Appendix A

Biological Assessment

BIOLOGICAL RESOURCES ASSESSMENT, JURISDICTIONAL DELINEATION, AND MSHCP CONSISTENCY ANALYSIS FOR INNOVATIVE CULTIVATION GROUP PROJECT SAN JACINTO, RIVERSIDE COUNTY, CALIFORNIA

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Contents

SECTION 1.0 - INTRODUCTION

Jennings Environmental, LLC (Jennings) was retained by Natural Resources Assessment, Inc. (NRAI) to conduct a literature review and reconnaissance-level survey for the proposed Innovative Cultivation Group Project (Project) in San Jacinto, California. The survey identified vegetation communities, the potential for the occurrence of special status species, or habitats that could support special status wildlife species, and recorded all plants and animals observed or detected within the Project boundary. This biological resources assessment is designed to address potential effects of the proposed project to designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW) or the California Native Plant Society (CNPS).

Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of the United States Fish and Wildlife Service (USFWS) and CDFW. Additionally, the site was surveyed for any drainage features that would meet the definition of the Waters of the US (WOUS), Waters of the State (WOS), or CDFW jurisdiction. Additionally, the project is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). As such, this report also contains the results of the consistency analysis performed for the project.

1.1 PROJECT LOCATION

The project is generally located in the northwest corner of Section 29, Township 4 South, Range 1 West, and is depicted on the *Lakeview* U.S. Geological Survey's (USGS) 7.5-minute topographic map. More specifically the project is located within APN 432-130-025, within the City of San Jacinto, Riverside County, California. The Project site is located on N Sanderson Ave., 0.44 miles north of the intersection of N Sanderson Ave. and Cottonwood Ave. The site is surrounded by agricultural parcels and one residential development to the southeast (Figures 1 and 2 in Appendix A).

1.2 PROJECT DESCRIPTION

Innovative Cultivation Group is proposing to expand their cultivation facilities to the northwestern portion of the parcel. This would include 68 covered greenhouse style rows. Additional improvements include water infrastructure, access roads, and fencing.

2.0 – METHODOLOGY

2.1 LITERATURE REVIEW

Prior to performing the field survey, existing documentation relevant to the Project site was reviewed. The most recent records of the California Natural Diversity Database (CNDDB) managed by CDFW (CDFW 2021), the USFWS Critical Habitat Mapper (USFWS 2021), and the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2022) were reviewed for the following quadrangles containing and surrounding the Project site: *Lakeview and San Jacinto* USGS 7.5-minute quadrangles. The *San Jacinto* quad was included in this search due to the site's proximity to their boarders. These databases contain records of reported occurrences of federal- or state-

listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Project site.

2.2 SOILS

Before conducting the surveys, soil maps for Riverside County were referenced online to determine the types of soil found within the Project site. Soils were determined in accordance with categories set forth by the United States Department of Agriculture (USDA) Soil Conservation Service and by referencing the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2022).

2.3 BIOLOGICAL RECONNAISSANCE-LEVEL SURVEY

Jennings biologist, Gene Jennings, conducted the general reconnaissance survey within the Project site to identify the potential for the occurrence of special status species, vegetation communities, or habitats that could support special status wildlife species. The surveys were conducted on foot, throughout the Project site between 0751 and 0830 hours on March 28, 2022. Weather conditions during the survey included temperatures ranging from 63.7 to 65.9 degrees Fahrenheit, with no cloud cover, no precipitation, and 0 to 2 mile per hour winds. Photographs of the Project site were taken to document existing conditions (Appendix B).

2.4 JURISDICTIONAL FEATURES

A general assessment of jurisdictional waters regulated by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW was conducted for the proposed Project area. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates the discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter- Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, CDFW regulates all substantial diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. The initial assessment was conducted by a desktop survey through the USGS National Hydrography Dataset for hydrological connectivity. Additional assessment findings are discussed in Sections 3.1.2 and 3.2.4. A discussion of the regulatory framework is provided in Appendix C.

2.5 WESTERN RIVERSIDE MULTIPLE SPECIES HABITAT CONSERVATION PLAN

The MSHCP is intended to balance the demands of the growth of western Riverside County with the need to preserve open space and protect species of plants and animals that are threatened with extinction. The MSHCP addresses incidental take of “covered” species. Of the 146 species addressed in the Western Riverside County MSHCP, 118 are adequately conserved simply by implementing the conservation program. Incidental take of these 118 species is permitted by the Western Riverside County MSHCP. The remaining 28 species are partially conserved. They would be adequately conserved when certain additional conservation requirements are implemented. The additional requirements are identified in the species-specific conservation objectives for those 28 species. The Riverside Conservation Authority (RCA)

is the governing body that administers the MSHCP. Their database was researched prior to conducting the filed visit.

2.6 VEGETATION

All plant species observed within the Project site were recorded. Vegetation communities within the Project site were identified and qualitatively described. Plant communities were determined in accordance with the *Manual of California Vegetation*, *Second Edition* (Sawyer et al. 2009). Plant nomenclature follows that of *The Jepson Manual, Second Edition* (Baldwin et al. 2012). A comprehensive list of the plant species observed during the survey is provided in Appendix D.

2.7 WILDLIFE

All wildlife and wildlife signs observed and detected, including tracks, scat, carcasses, burrows, excavations, and vocalizations, were recorded. Additional survey time was spent in those habitats most likely to be utilized by wildlife (native vegetation, wildlife trails, etc.) or in habitats with the potential to support state- and/or federally listed or otherwise special status species. Notes were made on the general habitat types, species observed, and the conditions of the Project site. A comprehensive list of the wildlife species observed during the survey is provided in Appendix D.

SECTION 3.0 – RESULTS

3.1 LITERATURE REVIEW RESULTS

According to the CNDDB, CNPSEI, and other relevant literature and databases, 52 sensitive species including 10 listed species, and 5 sensitive habitats, have been documented in the *Lakeview and San Jacinto* quads. This list of sensitive species and habitats includes any State and/or federally listed threatened or endangered species, CDFW designated Species of Special Concern (SSC), and otherwise Special Animals. “Special Animals” is a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of “species at risk” or “special status species.” The CDFW considers the taxa on this list to be those of greatest conservation need.

An analysis of the likelihood for the occurrence of all CNDDB sensitive species documented in the *Lakeview and San Jacinto* quads is provided in Table 2, in Appendix D. This analysis takes into account species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions. According to the databases, no USFWS designated critical habitat occurs within or adjacent to the project site.

3.1.1 SOILS

After review of USDA Soil Conservation Service and by referencing the USDA NRCS Web Soil Survey (USDA 2022), it was determined that the Project site is located within the Western Riverside Area, California area CA679. Based on the results of the database search none of the soils present on site are classified as hydric soils. The Project site contains four (4) soil types (Figure 3 in Appendix A):

Traver loamy fine sand, eroded (Tp2). This soil is moderately well-drained with a moderately high to high capacity to transmit water. This soil consists of alluvium derived from granite, typically ranges in elevation around 1,000 feet above mean sea level (amsl), and is considered farmland of statewide importance.

Traver loamy fine sand, saline-alkali, eroded (Tr2). This soil is moderately well-drained with a moderately high to high capacity to transmit water. This soil consists of alluvium derived from granite, typically ranges in elevation around 1,000 feet amsl, and is considered farmland of statewide importance.

Traver fine sandy loam, saline-alkali (Ts). This soil is moderately well-drained with a moderately high to high capacity to transmit water. This soil consists of alluvium derived from granite, typically ranges in elevation around 1,000 feet amsl, and is considered farmland of statewide importance.

Traver fine sandy loam, strongly saline-alkali, eroded (Tt2). This soil is moderately well-drained with a moderately high to high capacity to transmit water. This soil consists of alluvium derived from granite, typically ranges in elevation around 1,000 feet amsl, and is not considered prime farmland.

3.1.2 JURISDICTIONAL WATERS

Aerial imagery of the site was examined and compared with the surrounding USGS 7.5-minute topographic quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The U.S. Fish and Wildlife Service National Wetland Inventory and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the Soil maps from the U.S. Department of Agriculture (USDA) - Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2022) were reviewed to identify the soil series on-site and to check if they have been identified regionally as hydric soils. Upstream and downstream connectivity of waterways (if present) was reviewed in the field, on aerial imagery, and topographic maps to determine jurisdictional status. No obvious signs of jurisdictional features were observed during the literature review.

3.1.3 MSHCP

Prior to the field visit the Riverside Conservation Authority's website and databases were searched. This includes the MSHCP plan itself and any relevant protocol survey requirements. The database also includes a mapping program that contains site-specific information related to criteria cell location, special survey areas for plants and animals, and vegetation mapping.

A summary of the MSHCP Conservation Goals and Policies as they relate to this Project is provided below in Table 1.

Table 1: MSHCP Conservation Goals for Project Area

Conservation Goals	**Within /Adjacent**	**Not Within /Adjacent**
Proposed Constrained Linkages: **None**		X

Conservation Goals	Within /Adjacent	Not Within /Adjacent
Core Areas: **None**		X
Linkages: **None**		X
Constrained Linkage:		X
Habitat Block:		X
Core: **None**		X
Criteria Cell**:**		X
Pre-existing conservation Area		X
Riparian/Riverine or Vernal Pool Habitat		X
Narrow Endemic Plant Survey Area	X	
Urban/Wildlife Interface		X
Mammal Survey Area		X
Amphibian Survey Area		X
Burrowing Owl Survey Area	X	

3.2 FIELD STUDY RESULTS

3.2.1 HABITAT

The habitat on-site consists of a mix of ruderal vegetation/bare ground with London rocket (*Sisymbrium irio*) and wall barley (*Hordeum murinum*) being the dominant ruderal vegetation. The ruderal vegetation is classified as *Avena spp.-Bromus spp.* Herbaceous Semi-Natural Alliance (Sawyer, 2015), or wild oats and annual brome grasslands. The site shows signs of recent disturbance from the installation of the agricultural facilities and historical disturbance in the form of mowing and disking. Table 1 in Appendix D contains a list of all plants found on-site. Surrounding land uses include undeveloped parcels and residential developments.

3.2.2 WILDLIFE

Species observed or otherwise detected on or in the vicinity of the project site during the surveys included; black phoebe (*Sayornis nigricans*) and song sparrow (*Melospiza melodia*).

The project site is located within an agricultural area of San Jacinto and is currently mostly developed. Except for the access roads on the parcel and a small area near the entrance, the majority of the parcel is

being used for cultivation. Surrounding parcels include agricultural uses, residential uses, and vacant parcels. A complete list of all wildlife observed is included in Table 1 of Appendix D.

3.2.3 SPECIAL STATUS SPECIES

No State and/or federally listed threatened or endangered species or other sensitive species were observed on-site during surveys.

Designated Critical Habitat

The site is not located within or adjacent to any USFWS designated Critical Habitat. No further action is required.

Nesting Birds

The Project site and immediate surrounding area does contain habitat suitable for nesting birds. Nesting bird surveys should be conducted prior to any construction activities taking place during the nesting season to avoid potentially taking any birds or active nests. In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season (generally March 15th to September 15th) and conducting a worker awareness training. However, if all work cannot be conducted outside of the nesting season, a project-specific Nesting Bird Management Plan can be prepared to determine suitable buffers.

3.2.4 JURISDICTIONAL WATERS

Waters of the United States and Waters of the State

The USACE has the authority to permit the discharge of dredged or fill material in Waters of the U.S. under Section 404 CWA. While the Regional Water Quality Board has authority over the discharge of dredged or fill material in Waters of the State under Section 401 CWA as well as the Porter-Cologne Water Quality Control Act. The Project area was surveyed with 100 percent visual coverage and no drainage features were present on site. As such, the subject parcel does not contain any wetlands, Waters of the U.S., or Waters of the State.

Fish and Game Code Section 1602 - State Lake and/or Streambed

The CDFW asserts jurisdiction over any drainage feature that contains a definable bed and bank or associated riparian vegetation. The Project area was surveyed with 100 percent visual coverage and no definable bed or bank features exist on the project site. There is an outlet structure that deposits water onto the site from the surrounding parcels, however, it appears that the amount of water that is discharged does not stay within a defined location or channel. It is either absorbed into the soil or lost to sheet flow within the parcel. As such, the subject parcel does not contain any areas under CDFW jurisdiction.

3.2.5 WETLANDS

NWI maps did not identify portions within the Project site as a Riverine/Riparian system. Additionally, only one of the requirements for wetland designation (hydric soils) was present within the parcel. The site does not contain hydric vegetation or wetland hydrology. In order to be classified as a wetland all three criteria

must be present within the project site. As such, there are no wetlands currently present on site.

3.3 MSHCP CONSISTENCY ANALYSIS

The Project is located within The San Jacinto Valley Area Plan of the MSHCP. The target conservation acreage range for The San Jacinto Valley Plan is 21,740 – 29,665 acres; it is composed of approximately 10,200 acres of existing Public/Quasi-Public Lands and 11,540 – 19,465 acres of Additional Reserve Lands.

The MSHCP Conservation Area comprises a variety of existing and proposed Cores, Linkages, Constrained Linkages, and Noncontiguous Habitat Blocks (referred to herein generally as "Cores and Linkages"). The Cores and Linkages within the San Jacinto Valley Area Plan include:

- Contains a portion of Proposed Constrained Linkage 20
- Contains all of Proposed Constrained Linkage 21
- Contains a portion of Proposed Core 3
- Contains a portion of Proposed Core 4
- Contains most of Proposed Core 5
- Contains most of Proposed Linkage 11 Linkage 3
- Contains a large portion of Proposed Linkage 14
- Contains eastern portion of Proposed Noncontiguous Habitat Block 5
- Contains all of Proposed Noncontiguous Habitat Block 6
- Contains a large portion of Proposed Noncontiguous Habitat Block 7
- Contains a small portion of Existing Constrained Linkage C
- Contains a small portion of Existing Core J

3.3.1 PUBLIC QUASI-PUBLIC LANDS (PQP) AND COVERED ROADS

Pursuant to Sections 3.2.1 PQP Lands are a Subset of MSHCP Conservation Area lands totaling approximately 347,000 acres of lands known to be in public/private ownership and expected to be managed for open space value and/or in a manner that contributes to the Conservation of Covered Species (including lands contained in existing reserves), as generally depicted in Figure 3-1 of the MSHCP, Volume I. Section 7.2.1 Existing Roads within Existing PQP Lands are existing roadways within existing Public/Quasi-Public Lands, including interstates, freeways, State highways, city and county maintained roadways, as well as local roads, which are not city, or county maintained that provide property access. This latter category of other maintained roadways are generally maintained by the adjacent property owners, either individually or collectively. Table 7-1, of the MSHCP, provides an estimate summarizing the extent of these various types of existing roadways which are permitted to remain within Public/Quasi-Public Lands.

The Project site is not located within or adjacent to any PQP Lands and will not impact a covered road.

- *No further discussion on this subject is made in this analysis*

3.3.2 SUBUNIT AREA/CELL CRITERIA

Pursuant to Section 3.3.12, Subunits are areas within an area plan that contain target conservation acreages along with a description of the planning species, biological issues, and considerations. The Project site is not located within a subunit area or cell criteria.

- *No further discussion on this subject is made in this analysis*

3.3.3 NARROW ENDEMIC PLANT SPECIES

Pursuant to Section 6.1.3 of the MSHCP, focused surveys for narrow endemic plant species are required for properties within the mapped areas if the appropriate habitat is present. The survey area maps have been reviewed and assessed, and the proposed project is located within a Narrow Endemic Plant Species Survey Area based on Figure 6-1 of the MSHCP. The Narrow Endemic Plant Species in this area are.

- Munz's onion
- San Diego ambrosia
- Many-stemmed dudleya
- Spreading navarretia
- California Orcutt grass
- Wrights's trichocoronis

Of the six species of plants within this Narrow Endemic Plant survey area, two have reached their conservation goals; Mun's onion and San Diego ambrosia. According to the "2019 Rare Plant Report" (RCA, 2019), Munz's onion and San Diego ambrosia have reached their conservation goals. The other four species have not reached the conservation goals under the MSHCP; Many-stemmed dudleya, spreading navarretia, California Orcutt grass, Wrights's trichocoronis. As such, a habitat assessment was completed on site. These four species are very habitat specific and water dependent species. These species are usually found within areas that receive more water than the Project site. They are typically found in or near vernal pools, riparian areas, and areas associated with those habitat types. The Project site is a cultivation site that is subject to mowing, pedestrian traffic, and vehicle traffic. Additionally, the site showed evidence of past soil disturbance in the form of disking and construction activity. The Project site is also isolated from any flows or terraces from the San Jacinto River to the north, where known occurrences for these species have been documented. Therefore, the habitat on-site is not suitable for these species and further focused surveys are not warranted or recommended. Additionally, none of these species were observed within or adjacent to the Project site

- *No further discussion on this subject is made in this analysis*

3.3.4 ADDITIONAL SURVEY NEEDS AND PROCEDURES

Based on Figures 6-2 (Criteria Area Species Survey Areas), 6-3 (Amphibian Species Survey Areas), 6-4 (BUOW Survey Areas), and 6-5 (Mammal Species Survey Areas) of the MSHCP and the MSHCP Mapping Program, the site is located in an area where additional surveys are needed for BUOW in conjunction with MSHCP implementation in order to achieve coverage for these species.

- *BUOW: Pursuant to MSHCP Section 6.3.2, surveys shall be conducted within suitable habitat for BUOW, according to accepted protocols.*
    - *Survey Results: Based on the April 2022 field survey, the site does not contain suitable habitat for this species. The property is continually maintained. No burrowing owls were observed during the site visit. No burrows of any kind were located within the property site. No portion of the project site showed any evidence of past or present BUOW activity. No feathers, whitewash, or castings were found and no suitable burrow surrogate species are present on-site. No suitable habitat exists on-site; therefore, no focused surveys are required.*

3.3.5 RIPARIAN/RIVERINE AREAS AND VERNAL POOLS

The MSHCP describes the protection of Riparian/Riverine Areas and Vernal Pools within the MSHCP Plan Area as important to the conservation of certain amphibian, avian, fish, invertebrate and plant species. The MSHCP describes guidelines to ensure that the biological functions and values for species inside the MSHCP Conservation Area are maintained, as outlined in Volume 1, Section 6.1.2.

Riparian/ Riverine

Pursuant to Section 6.1.2 of the MSHCP, Riparian/Riverine areas are lands which contain habitat dominated by trees, shrubs, persistent emergent vegetation, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from nearby freshwater sources, or areas with freshwater flow during all or a portion of the year. Riverine habitat includes all wetlands and deepwater habitats contained in natural or artificial channels periodically or continuously containing flowing water or which forms a connecting link between the two bodies of standing water. Riverine habitat is bounded on the landward side by upland, by the channel bank (including natural and man-made levees), or by wetlands dominated by trees, shrubs, persistent emergents, mosses, or lichens. In braided streams, the system is bounded by the banks forming the outer limits of the depression within which the braiding occurs. Springs discharging into a channel are considered part of the riverine habitat. The term riparian is used to define the type of wildlife habitat found along the banks of a river, stream, lake, or other body of water. Riparian habitats are ecologically diverse and can be found in many types of environments including grasslands, wetlands, and forests.

The Project site does not contain any areas that meet the definition of Riparian/Riverine.

- *No further discussion on this subject is made in this analysis*

Vernal Pools

Pursuant to Section 6.1.2 of the MSHCP, Vernal Pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics should consider (1) the length of time the area exhibits upland and wetland characteristics, and (2) the manner in which the area fits into the overall ecological system

as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.

The Project site does not contain the appropriate soils, vegetation, or hydrology to allow for vernal pools.

- *No further discussion on this subject is made in this analysis*

Fairy Shrimp

The MSHCP contains coverage for three species of fairy shrimp (Riverside, vernal pool, and Santa Rosa fairy shrimps). As mentioned in the Vernal Pool discussion, the site does not contain vernal pools. Vernal pools are a required constituent element for all three fairy shrimp species in the MSHCP. As such, they are considered absent from the Project site.

- *No further discussion on this subject is made in this analysis*

Riparian Birds

The MSCHP includes coverage for many riparian birds, including least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo. As mentioned above in the Riparian/Riverine section, the site does not contain any riparian or riverine habitats which are a required constituent element for the riparian bird species. As such, these species are considered absent from the Project site.

- *No further discussion on this subject is made in this analysis*

3.3.6 INFORMATION ON OTHER SPECIES

Delhi sands flower-loving fly

The Delhi Sands flower-loving fly is found at low numbers and is narrowly distributed within the Plan Area. This species is restricted by the distribution and availability of open Habitats within the fine, sandy Delhi series soils. USFWS has identified three main population areas are known to currently or to have at one time existed in the Plan Area. One is located in the northwestern corner of the Plan Area, a second is located in the Jurupa Hills, and the third is located in the Agua Mansa Industrial Center area. Because the Delhi Sands flower-loving fly requires a specific Habitat type, this species will require site-specific considerations, protection and enhancement of this limited Habitat type, and species-specific management to maintain the Habitat and populations.

The Project site does not contain the appropriate soils for this species and is not within or near known areas for this species.

- *No further discussion on this subject is made in this analysis*

Species Not Adequately Conserved

As described in Section 2.1.4, of the 146 Covered Species addressed in the MSHCP, 118 species are considered to be adequately conserved. The remaining 28 Covered Species will be considered to be adequately conserved when certain conservation requirements are met as identified in the species-

specific conservation objectives for those species. For 16 of the 28 species, particular species-specific conservation objectives, which are identified in Table 9-3, must be satisfied to shift those particular species to the list of Covered Species Adequately Conserved. For the remaining 12 species, a Memorandum of Understanding must be executed with the Forest Service that addresses management for these species on Forest Service Land in order to shift these species to the list of Covered Species Adequately Conserved.

The Project site does not contain the appropriate habitats for any of these species. There is no occurrence potential for any of these species to occur within the Project site.

- *No further discussion on this subject is made in this analysis*

3.3.7 URBAN/ WILDLANDS INTERFACE

Section 6.1.4 of the MSHCP presents guidelines to minimize the indirect effects of projects in proximity to the MSCHP Conservation areas. This section provides mitigation measures for impacts associated with Drainage, Toxics, Lighting, Noise, Invasives, Barriers, and Grading/Land Development.

The Project site is not within or adjacent to any area the meets the definition of an urban/wildland interface. The site is fenced off and mostly surrounded by other fenced off developed parcels.

- *No further discussion on this subject is made in this analysis*

3.3.7 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

Appendix C of the MSHCP details Best Management Practices (BMPs) that should be implemented. However, the project does not impact any of the covered species or habitats described in the MSHCP or any federally or state-listed species. As such, there are only two BMPs that could qualify as required for this project:

> 13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
>
> 14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with an orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

SECTION 4.0 - CONCLUSIONS AND RECOMMENDATIONS

Based on the literature review and personal observations made in the project site and immediate vicinity, no State and/or federally listed threatened or endangered species are documented/or expected to occur within the Project site. Additionally, no plant species with the California Rare Plant Rank (CRPR) of 1 or 2

were observed on-site or documented/expected to occur on-site. No other sensitive species were observed within the project area or buffer area.

Jurisdictional Delineation

There are no streams, channels, washes, or swales that meet the definitions of Section 1600 of the State of California Fish and Game Code (FGC) under the jurisdiction of the CDFW, Section 401 ("Waters of the State") of the Clean Water Act (CWA) under the jurisdiction of the Regional Water Quality Control Board (RWQCB), or "Waters of the United States" (WOUS) as defined by Section 404 of the CWA under the jurisdiction of the U.S. Army Corps of Engineers (Corps) within the subject parcel. Therefore, no permit from any regulatory agency will be required.

MSHCP Consistency

The site is not mapped within a criteria cell or subunit. The Project is also consistent with the MSHCP policies found in Section 6 which include Riparian/Riverine Areas/ Vernal Pools; Narrow Endemic Plant Species; Urban/Wildlands Interface; and Surveys for Special Status Species. The site is not located within an area mapped for Criteria Area Plant Species, Special Status Species, Riparian/Riverine/Vernal Pools, and Urban/Wildlife Interface. The site is mapped within an area for Narrow Endemic Plant species. However, there is no suitable habitat within the Project site for those species. Additionally, the site is not suitable for BUOW, and no individuals were observed. Therefore, the Project is consistent with MSCHP policies and conditions.

Nesting Birds

Since there is some habitat within the project site and adjacent area that is suitable for nesting birds in general, a pre-construction nesting bird survey is recommended before the commencement of any Project-related work activities within nesting season (March 15 through September 15) to avoid any potential Project-related impacts to nesting birds. The following is a general Project condition for nesting bird protection:

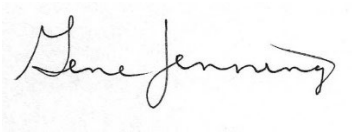
> Bird nesting season generally extends from March 15 – September 15. To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist will conduct pre-construction Nesting Bird Surveys (NBS) prior to project-related disturbance to nestable vegetation to identify any active nests. If no active nests are found, no further action will be required. If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

Certification

I hereby certify that the statements furnished herein, and in the attached exhibits present data and information required for this analysis to the best of my ability, and the facts, statements, and information presented are true and correct to the best of my knowledge and belief. This report was prepared in accordance with professional requirements and standards. Fieldwork conducted for this assessment was performed by me. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project proponent and that I have no financial interest in the project.

Please do not hesitate to contact me at 909-534-4547 should you have any questions or require further information.

Sincerely,



Gene Jennings
Principal/Regulatory Specialist

Appendices:

- Appendix A – Figures
- Appendix B – Site Photos
- Appendix C – Regulatory Framework
- Appendix D – Tables

Section 5 – REFERENCES

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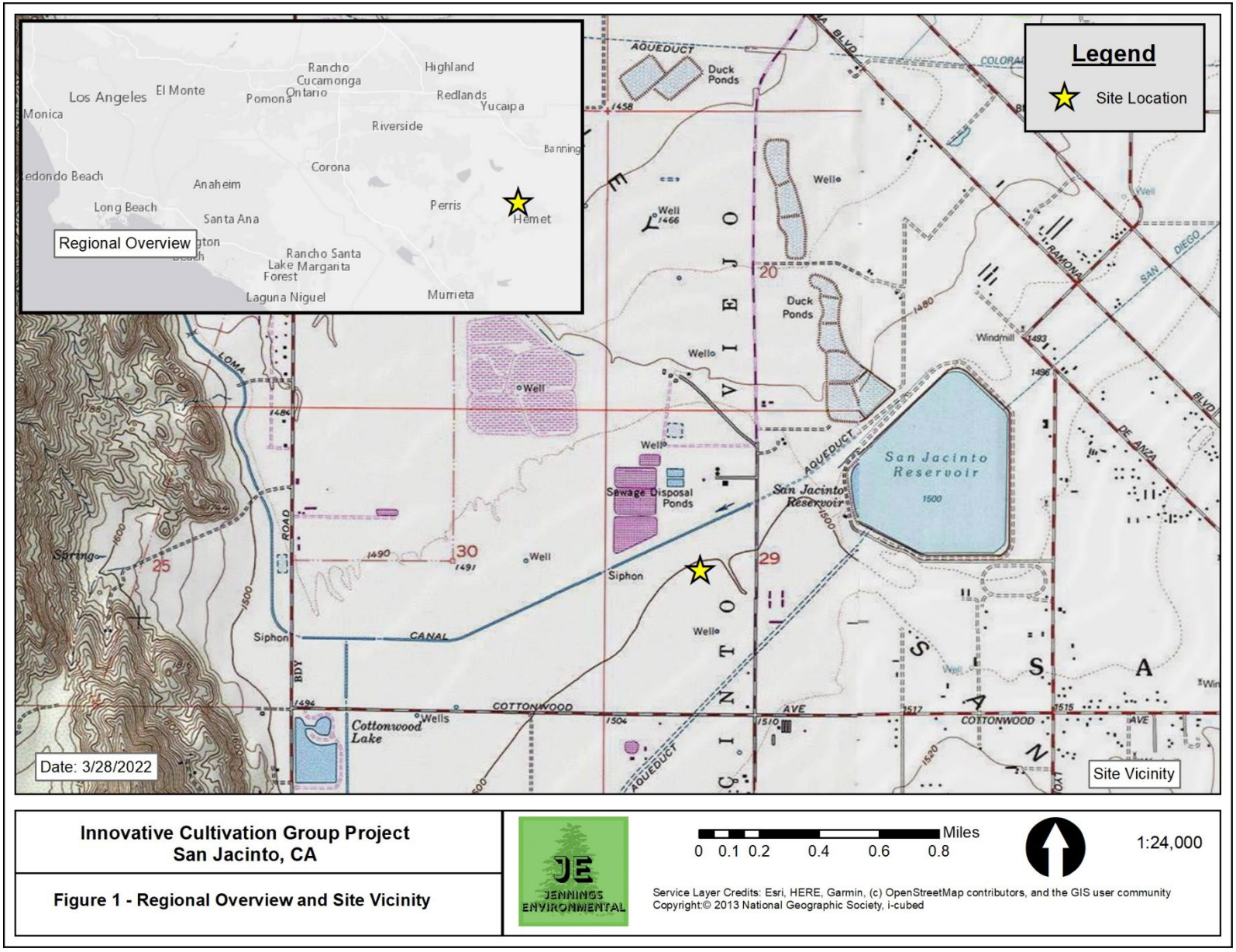
Appendix A – Figures


Legend
Site Location
Regional Overview
Los Angeles
El Monte
Monica
Pomona
Rancho Cucamonga
Ontario
Highland
Redlands
Yucaipa
Riverside
Banning
Corona
Anaheim
Long Beach
Santa Ana
Perris
Hemet
Rancho Santa Margarita
Lake Forest
Laguna Niguel
Murrieta
AQUEDUCT
Duck Ponds
Windmill
Well
Sewage Disposal Ponds
San Jacinto Reservoir
1500
SAN JACINTO VALLEY
SAN JACINTO
Siphon
CANAL
COTTONWOOD AVE
Cottonwood Lake
Wells
LOMA ROAD
RAMONA BLVD
SAN DIEGO AQUEDUCT
DE ANZA BLVD
Date: 3/28/2022
Site Vicinity
Innovative Cultivation Group Project
San Jacinto, CA
Figure 1 - Regional Overview and Site Vicinity
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Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
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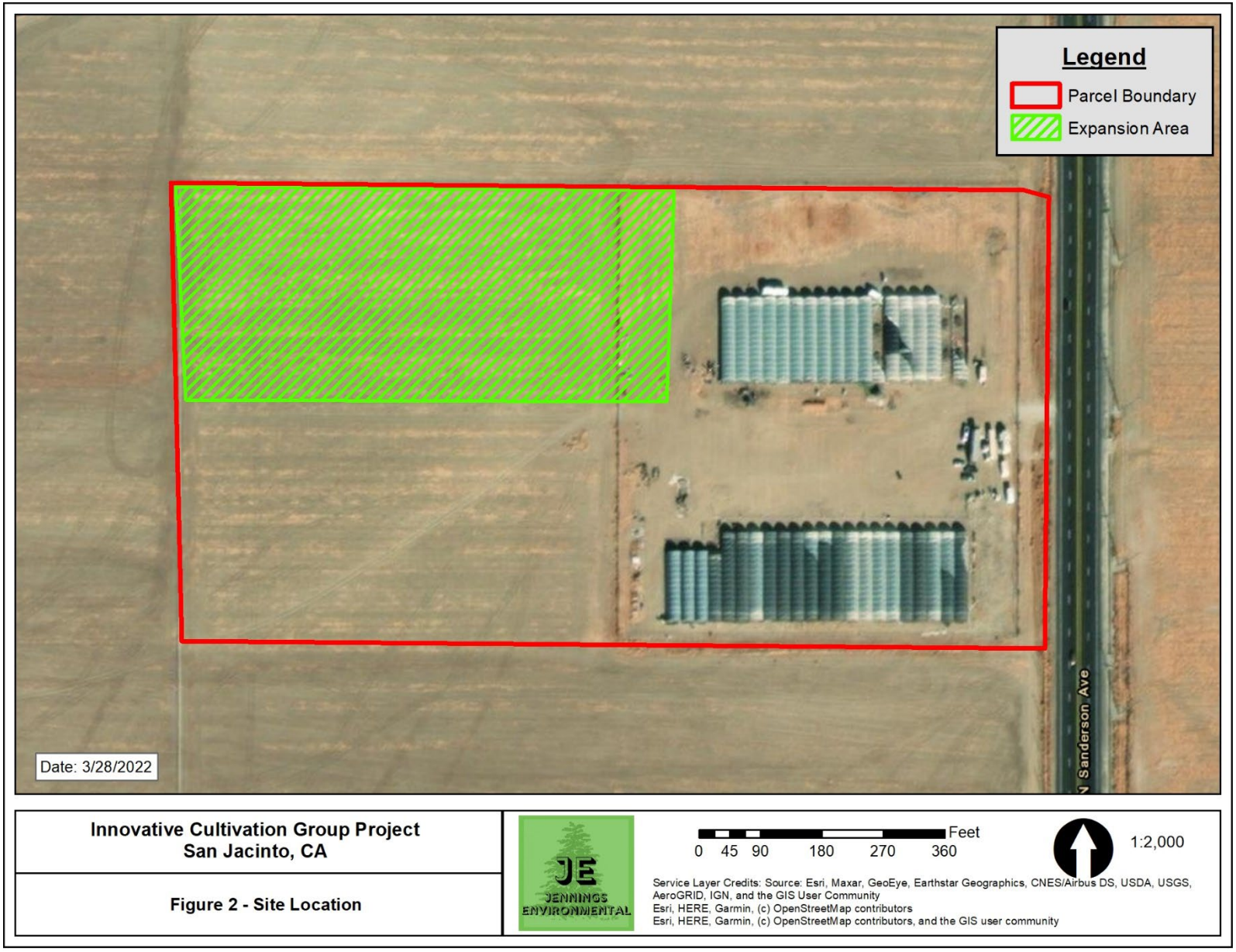
Legend
Parcel Boundary
Expansion Area
Date: 3/28/2022
N Sanderson Ave
Innovative Cultivation Group Project
San Jacinto, CA
Figure 2 - Site Location
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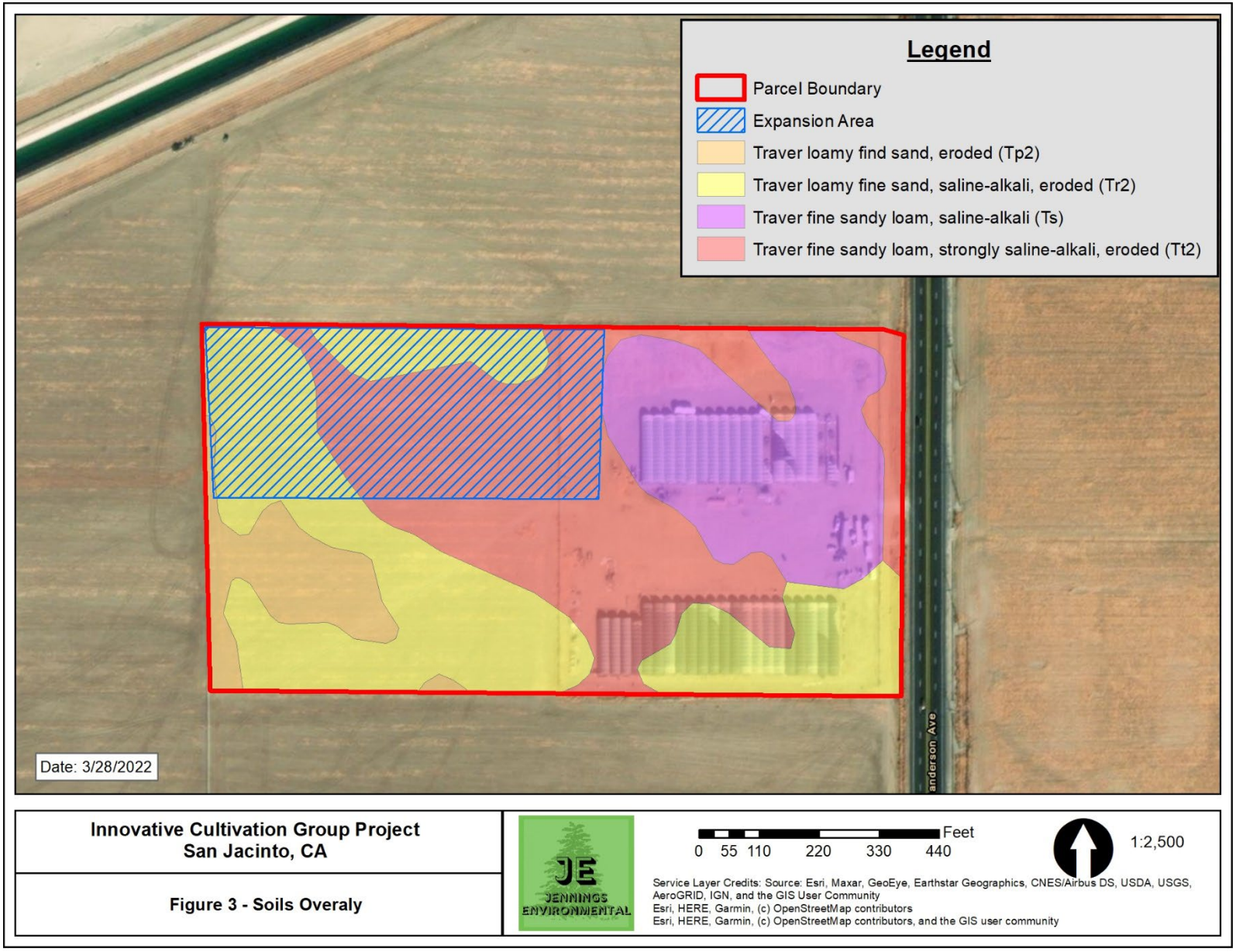
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community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Parcel Boundary
Expansion Area
Traver loamy find sand, eroded (Tp2)
Traver loamy fine sand, saline-alkali, eroded (Tr2)
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Traver fine sandy loam, strongly saline-alkali, eroded (Tt2)
Date: 3/28/2022
anderson Ave
Innovative Cultivation Group Project
San Jacinto, CA
Figure 3 - Soils Overaly
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Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Appendix B – Photos

	Photo 1 – Western edge of Parcel, facing northeast. Showing access road with ruderal vegetation.

	Photo 2 – Southeast corner of Parcel, facing northwest. Showing ruderal vegetation and bare ground near entrance.

	Photo 3 – Southeast corner of expansion area, west.

Appendix C – Regulatory Framework

1.1 FEDERAL JURISDICTION

1.1.1 United States Army Corps of Engineers

Pursuant to Section 404 of the CWA, the United States Army Corps of Engineers (USACE) regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined by 33 Code of Federal Regulations (CFR) Part 328 and currently includes: (1) all navigable waters (including all waters subject to the ebb and flow of the tide), (2) all interstate waters and wetlands, (3) all other waters (e.g., lakes, rivers, intermittent streams) that could affect interstate or foreign commerce, (4) all impoundments of waters mentioned above, (5) all tributaries to waters mentioned above, (6) the territorial seas, and (7) all wetlands adjacent to waters mentioned above. Waters of the United States do not include (1) waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (CWA), and (2) prior converted cropland. Waters of the United States typically are separated into two types: (1) wetlands and (2) "other waters" (non-wetlands) of the United States.

Wetlands are defined by 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support … a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987, USACE published a manual (1987 Wetland Manual) to guide its field personnel in determining jurisdictional wetland boundaries. This manual was amended in 2008 to the USACE 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (2008 Arid West Supplement). Currently, the 1987 Wetland Manual and the 2008 Arid West Supplement provide the legally accepted methodology for identification and delineation of USACE-jurisdictional wetlands in southern California.

In the absence of wetlands, the limits of USACE jurisdiction in nontidal waters, including intermittent Relatively Permanent Water (RPW) streams, extend to the Ordinary High Water Mark (OHWM), which is defined by 33 CFR 328.3(e) as:

> … that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

On January 9, 2001, the U.S. Supreme Court ruled (in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers) (SWANCC) that USACE jurisdiction does not extend to previously regulated isolated waters, including but not limited to isolated ponds, reservoirs, and wetlands. Examples of isolated waters that are affected by this ruling include vernal pools, stock ponds, lakes (without outlets), playa lakes, and desert washes that are not tributary to navigable or interstate waters or to other jurisdictional waters. A joint legal memorandum by EPA and USACE was signed on January 15, 2003.

In May 2007, USACE and EPA jointly published and authorized the use of the Jurisdictional Determination Form Instructional Guidebook (USACE 2007). The form and guidebook define how to determine if an area is USACE jurisdictional and if a significant nexus exists per the Rapanos decision. A nexus must have more than insubstantial and speculative effects on the downstream TNW to be considered a significant nexus. This guidebook is updated by the 2008 Arid West Supplement, the 2010 Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, and the 2011 Ordinary High Flows and the Stage-Discharge Relationship in the Arid West Region.

A joint guidance by EPA and USACE was issued on June 5, 2007, and revised on December 2, 2008, is consistent with the Supreme Court's decision in the consolidated cases Rapanos v. United States and Carabell v. United States (126 S. Ct. 2208 [2006]) (Rapanos), which addresses the jurisdiction over waters of the United States under the CWA (33 U.S.C. §1251 et seq.). A draft guidance was circulated in April 2011 to supersede both the 2003 SWANCC guidance and 2008 Rapanos decision; however, this guidance is not finalized and lacks the force of law.

USACE will continue to assert jurisdiction over Traditionally Navigable Waters (TNWs), wetlands adjacent to TNW, non-navigable tributaries of TNW that are Relatively Permanent Waters (RPW) where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months), and wetlands that directly abut such tributaries.

USACE generally will not assert jurisdiction over swales or erosional features (e.g., gullies or small washes characterized by low volume, infrequent, or short duration flow) or nontidal drainage ditches (including roadside ditches) that are (1) excavated wholly in and draining only uplands and (2) that do not carry a relatively permanent flow of water. USACE defines a drainage ditch as:

> A linear excavation or depression constructed for the purpose of conveying surface runoff or groundwater from one area to another. An "upland drainage ditch" is a drainage ditch constructed entirely in uplands (i.e., not in waters of the United States) and is not a water of the United States, unless it becomes tidal or otherwise extends the ordinary high water line of existing waters of the United States.

Furthermore, USACE generally does not consider "[a]rtificially irrigated areas which would revert to upland if the irrigation ceased" to be subject to their jurisdiction. Such irrigation ditches are linear excavations constructed for the purpose of conveying agricultural water from the adjacent fields. Therefore, such agricultural ditches are not considered to be subject to USACE jurisdiction.

USACE will use fact-specific analysis to determine whether waters have a significant nexus with (1) TNW for nonnavigable tributaries that are not relatively permanent (non-RPW); (2) wetlands adjacent to nonnavigable tributaries that are not relatively permanent; and (3) wetlands adjacent to, but that do not directly abut, a relatively permanent nonnavigable tributary. According to

USACE, "a significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters," including consideration of hydrologic and ecologic factors. A primary component of this determination lies in establishing the connectivity or lack of connectivity of the subject drainages to a TNW.

1.2 STATE JURISDICTION

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the CWA as well as the California Porter-Cologne Water Quality Control Act (Porter-Cologne; California Water Code, Division 7, §13000 et seq.). Waters of the State are defined by Porter-Cologne as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050(e)). Waters of the State broadly includes all waters within the State's boundaries (public or private), including waters in both natural and artificial channels.

1.2.1 Regional Water Quality Control Board

Under Porter-Cologne, the State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Boards (RWQCB) regulate the discharge of waste into waters of the State. Discharges of waste include "fill, any material resulting from human activity, or any other 'discharge' that may directly or indirectly impact 'waters of the state.'" Porter-Cologne reserves the right for the State to regulate activities that could affect the quantity and/or quality of surface and/or groundwaters, including isolated wetlands, within the State. Wetlands were defined as waters of the State if they demonstrated both wetland hydrology and hydric soils. Waters of the State determined to be jurisdictional for these purposes require, if impacted, waste discharge requirements (WDRs).

When an activity results in fill or discharge directly below the OHWM of jurisdictional waters of the United States (federal jurisdiction), including wetlands, a CWA Section 401 Water Quality Certification is required. If a proposed project is not subject to CWA Section 401 certification but involves activities that may result in a discharge to waters of the State, the project may still be regulated under Porter-Cologne and may be subject to waste discharge requirements. In cases where waters apply to both CWA and Porter-Cologne, RWQCB may consolidate permitting requirements to one permit.

1.2.2 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation" (California Code of Regulations, Title 14, Section 1.72). The jurisdiction of CDFW may include areas in or near intermittent streams, ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams that are indicated on USGS maps, watercourses that may contain subsurface flows, or within the flood plain of a water body. CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW limits of jurisdiction typically include the maximum extents of the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

In a CDFW guidance of stream processes and forms in dryland watersheds (Vyverberg 2010), streams are identified as having one or more channels that may all be active or receive water only during some high flow event. Subordinate features, such as low flow channels, active channels, banks associated with secondary channels, floodplains, and stream-associated vegetation, may occur within the bounds of a single, larger channel. The water course is defined by the topography or elevations of land that confine a stream to a definite course when its waters rise to their highest level. A watercourse is defined as a stream with boundaries defined by the maximal extent or expression on the landscape even though flow may otherwise be intermittent or ephemeral.

Artificial waterways such as ditches (including roadside ditches), canals, aqueducts, irrigation ditches, and other artificially created water conveyance systems also may be under the jurisdiction of CDFW. CDFW may claim jurisdiction over these features based on the presence of habitat characteristics suitable to support aquatic life, riparian vegetation, and/or stream-dependent terrestrial wildlife. As with natural waterways, the limit of CDFW jurisdiction of artificial waterways includes the uppermost bank-to-bank distance and/or the outermost extent of riparian vegetation dripline, whichever measurement is greater.

CDFW does not have jurisdiction over wetlands but has jurisdiction to protect against a net loss of wetlands. CDFW supports the wetland criteria recognized by USFWS; one or more indicators of wetland conditions must exist for wetlands conditions to be considered present. The following is the USFWS accepted definition of a wetland:

> Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the lands supports hydrophytes, (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year (Cowardin et al. 1979).

In A Clarification of the U.S. Fish and Wildlife Service's Wetland Definition (Tiner 1989), the USFWS definition was further clarified "that in order for any area to be classified as wetland by the Service, the area must be periodically saturated or covered by shallow water, whether wetland vegetation and/or hydric soils are present or not; this hydrologic requirement is addressed in the first sentence of the definition." When considering whether an action would result in a net loss of wetlands, CDFW will extend jurisdiction to USFWS-defined wetland conditions where such conditions exist within the riparian vegetation that is associated with a stream or lake and does not depend on whether those features meet the three-parameter USACE methodology of wetland determination. If impacts to wetlands under the jurisdiction of CDFW are unavoidable, a mitigation plan will be implemented in coordination with CDFW to support the CDFW policy of "no net loss" of wetland habitat.

Appendix D – Tables

Table 1. Species Observed On-Site

Common Name	Scientific Name
Plants	
London rocket	*Sisymbrium irio*
Wall barley	*Hordeum murinum*
Cheeseweed mallow	*Malva parviflora*
Summer cypress	*Bassia scoparia*
Stinknet	*Oncosiphon piluliferum*
Common fiddleneck	*Amsinckia intermedia*
Birds	
Say's phoebe	*Sayornis saya*
Mourning Dove	*Zenaida macroura*
Song sparrow	*Melospiza melodia*
Black phoebe	*Sayornis nigricans*

Table 2 – CNDDB Potential to Occur for the *Lakeview and San Jacinto* Quadrangles

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Abronia villosa var. aurita	chaparral sand-verbena	None, None	G5T2?, S2, 1B.1	Chaparral, coastal scrub, desert dunes. Sandy areas. 60-1570 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Agelaius tricolor	tricolored blackbird	None, Threatened	G1G2, S1S2, CDFW-SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None, None	G5T3, S3, CDFW-WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Allium marvinii	Yucaipa onion	None, None	G1, S1, 1B.2	Chaparral. In openings on clay soils. 850-1070 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Anniella stebbinsi	Southern California legless lizard	None, None	G3, S3, CDFW-SSC	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Antrozous pallidus	pallid bat	None, None	G4, S3, CDFW-SSC	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Aquila chrysaetos	golden eagle	None, None	G5, S3, CDFW-WL	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Arizona elegans occidentalis	California glossy snake	None, None	G5T2, S2, CDFW-SSC	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Artemisiospiza belli belli	Bell's sage sparrow	None, None	G5T2T3, S3, CDFW-WL	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Aspidoscelis hyperythra	orange-throated whiptail	None, None	G5, S2S3, CDFW-WL	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Astragalus pachypus var. jaegeri	Jaeger's milk-vetch	None, None	G4T1, S1, 1B.1	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland. Dry ridges and valleys and open sandy slopes; often in grassland and oak-chaparral. 365-1040 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Athene cunicularia	burrowing owl	None, None	G4, S3, CDFW-SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Atriplex coronata var. notatior	San Jacinto Valley crownscale	Endangered, None	G4T1, S1, 1B.1	Playas, valley and foothill grassland, vernal pools. Alkaline areas in the San Jacinto River Valley. 35-460 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Atriplex parishii	Parish's brittlescale	None, None	G1G2, S1, 1B.1	Vernal pools, chenopod scrub, playas. Usually on drying alkali flats with fine soils. 4-1420 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Atriplex serenana var. davidsonii	Davidson's saltscale	None, None	G5T1, S1, 1B.2	Coastal bluff scrub, coastal scrub. Alkaline soil. 0-480 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Bombus crotchii	Crotch bumble bee	None, None	G3G4, S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Brodiaea filifolia	thread-leaved brodiaea	Threatened, Endangered	G2, S2, 1B.1	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Buteo regalis	ferruginous hawk	None, None	G4, S3S4, CDFW-WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Calochortus plummerae	Plummer's mariposa-lily	None, None	G4, S4, 4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	None, None	G5T3Q, S3, CDFW-SSC	Southern California coastal sage scrub. Wrens require tall opuntia cactus for nesting and roosting.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Caulanthus simulans	Payson's jewelflower	None, None	G4, S4, 4.2	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Centromadia pungens ssp. laevis	smooth tarplant	None, None	G3G4T2, S2, 1B.1	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 5-1170 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None, None	G5T3T4, S3S4, CDFW-SSC	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Chorizanthe parryi var. parryi	Parry's spineflower	None, None	G3T2, S2, 1B.1	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Threatened, Endangered	G5T2T3, S1	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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Corynorhinus townsendii	Townsend's big-eared bat	None, None	G4, S2, CDFW-SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Crotalus ruber	red-diamond rattlesnake	None, None	G4, S3, CDFW-SSC	Chaparral, woodland, grassland, and 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.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Deinandra mohavensis	Mojave tarplant	None, Endangered	G2, S3, 1B.3	Riparian scrub, coastal scrub, chaparral. Low sand bars in river bed; mostly in riparian areas or in ephemeral grassy areas. 640-1645 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Desert Fan Palm Oasis Woodland	Desert Fan Palm Oasis Woodland	None, None	G3, S3.2	Riparian woodland	This habitat is not present within the Project area
Dipodomys merriami parvus	San Bernardino kangaroo rat	Endangered, Candidate Endangered	G5T1, S1, CDFW-SSC	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Dipodomys stephensi	Stephens' kangaroo rat	Endangered, Threatened	G2, S2	Primarily annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Imperata brevifolia	California satintail	None, None	G4, S3, 2B.1	Coastal scrub, chaparral, riparian scrub, mojave desert scrub, meadows and seeps (alkali), riparian scrub. Mesic sites, alkali seeps, riparian areas. 3-1495 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Lanius ludovicianus	loggerhead shrike	None, None	G4, S4, CDFW-SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Lasiurus xanthinus	western yellow bat	None, None	G4G5, S3, CDFW-SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None, None	G4T2, S2, 1B.1	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None, None	G5T3T4, S3S4, CDFW-SSC	Intermediate canopy stages of shrub habitats and open shrub / herbaceous and tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Nama stenocarpa	mud nama	None, None	G4G5, S1S2, 2B.2	Marshes and swamps. Lake shores, river banks, intermittently wet areas. 15-815 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Navarretia fossalis	spreading navarretia	Threatened, None	G2, S2, 1B.1	Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrounded by other habitat types. 15-850 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Neotoma lepida intermedia	San Diego desert woodrat	None, None	G5T3T4, S3S4, CDFW-SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Onychomys torridus ramona	southern grasshopper mouse	None, None	G5T3, S3, CDFW-SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None, None	G5T2, S1S2, CDFW-SSC	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Phrynosoma blainvillii	coast horned lizard	None, None	G3G4, S3S4, CDFW-SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Plegadis chihi	white-faced ibis	None, None	G5, S3S4, CDFW-WL	Shallow freshwater marsh. Dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Polioptila californica californica	coastal California gnatcatcher	Threatened, None	G4G5T3Q, S2, CDFW-SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Pseudognaphalium leucocephalum	white rabbit-tobacco	None, None	G4, S2, 2B.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral. Sandy, gravelly sites. 35-515 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Setophaga petechia	yellow warbler	None, None	G5, S3S4, CDFW-SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Sidalcea neomexicana	salt spring checkerbloom	None, None	G4, S2, 2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojave desert scrub. Alkali springs and marshes. 3-2380 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	None, None	G4, S4	Riparian forest	This habitat is not present within the Project area
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	None, None	G3, S3.2	Riparian forest	This habitat is not present within the Project area
Southern Mixed Riparian Forest	Southern Mixed Riparian Forest	None, None	G2, S2.1	Riparian forest	This habitat is not present within the Project area

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Southern Riparian Scrub	Southern Riparian Scrub	None, None	G3, S3.2	Riparian scrub	This habitat is not present within the Project area
Spea hammondii	western spadefoot	None, None	G2G3, S3, CDFW-SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Taxidea taxus	American badger	None, None	G5, S3, CDFW-SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Tortula californica	California screw moss	None, None	G2G3, S2?, 1B.2	Chenopod scrub, valley and foothill grassland. Moss growing on sandy soil. 45-750 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Trichocoronis wrightii var. wrightii	Wright's trichocoronis	None, None	G4T3, S1, 2B.1	Marshes and swamps, riparian forest, meadows and seeps, vernal pools. Mud flats of vernal lakes, drying river beds, alkali meadows. 5-435 m.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Scientific Name	Common Name	Federal/State Status	Other Status	Habitat	Potential to Occur
Vireo bellii pusillus	least Bell's vireo	Endangered, Endangered	G5T2, S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.
Xanthocephalus xanthocephalus	yellow-headed blackbird	None, None	G5, S3, CDFW-SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	Suitable habitat for this species does not occur on site. As such, this species is considered absent from the Project site.

Coding and Terms

E = Endangered T = Threatened C = Candidate FP = Fully Protected SSC = Species of Special Concern R = Rare

State Species of Special Concern: An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: "It is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes or to take, possess or destroy the nest or eggs of any such bird."

State Fully Protected: The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Global Rankings (Species or Natural Community Level):

G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure – Common; widespread and abundant.
? = Uncertainty in the exact status of an element (could move up or down one direction from current rank)

Subspecies Level: Taxa which are subspecies or varieties receive a taxon rank (T-rank**)** attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa.* The T-rank refers only to the global condition of ssp. *phaea*.

State Ranking:

S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.
S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.
S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.
S5 = Secure – Common, widespread, and abundant in the State.

California Rare Plant Rankings (CNPS List):

1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
1B = Plants rare, threatened, or endangered in California and elsewhere.
2A = Plants presumed extirpated in California, but common elsewhere.
2B = Plants rare, threatened, or endangered in California, but more common elsewhere.
3 = Plants about which more information is needed; a review list.
4 = Plants of limited distribution; a watch list.

Threat Ranks:

.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)