Appendix G

Biological Resources Documents



GENERAL BIOLOGICAL ASSESSMENT AND WESTERN RIVERSIDE COUNTY MSHCP CONSISTENCY ANALYSIS FOR FUEGO FARMS COMMERCIAL AGRICULTURAL OPERATION ASSESSOR'S PARCEL NUMBER 933-020-005

RIVERSIDE COUNTY, CALIFORNIA

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1.0 Introduction

HES was contracted to prepare a general biological assessment (GBA) and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the proposed Fuego Farms Commercial Agricultural Operation site consisting of the southwest portion of Assessor's Parcel Number (APN) 933-020-005. The site is located within unincorporated Riverside County, California. The purpose of this GBA is to identify any potential biological resources that may be present on or adjacent to the project site.

1.1 Project Site Location

The Fuego Farms Commercial Agricultural Operation site will be constructed on approximately 4.28 acres of the southwest portion of APN 933-020-005, which consists of an existing 72.15-acre agricultural facility. The remainder of the site is not a part of the proposed development area and will continue to be utilized for agricultural use. The site is located in an unincorporated area of western Riverside County, south of the Santa Rosa Plateau and west of the cities of Murrieta and Temecula. The site is located north of Carancho Road, west of De Luz Road, and east of El Calamar Road. Specifically, the project site is located within Section 1, Township 8 south, Range 4 west of the *Temecula*, *Fallbrook*, *Wildomar*, and *Murrieta* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps. Refer to Figures 1 and 2.

1.2 Project Description

The Fuego Farms Commercial Agricultural Operation involves the development of a commercial agricultural operation on the southwestern corner of the parcel. The type of agricultural operation is unknown at this time. Proposed development includes fifteen 3,840 square foot greenhouse buildings, two 2,880 square foot greenhouse buildings, and a 4,800 square foot steel building for office use and product processing. The proposed project also includes associated access driveways, paved areas, utility infrastructure, retaining walls, and parking facilities. Implementation of the proposed project will impact approximately 4.28 acres of the project site. In addition, the project proposes offsite roadway improvements within the existing Carancho Road right-of-way, including acceleration and deceleration lanes to facilitate access to the site. Offsite improvements will impact approximately 0.18 acre of already disturbed/developed areas within the existing road right-of-way. Existing culverts/drainage facilities beneath the existing Carancho Road will remain in place. No temporary impacts or offsite staging areas are anticipated as part of the project. Refer to Figure 3, *Site Plans*.

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. 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 were reviewed to obtain information on the potential for sensitive species to occur within 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 to determine requirements for sensitive species surveys within the boundaries of the MSHCP.

2.1.1 Western Riverside County MSHCP

The Western Riverside County MSHCP (Dudek and Associates 2003) 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 (CDFWG), 129 listed and special-status plant and animal species receive some level of coverage under the Western Riverside County MSHCP. Of the 129 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 County of Riverside, 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 County 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 site is located within the Southwest Area Plan of the Western Riverside County MSHCP. The southeastern portion of APN 933-020-005 is located within the Southwest Area Plan, in the Santa Rosa Plateau Subunit (SU6), in Criteria Cell 7051. Conservation within Criteria Cell 7051 will contribute to assembly of Proposed Constrained Linkage 12, and will focus on chaparral, woodland and forest habitat along Sandia Canyon and adjacent agricultural land. Areas conserved within Criteria Cell 7051 will be connected to woodland and forest habitat and agricultural land proposed for conservation in Cell Group M to the south and to chaparral, woodland and forest habitat and agricultural land proposed for conservation in Criteria Cell 7053 to the east. Conservation within Criteria Cell 7051 will range from 10 to 20 percent, focused in the eastern portion of the Cell.

The project site is located within a plan-defined area requiring surveys for narrow endemic plant species, criteria area plant species, and amphibian species, including Many-stemmed dudleya (Dudleya multicaulis), California Orcutt grass (Orcuttia californica), Spreading navarretia (Navarretia fossalis), San Miguel savory (Clinopodium chandleri), Hammitt's clay-cress (Sibaropsis hammittii), Wright's trichocoronis (Trichocoronis wrightii), Parish's brittlescale (Atriplex parishii), Davidson's saltscale (Atriplex serenana var. davidsonii), Round-leaved filaree (California macrophylla), Coulter's goldfields (Lasthenia glabrata ssp. coulteri), Heart-leaved pitcher sage (Lepechinia cardiophylla), Prostarte navarretia (Navarretia prostrata), and California red-legged frog (Rana draytonii). In addition, the project site is within the Western Riverside County MSHCP burrowing owl (Athene cunicularia) survey area. APN 933-020-005 contains potentially suitable habitat for San Migeul savory, Round-leaved filaree, and Heartleaved pitcher sage within the chaparral and coast live oak woodlands located within the central and northern portions of the parcel. Further potentially suitable habitat for burrowing owl is present within the ruderal habitat located within the central portion of the parcel. However, the proposed project will be confined to approximately 4.28 acres of the southwest portion of APN 933-020-005 consisting of existing agricultural orchards. A habitat assessment conducted within the project area footprint determined that the site does not provide suitable habitat for the any of the above listed narrow endemic plant species, criteria area plant species, and amphibian species. In addition, a habitat assessment conducted for burrowing owl determined that no suitable habitat for burrowing owl exists within the project area footprint as the site is highly disturbed by existing avocado orchard agricultural uses and no small mammal burrows were observed. The avocado orchards do not provide the open fields necessary for burrowing owl habitat.

2.2 Field Survey

On January 8, 2021, HES biologists conducted a field survey of the project site. The ambient temperature at 10:00 a.m. was 57 degrees Fahrenheit, sunny, with winds ranging from zero to one mile per hour from the southwest. 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 and areas that were inaccessible were surveyed with binoculars 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 approximately 4.28 acres of the southwest portion of APN 933-020-005, which is an existing 72.15-acre agricultural facility. The project site is currently disturbed and utilized for agricultural use consisting of an avocado orchard with associated irrigation infrastructure. Site topography consists of gently sloping terrain from the north towards the southern site boundary, with elevations ranging from 1,365 feet above mean sea level (AMSL) to 1290 feet AMSL. The 4.28-acre project site is highly disturbed by agricultural use and is dominated by avocado trees. Immediately surrounding the project site to the north, and east is the existing agricultural facility located within the remainder of APN 933-020-005. Several drainages cross through APN 933-020-005 to the north and east of the project site. Land uses surrounding APN 933-020-005 include Carancho Road and residential uses to the south, vacant lands and the Santa Rosa Plateau to the north, vacant lands and agricultural uses to the west, and a mix of agricultural and residential uses to the east.

3.2 Soils

The Natural Resources Conservation Services Soils Survey identifies three soil types within the site, as described below (Appendix B):

- Cajalco fine sandy loam (CaD2), 8 to 15 percent slopes, eroded;
- Cajalco rocky fine sandy loam (CbF2), 15 to 50 percent slopes, eroded; and,
- Las Posas rocky loam (LkF3), 15 to 50 percent slopes, severely eroded.

3.3 Plant and Habitat Communities

APN 933-020-005 is characterized by a mix of sumac series chaparral laurel sumac dominant, upland ruderal, agricultural orchards, coast live oak woodland, disturbed/developed, and ephemeral drainages. The 4.28-acre project site is comprised of agricultural orchards and disturbed/developed areas, as described below. Refer to Figure 4, *Habitat Map*.

Agricultural Orchards

The project site contains approximately 3.91 acres of agricultural orchards. These areas are located within the southern portion of the site and are characterized by agricultural orchards and access roads. Vegetation found in these areas consists of non-native plant species and scattered ornamental trees. Common plant species observed include Peruvian pepper tree (*Schinus mole*), avocado tree (*Persea americana*), fig tree (*Ficus carica*), Century plant (*Agave americana*), and prickly pear cactus (*Opuntia littoralis*).

Disturbed /Developed

The project site contains approximately 0.37 acres of disturbed/developed areas. These areas are located throughout the site and are characterized by an existing single-family residence, structures, trailers, and access roads. Vegetation found in these areas consists of non-native plant species and scattered ornamental trees. Common plant species observed include tumbleweed (Amaranthus albus), oats (Avena spp.), brome spp. (Bromus spp.), mustard (Hirschfeldia incana), stinknet (Oncosiphon piluliferum), common phacelia (Phacelia distans), Russian thistle (Salsola tragus), Peruvian pepper tree.

3.4 Wildlife

General wildlife species documented on the project site or within the vicinity of the site include mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), Anna's hummingbird (*Calypte anna*), California scrub jay (*Aphelocoma californica*), pocket gopher (*Thomomys bottae*), white-crowned sparrow (*Zonotrichia leucophrys*), red-tailed hawk (*Buteo jamaicensis*) and a house cat (*Felis catus*). The complete list of species observed is included in Appendix A.

3.5 Regional Connectivity/Wildlife Movement

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

The project site is not located within a designated wildlife corridor or linkage. The project area was evaluated for its function as a wildlife corridor that species use to move between wildlife habitat zones. The project site consists of approximately 4.28 acres of the southwest portion of APN 933-020-005. The project site consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. Immediately surrounding the project site to the north and east is an existing agricultural facility located within the remainder of APN 933-020-005. Several drainages cross through APN 933-020-005 to the north and east of the project site. Land uses surrounding APN 933-020-005 include Carancho Road and residential uses. Although the ephemeral drainages to the north and east of the project site could be utilized for local wildlife movement, no wildlife movement corridors were found to be present on the project site. No impacts to wildlife movement corridors are expected.

3.6 Sensitive Biological Resources

According to the CNDDB, a total of 49 sensitive species of plants and 47 sensitive species of animals have the potential to occur on or within the vicinity of the project area. These include those species listed or candidates for listing by the U. S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW) and California Native Plant Society (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 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.

3.6.1 Sensitive Plant Resources

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. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

Munz's onion

Munz's onion (*Allium munzii*) is a federally Endangered, state Threatened, and CNPS 1B.1 listed plant species. It is found in chaparral, coastal scrub, valley and foothill grasslands, cismontane woodland, and pinyon and juniper woodland. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

San Diego ambrosia

San Diego ambrosia (*Ambrosia pumila*) is listed as federally Endangered and 1B.1 in the CNPS rare plant inventory. Its habitat includes wetlands in chaparral, coastal sage scrub, valley and foothill grassland. No habitat for this species is present on the project site. **This species is not present.**

Rainbow Manzanita

Rainbow Manzanita (*Arctostaphylos rainbowensis*) is ranked 1B.1 in the CNPS rare plant inventory. It is usually found in gabbro chaparral habitat. This species has been recorded within 1,100 feet of the project site; however, the 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

Jaeger's milk-vetch

Jaeger's milk-vetch (*Astragalus pachypus var. jaegeri*) is ranked 1B.1 in the CNPS rare plant inventory. It is often found in dry ridges and valleys, and open sandy slopes. Its habitat includes coastal scrub, chaparral, valley and foothill grassland, and cismontane woodland. This species has been recorded within 1,100 feet of the project site; however, the 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **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. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

Orcutt's brodiaea

Orcutt's brodiaea (*Brodiaea orcuttii*) is ranked 1B.1 in the CNPS rare plant inventory. The species occurs in mesic, clay habitats, usually in vernal pools and small drainages. Its habitats include vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows, and seeps. The 4.28-acre project area consists of disturbed land

characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **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. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

Orcutt's pincushion

Orcutt's pincushion (*Chaenactis glabriuscula var. orcuttiana*) is ranked 1B.1 in the CNPS rare plant inventory. The species occurs in sandy sites of coastal bluff scrub, and coastal dunes habitat. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **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. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

San Diego button-celery

San Diego button-celery (*Eryngium aristulatum var. parishii*) is a federally and state listed endangered species and is ranked 1B.1 in the CNPS rare plant inventory. Its habitat includes coastal scrub, valley & foothill grasslands, vernal pools, and wetlands. Its flowering period is from May to June. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

Campbell's liverwort

Campbell's liverwort (*Geothallus tuberosus*) is ranked 1B.1 in the CNPS rare plant inventory. Its habitat includes coastal scrub, and vernal pools. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

Tecate cypress

Tecate cypress (*Hesperocyparis forbesii*) is ranked 1B.1 in the CNPS rare plant inventory. It is found on clay or gabbro, primarily on north-facing slopes and in groves often associated with chaparral habitat. Its habitat includes closed-cone coniferous forest, and chaparral. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **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. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

Parish's meadowfoam

Parish's meadowfoam (*Limnanthes alba ssp. parishii*) is a state listed endangered species. It is ranked 1B.2 in the CNPS rare plant inventory. This species is typically found in vernally moist areas and temporary seeps of highland meadows and plateaus. They are also often found bordering lakes and streams. It is found in lower montane coniferous forest, meadows and seeps, wetland, and vernal pools. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

Spreading navarretia

Spreading navarretia (*Navarretia fossalis*) is a federally listed Threatened Species and is ranked 1B.1 in the CNPS rare plant inventory. Its habitat includes alkali playa, chenopod scrub, marsh and swamp, vernal pools, and wetlands. This species is typically found in swales and vernal pools, often surrounded by other habitat types. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

California Orcutt grass

California Orcutt grass (*Orcuttia californica*) is a federal and state endangered species. It is ranked 1B.1 in the CNPS rare plant inventory. It is found in vernal pools. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

Bottle liverwort

Bottle liverwort (*Sphaerocarpos drewei*) is ranked 1B.1 in the CNPS rare plant inventory. Its habitats include chaparral and coastal scrub. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present within the project area. **This species is not present.**

3.6.2 Sensitive Animal Resources

A total of 13 animal species are listed as state and/or federal Threatened, Endangered, Candidate will be reviewed in this section. CDFW Species of Special Concern will also be discussed in this section. All sensitive species recorded 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:

Cooper's hawk

The Cooper's hawk (*Accipiter cooperii*) is a CDFW watch list wildlife species. It is found in cismontane woodland, riparian forest, riparian woodland, and upper montane coniferous forest habitat. It nests mainly in riparian growths of deciduous trees and live oaks, and its nesting season is between February 15 and August 15. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. Although potentially suitable nesting habitat occurs within the riparian woodlands located adjacent to the project site, no habitat for this species is present on the project site. **This species is not present.**

Southern California rufous-crowned sparrow

Southern California rufous-crowned sparrow (Aimophila ruficeps canescens) is a CDFW watch list wildlife species. It frequents relatively steep, often rocky hillsides with grass and forb patches. This species is a resident in Southern California coastal sage scrub and sparse mixed chaparral. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present on the project site.

This species is not present.

Arroyo Toad

Arroyo Toad (*Anaxyrus californicus*) is a federally listed endangered species and a CDFW Species of Special Concern. The most favorable breeding habitat for this species consists of slow-moving shallow pools, nearby sandbars, and adjacent stream terraces. Its habitat includes desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. There is no habitat for this species on the project site. **This species is not present.**

Orange-throated whiptail

The orange-throated whiptail (*Aspidoscelis hyperythra*) is a CDFW watch list wildlife species. It is found in chaparral, coastal sage scrub, and cismontane woodlands. This species prefers washes and other sandy areas with patches of brush and rocks. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. No habitat for this species is present on the project site. **This species is not present.**

Burrowing owl

Burrowing owl is a CDFW Species of Special Concern. Its habitat includes coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean 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 (*Spermophilus beecheyi*). No burrowing owl has been recorded within 5 miles of the site. A habitat assessment for this species was conducted due to the fact that the site is within the Western Riverside County MSHCP burrowing owl survey area. Although signs of ground squirrels were identified on APN 933-020-005, the 4.28-acre project area is highly disturbed by ongoing agricultural uses and no small mammal burrows were observed. The habitat assessment determined that no suitable habitat for burrowing owl exists within the project area as the site is highly disturbed by existing avocado orchard agricultural uses and no small mammal burrows were observed. The avocado orchards are trees that do not provide the open fields necessary for burrowing owl habitat. Therefore, no suitable habitat for this species is present on the project site. **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*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Erigonum*. No habit for this species is present on the project site. **This species is not present.**

Vernal pool fairy shrimp

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

San Diego fairy shrimp

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

Swainson's hawk

Swainson's hawk (*Buteo swainsoni*) is a state listed Threatened Species. This species favors open grasslands for foraging but also occurs in agricultural settings. It relies on scattered stands of trees near agricultural fields and grasslands for nesting sites. Its habitats include great basin grassland, riparian forest, riparian woodland, and valley and foothill grassland. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. Although potentially suitable habitat occurs within the riparian woodlands and upland areas located adjacent to the project site, no habitat for this species is present on the project site. **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. No habitat for this species is present on the project site. **This species is not present.**

Red-diamond rattlesnake

The Red-diamond rattlesnake (Crotalus ruber) is listed on the CDFW Watch List. This species prefers chaparral, Mojavean desert scrub, and Sonoran desert scrub. This species is found in southwestern California, from the Morongo Valley west to the coast and south along the peninsular ranges to mid Baja California. This species typically inhabits rocky areas and dense vegetation. It needs rodent burrows, cracks in rocks, or surface cover objects. No habitat for this species is present on the project site. **This species is not present.**

San Bernardino kangaroo rat

San Bernardino kangaroo rat (*Dipodomys merriami parvus*) is a federally listed Endangered Species, state listed Candidate Endangered 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.**

Stephen's kangaroo rat

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

Quino checkerspot butterfly

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

Coastal California gnatcatcher

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

California red-legged frog

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

Riverside fairy shrimp

Riverside fairy shrimp (*Streptocephalus woottoni*) is a federally listed Endangered Species. This species is found in coastal scrub, valley and foothill grassland, vernal pool, and wetland habitat. This species typically inhabits seasonal 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.

3.7 **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.

3.8 Jurisdictional Waters

APN 933-020-005 contains approximately 7.03 acres (8,310 linear feet) of ephemeral drainages and associated riparian areas that would be considered CDFW jurisdictional and Waters of the State (Figure 5, *Jurisdictional Waters Map*). The ephemeral drainages are dominated by a mix of coast live oak woodland and upland plant species. The 4.28-acre project area does not contain jurisdictional drainages; however, the proposed roadway improvement areas cross over an existing culvert that conveys flows from ephemeral drainages located within APN 933-020-005 beneath Carancho Road to the south. The existing culvert and drainage facilities beneath Carancho Road will remain in place. No impacts to drainages will result from project implementation. Further, the project area does not contain any wetlands or vernal pools.

4.0 Project Impacts

The Fuego Farms Commercial Agricultural Operation consists of the development of a commercial agricultural operation consisting of fifteen 3,840 square foot greenhouse buildings, two 2,880 square foot greenhouse buildings, and a 4,800 square foot steel building for office use and product processing. The proposed project also includes associated access driveways, paved areas, utility infrastructure, retaining walls, and parking facilities. Implementation of the proposed project will impact approximately 4.28 acres of the project site. In addition, the proposed project will result in impacts to approximately 0.18 acre of offsite disturbed/developed areas located within the existing Carancho Road right-of-way.

4.1 Impacts to Habitats

Implementation of the proposed project will impact the entire 4.28-acre project area, consisting of approximately 3.91 acres of agricultural orchards and 0.37 acres of disturbed habitat (Figure 6, *Habitat Impacts Map*). Approximately 0.2 acre of the proposed project impact area is located within the boundaries of MSHCP Criteria Cell 7051. Project impacts to habitats located within Criteria Cell 7051 include 0.03 acre of disturbed/developed area and 0.17 acre of agricultural orchards. In addition, the proposed offsite road improvements are located within Criteria Cell 7051 and will impact approximately 0.18 acre of disturbed/developed areas within the existing Carancho Road right-of-way.

4.2 Impacts to Sensitive Species

The project site does not contain suitable habitat for any of the sensitive species that according to CNDDB have the potential to occur on or in the vicinity of the project site. The 4.28-acre project area is highly disturbed by ongoing agricultural uses. Therefore, no impacts to sensitive species are expected to occur.

4.3 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.

4.4 Impacts to Critical Habitat

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

4.5 Impacts to Wildlife Movement Corridors

Wildlife movement corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbances. The project site was evaluated for its function as a wildlife corridor that species would use to move between wildlife habitat zones. Typically, mountain canyons or riparian corridors are used by wildlife as corridors; the project site does not contain these features. The project site consists of approximately 4.28 acres of the southwest portion of APN 933-020-005. The project site consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. Immediately surrounding the project site to the north and east is an existing agricultural facility located within the remainder of APN 933-020-005. Several drainages cross through APN 933-020-005 to the north and east of the project site. Land uses surrounding APN 933-020-005 include Carancho Road and residential uses. Although the ephemeral drainages to the north and east of the project site could be utilized for local wildlife movement, no wildlife movement corridors were found to be present on the project site. No impacts to wildlife movement corridors are expected.

4.6 Conflict with Local Policies or Ordinances Protecting Biological Resources

Should the proposed project result in the removal of trees, it will be required to comply with County of Riverside Ordinance No. 559.

4.7 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 project is within the Western Riverside MSHCP. The proposed project is required to comply with the Western Riverside MSHCP guidelines and requirements. The proposed project is consistent with the guidelines and requirements of the MSHCP; therefore, no conflicts will result from project implementation.

4.8 State and Federal Drainages

APN 933-020-005 contains approximately 7.03 acres (8,310 linear feet) of ephemeral drainages and associated riparian areas that would be considered CDFW jurisdictional and Waters of the State (Figure 5, *Jurisdictional Waters Map*). The 4.28-acre project area does not contain jurisdictional drainages; however, the proposed roadway improvement areas cross over an existing culvert that conveys flows from ephemeral drainages located within APN 933-020-005 beneath Carancho Road to the south. The existing culvert/drainage facilities beneath the existing Carancho Road will remain in place. No impacts to drainages will result from project implementation. Therefore, implementation of the proposed project will not result in impacts to state or federally jurisdictional drainages.

5.0 Western Riverside County MSHCP Consistency Analysis

5.1 MSHCP Requirements

The Fuego Farms Commercial Agricultural Operation site will be constructed on approximately 4.28 acres of the southwest portion of APN 933-020-005. The project site is located within the Southwest Area Plan of the Western Riverside County MSHCP. The southeastern portion of APN 933-020-005 is located within the Southwest Area Plan, in the Santa Rosa Plateau Subunit (SU6), in Criteria Cell 7051. Conservation within Criteria Cell 7051 will contribute to assembly of Proposed Constrained Linkage 12, and will focus on chaparral, woodland and forest habitat along Sandia Canyon and adjacent agricultural land. Areas conserved within Criteria Cell 7051 will be connected to woodland and forest habitat and agricultural land proposed for conservation in Cell Group M to the south and to chaparral, woodland and forest habitat and agricultural land proposed for conservation in Criteria Cell 7053 to the east. Conservation within Criteria Cell 7051 will range from 10 to 20 percent, focused in the eastern portion of the Cell. APN 933-020-005 is located within the northwestern corner of Criteria Cell 7051.

The 4.28-acre project area will be confined to approximately 4.28 acres of the southwest portion of APN 933-020-005. The remainder of the parcel is not part of the project and is not being evaluated by this report. The County will Condition the project that on all Final Maps and Exhibits, the remaining portion of the parcel will be mapped as "NOT A PART".

The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. The proposed project area does not contain the chaparral, woodland and forest habitats described for conservation within Criteria Cell 7051. Further, the project area does not contain lands along or adjacent to Sandia Canyon, and would not provide a connection to Proposed Constrained Linkage 12 or habitat within Criteria Cell 7053 to the east. Therefore, the 4.28-acre project area would not contribute to the conservation goals described for Criteria Cell 7051.

A discussion of the applicable Western Riverside County MSHCP requirements follows:

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

APN 933-020-005 contains approximately 7.03 acres (8,310 linear feet) of ephemeral drainages and associated riparian areas. However, the proposed 4.28-acre project area does not contain habitat that may be considered riparian/riverine areas as defined in Section 6.1.2 of the Western Riverside County MSHCP. The proposed project area is located 40 feet west and 30 feet east of ephemeral drainages and associated riparian areas. The ephemeral drainage to the west is dominated by a mix of upland plant species and scattered coast live oak trees. The ephemeral drainage to the east is dominated by upland plant species. The adjacent ephemeral drainages and associated riparian habitat do not support suitable habitat for riparian/riverine bird species. Due to the lack of suitable riparian habitat within or adjacent to the proposed project development area, focused surveys for riparian/riverine bird species listed in Section 6.1.2 of the MSHCP are not warranted.

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

The entire site was evaluated for the presence of habitat capable of supporting branchiopods. The site was evaluated as described in the USFWS Survey Guidelines for the Listed Large Branchiopods (May 31, 2016). The project area is 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 located within a Western Riverside County MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) for Many-stemmed dudleya, California Orcutt grass, Spreading navarretia, San Miguel savory, Hammitt's clay-cress, Wright's trichocoronis pursuant to Section 6.1.3 of the MSHCP. The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. A habitat assessment conducted within the project area footprint determined that the site does not provide suitable habitat for the any of the above listed narrow endemic plant species.

Section 6.1.4 Urban/Wildlands Interface Guidelines

APN 933-020-005 is located adjacent to the Santa Rosa Plateau to the north. Further, several ephemeral drainages cross through APN 933-020-005 to the north and east of the 4.28-acre project site. Therefore, Urban/Wildlands Interface Guidelines (Section 6.14 of the MSHCP) are required to be applied to the project. The following mitigation measures shall be incorporated into the project to reduce potential impacts to the adjacent offsite drainages:

Drainage – Water Quality Best Management Practices (BMPs) shall be incorporated, including the National Pollutant Discharge Elimination Systems (NPDES) and erosion control requirements from the Regional Water Quality Control Board to ensure that the quantity and quality of surface water runoff discharged into the offsite drainages is not altered in an adverse way when compared with existing conditions. These BMPs will be implemented as part of the Storm Water Pollution Prevention Plan (SWPPP) in order to ensure that water quality is not degraded.

Toxics - Measures such as those employed to address drainage issues will be implemented for toxics. Land uses proposed in proximity to the offsite drainages that use chemicals or generate bioproducts that are potentially toxic or may adversely affect wildlife species, habitat or water quality must incorporate measures to ensure that application of such chemicals does not result in discharge to the drainage.

Invasives - Invasive, non-native plant species must not be used as landscaping materials for development that is proposed adjacent to the offsite drainage areas. Table 6-2 of Volume 1 of the MSHCP lists the plants that should be avoided.

Section 6.3.2 Additional Surveys and Procedures

The project site is located within a Western Riverside County MSHCP Additional survey area for California red-legged frog. In addition, the project site is not located within the Western Riverside County MSHCP Criteria Area Plant Species Survey Area (CAPSSA) Parish's brittlescale, Davidson's saltscale, Round-leaved filaree, Coulter's goldfields, Heart-leaved pitcher

sage, Prostarte navarretia. Further, the project site is located within the Western Riverside County MSHCP Additional survey area for burrowing owl.

The 4.28-acre project area consists of disturbed land characterized by agricultural orchards and disturbed/developed areas. A habitat assessment conducted within the project area footprint determined that the site does not provide suitable habitat for the any of the above listed criteria area plant species and amphibian species.

A burrowing owl habitat assessment was conducted on the 4.28-acre project area. Due to the fact that the site is highly disturbed by existing avocado orchard agricultural uses and no small mammal burrows were observed, the habitat assessment determined that no suitable habitat for burrowing owl exists within the project area. The avocado orchards are trees that do not provide the open fields necessary for burrowing owl habitat.

However, due to the fact that the project site is located within the Western Riverside County MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of project activities (e.g. vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding project activities. If BUOW are found to have colonized the project site prior to the initiation of construction, the project proponent will immediately inform RCA and the Wildlife Agencies and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA and the Wildlife Agencies prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

6.0 Recommendations

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

Burrowing Owl

- A habitat assessment has determined that the site does not provide suitable habitat for burrowing owl. However, due to the fact that the project site is located within the Western Riverside County MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of project activities (e.g. vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding project activities.
- If BUOW are found to have colonized the project site prior to the initiation of construction, the project proponent will immediately inform RCA and the Wildlife

Agencies and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA and the Wildlife Agencies prior to initiating ground disturbance.

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

Nesting Birds

- Project ground disturbing and vegetation clearing activities should occur outside of the bird nesting season of February 1 through September 15;
- If avoidance of ground disturbing and vegetation clearing activities cannot be implemented and these activities will occur during the bird nesting season, a qualified biologist shall conduct pre-construction nesting bird surveys during the nesting bird season within 3 days prior to vegetation removal and/or construction activities; and,
- If active nests are found during nesting bird surveys, they will be flagged and a 500-foot buffer for raptors and a 250-foot buffer for migratory song birds, shall be installed around the nests. The buffers must remain in place until the young have fledged and the nest becomes unoccupied.

7.0 Certification

ASSOCIATE BIOLOGIST

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	02-26-2021	Signed	Shown fatihil Humander	
			PROJECT MANAGER	
Fieldwo	ork Performed By:			
Hallie l	Hernandez			
ASSOC	CIATE BIOLOGIST			
Elizabe	eth Gonzalez			

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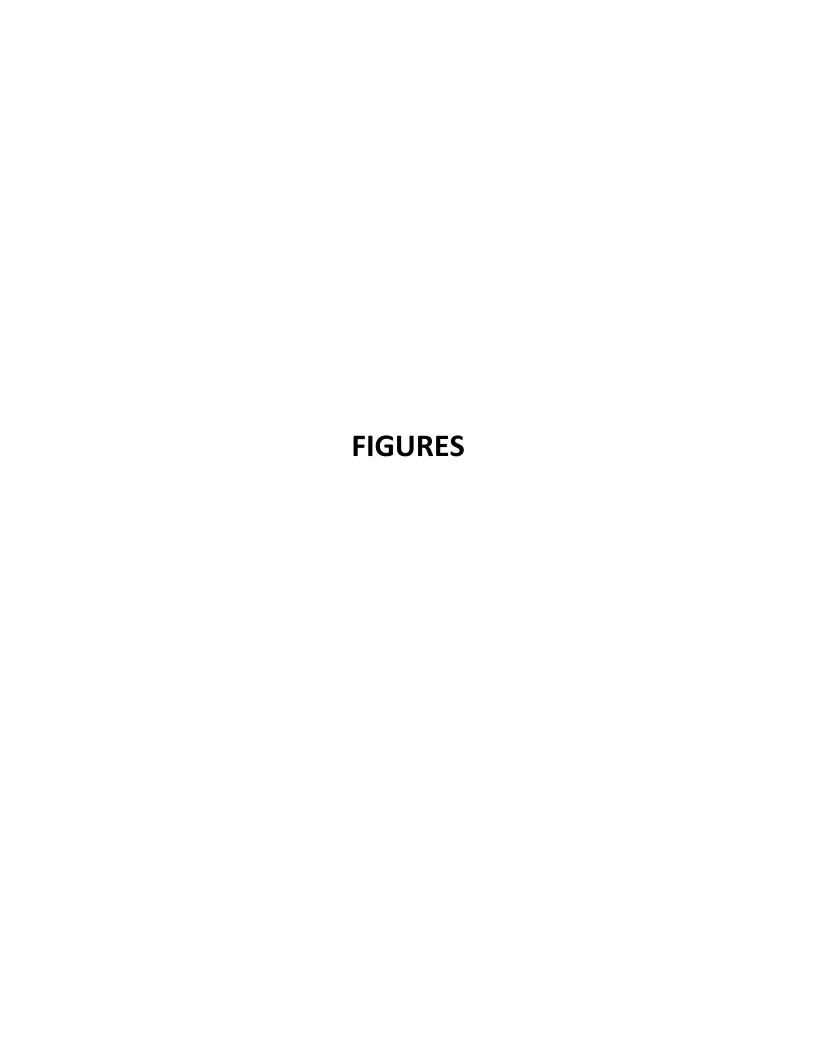
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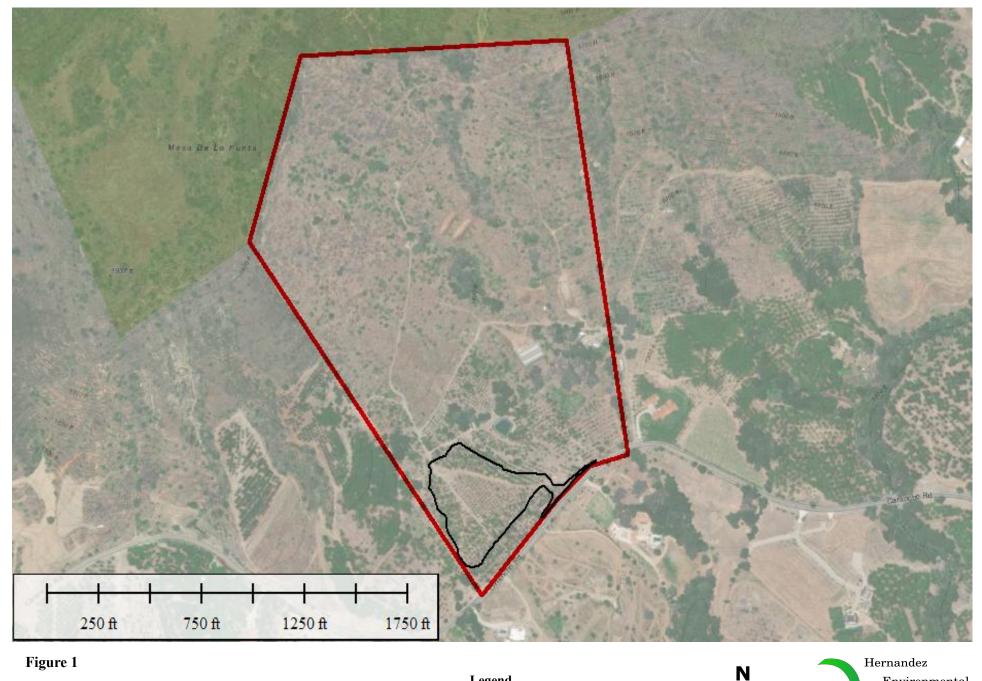
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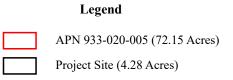
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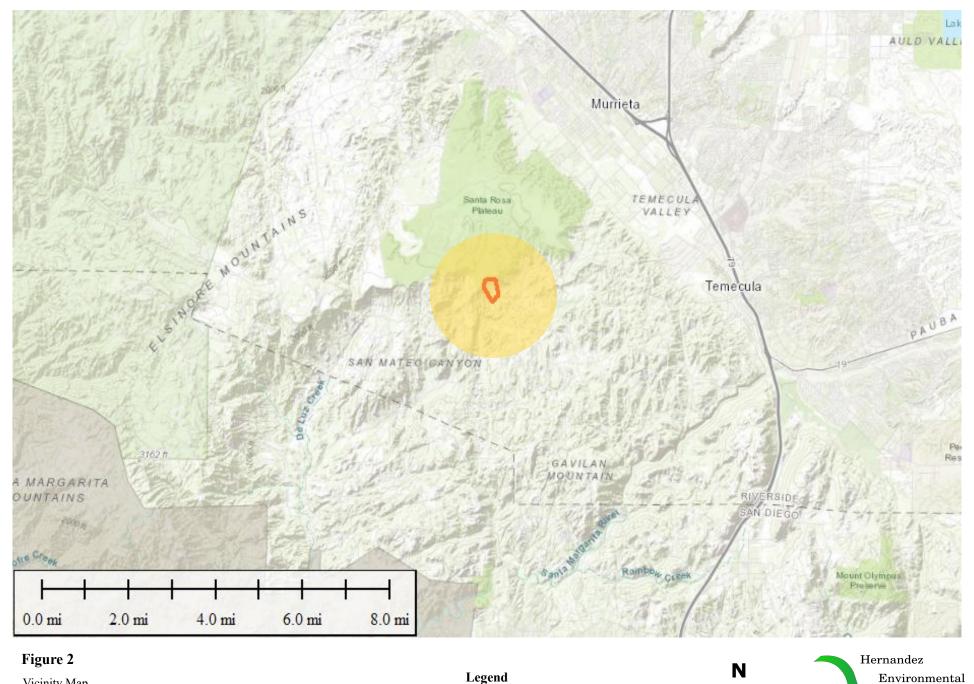


Location Map
Fuego Farms Commercial Agricultural Operation
APN 933-020-005
Riverside County, California



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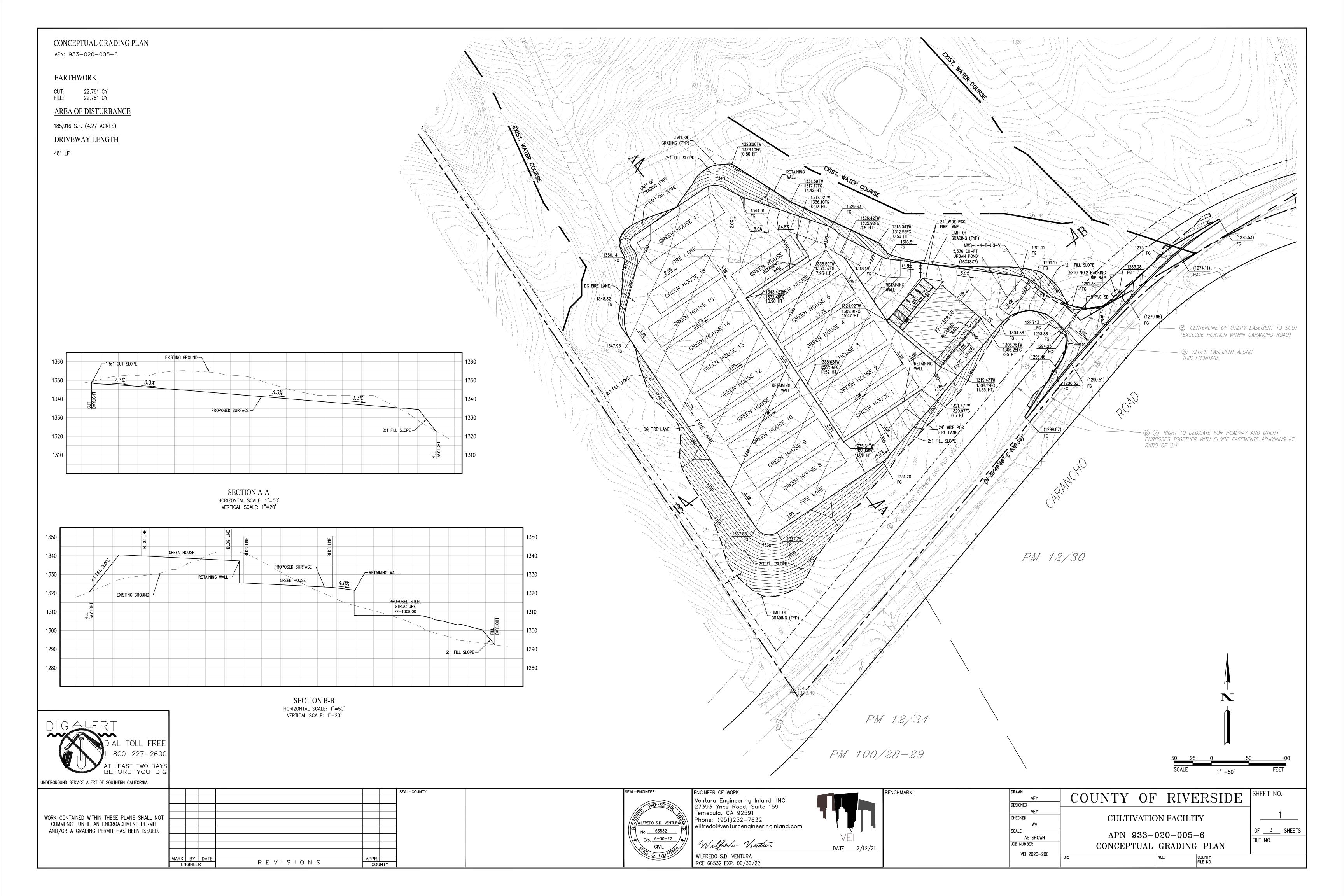


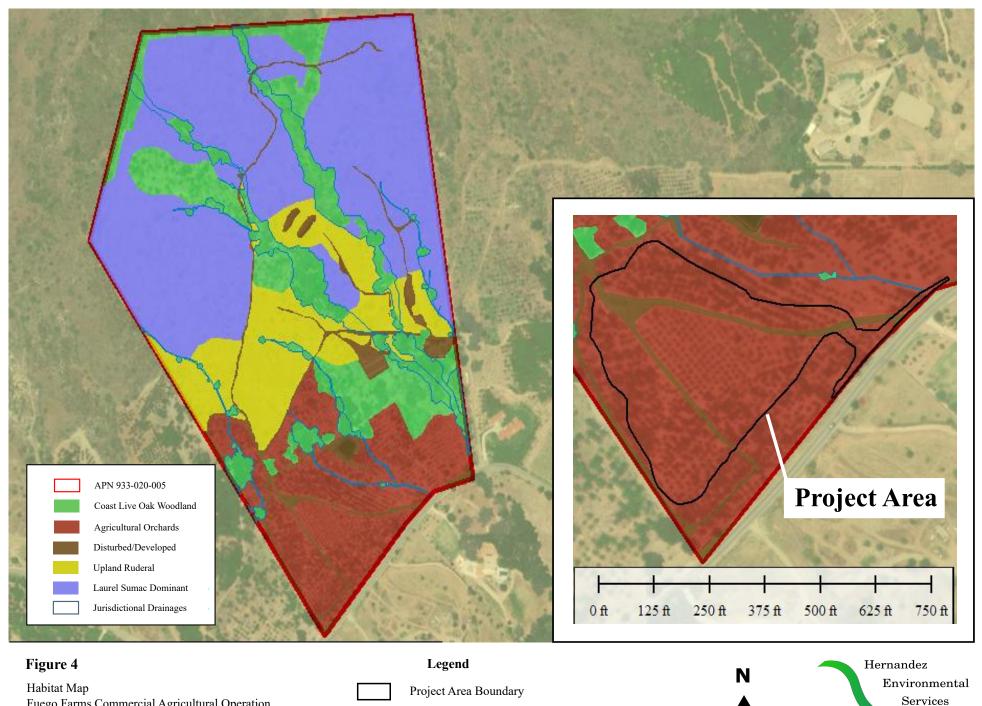
Vicinity Map Fuego Farms Commercial Agricultural Operation APN 933-020-005 Riverside County, California

APN 933-020-005



Environmental Services





Services Fuego Farms Commercial Agricultural Operation Onsite Agricultural Orchards (3.91 Acres) APN 933-020-005 Riverside County, California Onsite Disturbed/Developed Areas (0.37 Acre)

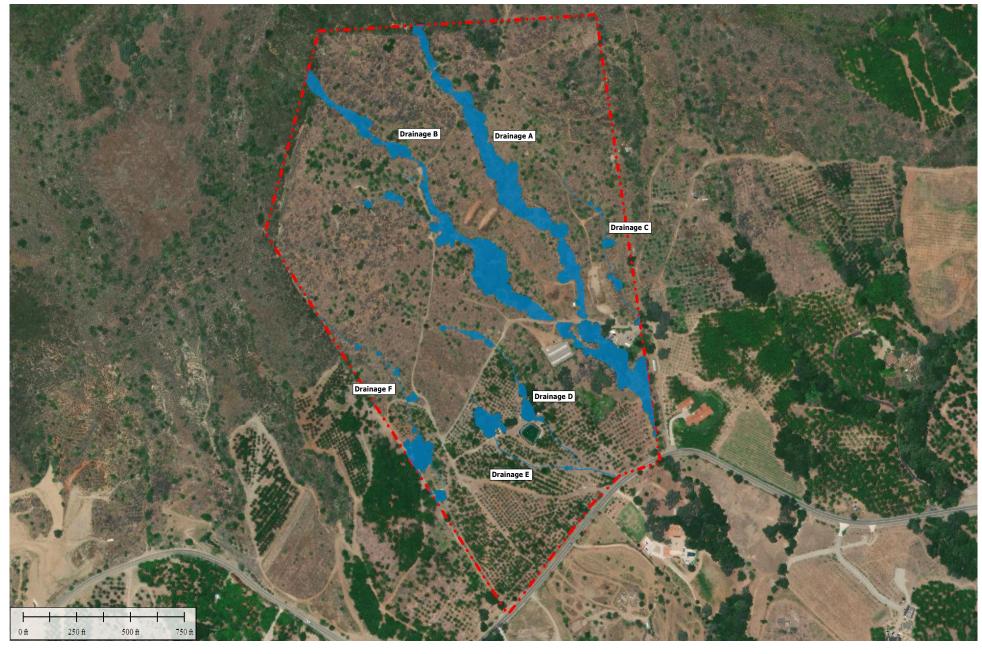
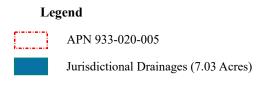
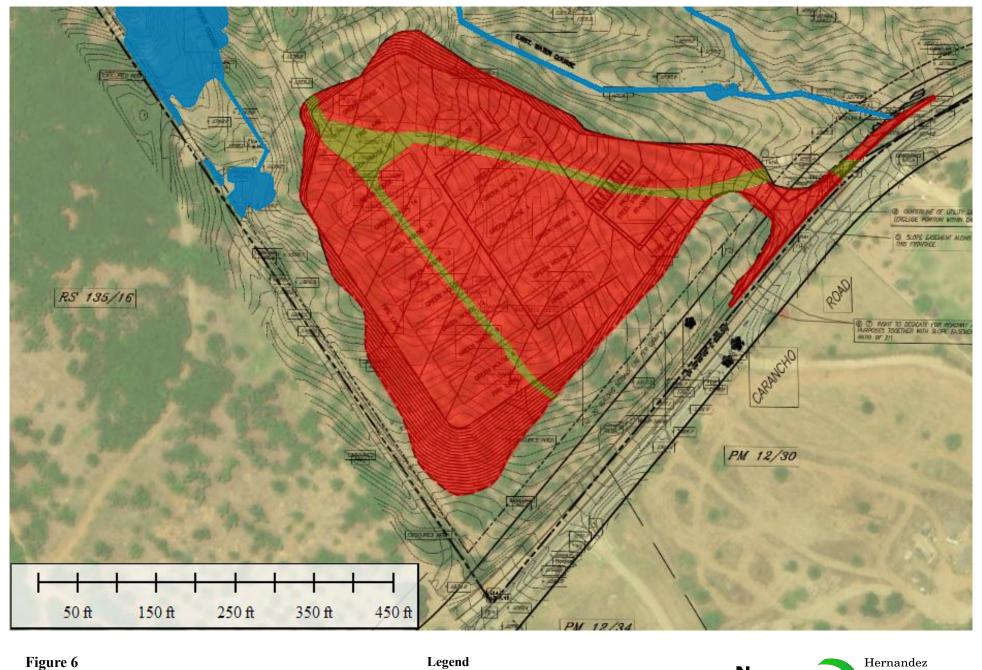


Figure 5

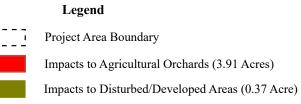
Jurisdictional Drainages Map
Fuego Farms Commercial Agricultural Operation
APN 933-020-005
Riverside County, California



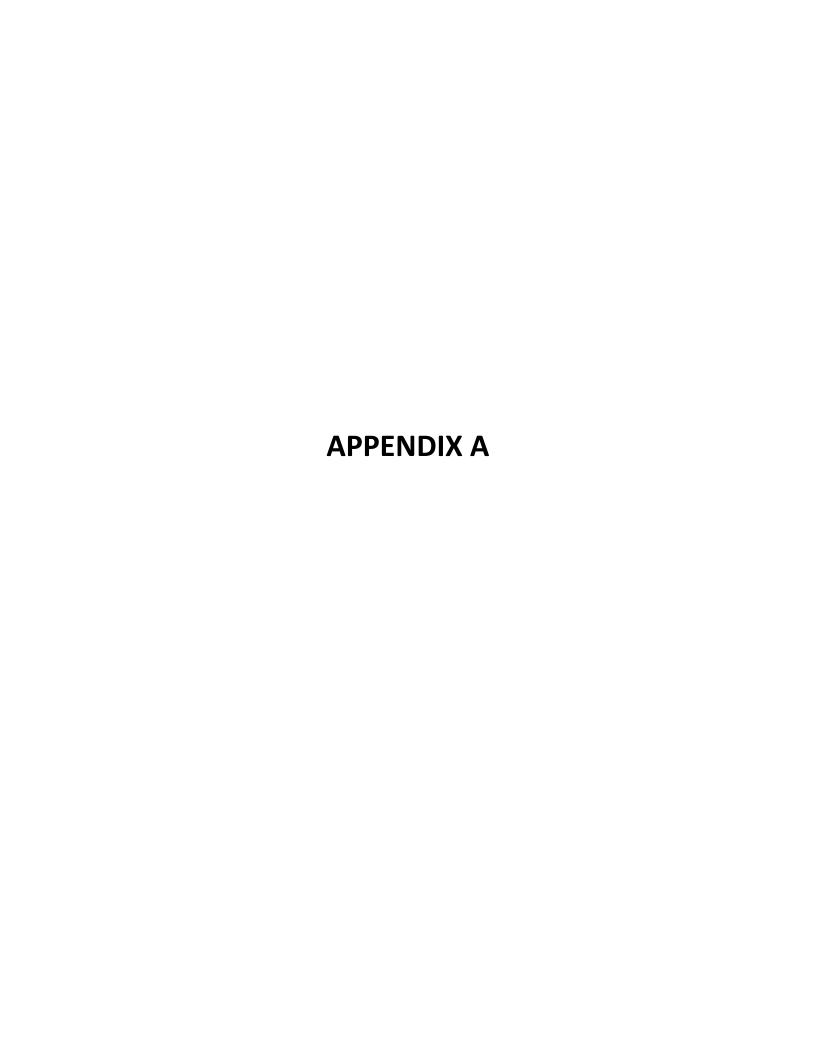




Habitat Impacts Map Fuego Farms Commercial Agricultural Operation APN 933-020-005 Riverside County, California







Species List

Plant List

Agave americana Century plant

Amaranthus albus Tumbleweed

Anthemis cotula Dog fennel

Araujia sericifera Moth plant

Artemisia californica Coastal sage brush

Baccharis pilularis Coyote brush

Baccharis salicifolia Mule fat

Brassica rapa Common mustard

Bromus carinatus California bromegrass

Cirsium vulgare Bull thistle

Croton setiger Turkey-mullein

Cynodon dactylon Bermuda grass

Diplacus puniceus Sticky monkeyflower

Erigeron bonariensis Flax-leaved horseweed

Erigeron canadensis Canada horseweed

Erodium brachycarpum White stemmed filaree

Ficus carica Common fig

Hesperoyucca whipplei Chaparral yucca

Heteromeles arbutifolia Toyon

Heterotheca grandiflora Telegraph weed

Malosma laurina Laurel sumac

Nicotiana glauca Tree tobacco

Opuntia littoralis Prickly pear

Panicum virgatum Switchgrass

Persea americana Avocado tree

Platanus racemose California sycamore

Pseudognaphalium californicum Ladies' tobacco

Quercus agrifolia Coast live oak

Quercus dumosa Scrub oak

Salix laevigata Red willow

Salsola australis Russian thistle

Schinus molle Peruvian pepper tree

Stephanomeria pauciflora Brownplume wirelettuce

Vitis girdiana Southern California grape

Washingtonia robusta Mexican fan palm

Animal List

Aphelocoma californica California scrub jay

Buteo jamaicensis Red-tailed hawk

Callipepla californica California quail

Calypte anna Anna's hummingbird

Canis latrans Coyote

Cathartes aura Turkey vulture

Colaptes auratus Northern flicker

Corvus corax Common raven

Felis catus House cat

Haemorhous mexicanus House finch

Melanerpes formicivorus Acorn woodpecker

Odocoileus hemionus Mule deer

Otospermophilus beecheyi California ground squirrel

Poecile atricapillus Black-capped chickadee

Polioptila sp. Gnatcatcher sp.

Psaltriparus minimus American bushtit

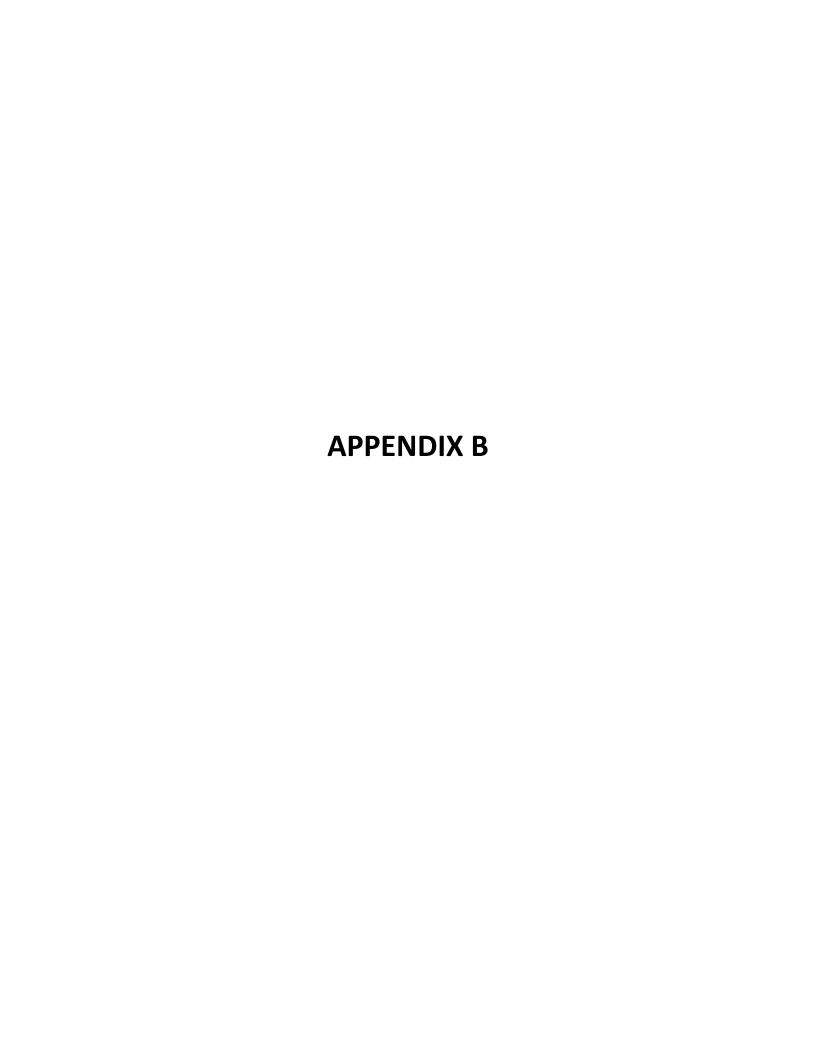
Setophaga coronata Yellow-rumped warbler

Sceloporus occidentalis Western fence lizard

Thomomys bottae Botta's pocket gopher

Zenaida macroura Mourning dove

Zonotrichia leucophrys White-crowned sparrow



Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
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. Not present.
Yucaipa onion	Monocots	None	None	1B.2	Chaparral	Chaparral.	In openings on clay soils. 850-1070 m.	No suitable habitat is present on site. Not present.
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. Not present.
alkali marsh aster	Dicots	None	None	2B.2	Meadow & seep	Meadow and seeps.	Alkaline. 60-765 m.	No suitable habitat is present on site. Not present.
San Diego ambrosia	Dicots	Endangered	None	1B.1	Chaparral Coastal scrub Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3-580 m.	No suitable habitat is present on site. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Rainbow manzanita	Dicots	None	None	1B.1	Chaparral Ultramafic	Chaparral.	Usually found in gabbro chaparral. 100-870 m.	No suitable habitat is present on site. Not present.
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 oakchaparral. 365-1040 m.	No suitable habitat is present on site. Not present.
California ayenia	Dicots	None	None	2B.3	Desert wash Mojavean desert scrub Sonoran desert scrub	Mojavean desert scrub, Sonoran desert scrub.	Sandy and gravelly washes in the desert; dry desert canyons. 60-1830 m.	No suitable habitat is present on site. Not present.
thread- leaved brodiaea	Monocots	Threatened	Endangered	1B.1	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland Vernal pool Wetland	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools.	Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. 15-1030 m.	No suitable habitat is present on site. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Orcutt's brodiaea	Monocots	None	None	1B.1	Chaparral Cismontane woodland Closed- cone coniferous forest Meadow & seep Ultramafic Valley & foothill grassland Vernal pool Wetland	Vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows and seeps.	Mesic, clay habitats; usually in vernal pools and small drainages. 30-1615 m.	No suitable habitat is present on site. Not present.
Santa Rosa Basalt brodiaea	Monocots	None	None	1B.2	Valley & foothill grassland	Valley and foothill grassland.	Santa Rosa Basalt. 585-1045 m.	No suitable habitat is present on site. Not present.
intermediat e mariposa- lily	Monocots	None	None	1B.2	Chaparral Coastal scrub Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland.	Dry, rocky calcareous slopes and rock outcrops. 60-1575 m.	No suitable habitat is present on site. Not present.
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. Not present.
Pendleton ceanothus	Dicots	None	None	1B.2	Chaparral Cismontane woodland	Chaparral, cismontane woodland.	Granitic. 110-870 m.	No suitable habitat is present on site. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
smooth tarplant	Dicots	None	None	1B.1	Alkali playa Chenopod scrub Meadow & seep Riparian woodland Valley & foothill grassland Wetland	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland.	Alkali meadow, alkali scrub; also in disturbed places. 5- 1170 m.	No suitable habitat is present on site. Not present.
Orcutt's pincushion	Dicots	None	None	1B.1	Coastal bluff scrub Coastal dunes	Coastal bluff scrub, coastal dunes.	Sandy sites. 3-80 m.	No suitable habitat is present on site. Not present.
Parry's spineflower	Dicots	None	None	1B.1	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	No suitable habitat is present on site. Not present.
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. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
San Miguel savory	Dicots	None	None	1B.2	Chaparral Cismontane woodland Coastal scrub Riparian woodland Ultramafic Valley & foothill grassland		Rocky, gabbroic or metavolcanic substrate. 120-975 m.	No suitable habitat is present on site. Not present.
summer holly	Dicots	None	None	1B.2	Chaparral Cismontane woodland	Chaparral, cismontane woodland.	Often in mixed chaparral in California, sometimes post- burn. 30-855 m.	No suitable habitat is present on site. Not present.
many- stemmed dudleya	Dicots	None	None	1B.2	Chaparral Coastal scrub Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	In heavy, often clayey soils or grassy slopes. 1-910 m.	No suitable habitat is present on site. Not present.
sticky dudleya	Dicots	None	None	1B.2	Chaparral Cismontane woodland Coastal bluff scrub Coastal scrub	Coastal scrub, coastal bluff scrub, chaparral, cismontane woodland.	On north and south- facing cliffs and banks. 20-870 m.	No suitable habitat is present on site. Not present.
San Diego button- celery	Dicots	Endangered	Endangered	1B.1	Coastal scrub Valley & foothill grassland Vernal pool Wetland	Vernal pools, coastal scrub, valley and foothill grassland.	San Diego mesa hardpan & claypan vernal pools & southern interior basalt flow vernal pools; usually surrounded by scrub. 15-880 m.	No suitable habitat is present on site. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Campbell's liverwort	Bryophytes	None	None	1B.1	Coastal scrub Vernal pool Wetland	Coastal scrub, vernal pools.	Liverwort known from mesic soil. 60- 610 m.	No suitable habitat is present on site. Not present.
Palmer's grapplingho ok	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. Not present.
Tecate cypress	Gymnosper ms	None	None	1B.1	Chaparral Closed- cone coniferous forest	Closed-cone coniferous forest, chaparral.	Primarily on north- facing slopes; groves often associated with chaparral. On clay or gabbro. 60-1650 m.	No suitable habitat is present on site. Not present.
Ramona horkelia	Dicots	None	None	1B.3	Chaparral Cismontane woodland Ultramafic	Chaparral, cismontane woodland.	Habitats in California include: mixed chaparral, vernal streams, and disturbed areas near roads. Clay soil; at least sometimes on gabbro. 380-1190 m.	No suitable habitat is present on site. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Santa Lucia dwarf rush	Monocots	None	None	1B.2	Chaparral Great Basin scrub Lower montane coniferous forest Meadow & seep Vernal pool Wetland	Vernal pools, meadows and seeps, lower montane coniferous forest, chaparral, Great Basin scrub.	Vernal pools, ephemeral drainages, wet meadow habitats and streamsides. 280- 2035 m.	No suitable habitat is present on site. Not present.
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. Not present.
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. Not present.
lemon lily	Monocots	None	None	1B.2	Lower montane coniferous forest Meadow & seep Riparian forest Upper montane coniferous forest Wetland	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest.	Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows & seeps. 625-2930 m.	No suitable habitat is present on site. Not present.
Parish's meadowfoa m	Dicots	None	Endangered	1B.2	Lower montane coniferous forest Meadow & seep Vernal pool Wetland	Lower montane coniferous forest, meadows and seeps, vernal pools.	Vernally moist areas and temporary seeps of highland meadows and plateaus; often bordering lakes and streams. 605-1805 m.	No suitable habitat is present on site. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Shevock's copper moss	Bryophytes	None	None	1B.2	Cismontane woodland	Cismontane woodland.	Moss on metamorphic rocks containing heavy metals; mesic sites. On rocks along roads, in same habitat as Mielichhoferia elongata. 365-1110 m.	No suitable habitat is present on site. Not present.
intermediat e monardella	Dicots	None	None	1B.3	Chaparral Cismontane woodland Lower montane coniferous forest	Chaparral, cismontane woodland, lower montane coniferous forest (sometimes).	Often in steep, brushy areas. 195- 1675 m.	No suitable habitat is present on site. Not present.
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. Not present.
spreading navarretia	Dicots	Threatened	None	1B.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. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
prostrate vernal pool navarretia	Dicots	None	None	1B.2	Coastal scrub Meadow & seep Valley & foothill grassland Vernal pool Wetland	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps.	Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m.	No suitable habitat is present on site. Not present.
California Orcutt grass	Monocots	Endangered	Endangered	1B.1	Vernal pool Wetland	Vernal pools.	10-660 m.	No suitable habitat is present on site. Not present.
white rabbit- tobacco	Dicots	None	None	2B.2	Chaparral Cismontane woodland Coastal scrub Riparian woodland	Riparian woodland, cismontane woodland, coastal scrub, chaparral.	Sandy, gravelly sites. 35-515 m.	No suitable habitat is present on site. Not present.
southern mountains skullcap	Dicots	None	None	1B.2	Chaparral Cismontane woodland Lower montane coniferous forest	Chaparral, cismontane woodland, lower montane coniferous forest.	In gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425- 2000 m.	No suitable habitat is present on site. Not present.
Hammitt's clay-cress	Dicots	None	None	1B.2	Chaparral Valley & foothill grassland	Valley and foothill grassland, chaparral.	Mesic microsites in open areas on clay soils in Stipa grassland. Often surrounded by Adenostoma chaparral. 715-1040 m.	No suitable habitat is present on site. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Southern Coast Live Oak Riparian Forest	Riparian	None	None		Riparian forest			Not Present
Southern Interior Basalt Flow Vernal Pool	Herbaceou s	None	None		Vernal pool Wetland			Not Present
Southern Sycamore Alder Riparian Woodland	Riparian	None	None		Riparian woodland			Not Present
bottle liverwort	Bryophytes	None	None	1B.1	Chaparral Coastal scrub	Chaparral, coastal scrub.	Liverwort in openings; on soil. 60-585 m.	No suitable habitat is present on site. Not present.
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. Not present.

Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Parry's tetracoccus	Dicots	None	None	1B.2	Chaparral Coastal scrub Ultramafic	Chaparral, coastal scrub.	Stony, decomposed gabbro soil. 135-705 m.	No suitable habitat is present on site. Not present.
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. Not present.
Valley Needlegrass Grassland	Herbaceou s	None	None		Valley & foothill grassland			Not Present

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Accipiter cooperii	Cooper's hawk	Birds	None	None	Cismontane woodland Riparian forest Riparian woodland Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	No suitable habitat is present on site. This species is not present .
Aimophila ruficeps canescens	southern California rufous- crowned sparrow	Birds	None	None	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 .
Anaxyrus californicus	arroyo toad	Amphibians	Endangered	None	Desert wash Riparian scrub Riparian woodland South coast flowing waters South coast standing waters	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	No suitable habitat is present on site. This species is not present .
Anniella stebbinsi	Southern California legless lizard	Reptiles	None	None		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	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Antrozous pallidus	pallid bat	Mammals	None	None	Chaparral Coastal scrub Desert wash Great Basin grassland Great Basin scrub Mojavean desert scrub Riparian woodland Sonoran desert scrub Upper montane coniferous forest Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands 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 .
Aquila chrysaetos	golden eagle	Birds	None	None	Broadleaved upland forest Cismontane woodland Coastal prairie Great Basin grassland Great Basin scrub Lower montane coniferous forest Pinon & juniper woodlands Upper montane coniferous forest Valley & foothill grassland	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	No suitable habitat is present on site. This species is not present .
Arizona elegans occidentalis	California glossy snake	Reptiles	None	None		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	Chaparral Coastal scrub	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6- 18 inches above ground. Territories about 50 yds apart.	No suitable habitat is present on site. This species is not present .

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Aspidoscelis hyperythra	orange- throated whiptail	Reptiles	None	None	lwoodland I 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.	
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None		Found in deserts and semi- arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.	or rocky	No suitable habitat is present on site. This species is not present.
Athene cunicularia	burrowing owl	Birds	None	None	· ·	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	No suitable habitat is present on site. This species is not present.
Atractelmis wawona	Wawona riffle beetle	Insects	None	None	Aquatic	Aquatic; found in riffles of rapid, small to medium clear mountain streams; 2000-5000 ft elev.	Strong preference for inhabiting submerged aquatic mosses	No suitable habitat is present on site. This species is not present.
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	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	Threatened	None	Valley & foothill grassland Vernal pool Wetland	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools.	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	No suitable habitat is present on site. This species is not present .
Branchinecta sandiegonensi s	San Diego fairy shrimp	Crustaceans	Endangered	None	Chaparral Coastal scrub Vernal pool Wetland	Endemic to San Diego and Orange County mesas.	Vernal pools.	No suitable habitat is present on site. This species is not present.
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened	Great Basin grassland Riparian forest Riparian woodland Valley & foothill grassland	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	No suitable habitat is present on site. This species is not present .
Campylorhync hus brunneicapillu s sandiegensis	coastal cactus wren	Birds	None	None	Coastal scrub	Southern California coastal sage scrub.	Wrens require tall opuntia cactus for nesting and roosting.	No suitable habitat is present on site. This species is not present.
Chaetodipus californicus femoralis	Dulzura pocket mouse	Mammals	None	None	Chaparral Coastal scrub Valley & foothill grassland	Variety of habitats including coastal scrub, chaparral & grassland in San Diego County.	Attracted to grass-chaparral edges.	No suitable habitat is present on site. This species is not present.
Chaetodipus fallax fallax	northweste rn San Diego pocket mouse	Mammals	None	None	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	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Coccyzus americanus occidentalis	western yellow- billed cuckoo	Birds	Threatened	Endangered	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.
Crotalus ruber	red- diamond rattlesnake	Reptiles	None	None	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.
Diadophis punctatus similis	San Diego ringneck snake	Reptiles	None	None		Open, fairly rocky areas. Use boards, flat rocks, woodpiles, stable talus, rotting logs & small ground holes for cover.	Prefer areas with surface litter or herbaceous vegetation. Often in somewhat moist areas near intermittent streams.	No suitable habitat is present on site. This species is not present .
Dipodomys merriami parvus	San Bernardino kangaroo rat	Mammals	Endangered	Candidate Endangered	Coastal scrub	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	Needs early to intermediate seral stages.	No suitable habitat is present on site. This species is not present.
Dipodomys stephensi	Stephens' kangaroo rat	Mammals	Endangered	Threatened	Coastal scrub Valley & foothill grassland	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover.	Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	No suitable habitat is present on site. This species is not present .
Elanus leucurus	white- tailed kite	Birds	None	None	Cismontane woodland Marsh & swamp Riparian woodland Valley & foothill grassland Wetland	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	No suitable habitat is present on site. This species is not present.

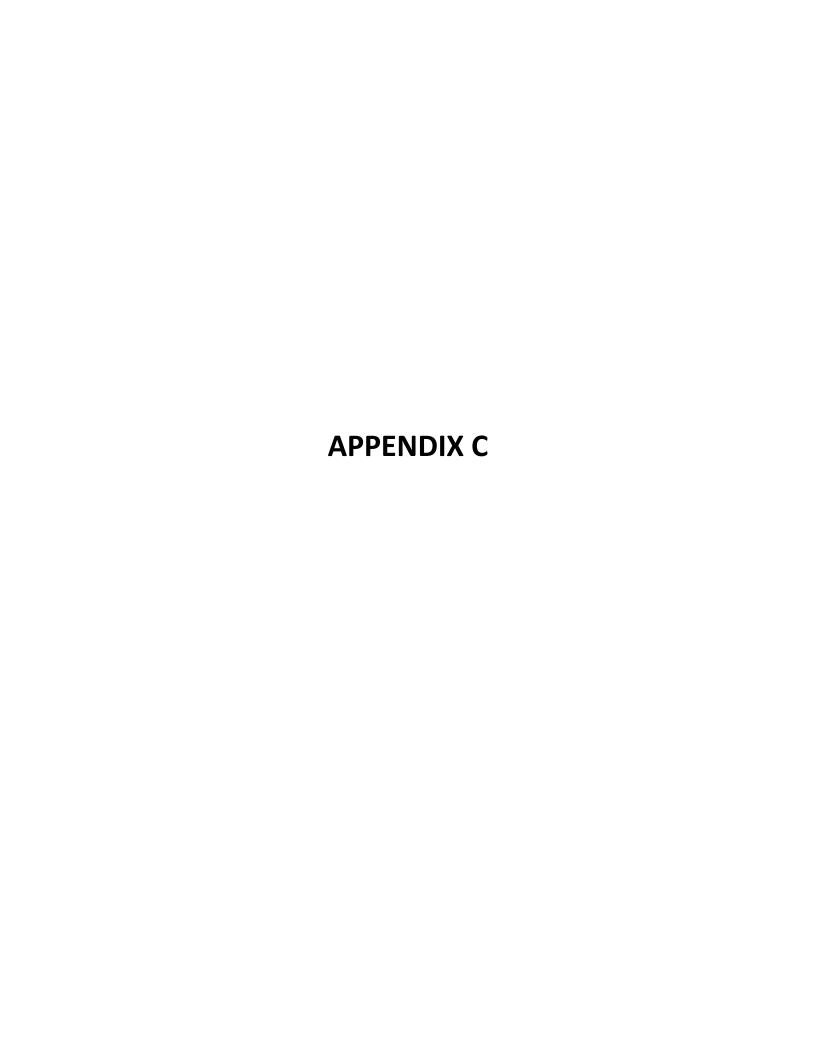
Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Emys marmorata	western pond turtle	Reptiles	None	None	Aquatic Artificial flowing waters Klamath/North coast flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland	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 .
Eremophila alpestris actia	California horned lark	Birds	None	None	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 .
Eumops perotis californicus	western mastiff bat	Mammals	None		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 checkerspo t 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	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Gila orcuttii	arroyo chub	Fish	None	None	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 .
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	None	None	Coastal scrub	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges.	Coastal sage scrub habitats in Southern California.	No suitable habitat is present on site. This species is not present.
Linderiella occidentalis	California linderiella	Crustaceans	None	None	Vernal pool	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions.	Water in the pools has very low alkalinity, conductivity, and total dissolved solids.	No suitable habitat is present on site. This species is not present.
Linderiella santarosae	Santa Rosa Plateau fairy shrimp	Crustaceans	None	None	Vernal pool	Found only in the vernal pools on Santa Rosa Plateau in Riverside County.	Southern basalt flow vernal pools.	No suitable habitat is present on site. This species is not present .
Myotis yumanensis	Yuma myotis	Mammals	None	None	Lower montane coniferous forest Riparian forest Riparian woodland Upper montane coniferous forest	Optimal habitats are open forests and woodlands with sources of water over which to feed.	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	No suitable habitat is present on site. This species is not present.
Nycticorax nycticorax	black- crowned night heron	Birds	None	None	Marsh & swamp Riparian forest Riparian woodland Wetland	Colonial nester, usually in trees, occasionally in tule patches.	Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	None	None	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 .
Perognathus longimembris brevinasus	Los Angeles pocket mouse	Mammals	None	None	Coastal scrub	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin.	, -	No suitable habitat is present on site. This species is not present .
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	Chaparral Cismontane woodland Coastal bluff scrub Coastal scrub Desert wash Pinon & juniper woodlands Riparian scrub Riparian woodland Valley & foothill grassland	habitats, most common in	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	No suitable habitat is present on site. This species is not present.
Plestiodon skiltonianus interparietalis	Coronado skink	Reptiles	None	None	Chaparral Cismontane woodland Pinon & juniper woodlands	Grassland, chaparral, pinon- juniper and juniper sage woodland, pine-oak and pine forests in Coast Ranges of Southern California.	Prefers early successional stages or open areas. Found in rocky areas close to streams and on dry hillsides.	No suitable habitat is present on site. This species is not present.
Polioptila californica californica	coastal California gnatcatche r	Birds	Threatened	None	Coastal bluff scrub Coastal scrub	of coastal sage scrub below	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	No suitable habitat is present on site. This species is not present .

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Rana draytonii	California red-legged frog	Amphibians	Threatened	None	Aquatic Artificial flowing waters Artificial standing waters Freshwater marsh Marsh & swamp Riparian forest Riparian scrub Riparian woodland Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	No suitable habitat is present on site. This species is not present .
Salvadora hexalepis virgultea	coast patch- nosed snake	Reptiles	None	None	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.
Spea hammondii	western spadefoot	Amphibians	None	None	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.
Streptocephal us woottoni	Riverside fairy shrimp	Crustaceans	Endangered	None	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	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Taricha torosa	Coast Range newt	Amphibians	None	None		Coastal drainages from Mendocino County to San Diego County.	Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	No suitable habitat is present on site. This species is not present .
Thamnophis hammondii	two-striped gartersnak e		None	None	Marsh & swamp Riparian scrub Riparian woodland Wetland	northwest Baja California. From sea to about 7,000 ft	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	No suitable habitat is present on site. This species is not present.
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered	Riparian forest Riparian scrub Riparian woodland	California in low riparian in vicinity of water or in dry river	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.





View of agricultural orchard within southern portion of project area.



View of disturbed area/access road adjacent to agricultural orchard within project area.



View of agricultural orchard within project area.

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View of agricultural orchard within project area.

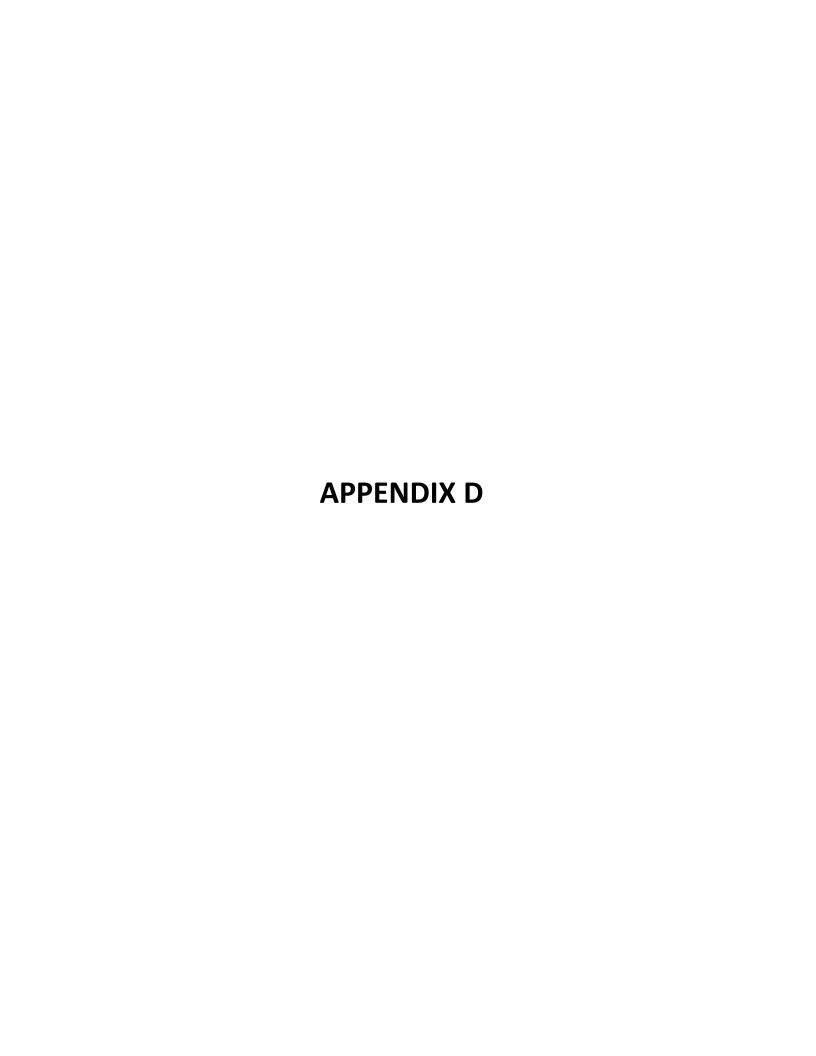


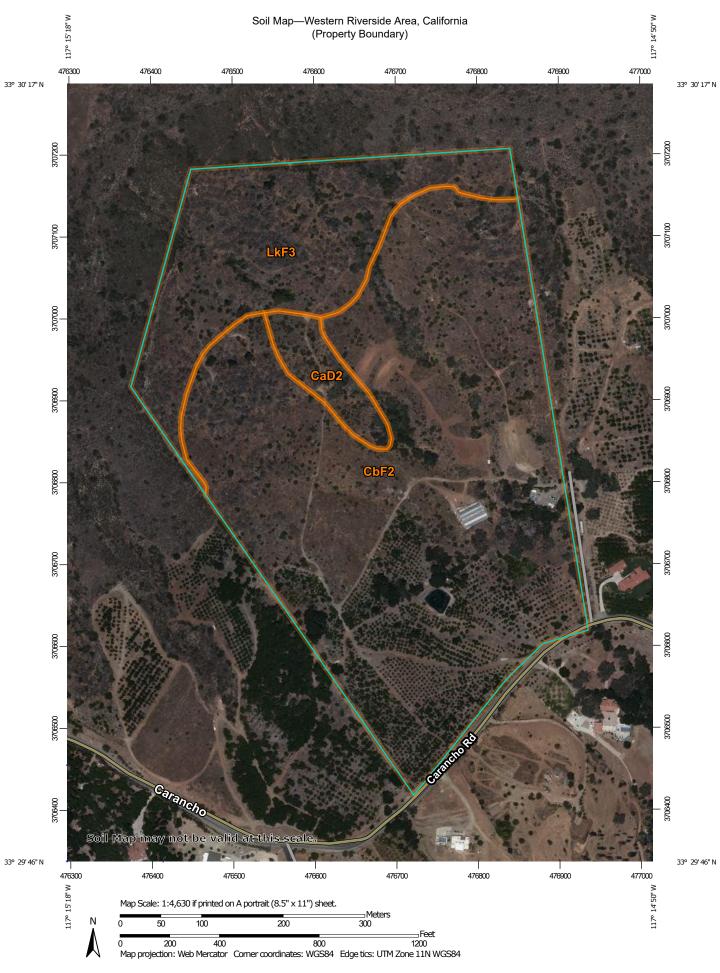
View of agricultural orchard and access road within project area.



View of culvert exiting the site and extending beneath Carancho Road.

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MAP LEGEND

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Water Features

Transportation

Background

Spoil Area

Stony Spot

Wet Spot

Other

Rails

US Routes

Major Roads

Local Roads

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

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

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 15, 2018—Jun 25, 2018

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
CaD2	Cajalco fine sandy loam, 8 to 15 percent slopes, eroded	2.6	3.7%
CbF2	Cajalco rocky fine sandy loam, 15 to 50 percent slopes, eroded	52.0	73.4%
LkF3	Las Posas rocky loam, 15 to 50 percent slopes, severely eroded	16.2	22.9%
Totals for Area of Interest		70.8	100.0%



JURISDICTIONAL DELINEATION FOR FUEGO FARMS CANNABIS CULTIVATION OPERATION ASSESSOR'S PARCEL NUMBER 933-020-005

COUNTY OF RIVERSIDE, CALIFORNIA

Prepared for:

Fuego Farms, LLC 2030 Froude Street San Diego, CA 92107

Prepared by:

Hernandez Environmental Services 17037 Lakeshore Drive Lake Elsinore, CA 92530

JANUARY 2021

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FIGURES

Figure 1 – Location Map

Figure 2 – Vicinity Map

Figure 3 – Site Plans

Figure 4 – CDFW Jurisdiction Map

Figure 5 – Project Impacts Map

APPENDICES

Appendix A – Site Photos

Appendix B – Soils Map

1.0 Introduction

HES was contracted to prepare a Jurisdictional Delineation for the proposed Fuego Farms Cannabis Cultivation Operation site consisting of the southwest portion of Assessor's Parcel Number (APN) 933-020-005. The site is located within unincorporated Riverside County, California. This Jurisdictional Delineation documents the present existing conditions on the project site.

1.1 Purpose

The purpose of this JD is to:

- Determine if any state or federal jurisdictional waters are present within the 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 Fuego Farms Cannabis Cultivation Operation site will be constructed on approximately 4.28 acres of the southwest portion of APN 933-020-005, which consists of an existing 72.15-acre agricultural facility. The remainder of the site is not a part of the proposed development area and will continue to be utilized for agricultural use. The site is located in an unincorporated area of western Riverside County, south of the Santa Rosa Plateau and west of the cities of Murrieta and Temecula. The site is located north of Carancho Road, west of De Luz Road, and east of El Calamar Road. Specifically, the project site is located within Section 1, Township 8 south, Range 4 west of the *Temecula*, *Fallbrook*, *Wildomar*, and *Murrieta* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps. Refer to Figures 1 and 2.

1.3 Project Description

The Fuego Farms Cannabis Cultivation Operation consists of the development of a cannabis cultivation facility consisting of fifteen 3,840 square foot greenhouse buildings, two 2,880 square foot greenhouse buildings, and a 4,800 square foot steel building for office use and product processing. The proposed project also includes associated access driveways, paved areas, utility infrastructure, retaining walls, and parking facilities. Implementation of the proposed project will impact approximately 4.28 acres of the project site. In addition, the project proposes offsite roadway improvements within the existing Carancho Road right-of-way, including acceleration and deceleration lanes to facilitate access to the site. Offsite improvements will impact approximately 0.2 acre of already disturbed/developed areas within the existing road right-of-way. Existing culverts/drainage facilities beneath the existing Carancho Road will remain in place. Refer to Figure 3, *Site Plans*.

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.

3.0 Methodology

3.1 Literature Review

Prior to the site visit, a literature review was conducted to aid in determining the potential for permanent, intermittent or ephemeral drainages, wetlands and riparian vegetation. Project background documents, topographic maps, satellite imaging, soils maps, and land use maps were examined to establish an accurate 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 December 8, 2020, HES conducted a field survey of the site. The field survey was 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 project site consists of approximately 4.28 acres of the southwest portion of APN 933-020-005, which is an existing 72.15-acre agricultural facility. The project site is currently disturbed and utilized for agricultural use consisting of an avocado orchard with associated irrigation infrastructure. Site topography consists of gently sloping terrain from the north towards the southern site boundary, with elevations ranging from 1,365 feet above mean sea level (AMSL) to 1290 feet AMSL. The 4.28-acre project site is disturbed by agricultural use and is dominated by avocado trees (*Persea americana*). Immediately surrounding the project site to the north, and east is the existing agricultural facility located within the remainder of APN 933-020-005. Several drainages cross through APN 933-020-005 to the north and east of the project site. Land uses surrounding APN 933-020-005 include Carancho Road and residential uses to the south, vacant lands and the Santa Rosa Plateau to the north, vacant lands and agricultural uses to the west, and a mix of agricultural and residential uses to the east.

4.2 Soils

The Natural Resources Conservation Services Soils Survey identifies three soil types within the site, as described below (Appendix B):

- Cajalco fine sandy loam (CaD2), 8 to 15 percent slopes, eroded;
- Cajalco rocky fine sandy loam (CbF2), 15 to 50 percent slopes, eroded; and,
- Las Posas rocky loam (LkF3), 15 to 50 percent slopes, severely eroded.

None of the soils present on-site are classified by the *United States Department of Agriculture's Natural Resources Conservation Service Web Soil Survey* as hydric soils.

4.3 Vegetation

The ephemeral drainages located within the boundaries of APN 933-020-005 are dominated by a mix of upland, ruderal vegetation, sumac series chaparral laurel sumac dominant habitat, and coast live oak woodlands. Dominant species observed within the upland, ruderal vegetated drainages include Russian thistle (Chenopodiaceae), tree tobacco (Nicotiana glauca), switch grass (Panicum virgatum), Canadian horse weed (Erigeron canadensis), Bermuda grass (Cynodon sp.), common mustard (Brassica rapa), black mustard (Brassica nigra), telegraph weed (Heterotheca grandiflora), plume wire lettuce (Stephanomeria pauciflora), red-stemmed filaree (Erodium cicatarium), and bromus sp. Dominant species observed within the sumac series chaparral laurel sumac dominant habitat include laurel sumac (Malosma laurina), coyote bush (Baccharis pilularis), scrub oak (Quercus berberidifolia), bush monkey flower (Mimulus aurantiacus), chaparral yucca (Hesperoyucca whipplei), chamise (Adenostoma fasciculatum), brittlebush (Encelia farinosa), and toyon (Heteromeles arbutifolia). Dominant species observed within the coast live oak woodlands include coast live oak (Quercus agrifolia), red willow (Salix laevigata), mulefat (Baccharis salicifolia), coyote bush (Baccharis pilularis), sycamore (Platanus occidentalis), scrub oak, and Mexican palm (Washingtonia robusta). Drainages A and B are dominated by coast live oak woodland. The northernmost portion of Drainage C is dominated by upland plant species and the southern portion of the drainage is dominated by coast live oak woodland. Drainage D is dominated by upland plant species in the northernmost portion, coast live oak woodland in the central portion, and is unvegetated in the southern portion flowing through the avocado orchards. Drainage E is dominated by coast live oak woodland in the northern portion and is primarily unvegetated with patches of mulefat in the southern portion as it flows through the avocado orchard. Drainage F is dominated by upland plant species with patches of coast live oak and willow trees.

4.4 Hydrology

APN 933-020-005 contains six unnamed ephemeral drainages (Drainages A, B, C, D, E, and F) dominated by upland plant species and coast live oak woodland. The ephemeral drainages measure

approximately 8,310 linear feet in length. The ephemeral drainages generally flow from northwest to south before continuing offsite.

The site is located within the Santa Margarita Watershed, the Santa Margarita hydrologic unit, and the Sandia Canyon hydrologic area. The project area contains unnamed tributaries to Sandia Canyon which ultimately flow to the Santa Margarita River and into the Pacific Ocean.

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

4.5 California Department of Fish and Wildlife Jurisdiction

APN 933-020-005 contains approximately 7.03 acres (8,310 linear feet) of ephemeral drainages and associated riparian areas that would be considered CDFW jurisdictional (Figure 4, *CDFW Jurisdiction Map*). The onsite ephemeral drainages are dominated by a mix of coast live oak woodland and upland plant species.

The proposed cannabis cultivation facility has been designed to avoid all impacts to drainages and riparian habitat (Figure 5, *Project Impacts Map*). Should the project site plans change, any impacts to drainages and/or associated riparian habitat will require the submittal of a Notification of Lake of Streambed Alteration pursuant to Fish and Game Code Section 1602.

4.6 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 drainages are not considered jurisdictional WUS, which are regulated by the USACE Sections 404 and 401 of the CWA.

5.0 Recommendations

WUS and CDFW jurisdiction are regulated by federal and state governments under a no-net-loss policy, and all impacts are considered significant and should be avoided to the greatest extent possible. Impacts to jurisdictional waters require mitigation through habitat creation, restoration,

or enhancement as determined by consultation with the regulatory agencies during the permitting process.

The proposed cannabis cultivation facility has been designed to avoid all impacts to onsite drainages and riparian habitat. Should the project site plans change, any impacts to drainages and/or associated riparian habitat will require submittal of a Notification of Lake of Streambed Alteration pursuant to Fish and Game Code Section 1602 and the purchase of mitigation at a minimum 2:1 mitigation ratio.

6.0 Certification

Shawn Gatchel-Hernandez

"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."

01-05-2021	Theur fatchel Humanaly	
DATE	SIGNATURE	
Field Work Performed By:		

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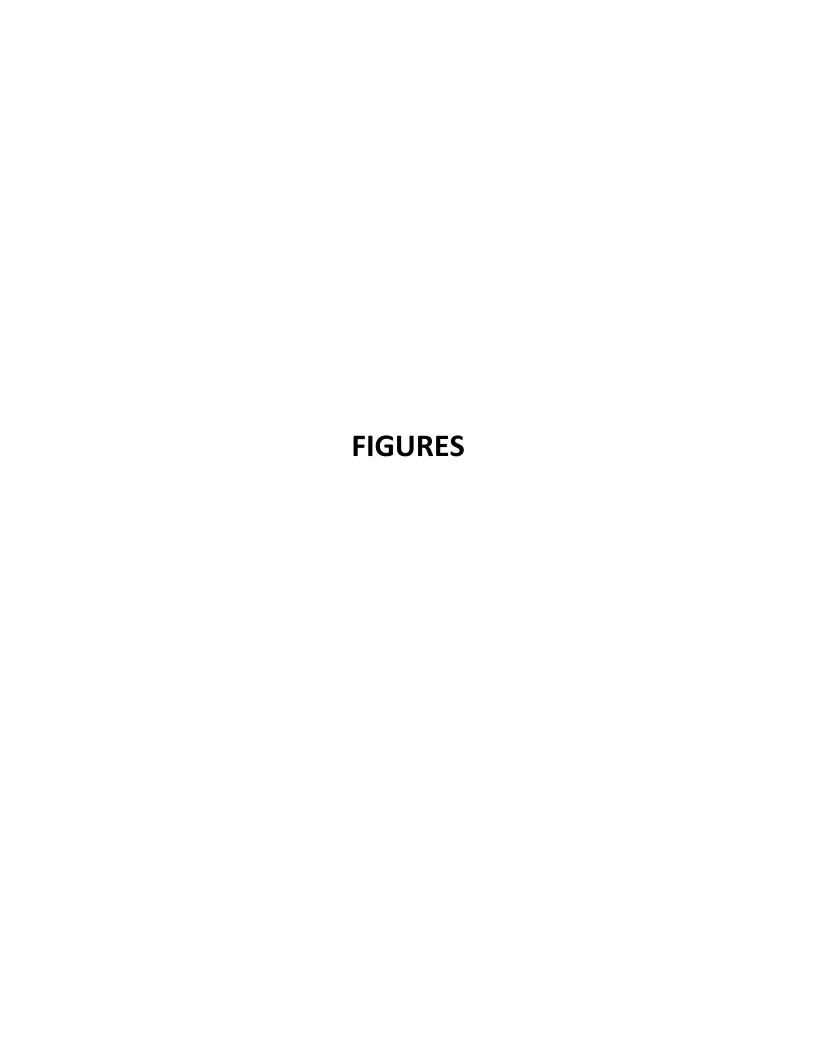
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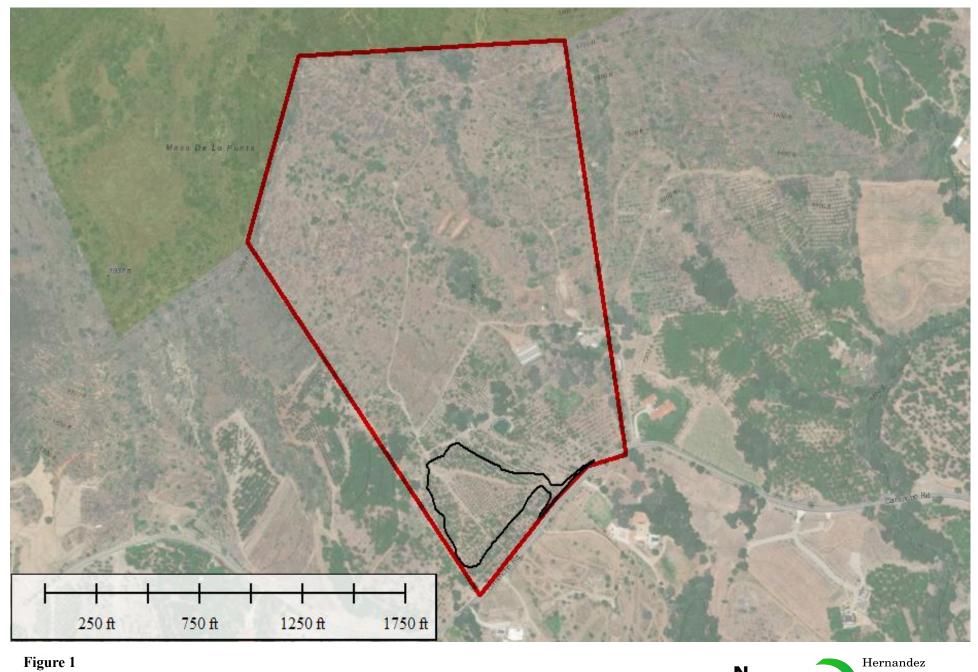
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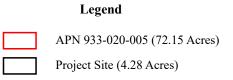
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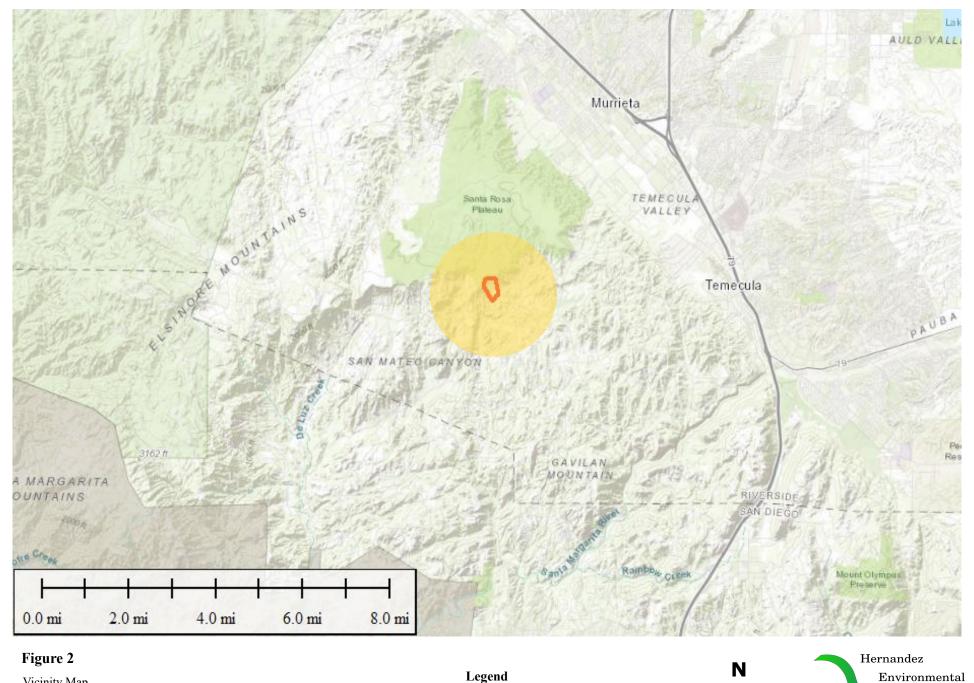




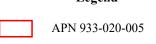
Location Map
Fuego Farms Cannabis Cultivation Operation
APN 933-020-005
Riverside County, California





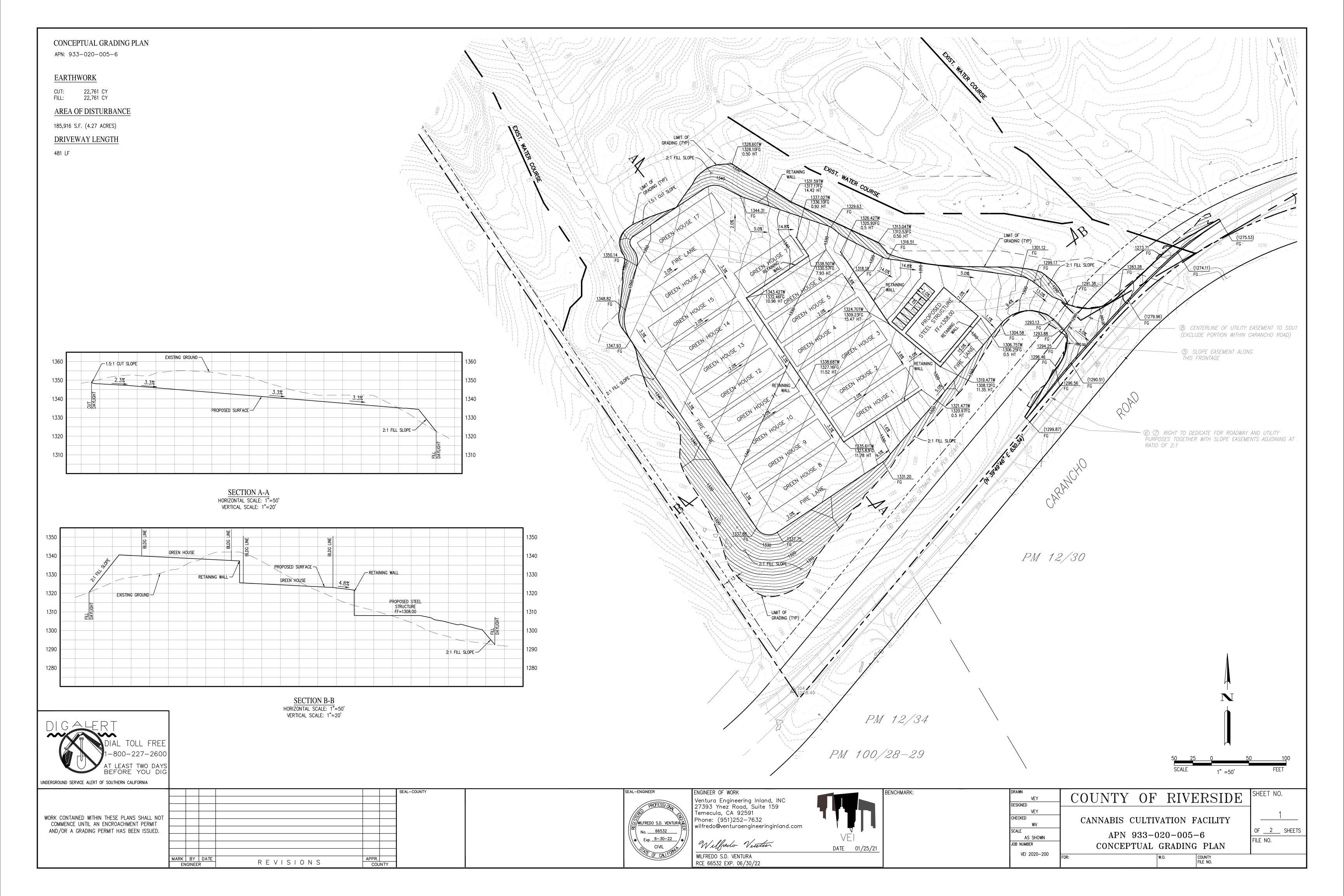


Vicinity Map Fuego Farms Cannabis Cultivation Operation APN 933-020-005 Riverside County, California



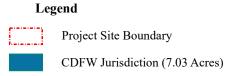


Environmental Services

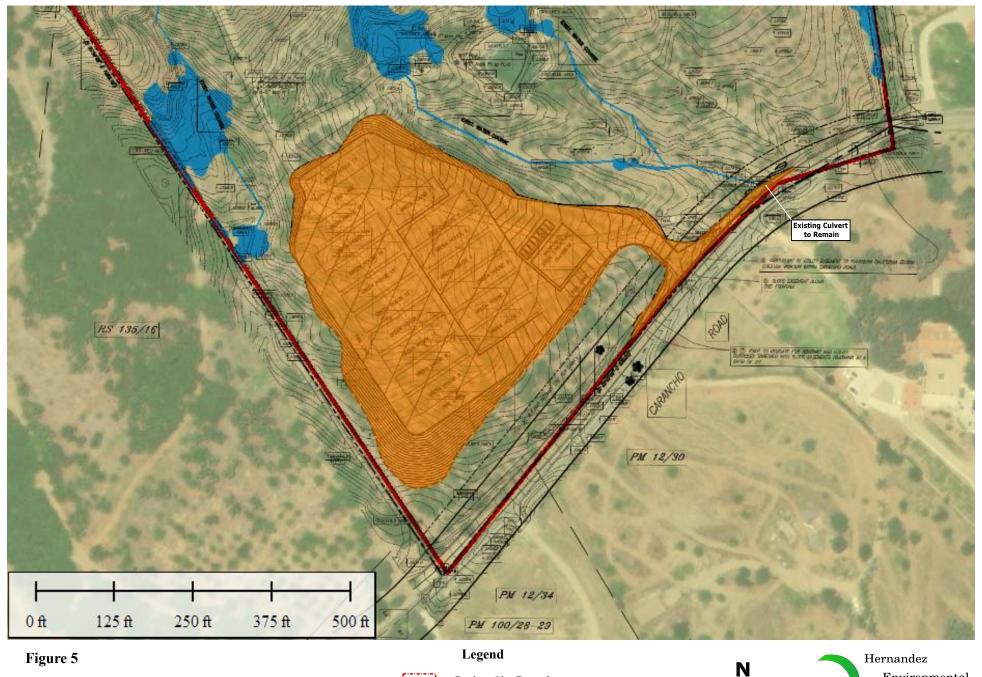




CDFW Jurisdiction Map
Fuego Farms Cannabis Cultivation Operation
APN 933-020-005
Riverside County, California



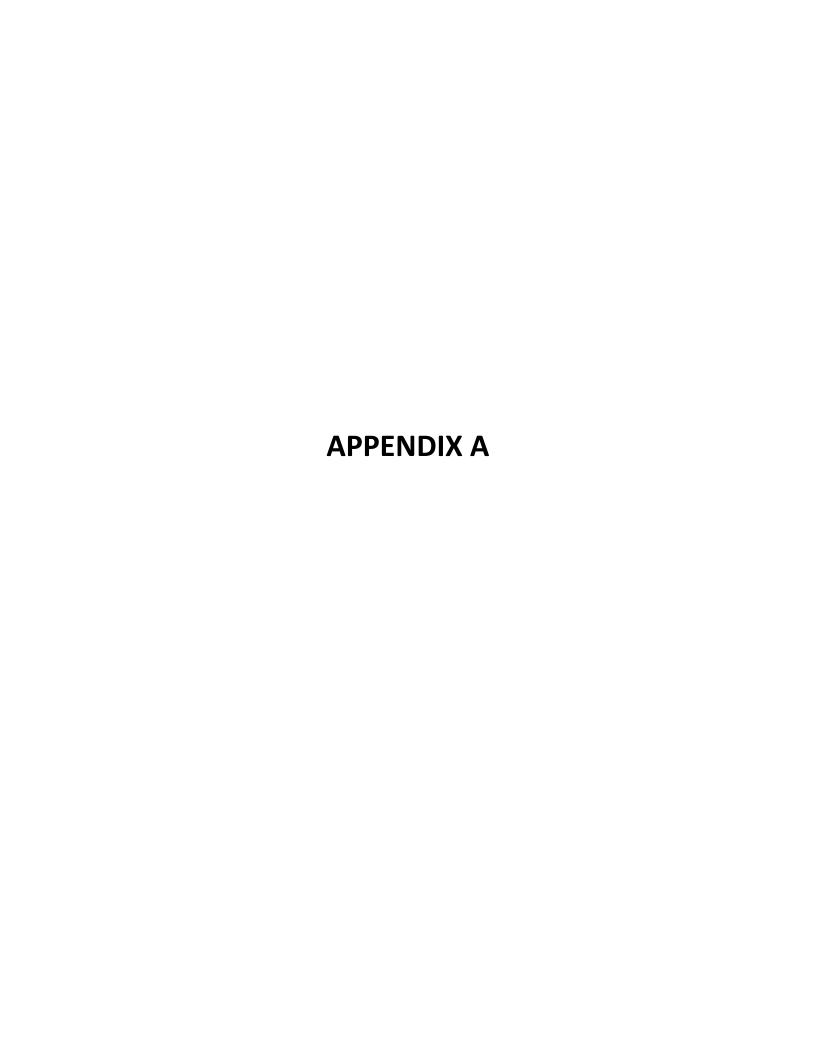




Project Impacts Map Fuego Farms Cannabis Cultivation Operation APN 933-020-005 Riverside County, California

Project Site Boundary CDFW Jurisdiction Project Impact Area (4.28 Acres)







Portion of Drainage A dominated by coast live oak woodland.



View of Drainage B from the southeastern portion of the site.



View of southern portion of Drainage C.



View of Drainage A culvert beneath access road.



View of the northern portion of Drainage D.



View of the southern portion of Drainage E flowing through avocado orchard.



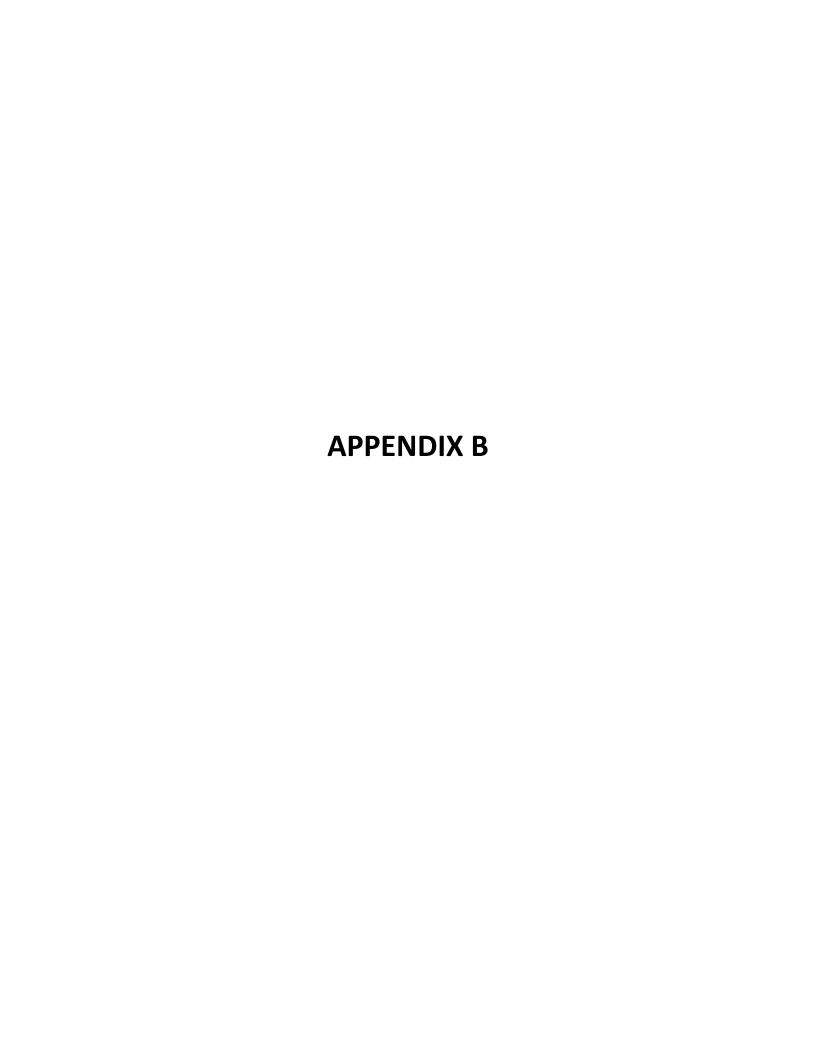
View of Drainage E culvert exiting the site beneath Carancho Road.

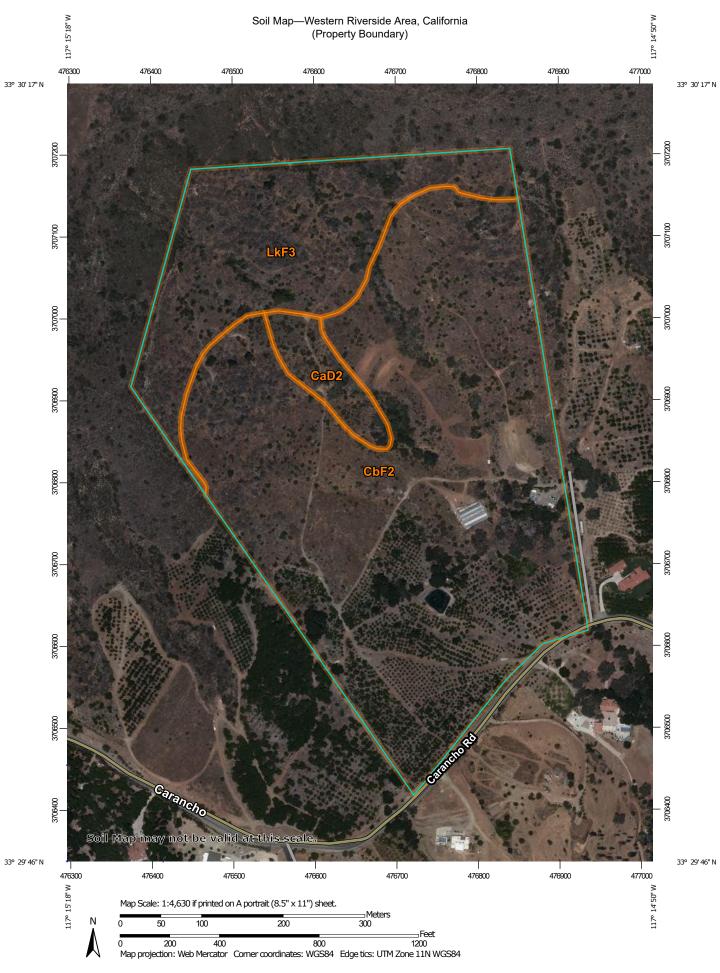


View of the northern portion of Drainage F.



View of the southern portion of Drainage F a: it exits the site to the west.





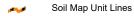
MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

(o) 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

OL:10

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 15, 2018—Jun 25, 2018

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
CaD2	Cajalco fine sandy loam, 8 to 15 percent slopes, eroded	2.6	3.7%
CbF2	Cajalco rocky fine sandy loam, 15 to 50 percent slopes, eroded	52.0	73.4%
LkF3	Las Posas rocky loam, 15 to 50 percent slopes, severely eroded	16.2	22.9%
Totals for Area of Interest		70.8	100.0%