Biological Resources Technical Report

Vernola Ranch, City of Jurupa Valley, California

FINAL REPORT

APNs - 160-050-005, -021, -023, -063, -067, -068, -070, -072 to -074, Right-of-Way

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CADRE Environmental

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GLOSSARY

AMSL	Above Mean Sea Level
APN	Assessor's Parcel Number
CAPSA	Criteria Area Plant Survey Areas
CDFG	California Department of Fish and Game (CDFW effective Jan 1st 2013)
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Ranking
CWA	Clean Water Act
DBESP	Determination of Biological Equivalent or Superior Preservation
FESA	federal Endangered Species Act
GIS	Geographic Information System
HANS	Habitat Acquisition and Negotiation Strategy
JPR	Joint Project Review
MBTA	Migratory Bird Treaty Act
MSHCP	Multiple Species Habitat Conservation Plan
NCCP	Natural Communities Conservation Plan
NEPS	Narrow Endemic Plant Species
NEPSA	Narrow Endemic Plant Survey Areas
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NWPR	Navigable Water Protection Rule
OHWM	Ordinary High Water Mark
RCA	Western Riverside County Regional Conservation Authority
RCIP	Riverside County Integrated Project
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	California Species of Special Concern
SWRCB	State Water Resources Control Board
TPM	Tentative Parcel Map
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

The proposal includes two (2) elements including a residential project level (northern region) and commercial program level (southern region) action (Project Area). The residential project level action (Residential Project Area) will include planned unit development, commercial retail uses, community paseo, gardens and exercise facilities. The southern commercial retail center (Commercial Project Area) will be planned at a future date.

The 153.00-acre (11.70-acres offsite) Residential Project Area, Assessor's Parcel Numbers (APNs), 160-050-063, 160-050-067, 160-050-068, 160-050-070, 160-050-072, portion of 160-050-005, 160-050-023, 160-050-073, 160-050-074, and Right-of-Way is located immediately south of Bellegrave Avenue, west of Pats Ranch Road, and east of Interstate 15, in the City of Jurupa Valley, western Riverside County, California (U.S. Geological Survey (USGS)) 7.5' series Corona North Quadrangle, Riverside County, Township 2 South, Range 6 West, Sections 19 and 30.

The 36.00-acre Commercial Project Area, APNs 160-050-021, portion of 160-050-005, 160-050-023, 160-050-073, 160-050-074, and Right-of-Way is located immediately west of Pats Ranch Road, east of Interstate 15, and north of Limonite Avenue in the City of Jurupa Valley, western Riverside County, California USGS 7.5' series Corona North Quadrangle, Riverside County, Township 2 South, Range 6 West, Sections 19 and 30.

The Project Areas are located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Eastvale Plan Area and are not located within an MSHCP Criteria Area Cell, Cell Group, or Linkage Area (Western Riverside County Regional Conservation Authority (RCA) Geographic Information System (GIS) Data Downloads 2021).

The entire Project Area is generally flat and has been actively and annually farmed (field corn) since at least 1985. The northern region is characterized as disturbed/developed and is the location of the farming support structures and storage/staging facilities. The eastern offsite area is characterized as disturbed as a result of road improvements conducted adjacent to Pats Ranch Road.

The following impact analysis is focused on the Residential Project Area and offsite impact areas. The Commercial Project Area will be analyzed at a future date.

A total of 164.70 acres of field cropland (field corn) and disturbed/developed vegetation communities will be directly impacted as a result of final project implementation for the Residential Project Area and offsite impact area. Direct impacts to all vegetation communities will be mitigated to a level of less than significant by implementing Jurupa Valley Municipal Code Sec. 3.80.070 (MSHCP Local Development Mitigation Fee).

The Natural Resources Conservation Service has the southeastern region (2-acres) of the offsite impact area mapped as Delhi fine sands (United States Fish and Wildlife Service Ontario Recovery Unit) (NRCS 2021). However, following a review of historic aerials, the entire offsite impact area occurs within the Pats Ranch Road right-of-way

and recent improvements have converted this area into disturbed habitat. Soils documented onsite during the habitat assessment were characterized as loamy/sand. As described in the following report and based on the extensive level of historic as well as current disturbed conditions, no suitable habitat for the Delhi sands flower-loving fly occurs within the offsite impact area and focused surveys are not warranted based on the following facts: 1) offsite impact area substrates no longer characterized as Delhi fine sand following improvements to Pats Ranch Road, and 2) No indicator plant species including California buckwheat, telegraph weed, or California croton detected onsite. The offsite impact area is dominated by non-native invasive species. No Impact.

The Residential Project Area and offsite impact area occurs almost completely within an MSHCP predetermined Survey Area for three (3) MSHCP narrow endemic plant species including San Diego ambrosia, San Miguel savory, and Brand's phacelia (RCA GIS Data Downloads 2021). According to the MSHCP guidelines, focused surveys are required during the appropriate flowering season to document the presence/absence of these species if suitable habitat is present and if the property is located within a predetermined Survey Area (MSHCP 2004). As previously stated, following a review of historic aerials, the entire Residential Project Area has and continues to be actively farmed from at least 1985. No native or undisturbed soils or vegetation communities were documented onsite for the three (3) MSHCP narrow endemic sensitive plant species. Focused MSHCP sensitive plant surveys are not warranted and the project is consistent with MSHCP Section 6.1.3. No Impact.

The Residential Project Area and offsite impact area are not located within an MSHCP Amphibian or Mammal Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2021). The project is consistent with MSHCP Section 6.3.2. No Impact.

The Residential Project Area and offsite impact area occur almost completely within a predetermined Survey Area for the burrowing owl. No suitable burrowing owl burrows larger than 4 inches in diameter potentially utilized for refugia and/or nesting were documented onsite. Also, no burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within the Residential Project Area and offsite impact area boundary during the habitat assessment and focused surveys are not warranted. However, the Residential Project Area and offsite impact area could be colonized if the fields were left fallow. Therefore, at a minimum, a 30-day preconstruction survey will be conducted immediately prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP (BIO-MM1 MSHCP Burrowing Owl 30-Day Preconstruction Survey). The project will be consistent with MSHCP Section 6.3.2 following implementation of BIO-MM1.

Potential habitat for two (2) MSHCP covered species was documented onsite during the habitat assessment and include, white-tailed kite and loggerhead shrike, both California Department of Fish and Wildlife Species of Special Concern. Potential impacts to these sensitive species will be mitigated by implementing Jurupa Valley Municipal Code Sec. 3.80.070 and Biological Mitigation and Avoidance Measures (BIO-MM2 Regulatory Requirement CDFG Code).

The Residential Project Area and offsite impact area possesses vegetation including ornamental trees and shrubs expected to potentially provide nesting habitat for nesting birds protected under the CDFG Codes. Measures for potential direct/indirect impacts to common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Impacts to nesting birds and raptors would be reduced to less than significant with the implementation of Biological Mitigation and Avoidance Measure (BIO-MM2 Regulatory Requirement CDFG Code).

No MSHCP Section 6.1.2 vernal pool or seasonal depression resources representing suitable habitat for sensitive fairy shrimp were detected within the Residential Project Area and offsite impact area. No MSHCP Section 6.1.2 riparian (scrub, forest or woodland) or riverine habitat is present within the Residential Project Area and offsite impact area. No suitable habitat for the least Bell's vireo, southwestern willow flycatcher or western yellow-billed cuckoo is present within or adjacent to the Residential Project Area and offsite impact area. The project is consistent with MSHCP Section 6.1.2. An MSHCP Determination of Biological Equivalent or Superior Preservation (DBESP) will not be required.

No features regulated by the Santa Ana Regional Water Quality Control Board, California Department of Fish and Wildlife and United States Army Corps of Engineers were documented within or immediately adjacent to the Residential Project Area and offsite impact area. No regulatory permits or certifications will need to be acquired.

Implementation of Jurupa Valley Municipal Code Sec. 3.80.070 and Mitigation and Avoidance Measures BIO-MM1 and BIO-MM2 would reduce all potential significant unavoidable impacts on biological resources below a level of significance and ensure compliance with MSHCP conservation requirements.

Jurupa Valley Municipal Code Sec. 3.80.070 MSHCP Local Development Mitigation Fee - The project applicant shall pay MSHCP Local Development Mitigation fees as established and implemented by the City of Jurupa Valley.

BIO-MM1 MSHCP Burrowing Owl 30-Day Preconstruction Survey - A 30-day burrowing owl preconstruction survey will be conducted immediately prior to the initiation of ground-disturbing construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP.

BIO-MM2 Regulatory Requirement CDFG Code - Regulatory requirement for potential direct/indirect impacts to nesting common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (between September 1st and February 15th) do not require pre-removal nesting bird surveys. If construction is proposed between February 16th and August 31st, a qualified biologist will conduct a nesting bird survey(s) no more than three (3) days prior to initiation of grading to document the presence or absence of nesting birds within or directly adjacent (100 feet) to the Residential Project Area and offsite impact area.

INTRODUCTION

The following biological technical report describes a detailed assessment of potential sensitive natural resources located within and immediately adjacent to the Vernola Ranch Project Area. Specifically, the report has been prepared to support the California Environmental Quality Act (CEQA) and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) documentation, compliance and review process conducted by the City of Jurupa Valley. As discussed below, the assessment includes a thorough literature review, site reconnaissance characterizing baseline conditions (including floral and faunal and dominate vegetation communities), impact analysis, and proposed mitigation/avoidance measures.

PROJECT LOCATION & DESCRIPTION

The proposal includes two (2) elements including a residential project level (northern region) and commercial program level (southern region) action (Project Area). The residential project level action (Residential Project Area) will include planned unit development, commercial retail uses, community paseo, gardens and exercise facilities. The southern commercial retail center (Commercial Project Area) will be planned at a future date.

The 153.00-acre (11.70-acres offsite) Residential Project Area, Assessor's Parcel Numbers (APNs), 160-050-063, 160-050-067, 160-050-068, 160-050-070, 160-050-072, portion of 160-050-005, 160-050-023, 160-050-073, 160-050-074, and Right-of-Way is located immediately south of Bellegrave Avenue, west of Pats Ranch Road, and east of Interstate 15, in the City of Jurupa Valley, western Riverside County, California (U.S. Geological Survey (USGS)) 7.5' series Corona North Quadrangle, Riverside County, Township 2 South, Range 6 West, Sections 19 and 30 as shown in Figure 1, *Regional Location Map* and Figure 2, *Project Areas Map.*

The 36.00-acre Commercial Project Area, APNs 160-050-021, portion of 160-050-005, 160-050-023, 160-050-073, 160-050-074, and Right-of-Way is located immediately west of Pats Ranch Road, east of Interstate 15, and north of Limonite Avenue in the City of Jurupa Valley, western Riverside County, California USGS 7.5' series Corona North Quadrangle, Riverside County, Township 2 South, Range 6 West, Sections 19 and 30 as shown in Figure 1, *Regional Location Map* and Figure 2, *Project Areas Map.*

The Project Areas are located within the Western Riverside County MSHCP Eastvale Plan Area and are not located within an MSHCP Criteria Area Cell, Cell Group, or Linkage Area (Western Riverside County Regional Conservation Authority (RCA) Geographic Information System (GIS) Data Downloads 2021).

The entire Project Area is generally flat and has been actively and annually farmed (field corn) since at least 1985. The northern region is characterized as disturbed/developed and is the location of the farming support structures and storage/staging facilities. The eastern offsite area is characterized as disturbed as a result of road improvements conducted adjacent to Pats Ranch Road. For the purpose of the following biological resources technical report, all Project Areas were analyzed for compliance with CEQA guidelines and MSHCP consistency.

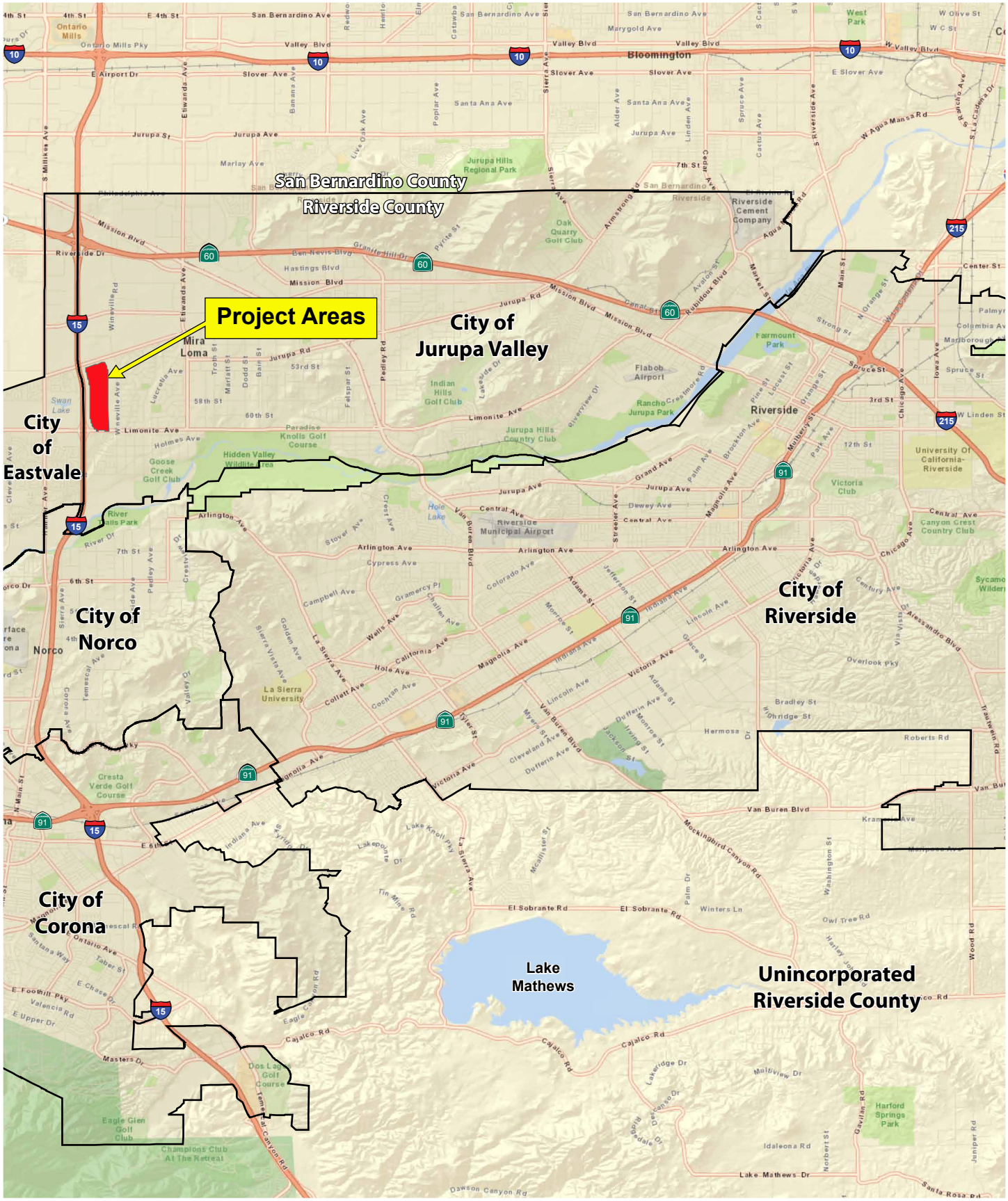

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Figure 1 - Regional Location Map

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not to scale

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Figure 2 - Project Areas Map

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Vernola Ranch Project Areas

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1 inch = 450 feet

METHODOLOGY

LITERATURE REVIEW

Existing biological resource conditions within and adjacent to the Project Area were initially investigated through review of pertinent scientific literature. Federal register listings, protocols, and species data provided by the USFWS were reviewed in conjunction with anticipated federally listed species potentially occurring within the Project Areas. The California Natural Diversity Database (CNDDB 2021a), a CDFW Natural Heritage Division species account database, was also reviewed for all pertinent information regarding the locations of known occurrences of sensitive species in the vicinity of the property. In addition, numerous regional floral and faunal field guides were utilized in the identification of species and suitable habitats. Combined, the sources reviewed provided an excellent baseline from which to inventory the biological resources potentially occurring in the area. Other sources of information included the review of unpublished biological resource letter reports and assessments. Other CDFW reports and publications consulted include the following:

- Special Animals (CDFW 2021b);
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2021c);
- Endangered, Threatened, and Rare Plants of California (CDFW 2021d); and
- Special Vascular Plants and Bryophytes List (CDFW 2021e).

FIELD SURVEYS

An initial reconnaissance survey of the Project Area was conducted by Ruben Ramirez, Cadre Environmental during the winter of 2021 in order to characterize and identify potential sensitive plant and wildlife habitats, and to establish the accuracy of the data identified in the literature search and previous surveys. Geologic and soil maps were examined to identify local soil types that may support sensitive taxa. Aerial photograph, topographic maps, and vegetation and rare plant maps prepared by previous studies in the region were used to determine community types and other physical features that may support sensitive plants/wildlife, uncommon taxa, or rare communities that occur within the Project Areas.

The MSHCP has determined that all of the sensitive species potentially occurring within the Project Areas have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for narrow endemic plant, criteria area, and specific wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined “Survey Area” (MSHCP 2004) as shown in Figure 3, *MSHCP Relationship Map*. habitat assessments for target species, were conducted for the following five (5) species.

- Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) [Federal Endangered (FE))

- San Diego ambrosia (*Ambrosia pumila*)
  [FE, California Rare Plant Ranking (CRPR) 1B.1];

- San Miguel savory (*Satureja chandleri*)
  [CRPR List 1B.2];

- Brand's phacelia (*Phacelia stellaris)*
  [CRPR 1B.1], and

- burrowing owl (*Athene cunicularia*)
  [California Species of Special Concern (SSC)].

Vegetation Communities/Habitat Classification Mapping

Natural community names and hierarchical structure follows the CDFW "List of California Terrestrial Natural Communities" and/or Holland (1986) classification systems, which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the MSHCP classification system.

Floristic Plant Inventory

A general plant survey was conducted throughout the Project Area during the initial reconnaissance in a collective effort to identify all species occurring onsite.

All plants observed during the survey efforts were either identified in the field or collected and later identified using taxonomic keys. Plant taxonomy follows Hickman (1993). Scientific nomenclature and common names used in this report generally follow Roberts et al. (2004) or Baldwin et al. (2012) for updated taxonomy. Scientific names are included only at the first mention of a species; thereafter, common names alone are used.

Wildlife Resources Inventory

All animals identified during the reconnaissance survey by sight, call, tracks, scat, or other characteristic sign were recorded onto a 1:200 scale orthorectified color aerial photograph or documented using a global positioning system (GPS). In addition to species actually detected, expected use of the site by other wildlife was derived from the analysis of habitats on the site, combined with known habitat preferences of regionally occurring wildlife species.

Vertebrate taxonomy followed in this report is according to the Center for North American Herpetology (2021 for amphibians and reptiles), the American Ornithologists' Union (1988 and supplemental) for birds, and Baker et al. (2003) for mammals. Both common and scientific names are used during the first mention of a species; common names only are used in the remainder of the text.

Regional Connectivity/Wildlife Movement Corridors

The analysis of wildlife movement corridors associated with the Project Area and immediate vicinity is based on information compiled from literature, analysis of the aerial photograph and direct observations made in the field during the reconnaissance site visit.

A literature review was conducted that includes documents on island biogeography (studies of fragmented and isolated habitat "islands"), reports on wildlife home range sizes and migration patterns, and studies on wildlife dispersal. Wildlife movement studies conducted in southern California were also reviewed. Use of field-verified digital data, in conjunction with the GIS database, allowed proper identification of regional vegetation communities and drainage features. This information was crucial to assessing the relationship of the Project Areas to large open space areas in the immediate vicinity and was also evaluated in terms of connectivity and habitat linkages. Relative to corridor issues, the discussions in this report are intended to focus on wildlife movement associated within the Project Areas and the immediate vicinity.

Jurisdictional Resources Assessment

The Project Area was assessed for jurisdiction by the United States Army Corps of Engineers, California Department of Fish and Wildlife, and Regional Water Quality Control Board. Non-wetland waters of the United States were assessed based on the limits of the Ordinary High-Water Mark (OHWM) as determined by erosion, the deposition of vegetation or debris, and changes in vegetation and soil characteristics. The assessment utilized the methodology for routine wetland determination according to the methods outlined in the USACE Wetland Delineation Manual (Environmental Laboratory 1987) and the Arid West Wetland Delineation Supplement and updated regulatory guidance letters (USACE 2008). Wetlands are identified by the presence of three characteristics: hydrophytic vegetation, wetland hydrology, and hydric soils. If any of these criteria were met, one or more transects were run to determine the extent of the wetland. Specifically, the presence of wetland hydrology was evaluated throughout the Project Area by recording the extent of observed surface flows, depth of inundation, depth to saturated soils, and depth to free water in the soil pits, where applicable. In addition, indicators of wetland or riverine hydrology were recorded, including water marks, drift lines, rack, debris, and sediment deposits, as warranted. Any indicators of hydric soils, such as redoximorphic features, buried organic matter, organic streaking, reduced soil conditions, gleyed or low-chroma soils, or sulfidic odor were also recorded.

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Figure 3 - MSHCP Relationship Map

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1 inch = 450 feet

SURROUNDING LAND USES/TOPOGRAPHY/SOILS

The entire Project Area is characterized as active field croplands which have been annually farmed since at least 1985. The Residential Project Area is characterized as active field croplands and disturbed/developed habitat which includes the location of farming support structures, facilities, staging areas and offsite impact areas along Pats Ranch Road. The southern Commercial Project Area is exclusively active field croplands. Representative distribution and photographs of these habitat types are illustrated in Figure 4, *Vegetation Communities Map* and Figures 5-8, *Current Project Area Photographs*. The Soil Survey of Western Riverside Area has the following soils mapped within the boundary of the Project Area as shown on Figure 9, *Soils Association Map*:

- DaD2 Delhi fine sand, 2 to 15 percent slopes, wind-eroded
- HhA2 Hilmar loamy sand, 0 to 2 percent slopes, eroded
- HIA Hilmar loamy very fine sand, 0 to 2 percent slopes
- HIC Hilmar loamy very fine sand, to 8 percent slopes
- RaB2 Ramona sandy loam, 2 to 5 percent slopes, eroded
- RaD3 Ramona sandy loam, 8 to 15 percent slopes, severely eroded

VEGETATION COMMUNITIES

Natural community names follow the CDFW "List of California Terrestrial Natural Communities" and/or Holland (1986) classification system, which have been refined and where appropriate to better characterize the habitat types onsite when not addressed by the MSHCP classification system. Acreage totals for vegetation communities documented onsite and offsite are listed in Table 1. *Vegetation Communities Acreages*.

Table 1.
Vegetation Communities Acreages

*Vegetation Type	Residential Project Area Acres	Residential Project Area (offsite) Acres	Commercial Project Area Acres	Acres (total)
Field Croplands (Field Corn)	142.44	0.00	36.00	178.44
Disturbed/Developed	10.56	11.70	0.00	22.26
TOTALS	**153.00**	**11.70**	**36.00**	**200.70**

**Source: Cadre Environmental 2021.*

Field Croplands

The majority of the Project Area is characterized as active field croplands which are annually disked and planted with field corn (*Zea mays*).

Disturbed/Developed

Disturbed habitats documented onsite are either devoid of vegetation or dominated by ruderal invasive species or native species common in disturbed areas including hairy crabgrass (*Digitaria sanguinalis*), barnyard grass (*Echinochloa crus-galli*), wild oat (*Avena fatua*), ripgut grass (*Bromus diandrus*), stinknet (*Oncosiphon piluliferum*), Australian saltbush (*Atriplex semibaccata*), prickly sow-thistle (*Sonchus asper*), cheeseweed (*Malva parviflora*), golden crownbeard (*Verbesina encelioides*), burclover (*Medicago polymorpha*), black mustard (*Brassica nigra*), horseweed (*Erigeron canadensis*), tocalote (*Centaurea melitensis*), red-stemmed filaree (*Erodium cicutarium*), white-stemmed filaree (*Erodium moschatum*), prickly lettuce (*Lactuca serriola*), Russian thistle (*Salsola tragus*), Alkali weed (*Cressa truxillensis*), spotted spurge (*Euphorbia maculata*), Palmer amaranth (*Amaranthus palmeri*), tumbling pigweed (*Amaranthus albus*), lamb's quarters (*Chenopodium album*), common knotweed (*Polygonum arenastrum*), annual sunflower (*Helianthus annuus*), puncture vine (*Tribulus terrestris*), annual jimson weed (*Datura stramonium*), tree tobacco (*Nicotiana glauca*), and horehound (*Marrubium vulgare*).

Developed regions of the Project Area concentrated in the Residential Project Area include farm support structures, residence, staging areas and ornamental plantings including Cape honeysuckle (*Tecoma capensis*), Mexican fan palms (*Washingtonia robusta*), pine (*Pinus* sp.), Peruvian pepper (*Schinus molle*), and Jacaranda (*Jacaranda mimosifolia*).

Representative distribution and photographs of these habitat types are illustrated in Figure 4, *Vegetation Communities Map* and Figures 5-8, *Current Project Area Photographs*.

GENERAL PLANT & WILDLIFE SPECIES

A complete list of plant species documented onsite is included in the vegetation descriptions.

General wildlife species documented on site include Canada goose (*Branta canadensis*), American kestrel (*Falco sparverius*) red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), American pipit (*Anthus rubescens*), European starling (*Sturnus vulgaris*), white crowned sparrow (*Zonotrichia leucophrys*), western meadowlark (*Sturnella neglecta*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), desert cottontail rabbit (*Sylvilagus audubonii*), and side-blotched lizard (*Uta stansburiana elegans*).

JURISDICTIONAL RESOURCES

The Project Area does not contain streams, wetlands or other aquatic features that meet the definition of Waters of the U.S. or Waters of the State as shown in Figure 4, Vegetation Communities Map and Figures 5-8, *Current Project Area Photographs*.

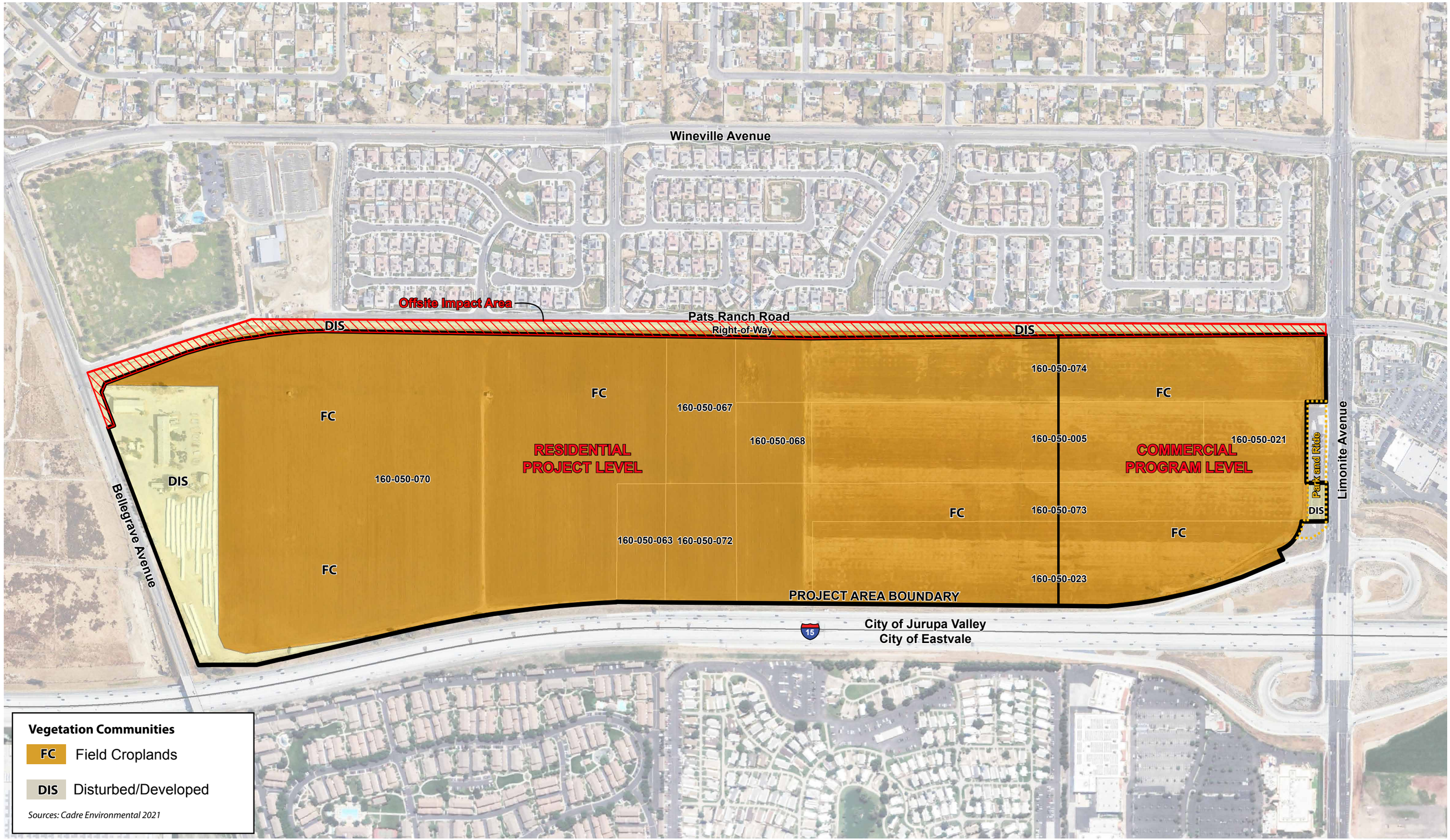

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Figure 4 - Vegetation Communities Map

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PHOTOGRAPH 1

PHOTOGRAPH 2

Refer to Figure 2 - Project Areas Map for Photographic Key

Figure 5 - Current Project Area Photographs

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PHOTOGRAPH 3

PHOTOGRAPH 4

Refer to Figure 2 - Project Areas Map for Photographic Key

Figure 6 - Current Project Area Photographs

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PHOTOGRAPH 5

PHOTOGRAPH 6

Refer to Figure 2 - Project Areas Map for Photographic Key

Figure 7 - Current Project Area Photographs

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PHOTOGRAPH 7

PHOTOGRAPH 8

Refer to Figure 2 - Project Areas Map for Photographic Key

Figure 8 - Current Project Area Photographs

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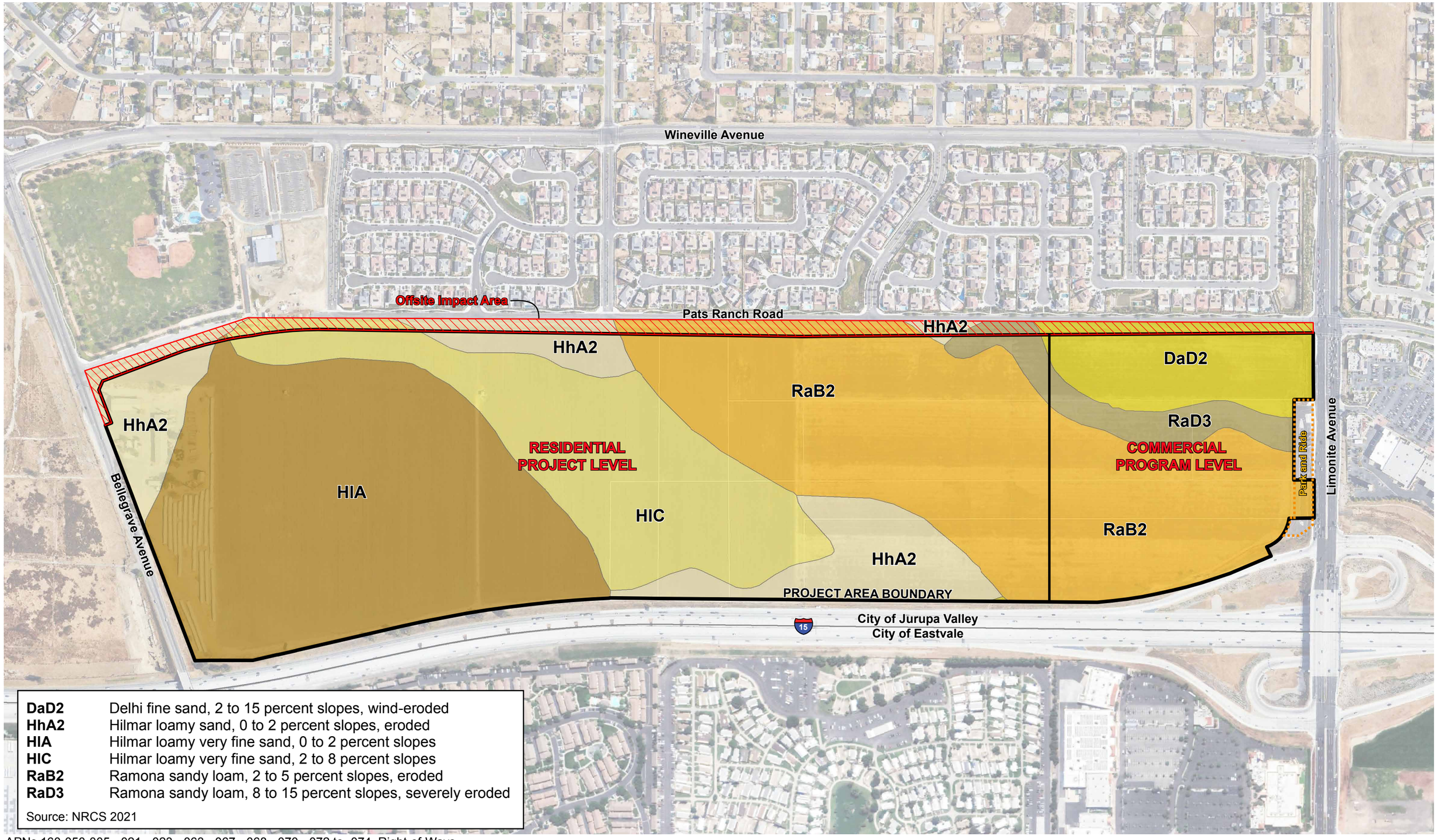

DaD2	Delhi fine sand, 2 to 15 percent slopes, wind-eroded
HhA2	Hilmar loamy sand, 0 to 2 percent slopes, eroded
HIA	Hilmar loamy very fine sand, 0 to 2 percent slopes
HIC	Hilmar loamy very fine sand, 2 to 8 percent slopes
RaB2	Ramona sandy loam, 2 to 5 percent slopes, eroded
RaD3	Ramona sandy loam, 8 to 15 percent slopes, severely eroded

Source: NRCS 2021

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Figure 9 - Soils Association Map

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SENSITIVE BIOLOGICAL RESOURCES

The following discussion describes the plant and wildlife species present, or potentially present within the property boundaries, that have been afforded special recognition by federal, state, or local resource conservation agencies and organizations, principally due to the species' declining or limited population sizes, usually resulting from habitat loss. Also discussed are habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by state and/or federal resource management agencies, or both, as threatened or endangered, under provisions of the state and federal endangered species act. Vulnerable or "at-risk" species that are proposed for listing as threatened or endangered (and thereby for protected status) are categorized administratively as "candidates" by the USFWS. CDFW uses various terminology and classifications to describe vulnerable species. There are additional sensitive species classifications applicable in California. These are described below.

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, USFWS, and special groups like the California Native Plant Society maintain watch lists of such resources. For the purpose of this assessment sources used to determine the sensitive status of biological resources are:

Plants: USFWS (2021), CNDDB (CDFW 2021a), CDFW (2021b), CNPS (2021), and Skinner and Pavlik (1994),

Wildlife: California Wildlife Habitat Relationships (2008), USFWS (2020), CNDDB (CDFW 2021a), and CDFW (2021b).

Habitats: CNDDB (CDFW 2021a).

FEDERAL PROTECTION AND CLASSIFICATIONS

The Federal Endangered Species Act of 1973 (FESA) defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range..." Threatened species are defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined as follows in Section 3(18) of the FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of a "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. Recently, the USFWS instituted changes in the listing status of former candidate species. Former C1 (candidate) species are now referred to simply as candidate species and

represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing at this time) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. However, some USFWS field offices have issued memoranda stating that former C2 species are henceforth to be considered Federal Species of Concern. This term is employed in this document but carries no official protections. All references to federally protected species in this report (whether listed, proposed for listing or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS.

For purposes of this assessment, the following acronyms are used for federal status species:

FE	Federal Endangered
FT	Federal Threatened
FPE	Federal Proposed Endangered
FPT	Federal Proposed Threatened
FC	Federal Candidate for Listing

The designation of critical habitat can also have a significant impact on the development of land designated as "*critical habitat*." The FESA prohibits federal agencies from taking any action that will "*adversely modify or destroy*" critical habitat (16 U.S.C. § 1536(a)(2)). This provision of the FESA applies to the issuance of permits by federal agencies. Before approving an action affecting critical habitat, the federal agency is required to consult with the USFWS who then issues a biological opinion evaluating whether the action will "*adversely modify"* critical habitat. Thus, the designation of critical habitat effectively gives the USFWS extensive regulatory control over the development of land designated as critical habitat.

The MBTA makes it unlawful to "*take*" any migratory bird or part, nest, or egg of such bird listed in wildlife protection treaties between the United States and Great Britain, the Republic of Mexico, Japan, and the Union of Soviet States. For purposes of the MBTA, "*take*" is defined as to pursue, hunt, capture, kill, or possess or attempt to do the same.

The Bald Eagle and Golden Eagle Protection Act explicitly protects the bald eagle and golden eagle and imposes its own prohibition on any taking of these species. As defined in this act, take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb. Current USFWS policy is not to refer the incidental take of bald eagles for prosecution under the Bald Eagle and Golden Eagle Protection Act (16 U.S.C. 668-668d).

STATE PROTECTION AND CLASSIFICATIONS

California's Endangered Species Act (CESA) defines an endangered species as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation,

predation, competition, or disease." The State defines a threatened species as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of CESA addresses the taking of threatened or endangered species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided..." Under CESA, "take" is defined as "...hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require "...permits or memorandums of understanding..." and can be authorized for "...endangered species, threatened species, or candidate species for scientific, educational, or management purposes." Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. SSC ("special" animals and plants) listings include special status species, including all state and federal protected and candidate taxa, Bureau of Land Management and US Forest Service sensitive species, species considered to be declining or rare by the CNPS or National Audubon Society, and a selection of species which are considered to be under population stress but are not formally proposed for listing. This list is primarily a working document for the CDFW's CNDDB project. Informally listed taxa are not protected per se but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites. For the purposes of this assessment, the following acronyms are used for State status species:

SE	State Endangered
ST	State Threatened
SCE	State Candidate Endangered
SCT	State Candidate Threatened
SFP	State Fully Protected
SP	State Protected

SR	State Rare
SSC	California Species of Special Concern
CWL	California Watch List

Nesting birds, including raptors, are protected under California Fish and Game Code Section 3503, which reads, “It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” In addition, under California Fish and Game Code Section 3503.5, “it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto”. Passerines and non-passerine land birds are further protected under California Fish and Game Code 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by CDFW.

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in the State. This organization has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of rare, threatened, or endangered vascular plant species of California (Tibor 2001). The list serves as the candidate list for listing as threatened and endangered by CDFW. The CNPS has developed five categories of rarity (CRPR):

CRPR 1A	Presumed extinct in California.
CRPR 1B	Rare, threatened, or endangered in California and elsewhere.
CRPR 2A	Plants presumed extirpated in California but common elsewhere
CRPR 2B	Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3	Plants about which we need more information – a review list.
CRPR 4	Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat.

As stated by the CNPS:

> “*Threat Rank is an extension added onto the California Rare Plant Rank and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of*

concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension." (CNPS 2010)

0.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

SENSITIVE HABITATS

As stated by CDFW:

> "*One purpose of the vegetation classification is to assist in determining the level of rarity and imperilment of vegetation types. Ranking of alliances according to their degree of imperilment (as measured by rarity, trends, and threats) follows NatureServe's Heritage Methodology, in which all alliances are listed with a G (global) and S (state) rank. For alliances with State ranks of S1-S3, all associations within them are also considered to be highly imperiled*" (CDFW 2012)

No vegetation communities listed by CDFW as sensitive were documented within or adjacent to the Residential Project Area.

No vegetation communities listed by CDFW as sensitive were documented within or adjacent to the Commercial Project Area.

SENSITIVE PLANTS

Based on a review of the CNDDB, MSHCP sensitive species survey area GIS database, and existing conditions within and adjacent to the property, a total of twenty-three (23) sensitive plant species listed in the State and local databases have potential to occur within the vicinity of the Project Area as presented in Table 2, *Sensitive Plant Species with Potential to Occur Onsite* (CNDDB 2021a). No suitable habitat for sensitive plant species including those listed as federal or state threatened/endangered was documented within the Residential or Commercial Project Area. No sensitive plant species listed in Table 2 or undisturbed native habitats were documented within the Project Area. The Project Area is characterized as heavily disturbed (active field croplands).

Table 2.
Sensitive Plant Species with Potential to Occur Onsite.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
San Diego ambrosia (*Ambrosia pumila*) FE CRPR 1B.1 MSHCP NEPS MSHCP Covered Species	San Diego ambrosia is known from Baja California, Mexico, and San Diego and Riverside counties in the United States. San Diego ambrosia occurs primarily on upper terraces of rivers and drainages as well as in open grasslands, openings in coastal sage scrub, and occasionally in areas adjacent to vernal pools.	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Marsh sandwort (*Arenaria paludicola*) FE/SE CRPR 1B.1	Perennial stoloniferous herb generally blooming from May to August with sandy openings in association with marshes and swamps (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Horn's milk-vetch (*Astragalus hornii* var. *hornii*) CRPR 1B.1	Annual herb generally blooming from May to October in lake margins, alkaline meadows, seeps and playas (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Nevin's barberry (*Berberis nevinii*) FE/SE CRPR 1B.1 MSHCP Covered Species	Perennial evergreen shrub which generally blooms from February to June within chaparral, cismontane woodland, coastal scrub, and riparian scrub in sandy, gravelly substrates (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Plummer's mariposa-lily (*Calochortus plummerae*) CRPR 4.2 MSHCP Covered Species	Perennial bulbiferous herb which generally blooms from May to June within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and grassland habitats with granite and rocky substrates (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Bristly sedge (*Carex comosa*) CRPR 2B.1	Perennial rhizomatous herb generally blooming from May to September within coastal prairie, marsh, swamp and valley and foothill grasslands habitats (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Smooth tarplant (*Centromadia pungens* ssp. *laevis*) CRPR 1B.1 MSHCP Covered Species	Annual herb which generally blooms from April to September within chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland (alkaline substrates). (CNPS 2021)	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*) FE/SE CRPR 1B.2	Annual herb (hemiparasitic) generally blooming from May to November within coastal dunes, marshes and swamps) (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Parry's spineflower (*Chorizanthe parryi* var. *parryi*) CRPR 1B.1 MSHCP Covered Species	Annual herb which generally blooms from April to June within chaparral, cismontane woodland, coastal scrub and grassland habitats with sandy and/or rocky openings (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Slender-horned spineflower (*Dodecahema leptoceras*) FE/SE CRPR 1B.1 MSHCP Covered Species	Annual herb which generally blooms from April to June within chaparral, cismontane woodland and coastal scrub (alluvial fan) with sandy substrates (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Many-stemmed dudleya (*Dudleya multicaulis*) CRPR 1B.2 MSHCP Covered	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Santa Ana River woollystar (*Eriastrum densifolium ssp. sanctorum*) FE/SE CRPR 1B.1 MSHCP Covered Species	Perennial herb which generally blooms from April to September within chaparral, coastal scrub (alluvial fan) in sandy and gravelly substrates (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Mesa horkelia (*Horkelia cuneata ssp. puberula*) CRPR 1B.1	Perennial herb which generally blooms from February to September within chaparral (maritime), cismontane woodland and coastal scrub with sandy or gravelly substrates (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*) CRPR List 1B.1 MSHCP Criteria Area Species	Coulter's goldfields is associated with low-lying alkali and saline habitats along the coast and inland valleys. The majority of the populations are associated with coastal salt marsh. In Riverside County, Coulter's goldfields primarily grow in highly alkaline, silty clays associated with the Traver-Domino-Willows soils, and usually in the wet areas in the alkali vernal plain community.	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Robinson's pepper-grass (*Lepidium virginicum var. robinsonii*) CRPR 4.3	Annual herb which generally blooms from January to July within chaparral and coastal sage scrub habitats (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Parish's desert-thorn (*Lycium parishii*) CRPR 2B.3	Perennial shrub generally blooms from March to April within coastal scrub and Sonoran Desert scrub (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Pringle's monardella (*Monardella pringlei*) CRPR 1A (Presumed Extant)	Annual herb which generally blooms from May to June in coastal scrub dominated sandy substrates (CNPS 2021)	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Brand's phacelia (*Phacelia stellaris*) CRPR 1B.1 MSHCP NEPS	Brand's phacelia is an annual herb and occurs in coastal sage scrub and dune habitats.	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Parish's gooseberry (*Ribes divaricatum* var. *parishii*) CRPR 1A	Perennial deciduous shrub generally blooming from February to April within riparian woodland habitats (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
San Miguel savory (*Satureja chandleri*) CRPR 1B.2 MSHCP NEPS	San Miquel savory is a perennial shrub. This species occurs in rocky habitats within chaparral, coastal scrub, riparian woodland, and grassland habitats.	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Chaparral ragwort (*Senecio aphanactis*) CRPR 2B.2	Annual herb which generally blooms from January to May within chaparral, cismontane woodland and coastal scrub habitats (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
Salt spring checkerbloom (*Sidalcea neomexicana*) CRPR 2.2	Perennial herb which generally blooms from March to June within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas within alkaline/mesic gravelly substrates (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.
San Bernardino aster (*Symphyotrichum defoliatum*)	Perennial rhizomatous herb generally blooming from July to December within various vegetation communities in associating with wetland substrates (ditches, streams and springs) (CNPS 2021).	No potential to occur onsite based on a complete lack of suitable undisturbed native soils or vegetation communities.

California Native Plant Society (CNPS): California Rare Plant Rank (CRPR)
CRPR 1A – plants presumed extinct in California
CRPR 1B – plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 2A – plants presumed extirpated in California but common elsewhere
CRPR 2B – plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3 – plants about which we need more information, a review list
CRPR 4 – plants of limited distribution, a watch list
.1 – Seriously endangered in California
.2 – Fairly endangered in California
.3 – Not very endangered in California

Federal (USFWS) Protection and Classification
FE – Federally Endangered
FT – Federally Threatened
FC – Federal Candidate for Listing

State (CDFW) Protection and Classification
SE – State Endangered
ST – State Threatened

Source: Cadre Environmental 2021.

SENSITIVE WILDLIFE

Based on a review of the CNDDB, MSHCP sensitive species survey area GIS database, and existing conditions within and adjacent to the property, a total of thirty-six (36) sensitive wildlife species have the potential of occurring within the vicinity of the Residential or Commercial Project Areas as presented in Table 3, *Sensitive Wildlife Species with Potential to Occur Onsite* (CNDDB 2021a). No suitable habitat for species listed as federal or state threatened/endangered was documented within the Residential or Commercial Project Areas. Potential habitat for two (2) MSHCP covered species was documented onsite during the habitat assessment and include, white-tailed kite (*Elanus leucurus*) and loggerhead shrike (*Lanius ludovicianus*) both CDFW SSC species.

Table 3. Sensitive Wildlife Species with Potential to Occur Onsite.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
INVERTEBRATES		
Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis)* FE MSHCP Covered Species	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 (MSHCP 2004).	The NRCS has the southeastern region of the Project Area (11-acres) mapped as Delhi fine sands (United States Fish and Wildlife Service Ontario Recovery Unit) as shown in Figure 9, *Soils Association Map*. However, following a review of historic aerials, the entire Project Area has and continues to be actively farmed from at least 1985. Soils documented onsite during the habitat assessment were characterized as loamy/sand. As described in the following report and based on the extensive level of historic as well as current disturbed conditions, no suitable habitat for the Delhi sands flower-loving fly occurs onsite and focused surveys are not warranted based on the following facts: 1) Project Area substrates no longer characterized as Delhi fine sand following annual farming activities., 2) No indicator plant species including California buckwheat (*Eriogonum fasciculatum*), telegraph

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
		weed (*Heterotheca grandiflora*), or California croton (*Croton californicus*) detected onsite. Site dominated by non-native invasive species.
FISH		
Santa Ana sucker (*Catostomus santaanae*) FT MSHCP Covered Species	Preferred habitat, open water and emergent vegetation (MSHCP 2004).	No potential to occur onsite based on a lack of open water.
Arroyo chub (*Gila orcuttii*) SSC MSHCP Covered Species	Preferred habitat, open water and emergent vegetation in lower gradient streams with sand or mud substrate (MSHCP 2004).	No potential to occur onsite based on a lack of open water.
REPTILES		
Southern California legless lizard (*Anniella stebbinsi*) SSC	Species found in a broader range of habitats that any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans.	No potential to occur onsite based on the lack of suitable habitat and highly disturbed/actively farmed nature of the Project Area.
Orange-throated whiptail (*Aspidoscelis hyperythra*) CWL MSHCP Covered Species	The orange-throated whiptail occurs primarily in a wide variety of habitats but is more closely tied to coastal sage scrub and chaparral habitats with less than 90 percent vegetative cover.	No potential to occur onsite based on the lack of suitable habitat and highly disturbed/actively farmed nature of the Project Area.
Coastal western whiptail (*Aspidoscelis tigris stejnegeri*) SSC MSHCP Covered Species	The coastal western whiptail occurs in a wide variety of habitats including coastal sage scrub, desert scrub, Riversidean alluvial fan scrub, woodlands, grasslands, playas, and respective ecotones between these habitats (MSHCP 2004).	No potential to occur onsite based on the lack of suitable habitat and highly disturbed/actively farmed nature of the Project Area.
Red-diamond rattlesnake (*Crotalus ruber*)	The red-diamond rattlesnake is often found	No potential to occur onsite based on the lack of suitable

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
SSC MSHCP Covered Species	in areas with dense vegetation especially chaparral and sage scrub up to 1,520 meters in elevation (MSHCP 2004).	habitat and highly disturbed/actively farmed nature of the Project Area.
Western pond turtle (*Emys marmorata*) SSC MSHCP Covered Species	The western pond turtle inhabits slow moving permanent or intermittent streams, small ponds, small lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and sewage treatment lagoons (Rathbun *et al*., 1992; Holland, 1994). Pools are the preferred habitat within streams (Bury, 1972, MSHCP 2004).	No potential to occur onsite based on a lack of open water.
Coast horned lizard (*Phrynosoma blainvillii*) SSC MSHCP Covered Species	The horned lizard occurs primarily in scrub, chaparral, and grassland habitats. The species is common in most areas of the Plan Area except where adjacent to urban situations (MSHCP 2004).	No potential to occur onsite based on the lack of suitable habitat and highly disturbed/actively farmed nature of the Project Area.
BIRDS		
Cooper's hawk (*Accipiter cooperii*) SSC MSHCP Covered Species	Cooper's hawk is most commonly found within or adjacent to riparian/oak forest and woodland habitats. This uncommon resident of California increases in numbers during winter migration.	No potential to occur onsite based on a lack of roosting, foraging, and nesting habitat.
Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) CWL MSHCP Covered Species	Southern California rufous-crowned sparrow is a non-migratory bird species that primarily occurs within sage scrub and grassland habitats and to a lesser extent chaparral sub-associations (Unitt 2004). This species generally breeds on the ground within grassland and scrub communities in the	No potential to occur onsite based on the lack of suitable habitat and highly disturbed/actively farmed nature of the Project Area.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
	western and central regions of California.	
Golden eagle (*Aquila chrysaetos*) CWL, SFP MSHCP Covered Species	Within southern California, the species prefers grasslands, brushlands (coastal sage scrub and chaparral), deserts, oak savannas, open coniferous forests, and montane valleys (Garrett and Dunn 1981, MSHCP 2004)	No potential to occur onsite based on a lack of roosting, foraging, and nesting habitat.
Bell's sage sparrow (*Artemisiospiza belli belli*) CWL MSHCP Covered Species	Bell's sage sparrow is an uncommon to fairly common but localized resident breeder in dry chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains (MSHCP 2004).	No potential to occur onsite based on the lack of suitable habitat and highly disturbed/actively farmed nature of the Project Area.
Burrowing owls (*Athene cunicularia*) SSC MSHCP Covered Species	The burrowing owl uses predominantly open land, including grassland, agriculture (e.g., dry-land farming and grazing areas), playa, and sparse coastal sage scrub and desert scrub habitats (Garrett and Dunn 1981). Some breeding burrowing owls are year-round residents and additional individuals from the north may winter throughout the MSHCP Area Plan (MSHCP 2004).	No potential burrowing owl burrows larger than 4 inches in diameter or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within or immediately adjacent to the Project Area.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) FT/SE MSHCP Covered Species	Although the preferred habitat, riparian scrub and forest, is well distributed at scattered locations within the Plan Area in the Riverside Lowland Bioregions, the western yellow-billed cuckoo apparently no longer inhabits much of this habitat (MSHCP 2004).	No potential to occur onsite based on a lack of riparian scrub, forest or woodland habitats within or adjacent to the Project Area.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
White-tailed kite (*Elanus leucurus*) SFP MSHCP Covered Species	The white-tailed kite is found in riparian, oak woodlands adjacent to large open spaces including grasslands, wetlands, savannahs and agricultural fields. This non-migratory bird species occurs throughout the lower elevations of California and commonly nests in coast live oaks (Unitt 2004).	May occasionally forage onsite within the open field croplands.
Southwestern willow flycatcher (*Empidonax traillii extimus*) FE/SE MSHCP Covered Species	The southwestern willow flycatcher is narrowly distributed at few locations within the Plan Area. Although the preferred habitat, riparian woodland and select other forests, is well distributed within all bioregions and spread over the entire Plan Area, few current locations for the willow flycatcher have been documented (MSHCP 2004).	No potential to occur onsite based on a lack of riparian scrub, forest or woodland habitats within or adjacent to the Project Area.
American peregrine falcon (*Falco peregrinus anatum*) SFP MSHCP Covered Species	Throughout the species' range, peregrine falcons are found in a large variety of open habitats, including tundra, marshes, seacoasts, savannahs and high mountains (AOU 1998, MSHCP 2004).	No potential to occur onsite based on a lack of roosting, foraging, and nesting habitat.
Yellow-breasted chat (*Icteria virens*) SSC MSHCP Covered Species	The yellow-breasted chat is associated with riparian woodland and riparian scrub habitats. (MSHCP 2004)	No potential to occur onsite based on a lack of riparian scrub, forest or woodland habitats within or adjacent to the Project Area.
Loggerhead shrike (*Lanius ludovicianus*) SSC MSHCP Covered *Species*	Loggerhead shrike prefer open ground for foraging and thick trees and shrubs including sage scrub, chaparral, and desert scrub habitats for nesting.	May occasionally forage onsite within the open field croplands.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Black-crowned night heron (*Nycticorax nycticorax*) MSHCP Covered Species	Black-crowned night-herons require marshes, ponds, reservoirs, and estuaries for foraging and also occur along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and, rarely, in kelp beds in marine subtidal habitats (MSHCP 2004).	No potential to occur onsite based on a lack of roosting, foraging, and nesting habitat.
Osprey (*Pandion haliaetus*) CWL MSHCP Covered *Species*	The osprey is restricted to large water bodies supporting fish with surrounding or nearby forest Habitats, often ponderosa pine or mixed conifer (MSHCP 2004).	No potential to occur onsite based on a lack of open water within or adjacent to the Project Area.
Double-crested cormorant (*Phalacrocorax auritus*) CWL MSHCP Covered Species	The double-crested cormorant is a common inhabitant of seacoasts and inland waters, rarely observed out of sight of land (MSHCP 2004).	No potential to occur onsite based on a lack of roosting, foraging, and nesting habitat.
White-faced ibis (*Plegadis chihi*) CWL MSHCP Covered Species	The white-faced ibis is sparsely distributed throughout the Riverside Lowlands Bioregions of the MSHCP Plan Area within its suitable Habitat. It occurs at some of the areas of freshwater marsh habitat but is only documented for breeding at two locations: Prado Basin and Mystic Lake/San Jacinto Wildlife Area (MSHCP 2004).	No potential to occur onsite based on a lack of roosting, foraging, and nesting habitat.
Coastal California gnatcatcher (*Polioptila californica californica*) FT/SSC MSHCP Covered Species	The coastal California gnatcatcher is a non-migratory bird species that primarily occurs within sage scrub habitats in coastal southern California dominated by California sagebrush (*Artemisia californica*), and California buckwheat (*Eriogonum fasciculatum*).	No potential to occur onsite based on the lack of suitable habitat and highly disturbed/actively farmed nature of the Project Area.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Tree swallow (*Tachycineta bicolor*) MSHCP Covered Species	Suitable habitat is provided for the tree swallow by the riparian forest and woodland up through the lodgepole pine belt for breeding habitats. It frequents valley foothill and montane riparian habitats below 2,700 meters (9,000 feet) for breeding within its range (MSHCP 2004).	No potential to occur onsite based on a lack of riparian scrub, forest or woodland habitats within or adjacent to the Project Area.
Least Bell's vireo (*Vireo bellii pusillus*) FE/SE MSHCP Covered Species	Least Bell's vireo resides in riparian habitats with a well-defined understory including southern willow scrub, mule fat, and riparian forest/woodland habitats.	No potential to occur onsite based on a lack of riparian scrub, forest or woodland habitats within or adjacent to the Project Area.
MAMMALS		
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax)* SSC MSHCP Covered Species	The northwestern San Diego pocket mouse occurs throughout the Plan Area in coastal sage scrub (including Diegan and Riversidean upland sage scrubs and alluvial fan sage scrub), sage scrub/grassland ecotones, chaparral, and desert scrubs at all elevations up to 6,000 feet (MSHCP 2004).	No potential to occur onsite based on the lack of suitable habitat and highly disturbed/actively farmed nature of the Project Area.
San Bernardino kangaroo rat (*Dipodomys merriami parvus*) FE MSHCP Covered Species	Alluvial sage scrub on alluvial fans, flood plains, along washes, in adjacent upland areas, and in areas with historic braided stream channels; these habitats characterized by sand, loam, sandy loam, or gravelly soils. Prefers the more open early and intermediate phases of alluvial sage scrub, but mature sage scrub is important as refugia during floods.	Not expected to occur onsite based on a lack of suitable habitat.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
Stephens' kangaroo rat (*Dipodomys stephensi*) FE/ST MSHCP Covered Species	The Stephens' kangaroo rat is found almost exclusively in open grasslands or sparse shrublands with cover of less than 50 percent during the summer (MSHCP 2004).	Not expected to occur onsite based on a lack of suitable habitat.
Western mastiff bat (*Eumops perotis californicus*) SSC	Western mastiff bats are found in a variety of biotic environments from low desert scrub to chaparral, oak woodland and ponderosa pine.	Not expected to occur onsite based on a lack of suitable habitat.
Yellow bat (*Lasiurus xanthinus*) SSC	Although formerly associated only with the desert palm oasis in California (Bond, 1970), yellow bats appear to be expanding their range to the coast and northward, possibly as a result of the planting of ornamental palms.	Not expected to occur onsite based on a lack of suitable habitat.
Bobcat (*Lynx rufus*) MSHCP Covered Species	The bobcat requires large expanses of relatively undisturbed brushy and rocky habitats near springs or other perennial water sources.	Not expected to occur onsite based on a lack of suitable habitat.
Pocketed free-tailed bat (*Nyctinomops femorosaccus*) SSC MSHCP Covered Species	Usually associated with rugged canyons, high cliffs, and rock outcroppings. Roosts in rock crevices and caves during the day; may also roost in buildings or under roof tiles (Ziener et al. 1988-1990).	Not expected to occur onsite based on a lack of suitable habitat.
Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) SSC MSHCP Covered Species	The Los Angeles pocket mouse appears to be limited to sparsely vegetated habitat areas in patches of fine sandy soils associated with washes or of aeolian (windblown) origin, such as dunes (MSHCP 2004).	Not expected to occur onsite based on a lack of suitable soils and habitat.

Species Name (*Scientific Name*) Status	**Habitat Description**	**Comments**
American badger (*Taxidea taxus*) SSC	The American badger prefers friable soils in open grassland and scrub habitat in southern California.	No burrows documented onsite.

Federal (USFWS) Protection and Classification
FE – Federally Endangered
FT – Federally Threatened
FC – Federal Candidate for Listing

State (CDFW) Protection and Classification
SE – State Endangered
ST – State Threatened
SSC – State Species of Special Concern
CWL – California Watch List
SPF – State Fully Protected

Sources: Cadre Environmental 2021.

Critical habitat designations by the USFWS were researched to determine if any of the Project Area is located within USFWS critical habitat.

The Residential Project Area does not occur within a designated critical habitat for federally endangered or threatened species.

The Commercial Project Area does not occur within a designated critical habitat for federally endangered or threatened species.

REGIONAL CONNECTIVITY/WILDLIFE MOVEMENT CORRIDORS

Overview

Wildlife corridors link areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallager 1989; Bennett 1990). Corridors effectively act as links between different populations of a species. A group of smaller populations (termed “demes”) linked together via a system of corridors is termed a “metapopulation.” The long-term health of each deme within the metapopulation is dependent upon its size and the frequency of interchange of individuals (immigration vs. emigration). The smaller the deme, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increases overall genetic diversity. An increase in a

population's genetic variability is generally associated with an increase in a population's health. Corridors mitigate the effects of habitat fragmentation by:

(1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity;

(2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and

(3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983; Fahrig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as "wildlife corridor", "travel route", "habitat linkage", and "wildlife crossing" to refer to areas in which wildlife moves from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this study, these terms are defined as follows:

Travel Route: A landscape feature (such as a ridge line, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover while moving between habitat areas; and provides a relatively direct link between target habitat areas.

Wildlife Corridor: A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species.

Wildlife Crossing: A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These are often "choke points" along a movement corridor.

Wildlife Movement within Project Area

The Project Area does not represent a regional wildlife movement corridor and provides extremely limited cover, food, and no natural unrestricted water courses that would facilitate regional wildlife movement onsite. The Project Area is not located within an

MSHCP designated core, extension of existing core, non-contiguous habitat block, constrained linkage, or linkage area. Also, the Project Area is completely bordered by high traffic roads including Interstate 15 to the west and/or high density residential and commercial development.

REGIONAL AND REGULATORY SETTING

FEDERAL

Federal Endangered Species Act

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the FESA of 1973, allowing participating jurisdictions to authorize "*take*" of plant and wildlife species. The MSHCP has been issued under this Section and provides incidental take for all covered species.

Clean Water Act

A stated by GLA:

> "*On June 22, 2020, the Navigable Waters Protection Rule (NWPR) became effective and superseded the previous definition of waters of the United States in all states except for Colorado. The U.S. District Court for the Northern District of California denied a motion on June 19, 2020 for preliminary injunction. District courts will hear the merits of the challenges over the next few months; however, at the time of the writing of this report, the definition of waters of the United States are as follows:*
>
> *(a) Jurisdictional waters. For purposes of the Clean Water Act, 33 U.S.C. 1251 et seq. and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term "waters of the United States" means:*
> *(1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;*
> *(2) Tributaries;*
> *(3) Lakes and ponds, and impoundments of jurisdictional waters; and*
> *(4) Adjacent wetlands.*
> *(b) Non-jurisdictional waters. The following are not "waters of the United States":*
> *(1) Waters or water features that are*
> *not identified in paragraph (a)(1), (2),(3), or (4) of this section;*
> *(2) Groundwater, including groundwater drained through subsurface drainage systems; (3) Ephemeral features, including ephemeral streams, swales, gullies, rills,*
> *and pools;*
> *(4) Diffuse stormwater run-off and directional sheet flow over upland;*

(5) Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;
(6) Prior converted cropland;
(7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
(8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;
(9) 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;
(10) Stormwater control features constructed or excavated in upland or in non- jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
(11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and
(12) Waste treatment systems.

Should the Navigable Waters Protection Rule be stayed or otherwise blocked due to pending litigation, the definition for Waters of U.S. would likely revert to the prior definition provided in USACE regulations at 33 CFR Part 328.3(a) as:
(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(2) All interstate waters including interstate wetlands;
(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:
(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or
(iii) Which are used or could be used for industrial purpose by industries in interstate commerce...
(4) All impoundments of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;
(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.
(8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

Under either definition, in the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 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.

Wetland Definition Pursuant to Section 404 of the Clean Water Act

The term "wetlands" (a subset of "waters of the United States") is defined at 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 the USACE published the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the Wetland Manual and Arid West Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List[1],[2]);

Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a

[1] Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. Arid West 2016 Regional Wetland Plant List. Phytoneuron 2016-30: 1-17. Published 28 April 2016.
[2] Note the USACE also publishes a National List of Plant Species that Occur in Wetlands (Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016.); however, the Regional Wetland Plant List should be used for wetland delineations within the Arid West Region.

matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

Whereas the Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland." (GLA 2020)

Migratory Bird Treaty and Bald and Golden Eagle Protection Acts

Migratory birds including resident raptors and passerines are protected under the federal MBTA. The MBTA of 1918 implemented the 1916 convention between the United States and Great Britain for the protection of birds migrating between the U.S. and Canada. Similar conventions between the United States and Mexico (1936), Japan (1972) and the Union of Soviet Socialists Republics (1976) further expanded the scope of international protection of migratory birds. Each new treaty has been incorporated into the MBTA as an amendment and the provisions of the new treaty are implemented domestically. These four treaties and their enabling legislation, the MBTA, established Federal responsibilities for the protection of nearly all species of birds, their eggs and nests.

The MBTA made it illegal for people to "take" migratory birds, their eggs, feathers or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof. The Bald and Golden Eagle Protection Act affords additional protection to all bald and golden eagles.

STATE

California Endangered Species Act

The CESA is similar to FESA in that it contains a process for listing of species regulating potential impacts to listed species. Section 2081 of the CESA authorizes the CDFW to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes. The MSHCP serves as an HCP pursuant the Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001, allowing participating jurisdictions to authorize "*Take*" of plant and wildlife species.

As stated by CDFW:

"*On June 22, 2004, the Department issued NCCP Approval and Take Authorization for the Western Riverside County MSCHP per Section 2800 et seq. of the California Fish and Game Code. The MSHCP establishes a multiple species conservation program to minimize and mitigate habitat loss and the incidental take of covered species in association with activities covered under the permit*." (CDFG 2004)

California Fish and Game Code 3503 and 3513

As stated by CDFW:

> "*CHAPTER 1. General Provisions [3500 - 3516] (Chapter 1 enacted by Stats. 1957, Ch. 456.) It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. (Amended by Stats. 1971, Ch. 1470.)"*

Native Plant Protection Act

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in plants that are listed. The CESA follows the NPPA and covers both plants and wildlife determined to be threatened with extinction or endangered. Plants listed as rare under the NPPA are designated as threated under the CESA. No plants listed under the CESA occur on the Project Area or offsite impact area.

Regional Water Quality Control Board

A stated by GLA:

> "*The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States*[3] *and waters of the state. Waters of the United States are defined above in Section II.A and waters of the state are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code 13050[e]).*
>
> *Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.*

[3] Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code or Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army USACE of Engineers (USACE) to be "waters of the U.S." in an approved jurisdictional determination; "waters of the U.S." identified in an aquatic resource report verified by the USACE upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of "waters of the U.S." or any current or historic federal regulation defining "waters of the U.S." under the federal Clean Water Act.

State Wetland Definition

The Water Boards define an area as wetland[4] as follows: An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.
The following wetlands are waters of the state:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;[5] and*
3. *Artificial wetlands[6] that meet any of the following criteria:*

a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
b. Specifically identified in a water quality control plan as a wetland or other water of the state;
c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):
i. Industrial or municipal wastewater treatment or disposal, ii. Settling of sediment,
iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
iv. Treatment of surface waters,
v. Agricultural crop irrigation or stock watering, vi. Fire suppression,
vii. Industrial processing or cooling,
viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
ix. Log storage,
x. Treatment, storage, or distribution of recycled water, or

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[4] State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. [For Inclusion in the Water Quality Control Plans for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California].

[5] "Created by modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.

[6] Artificial wetlands are wetlands that result from human activity.

xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
xii. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in
2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state." (GLA 2020)

CDFW Streambed Alteration Agreement

As stated by GLA:

"*Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the 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." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW also defines a stream as "a body of water that 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."

It is important to note that the Fish and Game Code defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities." (GLA 2020)

LOCAL & MSHCP COMPLIANCE ANALYSIS

Western Riverside County MSHCP Compliance Analysis

The proposed Project Area is located completely within the MSHCP, which is a comprehensive multi-jurisdictional effort that includes western Riverside County and eighteen (18) cities including the City of Jurupa Valley. Rather than addressing sensitive species on an individual basis, the MSHCP focuses on conservation of 146 species, including those listed at the federal and state levels and those that could become listed in the future. The MSHCP proposed a reserve system of approximate 500,000 acres, of

which 347,000 acres are currently within public ownership and 153,000 acres will need to be assembled from lands currently in private ownership. The MHSCP allows the County and other permittees (including the City of Jurupa Valley) to issue take permits for listed species so that applicants do not need to receive endangered species incidental take authorization from the USFWS and CDFW.

On June 7th, 2003, the County Board of Supervisors adopted the MSHCP, certified the Environmental Impact Report/Environmental Impact Statement, and authorized the Chairman to sign the Implementing Agreement with the respective wildlife agencies. The Incidental Take Permit was issued by the wildlife agencies on June 22nd, 2004. The City of Jurupa Valley is a Permittee under the MSHCP.

MSHCP Reserve Design & Criteria Area Objectives

Regions of the MHSCP have been organized into Area Plans that generally coincide with logical political boundaries, including city limits or long-standing unincorporated communities. The Vernola Ranch Project Area is located within the Eastvale Area Plan. The Eastvale Plan has a target conservation acreage of 1,040 - 1,185 acres; it is composed of approximately 895 acres of existing Public/Quasi-Public Lands and 145 - 290 acres of Additional Reserve Lands (MSHCP 2004).

The Residential and Commercial Project Areas are not located within an MSHCP Criteria Area Cell, Cell Group, or Linkage Area. Therefore, no Habitat Evaluation and Acquisition Negotiation Strategy (HANS) or Joint Project Review (JPR) are required.

MSHCP Sensitive Species

Delhi Sands flower-loving fly - The Natural Resources Conservation Service has the southeastern region (11-acres) of the Project Area mapped as Delhi fine sands (United States Fish and Wildlife Service Ontario Recovery Unit) as shown in Figure 9, *Soils Association Map* (NRCS 2021). However, following a review of historic aerials, the entire Residential and Commercial Project Areas have and continue to be actively farmed from at least 1985. Soils documented onsite during the habitat assessment were characterized as loamy/sand. As described in the following report and based on the extensive level of historic as well as current disturbed conditions, no suitable habitat for the Delhi sands flower-loving fly occurs onsite and focused surveys are not warranted based on the following facts: 1) Project Area and offsite impact area substrates no longer characterized as Delhi fine sand following annual farming activities, and 2) No indicator plant species including California buckwheat (*Eriogonum fasciculatum*), telegraph weed (*Heterotheca grandiflora*), or California croton (*Croton californicus*) detected onsite. The Project Area is dominated by non-native invasive species.

MSHCP Narrow Endemic Plant Species - The Residential and Commercial Project Areas occur almost completely within an MSHCP predetermined Survey Area for three (3) MSHCP narrow endemic plant species including San Diego ambrosia, San Miguel savory, and Brand's phacelia (RCA GIS Data Downloads 2021). According to the MSHCP guidelines, focused surveys are required during the appropriate flowering season to document the presence/absence of these species if suitable habitat is present and if the property is located within a predetermined Survey Area (MSHCP 2004). As previously

stated, following a review of historic aerials, the entire Project Area has and continues to be actively farmed from at least 1985. No native or undisturbed soils or vegetation communities were documented within the Residential and Commercial Project Areas for the three (3) MSHCP narrow endemic sensitive plant species as outlined in Table 2, *Sensitive Plant Species with Potential to Occur Onsite*. Focused MSHCP sensitive plant surveys are not warranted and the project is consistent with MSHCP Section 6.1.3

MSHCP Criteria Area Species - The Residential and Commercial Project Areas are not located within a Criteria Area Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2021). The project is consistent with MSHCP Section 6.3.2.

MSHCP Amphibian and Mammal Species - The Residential and Commercial Project Areas are not located within an MSHCP Amphibian or Mammal Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2021). The project is consistent with MSHCP Section 6.3.2.

MSHCP Burrowing Owl - The Residential and Commercial Project Areas occur almost completely within a predetermined Survey Area for the burrowing owl. No suitable burrowing owl burrows larger than 4 inches in diameter potentially utilized for refugia and/or nesting were documented within the Residential and Commercial Project Areas. Also, no burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within the Project Area boundary during the habitat assessment and focused surveys are not warranted. However, the Residential and Commercial Project Areas could be colonized if the fields were left fallow. Therefore, at a minimum, a 30-day preconstruction survey will be conducted immediately prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP (**BIO-MM1 MSHCP Burrowing Owl 30-Day Preconstruction Survey**). If burrowing owls are detected onsite during the 30-day preconstruction survey, a burrowing owl relocation plan will be developed for the passive/active translocation of individuals as directed by the City of Jurupa Valley, RCA and wildlife agencies. The project will be consistent with MSHCP Section 6.3.2 following implementation of BIO-MM1.

MSHCP Section 6.1.2 Riparian, Riverine, Vernal Pool Resources

Regulated activities within inland streams, wetlands and riparian areas in Western Riverside County California fall under the jurisdiction of the MSHCP Section 6.1.2. The MSHCP requires, among other things, assessments for riparian/riverine and vernal pool resources. As projects are proposed within the MSHCP Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas, and vernal pools are required, as currently mandated by CEQA, using available information augmented by project-specific mapping provided to and reviewed by the permittee's biologist(s). Riparian/riverine areas and vernal pools are defined for this section as follows in accordance with Section 6.1.2, Vol. I, of the Final MSHCP Plan:

> "*Riparian/Riverine Areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby*

fresh water source; or areas with fresh water flow during all or a portion of the year." (MSHCP 2004)

It is assumed the first part of the definition defines riparian habitat, and the second part defines riverine areas. Vernal pools are defined as:

> "…*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*". (MSHCP 2004)

No evidence of vernal pool, ephemeral depressions, stock ponds, road ruts or other wetland features were recorded on the Residential and Commercial Project Areas. Vernal pools are depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools became completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (lacking oxygen or air) develop.

Consistent with conditions documented onsite and as previously stated, the Residential and Commercial Project Areas are characterized as loamy sand substrates possessing well drained substrates (drainage class). No indication of clay substrates or hydric soils were documented within the Residential and Commercial Project Areas.

A review of historic aerials was conducted to determine if inundated features were present during years of high rainfall when features would certainly be documented. Historic aerials taken in 2011 represent an ideal baseline during which know (previously documented) inundated vernal pool, ephemeral depressions, stock ponds, road ruts can easily be seen. No sign of indication of inundation was documented within the Residential and Commercial Project Areas during a review of historic aerials.

In summary, none of the conditions (i.e., no inundated depressions including road ruts, hydric soils, historic inundation, etc.) were observed on documented within the Residential and Commercial Project Areas. No features are present that would support fairy shrimp. No standing water or other sign of areas that pond water was recorded.

No riparian scrub, forest or woodland habitat suitable for the least Bell's vireo, southwestern willow flycatcher or western yellow-billed cuckoo is present within or adjacent to the Residential and Commercial Project Areas. The project is consistent with MSHCP Section 6.1.2.

An MSHCP Determination of Biological Equivalent or Superior Preservation (DBESP) will not be required.

MSHCP Urban/Wildlands Interface Guidelines

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to an MSHCP Conservation Area. The Residential and Commercial Project Areas are not located adjacent to an existing or proposed MSHCP Conservation Area. The project is consistent with MSHCP Section 6.1.4.

MSHCP Fuels Management Guidelines

The fuels management guidelines presented in Section 6.4 of the MSHCP are intended to address brush management activities around new development within or adjacent to MSHCP Conservation Areas. The Residential and Commercial Project Areas are not located adjacent to an existing or proposed MSHCP Conservation Area. The project is consistent with MSHCP Section 6.4.

City of Jurupa Protected Trees

The City of Jurupa Valley does not possess an ordinance pertaining to the protection of trees. Therefore, the following regulations apply to tree removal within Riverside County.

- Riverside County Code of Ordinances, Section 12.08.050 requires a permit from the county transportation Director to remove or severely trim any tree planted in the right-of-way of any county highway.
- Riverside County Code of Ordinances, Section 12.24 or Ordinance No. 559 requires a permit to “remove any living native tree on any parcel or property greater than one-half acre in size, located in an area above 5,000 feet in elevation and within the unincorporated area of the County of Riverside.”
- The Riverside County Oak Tree Management Guidelines address the treatment of oak woodlands and their preservation.

No native trees or oak species occur onsite and the removal of ornamental trees would not conflict with any County of Riverside protected tree ordinance or oak tree management guidelines.

City of Jurupa Valley General Plan - Conservation and Open Space Element

As outlined below, the City of Jurupa Valley’s 2017 General Plan Conservation and Open Space Element (Chapter 4) Goals and Polices for the preservation and protection of critical open space and natural resources have been incorporated into the project design and mitigation approach.

Biological Resources

COS 1.1 Habitat Conservation. Conserve key habitats, including existing wetlands and California native plant communities, with a focus on protecting and restoring the following endangered species habitats:

1. Conserve alluvial fan sage scrub associated with the Santa Ana River to support key populations of Santa Ana River woollystar (*Eriastrum densifolium sanctorum*).

The Residential and Commercial Project Areas are not located within or adjacent to the Santa Ana River and no alluvial fan sage scrub habitat is located onsite. The proposed project is in compliance with Policy COS 1.1(1).

2. Conserve clay soils to support key populations of many-stemmed liveforever plants (*Dudleya multicaulis*) known to occur along the Jurupa Valley portion of the Santa Ana River.

The Residential and Commercial Project Areas are not located within or adjacent to the Santa Ana River and no clay soils are located onsite. The proposed project is in compliance with Policy COS 1.1(2).

3. Conserve known populations of least Bell's vireo and southwestern willow flycatcher along the Santa Ana River.

The Residential and Commercial Project Areas are not located within or adjacent to the Santa Ana River and no riparian scrub, forest or woodland habitats are located within or adjacent to the property. The proposed project is in compliance with Policy COS 1.1(3).

4. Conserve large intact habitat areas consisting of coastal sage scrub, chaparral, and grasslands to support known locations of coastal California gnatcatcher (*Polioptila californica*).

No suitable coastal California gnatcatcher habitat is present within or adjacent to the Residential and Commercial Project Areas. The proposed project is in compliance with Policy COS 1.1(4).

5. Conserve grassland and coastal sage scrub supporting known populations of San Bernardino kangaroo rat (*Dipodomys merriami parvus*) in the Jurupa Mountains.

No suitable habitat for the San Bernardino kangaroo rat occurs within or adjacent to the Residential and Commercial Project Areas. The proposed project is in compliance with Policy COS 1.1(5).

6. Conserve grasslands adjacent to sage scrub for foraging habitat for raptors.

No large expansive grassland habitats occur onsite. However, the expansive field croplands provide foraging habitat for raptors. Impacts to raptor foraging habitat will be mitigated to a level of less than significant by implementing City of Jurupa Valley Municipal

Code Section 3.80.070 (see below). The proposed project is in compliance with Policy COS 1.1(6).

7. Conserve riparian areas, including river basin, creeks, streams, vernal springs, seeps and other natural water features.

No riparian scrub, forest, woodland or water features are located within the Residential and Commercial Project Areas. The proposed project is in compliance with Policy COS 1.1(7).

COS 1.2 Protection of Significant Trees. Protect and preserve significant trees, as determined by the City Council upon the recommendation of the Planning Commission. Significant trees are those trees that make substantial contributions to natural habitat or to the urban landscape due to their species, size, or rarity. In particular, California native trees should be protected.

No native trees or oak species occur onsite and the removal of primarily ornamental trees would not conflict with any County of Riverside protected tree ordinance or oak tree management guidelines. The proposed project is in compliance with Policy COS 1.2.

COS 1.3 Other Significant Vegetation. Maintain and conserve superior examples of vegetation, including: agricultural wind screen plantings, street trees, stands of mature native and non-native trees, and other features of ecological, aesthetic, and conservation value.

No significant vegetation features are located within the Residential and Commercial Project Areas. The Residential and Commercial Project Areas are characterized as field croplands with isolated ornamental trees located exclusively in the northern region of the property where farming facilities are located. The proposed project is in compliance with Policy COS 1.3.

<u>Wildlife Habitats</u>

COS 2.1 MSHCP Implementation. Implement provisions of the MSHCP when conducting review of development applications, General Plan amendments/zoning changes, transportation, or other infrastructure projects that are covered activities in the MSHCP.

The previous section (LOCAL - Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis) assesses compliance with all MSHCP requirements. The Residential and Commercial Project Areas are not located within an MSHCP criteria area cell, group, or linkage area. The proposed project is in compliance with Policy COS 2.1.

COS 2.2 Wildlife Corridors. Identify and maintain a continuous wildlife corridor along the City's northern boundary through the Jurupa Mountains and along the Santa Ana River from the northern boundary to the City's western boundary. Condition development approvals to ensure that important corridors for wildlife movement and dispersal are protected and not interrupted by walls, fences, roadways or other obstructions. Features

of particular importance to wildlife include riparian corridors, wetlands, streams, springs, and protected natural areas with cover and water. Linkages and corridors shall be provided to maintain connections between habitat areas.

The Residential and Commercial Project Areas are not located within or adjacent to the Jurupa Mountains or Santa Ana River. The Project Area does not represent a regional wildlife movement corridor and provides extremely limited cover, food, and no natural unrestricted water courses that would facilitate regional wildlife movement onsite. The Project Area is not located within an MSHCP designated core, extension of existing core, non-contiguous habitat block, constrained linkage, or linkage area. Also, the Residential and Commercial Project Areas are completely bordered by high traffic roads including Interstate 15 to the west and/or high density residential and commercial development. The proposed project is in compliance with Policy COS 2.2.

COS 2.3 Biological Reports. Require the preparation of biological reports to assess the impacts of development and provide mitigation for impacts to biological resources when reviewing discretionary development projects with the potential to affect adversely wildlife habitat.

The following Biological Resources Technical Report assesses impacts and proposes mitigation to offset impacts to wildlife habitat and ensure compliance with all MSHCP and CEQA guidelines. The proposed project is in compliance with Policy COS 2.3.

Water Resources - Floodplain and Riparian Area Management

COS 3.16 Floodway Modification. Encourage other agencies to limit floodway modification or channelization only as a “last resort,” and limit the alteration to:

1. That necessary for the protection of public health and safety, only after all other options are exhausted,
2. Essential public service projects where no other feasible construction method or alternative project location exists,
3. Projects where the primary function is improvement of fish and wildlife habitat, or
4. Private development entitlements shall be required to design floodplain and river edge treatments to simulate and ultimately regenerate natural terrain and riparian habitat, using techniques such as covering and re-planting over rip-rap embankments, and utilizing gentle contoured slopes that do not exceed 8:1 slope ratio.

The Residential and Commercial Project Areas are not located within or adjacent to the Santa Ana River floodplain and no riparian scrub, forest or woodland habitat is located onsite. The proposed project is in compliance with Policy COS 3.16.

COS 3.17 Environmental Mitigation. Encourage and, where possible, require that substantial modifications of a floodplain be designed to reduce adverse environmental effects to the maximum extent feasible, considering the following factors:

1. Stream scour
2. Erosion protection and sedimentation

3. Wildlife habitat and linkages
4. Groundwater recharge capability
5. Adjacent property
6. Designed to achieve a natural effect. Examples could include soft riparian bottoms, riparian corridors within the floodway, and gentle and modulating bank slopes, wide and shallow flood- ways, minimization of visible use of concrete, and landscaping with California native plants to the maximum extent possible. A site-specific hydrologic study may be required.

The Residential and Commercial Project Areas are not located within or adjacent to the Santa Ana River floodplain. The proposed project is in compliance with Policy COS 3.17.

COS 3.18 Setbacks. Based upon site-specific study, all development shall be set back from the designated floodway boundary or top of bank, whichever is most appropriate, a distance adequate to address the following issues:

1. Public safety,
2. Erosion,
3. Riparian or wetland buffer,
4. Wildlife movement corridor or linkage, and
5. Slopes.

The Residential and Commercial Project Areas are not located within or adjacent to the Santa Ana River floodplain and no riparian scrub, forest or woodland habitat is located onsite. The proposed project is in compliance with Policy COS 3.18.

COS 3.19 Trails. Consider designating floodway setbacks to accommodate greenways, trails, and recreation opportunities and allowing such uses within floodways, where appropriate.

The Residential and Commercial Project Areas are not located within or adjacent to the Santa Ana River floodplain. The proposed project is in compliance with Policy COS 3.19.

COS 3.20 Riparian Area Preservation. Require development projects to preserve and enhance native riparian habitat and prevent obstruction of natural watercourses. Zoning incentives, such as transfer of development credits, should be used to the maximum extent possible.

The Residential and Commercial Project Areas are not located within or adjacent to the Santa Ana River floodplain and no riparian scrub, forest or woodland habitat is located onsite. The proposed project is in compliance with Policy COS 3.20.

COS 3.21 Ecotones. Identify and, to the maximum extent possible, conserve remaining upland habitat areas, or “ecotones” adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species.

The Project Area is not located within or adjacent to a wetland and no riparian scrub, forest or woodland habitat is located onsite. The proposed project is in compliance with Policy COS 3.21.

City of Jurupa Valley Municipal Code Section 3.80.070 (MSHCP Local Development Mitigation Fee)

The project applicant shall pay MSHCP Local Development Mitigation fees as established and implemented by the City of Jurupa Valley (Municipal Code Sec. 3.80.070. - Western Riverside County Multiple Species Habitat Conservation Plan mitigation fee). Five categories of the fee are defined and include: Residential, density less than 8.0 dwelling units per acre $14,236 per dwelling unit; Residential, density between 8.1 and 14.0 dwelling units per acre $1,766 per dwelling unit; Residential, density greater than 14.1 dwelling units per acre $781 per dwelling unit; Commercial $19,066 per acre; and Industrial $19,066 per acre.

ENVIRONMENTAL IMPACTS

The following sections include an analysis of the direct impacts, indirect impacts, and cumulative effects of the proposed action on sensitive biological resources. This analysis characterizes the project related activities that are anticipated to adversely impact the species, and when feasible, quantifies such impacts. Direct effects are defined as actions that may cause an immediate effect on the species or its habitat, including the effects of interrelated actions and interdependent actions. Indirect effects are caused by or result from the proposed actions, are later in time, and are reasonably certain to occur. Indirect effects may occur outside of the area directly affected by the proposed action.

Cumulative impacts refer to incremental, individual environmental effects of two or more projects when considered together. These impacts taken individually may be minor but may be collectively significant. Cumulative effects include future tribal, local, or private actions that are reasonably certain to occur in the proposal vicinity considered in this report. A cumulative impact to biological resources may occur if a project has the potential to collectively degrade the quality of the environment, substantially reduce the habitat of wildlife species or cause a population to drop below self-sustaining levels, thereby threatening to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species.

THRESHOLD OF SIGNIFICANCE

The environmental impacts relative to biological resources are assessed using impact significance criteria which mirror the policy statement contained in the CEQA at Section 21001 (c) of the Public Resources Code. This section reflects that the legislature has established it to be the policy of the state to:

> "*Prevent the elimination of fish and wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities*…"

The following definitions apply to the significance criteria for biological resources:

- "*Endangered*" means that the species is listed as endangered under state or federal law.
- "*Threatened*" means that the species is listed as threatened under state or federal law.
- "*Rare*" means that the species exists in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens.
- "*Region*" refers to the area within southern California that is within the range of the individual species.
- "*Sensitive habitat*" refers to habitat for plants and animals (1) which plays a special role in perpetuating species utilizing the habitat on the property, and (2) without which there would be substantial danger that the population of that species would drop below self-perpetuating levels.
- "*Substantial effect*" means significance loss or harm of a magnitude which, based on current scientific data and knowledge, (1) would cause a species or a native plant or animal community to drop below self-perpetuating levels on a statewide or regional basis or (2) would cause a species to become threatened or endangered.

Impacts to biological resources may result in a significant adverse impact if one or more of the following conditions would result from implementation of the proposed project.

- Have a substantial adverse effect, either directly or through habitat modification, on any endangered, or threatened species, as listed in Tittle 14 of the California Code of Regulations (Sections 670.2 or 670.5) or Title 50, Code of Federal Regulations (Sections 17.11 or 17.12).
- Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS, and meets the definition of Section 15380 (b), (c), or (d) of the CEQA Guidelines.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident migratory wildlife corridors, or impede the use of native nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state conservation plan.

Also, the determination of impacts has been made according to the federal definition of "*take*". The federal FESA prohibits the "*taking*" of a member of an endangered or threatened wildlife species or removing, damaging, or destroying a listed plant species by any person (including private individuals and private or government entities). The FESA defines "*take*" as "*to harass, harm, pursue, hunt, shoot, would, kill, trap, capture or collect*" an endangered or threatened species, or to attempt to engage in these activities.

DIRECT IMPACTS

The following impact analysis is focused on the Residential Project Area and offsite impact areas. The Commercial Project Area will be analyzed at a future date.

A total of 164.70 acres of vegetation communities will be directly impacted as a result of project implementation as summarized in Table 4, *Vegetation Community Impacts,* and illustrated on Figure 10*, Vegetation Communities Impact Map*. Offsite impacts include road improvements to Pats Ranch Road. As previously stated, no vegetation communities listed by CDFW as sensitive were documented within or adjacent to the Residential Project Area or offsite impact area. However, removal of vegetation communities onsite has the potential to impact sensitive plant and wildlife specifies, as described in further detail below. The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered. Therefore, compliance with City of Jurupa Valley Municipal Code Sec. 3.80.070, which requires the project applicant to pay MSHCP Local Development Mitigation fees and Biological Mitigation and Avoidance Measures (**BIO-MM1 MSHCP Burrowing Owl 30-Day Preconstruction Survey**) and (**BIO-MM2 Regulatory Requirement CDFG Code**) identified below would ensure direct impacts to all vegetation communities will be mitigated to a level of less than significant.

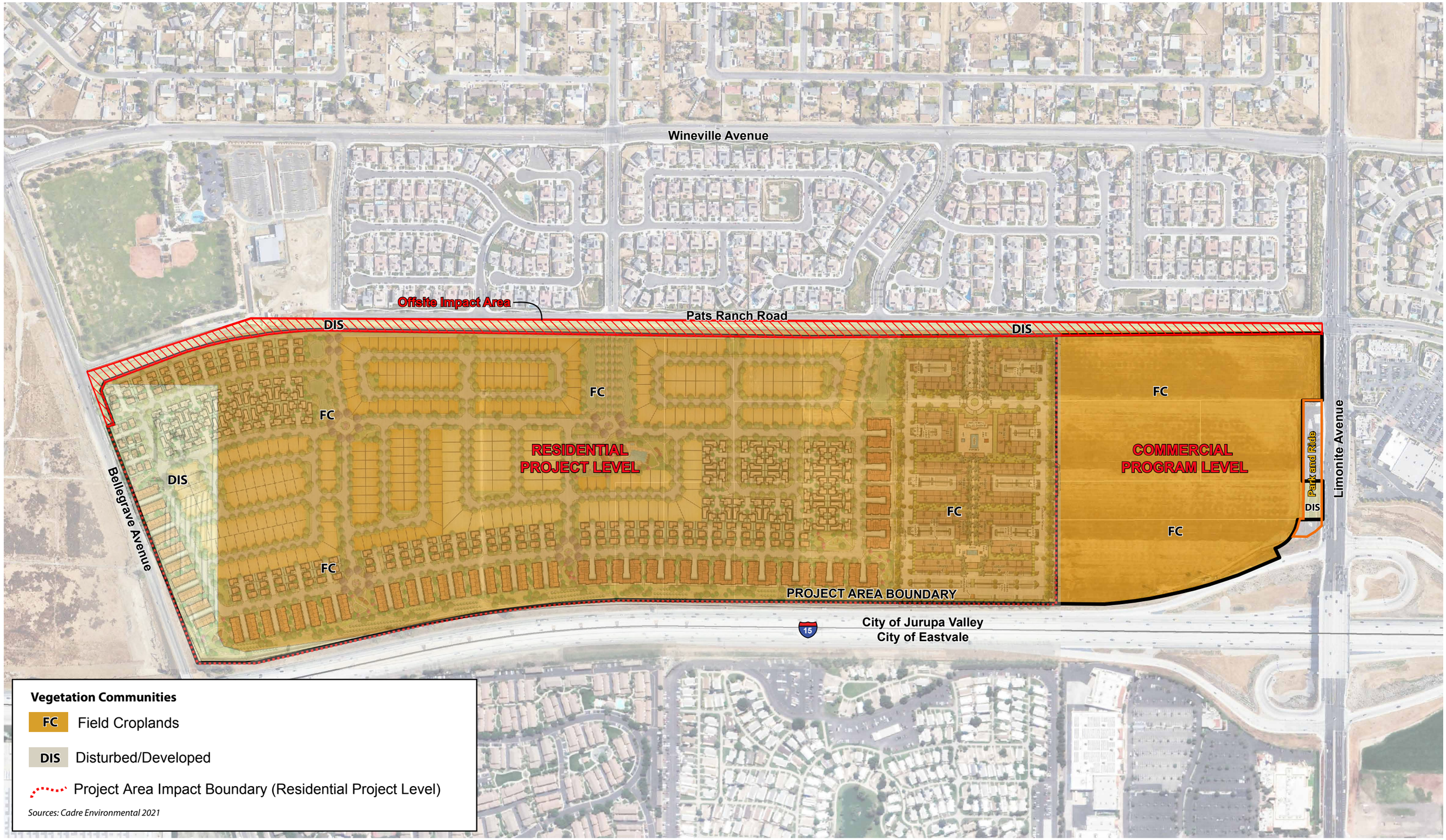
Table 4.
Residential Area Vegetation Community Impacts

*Vegetation Type	Residential Project Area Acres	Residential Project Area (offsite) Acres	Impact Acres (total)
Field Croplands (Field Corn)	142.44	0.00	142.44
Disturbed/Developed	10.56	11.70	22.26
TOTALS	**153.00**	**11.70**	**164.70**

**Source: Cadre Environmental 2021.*

Protected Trees

No native trees or oak species occur onsite and the removal of ornamental trees would not conflict with any County of Riverside protected tree ordinance or oak tree management guidelines. No Impact.



APNs 160-050-005, -021, -023, -063, -067, -068, -070, -072 to -074, Right-of-Ways

Figure 10 - Vegetation Communities Impact Map
Biological Resources Technical Report
Vernola Ranch Project Areas

CADRE Environmental

1 inch = 450 feet

Jurisdictional Resources

No features regulated by the Santa Ana Regional Water Quality Control Board, California Department of Fish and Wildlife and United States Army Corps of Engineers were documented within or immediately adjacent to the Residential Project Area or offsite impact area. No regulatory permits or certifications will need to be acquired.

The project will comply with all applicable water quality regulations, including complying with a National Pollutant Discharge Elimination System (NPDES) permit and Municipal Separate Storm Sewer System (MS4) Permit by the Santa Ana Region Water Quality Control Board. This State Permit places pollution prevention requirements on planned developments, construction sites, commercial and industrial businesses, municipal facilities and activities, and residential communities. Both of these permits include the treatment of all surface runoff from paved and developed areas, the implementation of applicable Best Management Practices (BMPs) during construction activities and the installation and proper maintenance of structural BMPs to ensure adequate long-term treatment of water before entering into any stream course or municipal system.

Sensitive Plants

No state or federally listed threatened or endangered plant species were detected or expected to occur within the Residential Project Area or offsite impact area as outlined in Table 2, *Sensitive Plant Species with Potential to Occur Onsite*. No Impact.

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined “Survey Area” (MSHCP 2004).

The Residential Project Area and offsite impact area occurs almost completely within an MSHCP predetermined Survey Area for three (3) MSHCP narrow endemic plant species including San Diego ambrosia, San Miguel savory, and Brand’s phacelia (RCA GIS Data Downloads 2021). According to the MSHCP guidelines, focused surveys are required during the appropriate flowering season to document the presence/absence of these species if suitable habitat is present and if the property is located within a predetermined Survey Area (MSHCP 2004). As previously stated, following a review of historic aerials, the entire Residential Project Area has and continues to be actively farmed from at least 1985. No native or undisturbed soils or vegetation communities were documented onsite for the three (3) MSHCP narrow endemic sensitive plant species as outlined in Table 2, *Sensitive Plant Species with Potential to Occur Onsite*. Focused MSHCP sensitive plant surveys are not warranted and the project is consistent with MSHCP Section 6.1.3. No Impact.

The Residential Project Area and offsite impact area are not located within a Criteria Area Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2021). The project is consistent with MSHCP Section 6.3.2. No Impact.

Sensitive Wildlife

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined "Survey Area" (MSHCP 2004).

The Natural Resources Conservation Service has the southeastern region (2-acres) of the offsite impact area mapped as Delhi fine sands (United States Fish and Wildlife Service Ontario Recovery Unit) as shown in Figure 9, *Soils Association Map* (NRCS 2021). However, following a review of historic aerials, the entire offsite impact area occurs within the Pats Ranch Road right-of-way and recent improvements have converted this area into disturbed habitat. Soils documented onsite during the habitat assessment were characterized as loamy/sand. As described in the following report and based on the extensive level of historic as well as current disturbed conditions, no suitable habitat for the Delhi sands flower-loving fly occurs within the offsite impact area and focused surveys are not warranted based on the following facts: 1) offsite impact area substrates no longer characterized as Delhi fine sand following improvements to Pats Ranch Road, and 2) No indicator plant species including California buckwheat, telegraph weed, or California croton detected onsite. The Project Area is dominated by non-native invasive species. No Impact.

The Residential Project Area and offsite impact area are not located within an MSHCP Amphibian or Mammal Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2021). The project is consistent with MSHCP Section 6.3.2. No Impact.

The Residential Project Area and offsite impact area occur almost completely within a predetermined Survey Area for the burrowing owl. No suitable burrowing owl burrows larger than 4 inches in diameter potentially utilized for refugia and/or nesting were documented onsite. Also, no burrowing owl or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within the Residential Project Area and offsite impact area boundary during the habitat assessment and focused surveys are not warranted. However, the Residential Project Area and offsite impact area could be colonized if the fields were left fallow. Therefore, at a minimum, a 30-day preconstruction survey will be conducted immediately prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP (**BIO-MM1 MSHCP Burrowing Owl 30-Day Preconstruction Survey**). If burrowing owls are detected onsite during the 30-day preconstruction survey, a burrowing owl relocation plan will be developed for the passive/active translocation of individuals as directed by the City of Jurupa Valley, RCA and wildlife agencies. The project will be consistent with MSHCP Section 6.3.2 following implementation of BIO-MM1.

Potential habitat for two (2) MSHCP covered species was documented within the Residential Project Area and offsite impact area during the habitat assessment and include, white-tailed kite (*Elanus leucurus*) CDFW SSC, and loggerhead shrike (*Lanius ludovicianus*) CDFW SSC. As previously stated, the MSHCP has determined that these sensitive species potentially occurring within Project Area have been adequately covered

(MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). Potential impacts to these sensitive species will be mitigated by implementing Jurupa Valley Municipal Code Sec. 3.80.070 and Biological Mitigation and Avoidance Measures (**BIO-MM2 Regulatory Requirement CDFG Code**).

The Residential Project Area and offsite impact area possesses vegetation including ornamental trees and shrubs expected to potentially provide nesting habitat for nesting birds protected under the CDFG Codes. Measures for potential direct/indirect impacts to common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (between September 1st and February 15th) does not require preconstruction nesting bird surveys. However, if construction is proposed between February 16th and August 31st, a qualified biologist will conduct a preconstruction nesting bird survey(s) no more than three (3) days prior to initiation of grading to document the presence or absence of nesting birds or raptors within or directly adjacent (100 feet) to the Residential Project Area and offsite impact area. Loss of an active nest would be considered a potentially significant impact. Impacts to nesting bird and/or raptor species would be reduced to less than significant with the implementation of Biological Mitigation and Avoidance Measure (**BIO-MM2 Regulatory Requirement CDFG Code**).

Western Riverside County Multiple Species Habitat Conservation Plan Compliance Analysis

As documented in the previous section, implementation of the proposed project will be consistent with all provisions, guidelines and objectives of the MSHCP following implementation of Jurupa Valley Municipal Code Sec. 3.80.070 and Biological Mitigation and Avoidance Measure (**BIO-MM1 MSHCP Burrowing Owl 30-Day Preconstruction Survey**).

INDIRECT IMPACTS

All MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to an MSHCP Conservation Area. The Residential Project Area and offsite impact area are not located adjacent to an existing or proposed MSHCP Conservation Area. The project is consistent with MSHCP Section 6.1.4.

Water Quality/Hydrology

The project will comply with all applicable water quality regulations, including complying with a NPDES permit and MS4 Permit by the Santa Ana Region Water Quality Control Board. This State Permit places pollution prevention requirements on planned developments, construction sites, commercial and industrial businesses, municipal facilities and activities, and residential communities. Both of these permits include the treatment of all surface runoff from paved and developed areas, the implementation of applicable Best Management Practices (BMPs) during construction activities and the installation and proper maintenance of structural BMPs to ensure adequate long-term treatment of water before entering into any stream course or municipal system.

Toxics

Storm water treatment systems will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant material, or other elements that could degrade or harm downstream biological or aquatic resources. Toxic sources within the Residential Project Area and offsite impact area would be limited to those commonly associated with residential development, such as pesticides, insecticides, herbicides, fertilizers, and vehicle emissions. In order to mitigate the potential effects of these toxics, the project will incorporate structural BMPs, as required in association with compliance with NPDES and MS4 permit systems, in order to reduce or prevent the level of toxins introduced into the municipal system.

Lighting

Lighting would not indirectly impact wildlife species. No open space or sensitive biological receptor sites are located within or adjacent to the Residential Project Area and offsite impact area. No significant impacts are anticipated.

Noise

Noise levels during and post construction would not indirectly impact wildlife species. No open space or sensitive biological receptor sites are located within or adjacent to the Residential Project Area and offsite impact area. No significant impacts are anticipated.

Invasive Species

Landscape plantings during and post construction would not indirectly impact natural communities. No open space or sensitive biological receptor sites are located within or adjacent to the Residential Project Area and offsite impact area. No significant impacts are anticipated. No significant impacts are anticipated.

Barriers

Barriers are intended to reduce or minimize unauthorized public access and associated impacts to protected resources. The Residential Project Area and offsite impact area are not located adjacent to an existing or proposed MSHCP Conservation Area or protected open space lands. No significant impacts are anticipated.

CUMULATIVE IMPACTS

The temporary direct and/or indirect impacts of the project would not result in significant cumulative impacts (CEQA Section 15310) to environmental resources within the region of the Residential Project Area and offsite impact area. Cumulative impacts refer to incremental effects of an individual project when assessed with the effects of past, current, and proposed projects. Although the project would result in the permanent loss of 164.70 acres of primarily field cropland (field corn) and disturbed/developed habitat, the MSHCP was developed to address the comprehensive regional planning effort and anticipated growth in the City of Jurupa Valley. The proposed project has been designed

and mitigated to remain in compliance with all MSHCP conservation goals and guidelines and therefore will not result in an adverse cumulative impact.

MITIGATION & AVOIDANCE MEASURES

The following biological mitigation and avoidance measures address those adverse impacts determined to be potentially significant or are relevant to the protection of biological resources to the extent practicable as part of ensuring compliance and consistency with all MSHCP conservation goals and CEQA guidelines.

BIO-MM1 MSHCP Burrowing Owl 30-Day Preconstruction Survey

A 30-day burrowing owl preconstruction survey will be conducted immediately prior to the initiation of ground-disturbing construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP. The survey will be conducted in compliance with both MSHCP and CDFW guidelines (MSHCP 2006, CDFW 2012). A report of the findings prepared by a qualified biologist shall be submitted to the City of Jurupa Valley prior to any permit or approval for ground disturbing activities. If burrowing owls are detected onsite during the 30-day preconstruction survey, during the breeding season (February 1st to August 31st) then construction activities shall be limited to beyond 300 feet of the active burrows until a qualified biologist has confirmed that nesting efforts are compete or not initiated. In addition to monitoring breeding activity, if construction is proposed to be initiated during the breeding season or active/passive relocation is proposed, a burrowing owl mitigation plan will be developed and approved by the City of Jurupa Valley, CDFW and USFWS.

BIO-MM2 Regulatory Requirement CDFG Code

Regulatory requirement for potential direct/indirect impacts to nesting common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (between September 1st and February 15th) do not require pre-removal nesting bird surveys. If construction is proposed between February 16th and August 31st, a qualified biologist will conduct a nesting bird survey(s) no more than three (3) days prior to initiation of grading to document the presence or absence of nesting birds within or directly adjacent (100 feet) to the Residential Project Area and offsite impact area.

The survey(s) will focus on identifying any raptors and/or bird nests that are directly or indirectly affected by construction activities. If active nests are documented, species-specific measures will be prepared by a qualified biologist and implemented to prevent abandonment of the active nest. At a minimum, grading in the vicinity of a nest will be postponed until the young birds have fledged. The perimeter of the nest setback zone will be fenced or adequately demarcated with stakes and flagging at 20-foot intervals, and construction personnel and activities restricted from the area. A survey report by a qualified biologist verifying that no active nests are present, or that the young have fledged, will be submitted to the City of Jurupa Valley for review and approval prior to initiation of grading in the nest-setback zone.

The qualified biologist will serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur. A final monitoring report of the findings, prepared by a qualified biologist, will be submitted to the City of Jurupa Valley documenting compliance with the CDFG Code. Any nest permanently vacated for the season would not warrant protection pursuant to the CDFG Code.

Implementation of Mitigation and Avoidance Measures **BIO-MM1** and **BIO-MM2** would reduce all potential significant unavoidable impacts on biological resources below a level of significance and ensure compliance with MSHCP conservation requirements.

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

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