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Environmental
Services





#### MAP LEGEND

### Area of Interest (AOI)

## Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Points

#### **Special Point Features**

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

... Gravelly Spot

Candfill

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

#### ...

0

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot
Other

#### 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 scale

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 13, May 27, 2020

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

Date(s) aerial images were photographed: May 25, 2019—Jun 25, 2019

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
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	2.9	33.4%
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	2.7	32.1%
PaC2	Pachappa fine sandy loam, 2 to 8 percent slopes, eroded	3.0	34.5%
Totals for Area of Interest		8.6	100.0%