



# Limonite Gap Closure Project

## MSHCP Consistency Analysis and Habitat Assessment

*prepared for*

**City of Eastvale**

12363 Limonite Ave #910

Eastvale, California 91752

Contact: Mark Thomas

*prepared by*

**Rincon Consultants, Inc.**

301 9th Street, Suite 109

Redlands, California 92374

**February 2020**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)



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# Table of Contents

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Executive Summary .....	1
1 Introduction .....	3
1.1 Project Location .....	3
1.2 Project Description.....	3
2 Methodology .....	10
2.1 Western Riverside County MSHCP Consistency Analysis .....	10
2.2 Literature Review .....	10
2.3 Field Reconnaissance Surveys.....	11
3 Existing Conditions.....	14
3.1 Land Use.....	14
3.2 Watershed and Drainages.....	14
3.3 Topography and Soils.....	14
3.4 Vegetation Communities/Land Cover Types .....	17
3.5 General Wildlife .....	17
4 Western Riverside County MSHCP Consistency Analysis .....	19
4.1 MSHCP Requirements.....	19
4.2 Habitat Assessment .....	19
4.3 Urban/Wildlands Interface Guidelines .....	23
4.4 Other Sensitive Biological Resources.....	24
4.5 MSHCP Consistency .....	25
5 Limitations, Assumptions, and Use Reliance .....	26
6 References .....	27
7 Certification and List of Preparers .....	29

## Figures

Figure 1 Regional Location.....	3
Figure 2 Project Location .....	7
Figure 3 USDA Soils Map.....	15
Figure 4 Vegetation Communities Map .....	18
Figure 5a Jurisdictional Waters.....	21
Figure 5b Potential Jurisdictional Waters .....	22

## **Appendices**

Appendix A The Riverside County Integrated Project (RCIP) Conservation Summary Report

Appendix B Jurisdictional Delineation Report

Appendix C Site Photographs

Appendix D Observed Plant Species List

# Executive Summary

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Rincon Consultants, Inc. (Rincon) prepared this Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis and Habitat Assessment Report for the Limonite Gap Closure (project) given the project's location within the MSHCP Plan Area. The report was completed to document existing site conditions and to determine potential impacts to sensitive biological resources covered by the MSHCP. The project site consists of approximately 35.62 acres and is located in the city of Eastvale (city), Riverside County, California, west of Interstate 15 (I-15), north of Schleisman Road, south of Merrill Avenue, and east of Archibald Avenue. The project site bisects the Cucamonga Creek Channel north of 65<sup>th</sup> Street and south of Remington Avenue. Rincon understands that the entirety of the project site is currently proposed for the construction of the Cucamonga Creek Channel Bridge and the reconfiguration of Limonite Avenue and arterial roads. The study area included the proposed limits of work (35.62-acre project site) and an additional 500-foot buffer for the burrowing owl habitat assessment.

The County of Riverside Regional Conservation Authority (RCA) MSHCP information tool was queried using the parcel information for the project site to determine potential MSHCP sensitive species survey and conservation requirements for the project. The proposed project does not occur within a survey area for amphibians, mammals, Narrow Endemic Plant Species, and Criteria Area Plant Species but it does occur within a survey area for burrowing owl (*Athene cunicularia*) (BUOW). In addition, this MSHCP Consistency Analysis also includes assessments for riparian/riverine habitat, riparian/riverine species and vernal pool/fairy shrimp habitat as well as the urban/wildlands interface.

The project site is partially developed and consists of existing paved roadways, agricultural uses (i.e., a plant nursery and an active dairy), and disturbed vacant land dominated by nonnative grasslands. One drainage channel exists within the project site, the Cucamonga Creek Channel. Additionally, the East Cucamonga Creek Channel is adjacent the northeast boundary of the project site approximately 200 to 500 feet northeast of the site. Three potentially jurisdictional ponds were also identified and delineated within the project site. Total potential United States Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) jurisdiction for the Cucamonga Creek Channel and ponds is 2.57 acres, and total potential California Department of Fish and Wildlife (CDFW) jurisdiction is 12.09 acres. However, these features do not meet the MSHCP definition of riparian/riverine habitat.

The project site contains potentially suitable nesting habitat for BUOW. A single observation of BUOW sign (pellets) was documented during the survey. The biologist also mapped potentially suitable BUOW burrows/complexes currently occupied with California ground squirrels (*Otospermophilus beecheyi*) within the study area. Due to the presence of suitable BUOW habitat and the single observation of sign within the study area, the proposed project would be required to comply with the standard conditions under the MSHCP, requiring a focused BUOW survey.

The proposed project could potentially remove street trees located along Kimball Avenue. Street trees are protected by the City of Eastvale. Therefore, a tree removal permit maybe required from the City if street trees are proposed for removal to accommodate the construction of the project along Kimball Avenue.

**Limonite Gap Closure Project**

The project site does not contain vernal pools, fairy shrimp, or riparian/riverine habitat. As such, no further actions are required pursuant to the MSHCP for these resources. Based on this analysis, with implementation of a focused and pre-construction survey for BUOW the proposed project would be consistent with the MSHCP.



# 1 Introduction

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This report documents the findings of a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis and Habitat Assessment prepared to demonstrate compliance with the Western Riverside County MSHCP. This assessment describes existing site conditions and includes a discussion of potential impacts to sensitive biological resources covered by the MSHCP for the Limonite Gap Closure Project (project), located in the city of Eastvale (city), Riverside County, California (Limonite Avenue is an east-west Urban Arterial that currently ends at Archibald Avenue. In order to improve the service and vehicular capacity of Limonite Avenue and connections between the neighboring City of Chino to the west and Interstate 15 (I-15) to the east, the project would involve an approximately 6,180 feet (1.17 mile) long new segment of Limonite Avenue between Kimball Avenue and the existing Limonite Avenue east of Archibald Avenue across the CCC.

Improvements on Limonite Avenue are divided into three segments, described from west to east:

1. ***Limonite Avenue from Hellman Avenue to the CCC:*** Approximately 2,450 feet of the existing segment of Limonite Avenue west of the CCC would be improved. From 900 feet east of the intersection with Taylor Way to the existing terminus of Limonite Avenue, improvements include the addition of a Class II bike lane with a transition to a multi-use trail on both sides, including signage and pavement delineation. New road would be constructed from the existing terminus to the CCC, including curb/gutter, raised median, sidewalk improvements, landscaped parkway, and a multi-use trail on both sides, including signage and pavement delineation.
2. ***Cucamonga Creek Channel (CCC) Bridge:*** This entirely new bridge across the CCC would span approximately 330 feet long by 82 to 88 feet wide, constructed across the CCC to allow continuation of Limonite Avenue. The CCC Bridge would be a 3-span precast concrete girder bridge supported by pier walls at the intermediate supports and located within the CCC. The CCC Bridge would include two lanes in each direction and a Class I Bike Lane/Multi-Use Trail with raised median buffer.
3. ***Limonite Avenue east of the CCC Bridge to Archibald Avenue:*** This segment would be constructed in conjunction with the proposed Homestead industrial development, including a multi-lane roundabout, curb and gutter, two thru lanes in each direction, a raised median, multi-use trails and/or Class II bike lanes on both sides. Improvement widths throughout this section would vary between 108 and 124 feet. Roadway improvements at the intersection would include the construction of new curb ramps, installation and/or modification of the traffic signal, signing, pavement delineation, and street lights. A roundabout or alternative intersection control along Limonite Avenue is being considered for a primary access to the proposed Homestead development (approximately 1,500 feet east of the CCC) (Eastvale 2020). Limonite Avenue would be widened just west of the intersection to conform to lane configuration. The west leg of Limonite Avenue would introduce single left and right turn lanes for east-bound traffic. Roadway improvements at the intersection would include the construction of new curb ramps, installation and/or modification of the traffic signal, signing, pavement delineation, street lights, and relocation

of conflicting overhead electrical, telecommunications, and cable television utilities. Improvement widths at the intersection would vary between 102 and 310 feet.

Construction in this area would also include the demolition/removals of multiple steel overhang feeding structures and a single-family residential building located on the existing dairy property just west of Archibald Avenue that is in conflict with the proposed roadway alignment. All removals would include the abatement of hazardous materials such as lead and asbestos containing materials per State and Federal rules and regulations. Additionally, multiple utility facilities may require relocation, including, but not limited to, a high-pressure gas facility located at the dairy and overhead electrical distribution/transmission facilities located at the proposed Limonite Avenue / Archibald Avenue intersection. The City would coordinate directly with the owners of the utility facilities in conflict for them to relocate their facilities prior to construction of the proposed roadway improvements.

Additional improvements include:

- A new 180-foot long bicycle/pedestrian bridge would be constructed across the CCC approximately 1,000 feet south of the proposed CCC Bridge. This bridge would close the gap of an existing multi-use trail located within the Southern California Edison (SCE) easement/transmission line area north of the Symphony at the Trails residential development. The proposed steel prefabricated bridge would vary between 12 to 16 feet wide to accommodate two-way multi-use travel.
- New catch basins and inlet structures would be constructed as necessary within the roadway limits with storm drain laterals to convey upstream and project-generated drainage.
- Domestic/reclaimed water and sewer mainline facilities would be installed connecting existing Jurupa Community Services District facilities located along the existing section of Limonite Avenue west of the CCC to facilities located at the Archibald Avenue/Limonite Avenue intersection.
- Landscape planting and hardscapes improvements would be installed in parkway areas adjacent to existing and proposed meandering sidewalk/Class II bike facilities/multi-use trails and in the raised medians.
- Street lighting would be installed along the corridor on both sides of Limonite Avenue.

Project construction would occur over approximately 12 months, with construction anticipated to begin in January 2022 and be completed in January 2023. Construction would involve grading and excavation for roadway improvements, bridge construction, paving activities, and architectural coating and pavement striping. It is anticipated that export/hauling operations may exceed 50,000 cubic yards of excess soils. Additionally, it is anticipated the project would require import materials that may exceed 50,000 cubic yards depending on final grading elevations.

Figure 1). The report also contains the results of an MSHCP-required habitat assessment for burrowing owl (BUOW) and an analysis of potential project-related impacts to the study area. The study area includes the proposed limits of work (35.62-acre project site) and an additional 500-foot buffer for the burrowing owl habitat assessment.

## 1.1 Project Location

The proposed project is located in Riverside County, specifically within the northwest area of the city of Eastvale (City) adjacent to the Cucamonga Creek Channel. The project site is located within the United States Geological Survey (USGS) *Corona North* 7.5-minute topographic quadrangle (Figure 2). The project involves constructing a new segment of the Limonite Avenue corridor connecting the existing Kimball Avenue west of the Hellman Avenue intersection to the existing Limonite Avenue east of Archibald Avenue. Additionally, the project limits extend along the Cucamonga Creek Channel from the existing Schleisman Road bridge to the south to the existing Remington Avenue bridge to the north. The approximately 35.62-acre project site is located within the following Assessor's Parcel Numbers (APNs):

- 144010023
- 144010020
- 144010015
- 144010010
- 144010009
- 144010073
- 144010075
- 144010060
- 144010072
- 144010041
- 144020011
- 144020009
- 144020010

## 1.2 Project Description

Limonite Avenue is an east-west Urban Arterial that currently ends at Archibald Avenue. In order to improve the service and vehicular capacity of Limonite Avenue and connections between the neighboring City of Chino to the west and Interstate 15 (I-15) to the east, the project would involve an approximately 6,180 feet (1.17 mile) long new segment of Limonite Avenue between Kimball Avenue and the existing Limonite Avenue east of Archibald Avenue across the CCC.

Improvements on Limonite Avenue are divided into three segments, described from west to east:

4. ***Limonite Avenue from Hellman Avenue to the CCC:*** Approximately 2,450 feet of the existing segment of Limonite Avenue west of the CCC would be improved. From 900 feet east of the intersection with Taylor Way to the existing terminus of Limonite Avenue, improvements include the addition of a Class II bike lane with a transition to a multi-use trail on both sides, including signage and pavement delineation. New road would be constructed from the existing terminus to the CCC, including curb/gutter, raised median, sidewalk improvements, landscaped parkway, and a multi-use trail on both sides, including signage and pavement delineation.
5. ***Cucamonga Creek Channel (CCC) Bridge:*** This entirely new bridge across the CCC would span approximately 330 feet long by 82 to 88 feet wide, constructed across the CCC to allow continuation of Limonite Avenue. The CCC Bridge would be a 3-span precast concrete girder bridge supported by pier walls at the intermediate supports and located within the CCC. The CCC Bridge would include two lanes in each direction and a Class I Bike Lane/Multi-Use Trail with raised median buffer.

6. ***Limonite Avenue east of the CCC Bridge to Archibald Avenue:*** This segment would be constructed in conjunction with the proposed Homestead industrial development, including a multi-lane roundabout, curb and gutter, two thru lanes in each direction, a raised median, multi-use trails and/or Class II bike lanes on both sides. Improvement widths throughout this section would vary between 108 and 124 feet. Roadway improvements at the intersection would include the construction of new curb ramps, installation and/or modification of the traffic signal, signing, pavement delineation, and street lights. A roundabout or alternative intersection control along Limonite Avenue is being considered for a primary access to the proposed Homestead development (approximately 1,500 feet east of the CCC) (Eastvale 2020). Limonite Avenue would be widened just west of the intersection to conform to lane configuration. The west leg of Limonite Avenue would introduce single left and right turn lanes for east-bound traffic. Roadway improvements at the intersection would include the construction of new curb ramps, installation and/or modification of the traffic signal, signing, pavement delineation, street lights, and relocation of conflicting overhead electrical, telecommunications, and cable television utilities. Improvement widths at the intersection would vary between 102 and 310 feet.

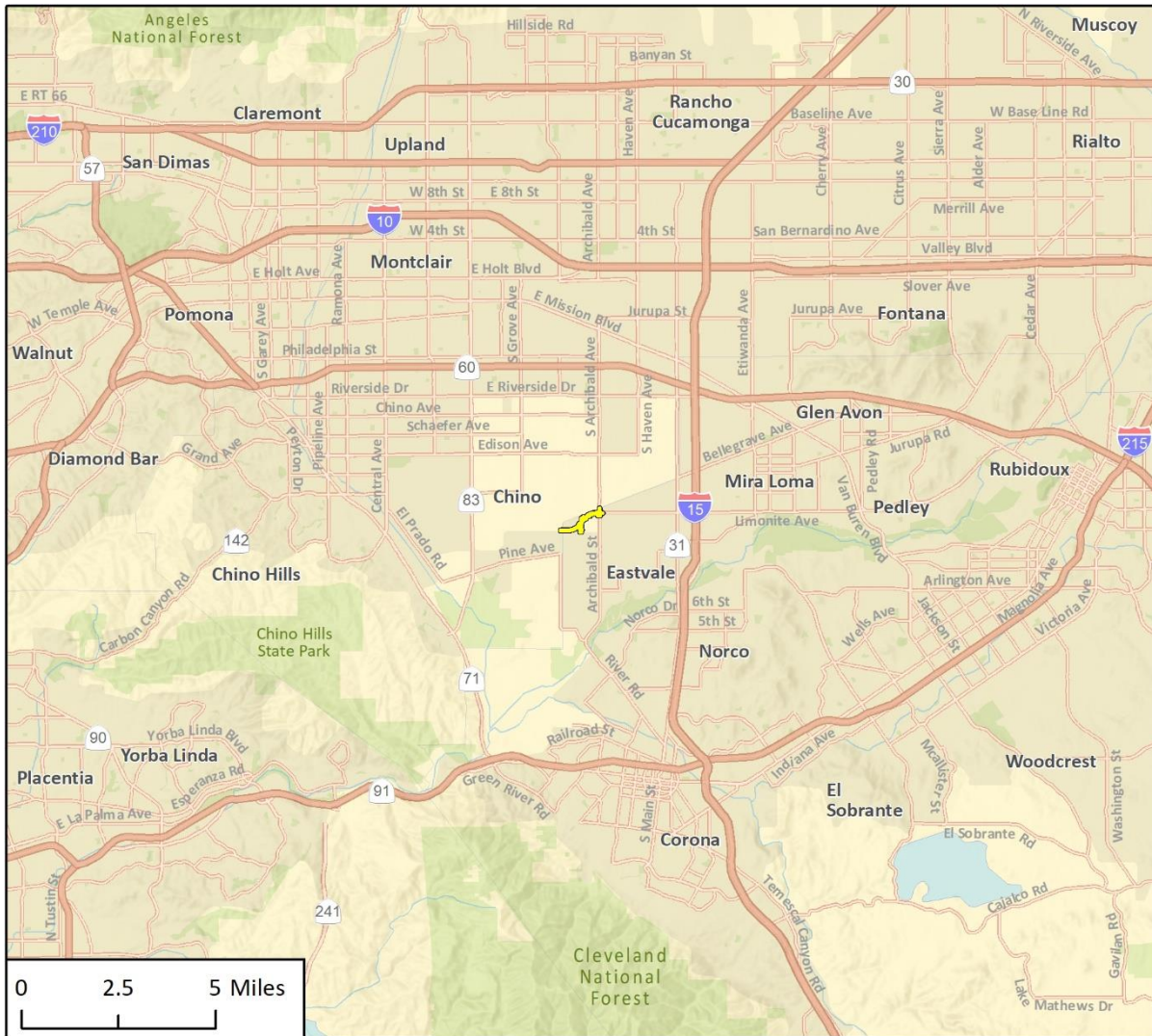
Construction in this area would also include the demolition/removals of multiple steel overhang feeding structures and a single-family residential building located on the existing dairy property just west of Archibald Avenue that is in conflict with the proposed roadway alignment. All removals would include the abatement of hazardous materials such as lead and asbestos containing materials per State and Federal rules and regulations. Additionally, multiple utility facilities may require relocation, including, but not limited to, a high-pressure gas facility located at the dairy and overhead electrical distribution/transmission facilities located at the proposed Limonite Avenue / Archibald Avenue intersection. The City would coordinate directly with the owners of the utility facilities in conflict for them to relocate their facilities prior to construction of the proposed roadway improvements.

Additional improvements include:

- A new 180-foot long bicycle/pedestrian bridge would be constructed across the CCC approximately 1,000 feet south of the proposed CCC Bridge. This bridge would close the gap of an existing multi-use trail located within the Southern California Edison (SCE) easement/transmission line area north of the Symphony at the Trails residential development. The proposed steel prefabricated bridge would vary between 12 to 16 feet wide to accommodate two-way multi-use travel.
- New catch basins and inlet structures would be constructed as necessary within the roadway limits with storm drain laterals to convey upstream and project-generated drainage.
- Domestic/reclaimed water and sewer mainline facilities would be installed connecting existing Jurupa Community Services District facilities located along the existing section of Limonite Avenue west of the CCC to facilities located at the Archibald Avenue/Limonite Avenue intersection.
- Landscape planting and hardscapes improvements would be installed in parkway areas adjacent to existing and proposed meandering sidewalk/Class II bike facilities/multi-use trails and in the raised medians.
- Street lighting would be installed along the corridor on both sides of Limonite Avenue.

Project construction would occur over approximately 12 months, with construction anticipated to begin in January 2022 and be completed in January 2023. Construction would involve grading and excavation for roadway improvements, bridge construction, paving activities, and architectural coating and pavement striping. It is anticipated that export/hauling operations may exceed 50,000 cubic yards of excess soils. Additionally, it is anticipated the project would require import materials that may exceed 50,000 cubic yards depending on final grading elevations.

**Figure 1 Regional Location**



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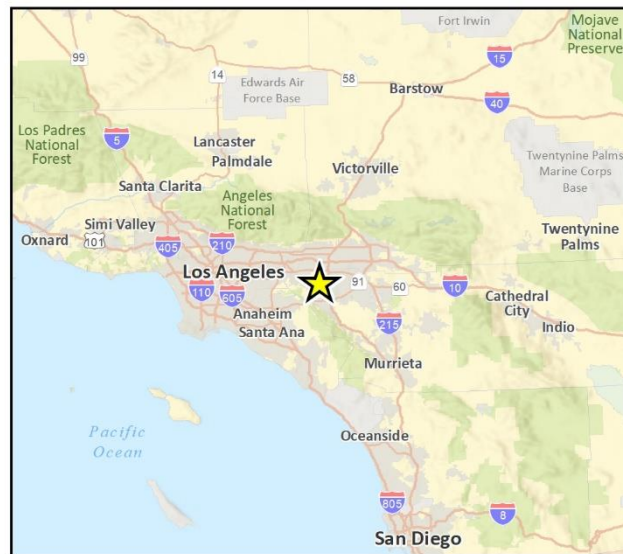
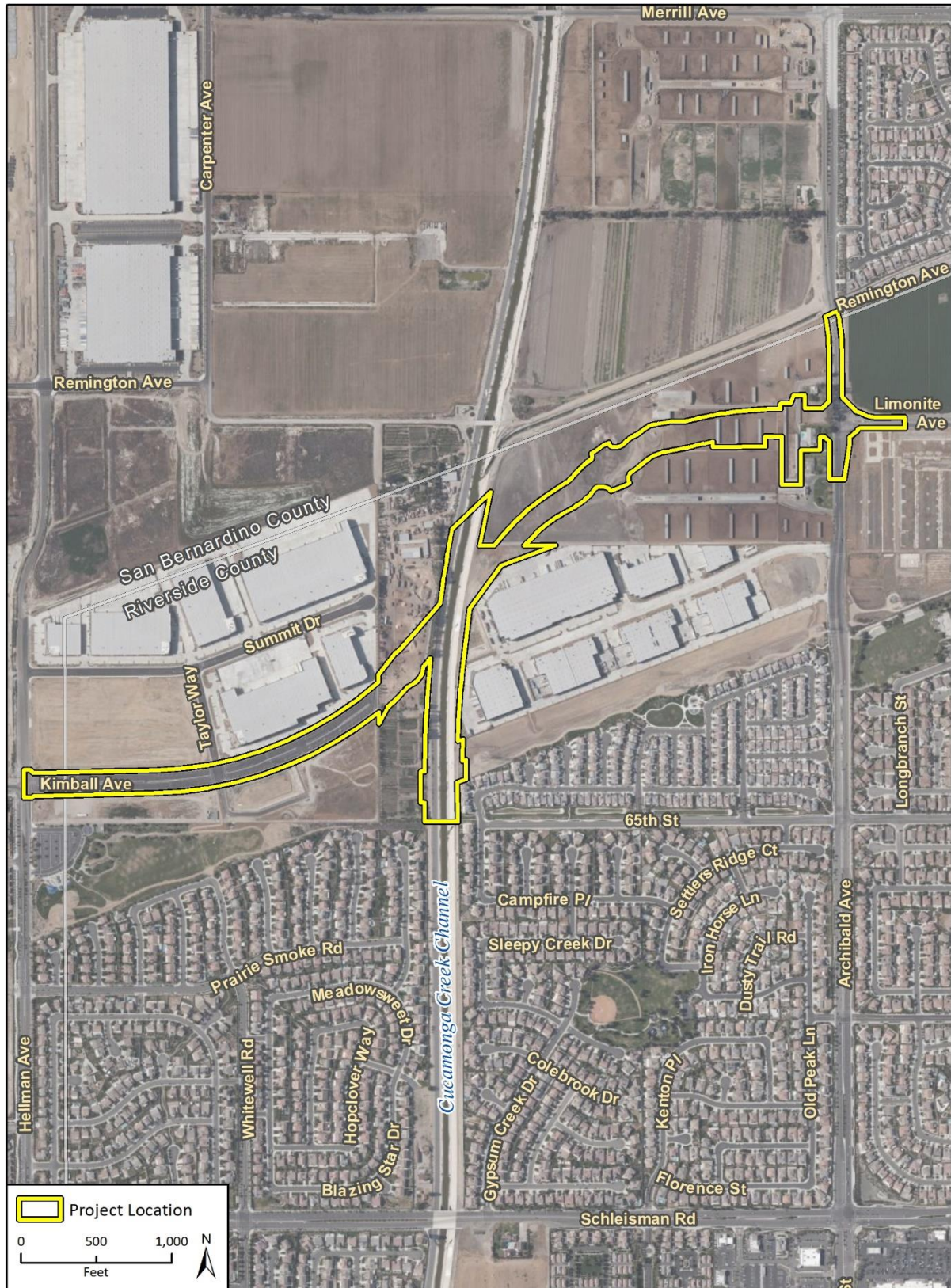


Fig 1 Project Location

Figure 2 Project Location



Imagery provided by National Geographic Society and its licensors © 2020.

The proposed street configuration between Taylor Way and the Cucamonga Creek Channel would transition from the existing road section as described above to the proposed “Cucamonga Creek Channel Bridge” configuration as outlined below. The transition would involve reconstruction and realignment of the existing raised median, left turn lanes, and lane striping commencing from approximately 900 feet east of the Taylor Way intersection to the existing easterly terminus of this segment of Limonite Avenue. Areas between the easterly terminus of the existing Limonite Avenue and the Cucamonga Creek Channel Bridge would include construction of a new road including curb/gutter, raised median, sidewalk improvements and a landscaped parkway. The project would also include a combination of Class I/Class II bike lanes on both sides of Limonite Avenue from Taylor Way to the Cucamonga Creek Channel Bridge. Traffic control devices including signage and pavement delineation would be installed with the improvements.

### 1.2.1 Cucamonga Creek Channel Bridge

The new alignment of Limonite Avenue intersects the Cucamonga Creek Channel at an approximately 60-degree skew. The Cucamonga Creek Channel Bridge would be a three-span precast concrete girder bridge supported by pier walls at the intermediate supports and would be located within the channel. The abutments and piers would be aligned parallel to the channel and the bridge would span approximately 330 feet across the Cucamonga Creek Channel.

### 1.2.2 East of Cucamonga Creek Channel

The proposed roadway features along Limonite Avenue between Cucamonga Creek Channel and Archibald Avenue would entail the construction of a new road segment including new curb/gutter, two through lanes in each direction, a raised median, and a combination of meandering raised Class I bike lanes/multi-use trails and/or Class II bike lanes with striped buffers on both sides. Improvements throughout this section would vary between 108 and 124 feet in width.

Widening would occur to Limonite Avenue just west of the Archibald intersection that conforms to both existing and ultimate Limonite Avenue/Archibald Avenue lane configuration without any future reconstruction of Limonite Avenue improvements west of the intersection. The west leg of Limonite Avenue would introduce single left and right turn lanes for east bound traffic. Roadway improvements at the Archibald Avenue intersection would include the construction of new curb ramps, installation and/or modification of the traffic signal, signing, pavement delineation, streetlights, and relocation of conflicting overhead electrical, telecommunications, and cable television utilities. Improvements located within this portion of the widening area would vary between 102 and 310 feet in width.

### 1.2.3 Landscape/Aesthetics

The project would also include railing architectural treatment and landscaping/irrigation/street lighting throughout the corridor to enhance aesthetics from Hellman Avenue to Taylor Way.

### 1.2.4 Bicycle/Pedestrian Bridge

A bicycle/pedestrian bridge is proposed south of Limonite Avenue over the Cucamonga Creek Channel to close the gap of a multi-use trail consistent with the City’s General Plan’s Circulation Element. The bridge would be located within the Southern California Edison easement/transmission line area on both sides of the channel. The proposed steel prefabricated bridge would be roughly 180 feet long and designed to clear span the channel. Depending on the final bridge design,



anticipated widths of the bridge would vary between 12 to 16 feet wide to accommodate two-way multi-use travel. This bridge would be located approximately 1,000 feet south of the proposed Cucamonga Creek Channel Bridge discussed above.

### 1.2.5 Drainage

Proposed catch basins/inlet structures located as necessary within the proposed roadway limits (curb face to curb face) with storm drain laterals would be installed throughout the project site to convey upstream and project generated drainage to the existing RCFC MDP facilities.

### 1.2.6 Roundabout

The implementation of roundabouts or an alternative intersection control along Limonite Avenue is being considered as a primary access to the proposed Homestead development (approximately 1,500 feet east of the Cucamonga Creek Channel).

### 1.2.7 Right-of-Way Requirements

Limonite Avenue is classified as an Urban Arterial per the City's General Plan; therefore, a right-of-way up to 152 feet in width would be acquired (or dedicated to the City by adjacent landowners) from the easterly property line of the existing Ranch development to the west leg of the Archibald Avenue intersection. Additionally, the project would impact six privately owned parcels throughout the corridor. Permanent slope easements, right of way/roadway easements, parkway/sidewalk/bike trail easements and/or temporary construction easements (TCEs) varying in width from 10 to 20 feet would be either acquired or dedicated by the property owner at these locations.

## 2 Methodology

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### 2.1 Western Riverside County MSHCP Consistency Analysis

The proposed project was analyzed to determine consistency with the requirements set forth in the MSHCP. The Regional Conservation Authority (RCA) MSHCP information tool was queried using the parcel information for the study area to determine potential MSHCP sensitive species survey and conservation requirements for the project. According to the MSHCP information tool, the MSHCP identifies this area as not requiring habitat assessments or other focused surveys for amphibians, mammals, Narrow Endemic Plant Species, and Criteria Area Plant Species. However, this area does require focused surveys for BUOW (Appendix A).

To ensure consistency with the requirements set forth in the MSHCP (Riverside County 2003), the study area was assessed, and geographic information systems (GIS) software was used to map the site in relation to MSHCP areas, including criteria cells, conservation areas, and wildlife movement corridors and linkages; study areas for plant, bird, mammal, and amphibian species; Criteria Area Species Study area (CASSA); and the Narrow Endemic Plant Study area (NEPSA).

The MSHCP also requires an assessment of the potentially significant project effects on riparian/riverine areas and vernal pools, if applicable. According to the MSHCP, the documentation for the assessment shall include mapping and a description of the functions and values of the mapped areas with respect to the species listed in Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools. An assessment of potential indirect impacts to existing or proposed MSHCP conservation areas that may exist on or adjacent to the site through an urban/wildlands interface analysis must also be included.

### 2.2 Literature Review

Prior to the field visit, a literature review was conducted to establish the environmental and regulatory setting of the proposed project. The background and literature review included review of the U.S. Department of Agriculture (USDA) *Soil Survey for the Western Riverside Area* (2020a), *Corona North* USGS 7.5-minute topographic quadrangle, aerial photographs (Google Earth 2020) and topographic maps (USGS 1979). The MSHCP, species accounts, and other reference materials were reviewed for habitat assessment requirements as well as habitat suitability elements for special-status species. The primary objective of the habitat assessment was to evaluate the study area's potential to support special-status species as well as to determine the applicability of other MSHCP and California Environmental Quality Act (CEQA) requirements as they pertain to the proposed project.

The California Department of Fish and Wildlife's (CDFW) California Natural Diversity Data Base (CNDDDB; CDFW 2020a), Biogeographic Information and Observation System (BIOS; CDFW 2020b) and United States Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2020a) were reviewed to determine if any special-status wildlife, plant or vegetation communities were previously recorded within five miles of the study area. The *National Wetlands Inventory* (NWI;

USFWS 2020b) was reviewed to determine if any wetland and/or non-wetland waters had been previously documented and mapped on or in the vicinity of the proposed study area. Other resources reviewed included the California Native Plant Society (CNPS) online *Inventory of Rare and Endangered Plants of California* (2020), CDFW *Special Animals List* (2020c), and CDFW *Special Vascular Plants, Bryophytes, and Lichens List* (2020d).

## 2.3 Field Reconnaissance Surveys

A field reconnaissance survey of the study area was conducted to document existing site conditions and the potential presence of sensitive biological resources, including sensitive plant and wildlife species, sensitive plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. Rincon Senior Biologist Ryan Gilmore conducted the reconnaissance survey on January 13 and 30, 2020. The biologist surveyed the study area on foot and visually inspected the area with the aid of binoculars (8 x 40) as necessary.

Identification of potentially jurisdictional aquatic resources during the reconnaissance survey included any potential wetlands and non-wetland waters that may constitute waters of the U.S., waters of the State, streambeds, and/or riparian/riverine or vernal pool resources. During the survey, the biologist noted general site characteristics, documented vegetation, and took representative photographs. Survey conditions included a temperature of 64-70 degrees Fahrenheit (°F), clear skies, and wind 0-3 miles per hour (mph).

### 2.3.1 Vegetation Mapping

Vegetation communities observed on site were mapped on a site-specific aerial photograph. All accessible portions of the study area were covered on foot. Vegetation was generally classified using the systems provided in the *Preliminary Descriptions of the Terrestrial Communities of California* (Holland 1986), and modified using *A Manual of California Vegetation, Second Edition* (MCV) (Sawyer et al. 2009) as necessary to reflect the existing site conditions.

### 2.3.2 Flora

All plant species observed in the study area were noted, and plants that could not be identified in the field were identified later using taxonomic keys. The reconnaissance survey included a directed search for sensitive plants that would have been apparent at the time of the survey. Floral nomenclature for native and non-native plants follows Baldwin et al. (2012) as updated by The Jepson Online Interchange (University of California Berkeley 2020). For ornamental plants, nomenclature follows U.S. Department of Agriculture (USDA) PLANTS Database (USDA 2020b), and for special-status plants follows Baldwin et al. (2012) and California Native Plant Society (CNPS 2020).

### 2.3.3 Fauna

Animal species observed directly or detected from calls, tracks, scat, nests, or other signs in the study area were noted. The survey was performed during the day; therefore, the identification of nocturnal animals was limited to signs (if present). Zoological nomenclature for birds is in accordance with the American Ornithologists' Union Checklist (2020) and for mammals, Wilson & DeeAnn M. Reeder (2005).

### 2.3.4 Riparian/Riverine Habitat Assessment

MSHCP Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, describes the process through which protection of riparian/riverine areas, vernal pools, and fairy shrimp species will occur within the MSHCP Area. Protection of these resources is important for a number of MSHCP conservation objectives. An assessment of a project's potentially significant effects on riparian/riverine areas, vernal pools, and fairy shrimp habitat is required. A formal jurisdictional delineation of waters and wetlands was completed as the project is proposed to be located within potentially jurisdictional features. Guidelines for determining whether or not these resources exist on site are described as follows:

- **Riparian/Riverine Areas** are described by the MSHCP as “lands which contain habitat dominated by trees, shrubs, persistent emergent, 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.” Riparian/riverine areas under the MSHCP also include drainage areas that are vegetated or have upland (non-riparian/riverine) vegetation that drain directly into an area that is described for conservation under the MSHCP (or areas already conserved).
- **Vernal Pools** are described by the MSHCP as “seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and /or vegetation during the drier portion of the growing season.”
- **Listed Fairy Shrimp Habitat** is described in the MSHCP as habitat for Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fairy shrimp (*Branchinecta lynchi*), or Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*), and includes ephemeral pools, artificially created habitat, and/or other features determined appropriate by a qualified biologist.

In addition, Section 6.1.2 of the MSHCP states:

“With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.”

If found, riparian/riverine habitat and vernal pools within the study area were identified, mapped, and recorded during the field reconnaissance survey and concurrent jurisdictional delineation.

Rincon conducted a jurisdictional delineation of waters of the United States, waters of the State and CDFW-jurisdictional streambeds based on a review of available literature and imagery supplemented with a field reconnaissance survey. The reconnaissance survey was conducted on January 13, 2020 by Rincon biologist Ryan Gilmore. The delineation assessed drainages within the project site and mapped all features in the field using GPS technology. This jurisdictional delineation was conducted in accordance with currently accepted regulatory guidelines. Detailed methodology for the jurisdictional delineation is provided in the stand alone Jurisdictional Delineation Report (Appendix B).

### 2.3.5 BUOW Habitat Assessment

The BUOW habitat assessment survey was conducted on January 13 and 30. Rincon biologist, Ryan Gilmore, walked the entire study area (i.e., the project site and 500-foot buffer, where accessible) to

identify potential burrows and BUOW sign. Areas of particular interest included all topographic relief areas characterized by low growing vegetation, grasslands, shrub lands with low density shrub cover, earthen berms, and any large debris piles. Access to adjacent properties was not granted. Therefore, these areas were surveyed with binoculars to the maximum extent feasible from the edge of the project site boundary. The survey included a systematic search for burrows and BUOW sign by walking through potential habitat within the survey area. Survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines did not exceed 30 meters (approximately 100 feet) and were reduced to account for differences in terrain, vegetation density, and ground surface visibility. Burrow openings large enough to provide entry for BUOWs were carefully checked for prey remains, cast pellets, white-wash, feathers, or any other indication of BUOW presence. Potential burrows, BUOW individuals, and/or sign (if observed) were recorded and mapped using Global Positions System (GPS) coordinates.

## 3 Existing Conditions

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This section provides a brief discussion of the existing conditions observed on site. Site photographs are located in Appendix C. The study area is located in arid western Riverside County which is characterized by long, hot, dry summers and short, relatively wet winters. Average temperatures range from 64 to 94°F during the summer and 39 to 67 °F during the winter. The average annual precipitation in the region is 13.34 inches.

### 3.1 Land Use

Current land use at the project site consists of light industrial development, commercial retail development, agriculture, and the San Bernardino County Flood Control District (SBCFCD) owned and operated Cucamonga Creek Channel. The western portion of the project site consists of fallow agricultural fields and industrial complexes. Towards the center of the project site is Cucamonga Creek Channel, adjacent to which is an active plant nursery. Last, an active dairy is located on the east side of the channel within the project site. The active dairy is included in preliminary plans and development applications to create a light industrial complex called “Homestead”.

Surrounding land uses include residential, agricultural, industrial, and open space areas used for recreation. Located just south of the western project boundary is American Heroes Park, a public park which contains a dog park, playground, and areas for picnicking. Light industrial developments are located immediately to the south and north of the dairy farm, and north of Kimball Avenue.

### 3.2 Watershed and Drainages

The study area is within the approximate 2,650-square mile Santa Ana River Watershed. The Santa Ana River Watershed spans from portions of the San Jacinto Mountains, San Bernardino Mountains, San Gabriel Mountains, and Santa Ana Mountains, to the cities of Rialto, Lake Elsinore, Anaheim, Huntington Beach, and Irvine. Two major rivers drain the Santa Ana River watershed: the Santa Ana River and the San Jacinto River. A formal jurisdictional delineation of waters and wetlands was completed for the project and is included in Appendix B.

### 3.3 Topography and Soils

Elevation remains relatively level throughout the approximately 35.62-acre project site. The topography ranges from 627 feet above mean sea level (msl) in the southwest corner of the project site to approximately 649 feet above msl in the northeastern corner. Additionally, the location of the proposed Limonite road will occur within developed and disturbed vacant areas, with the largest change in elevation being the bank of the Cucamonga Creek Channel to the channel bottom.

The NRCS Web Soil Survey identifies seven soil map units in the project site: Chino silt loam, Delhi loamy fine sand (0 to 2 percent slopes), Grangeville loamy fine sand (0 to 5 percent slopes), Grangeville fine sandy loam, Hilmar loamy very fine sand (0 to 2 percent slopes), Hilmar loamy fine sand, and riverwash (Figure 3)(NRCS 2020a). These seven map units can be organized into five soil series that are described below. Based on Rincon’s observations of soil surface conditions during the

Figure 3 USDA Soils Map



Imagery provided by Esri and its licensors © 2020. Additional data provided by USDA, 2017.

Fig. 3 USDA Soils Map\_50ftbuff

reconnaissance survey, the soils on site are generally consistent with those mapped by the NRCS Web Soil Survey. One of the soils (riverwash) that occur within the Cucamonga Creek Channel is designated as hydric (NWI; USFWS 2020a). It should be noted that the Cucamonga Creek Channel has been completely developed with the channelization of the creek.

### 3.3.1 Hilmar Series

Hilmar loamy fine sand and Hilmar loamy very fine sand (0 to 2 percent slopes) were found at the western end of Kimball Avenue, the plant nursery, the dairy and along Archibald Avenue. Hilmar soils are typically level and occur near basins at elevations of 300 to 900 feet. The soils formed in alluvium derived from granitic rock and are somewhat poorly or poorly drained with a fluctuating water table. Hilmar soils typically support alfalfa, grapes, row crops, and irrigated pasture. Vegetation in uncultivated areas typically consists of saltgrass (*Distichlis spicata*) and annual grasses.

### 3.3.2 Chino Series

Chino silt loam were found in the southern portion of the project site. This series typically consists of somewhat poorly drained soils in basins and flood plains at elevations from sea level to 3,100 feet above msl. These soils formed in alluvium derived from granitic rocks. They are typically used for grazing or irrigated truck and row crops. Uncultivated areas typically consist of annual grasses, weeds, and shrubs.

### 3.3.3 Delhi Series

Delhi loamy fine sand with (0 to 2 percent slopes) was found in one area on the western portion of the site. This series typically consists of very deep, somewhat excessively drained soils. They formed in wind modified material weathered from granitic rock sources and are usually found on floodplains, alluvial fans, and terraces. Delhi soils are typically used for growing grapes (*Vitis* sp.), peaches (*Prunus* sp.), truck crops, and alfalfa (*Medicago* sp.). Uncultivated areas typically consist of annual grasses and forbs.

### 3.3.4 Grangeville Series

Grangeville loamy fine sand 0 to 5 percent slopes and Grangeville fine sandy loam were found onsite adjacent to the Cucamonga Creek Channel. This series consists of very deep, somewhat poorly drained soils that formed in moderate course textured alluvium dominantly from granitic rock sources. These soils occur on alluvial fans and floodplains and have slopes ranging from 0 to 2 percent. Grangeville soils are typically used for growing alfalfa, grapes, cotton, truck crops, and irrigated pasture. Uncultivated areas typically consist of annual grasses, forbs, native alkali-tolerant plants, and scattered oak (*Quercus* sp.) and cottonwood (*Populus* sp.) trees.

### 3.3.5 Riverwash

Riverwash is a hydric soil type found onsite adjacent and underlying the Cucamonga Creek Channel. This series consists of frequently flooded soils that formed in alluvium derived from granite that occur on flood plains. Little to no vegetation grows on this series due to flooding. Riverwash materials are erratically deposited with stratified layers of sand, gravel, and cobbles. Small layers of finer soil materials may be stratified with the coarser sediments which dominate riverwash. Riverwash is generally devoid of vegetation, but there may be growth of willow (*Salix* sp.) and annual weeds.



## 3.4 Vegetation Communities/Land Cover Types

Four land cover types occur within the study area: non-native annual grassland, developed, ornamental, and agriculture (Figure 4). Overall, 93.71% of the site consists of developed, agriculture, and ornamental landcover types with the remaining 6.29% consisting of non-native grasslands. A list of plant species observed within the study area is included as Appendix D.

### 3.4.1 Non-Native Annual Grassland (42200)

Non-native annual grassland is the dominant vegetative land cover type found within the project site. This community is typically dominated by a dense cover of annual grasses that usually include wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), and soft chess (*Bromus hordeaceus*). The grassland covers multiple portions of the western section of the site. This vegetation community consists of 2.24 acres and constitutes approximately 6.29% of the total area of the project site.

### 3.4.2 Developed

Developed land cover include areas where development such as residential, industrial buildings, asphalt road, graveled access roads, parking areas, and plant nursery occur within the project site. These areas have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. This land cover type consists of 22.75 acres and constitutes approximately 63.86% of the total area of the project site.

### 3.4.3 Ornamental

Ornamental habitat primarily consists of American Heroes Park. Ornamental habitat areas are those which have been significantly modified by human activity with plantings of primarily non-native vegetation cover types (lawns, shrubs, and trees). This area within the project site is located between at the western terminus of the study area. This land cover type consists of 0.4 acre and constitutes approximately 1.09% of the total area of the project site.

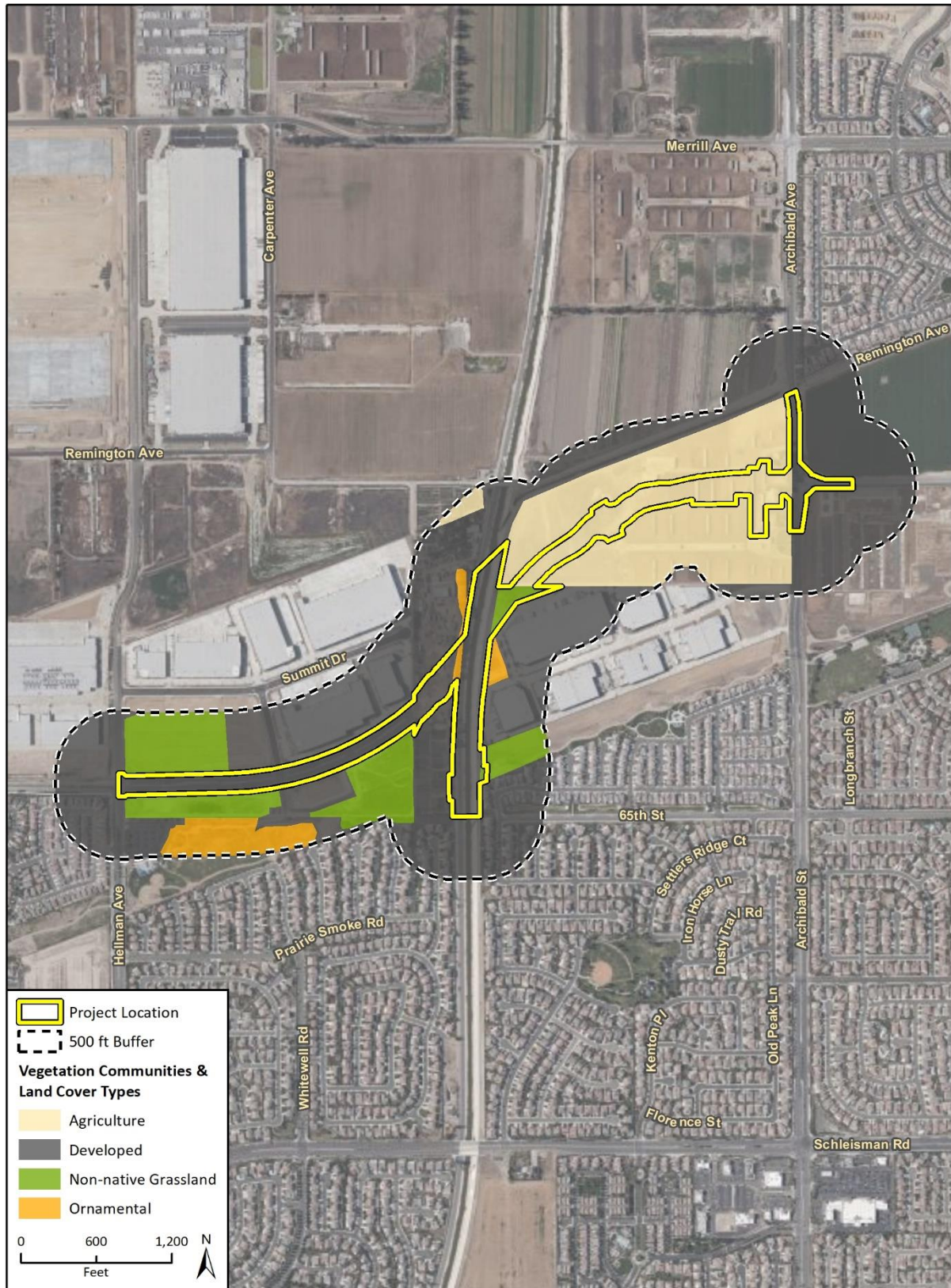
### 3.4.4 Agriculture

Areas mapped as agriculture include grazed pastures and an active dairy. This land cover type occurs along the eastern portion of the project site. This land cover type consists of 10.24 acres and constitutes approximately 28.75% of the total area of the project site.

## 3.5 General Wildlife

The study area provides limited habitat for wildlife species that commonly occur within urban communities in Riverside County. Common avian species such as red-winged blackbird (*Agelaius phoeniceus*), red-tailed hawk (*Buteo jamaicensis*), Say's phoebe (*Sayornis saya*), common raven (*Corvus corax*), rock pigeon (*Columba livia*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), mallard (*Anas platyrhynchos*), lesser yellowlegs (*Tringa flavipes*), European starling (*Sturnus vulgaris*), sandpiper (*Calidris* sp.), and Anna's hummingbird (*Calypte anna*) were observed on site during the survey. California ground squirrel (*Otospermophilus beecheyi*) was the only live mammal observed within the study area. Western fence lizard (*Sceloporus occidentalis*) was the only reptile observed within the study area. Sensitive species with potential to occur within the study area are discussed in Section 4.

Figure 4 Vegetation Communities Map



Imagery provided by National Geographic Society and its licensors © 2020.

## 4 Western Riverside County MSHCP Consistency Analysis

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### 4.1 MSHCP Requirements

The MSHCP establishes habitat assessment requirements for certain species of plants, birds, mammals, and amphibians. The proposed project is located in the Eastvale Area Plan within the River Habitat Management Unit (HMU) of the MSHCP. It is not located within a Cell group or Criteria Cell. The study area does not occur within any required amphibian or mammal habitat assessment areas, but it does occur within a required habitat assessment and survey area for BUOW (Appendix A). Additionally, the study area does not occur within a survey area for Narrow Endemic Plant Species or Criteria Area Plant Species.

This habitat assessment addresses the potential for sensitive biological resources to occur within the study area. The habitat assessment addresses the presence/absence of riparian/riverine areas and vernal pools in the study area, includes an urban/wildlands interface analysis, and identifies any migratory corridors and linkages located on or in the vicinity of the study area.

### 4.2 Habitat Assessment

#### 4.2.1 Riparian/Riverine, Vernal Pool, and Fairy Shrimp Habitat

Section 6.1.2 of the MSHCP describes the process to protect species associated with riparian/riverine areas and vernal pools. As defined in the MSHCP, riparian/riverine areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or depend on a nearby freshwater source or areas that contain a freshwater flow during all or a portion of the year. These areas may support one or more species listed in Section 6.1.2 of the MSHCP. Vernal pools are seasonal wetlands that occur in depressions, typically have wetland indicators that represent all three parameters (soils, vegetation, and hydrology), and are defined based on vernal pool indicator plant species during the wetter portion of the growing season but normally lack wetland indicators associated with vegetation and/or hydrology during the drier portion of the growing season.

Based upon the findings of Rincon's reconnaissance survey, no riparian/riverine habitat is present within the project site. The Cucamonga Creek Channel and three potentially jurisdictional ponds delineated within the project site were artificially created by human activity and therefore do not meet the MSHCP definition of riparian/riverine habitat (Figure 5a and 5b).

The proposed project would be confined to the existing disturbed non-annual grasslands, developed, and agricultural areas. The three detention ponds may be filled as a result of the proposed project. No riparian/riverine habitat occurs within the proposed project site; and therefore, no further actions related to riparian/riverine habitat are required pursuant to the MSHCP.

No vernal pools or fairy shrimp habitat was observed within the project site. The project site is underlain by poorly drained soils. The only areas of ponding observed are the three potentially jurisdictional detention ponds at the active dairy. These ponds are human constructed to retain water onsite within the property of the active dairy. They collect water runoff from dairy operations and precipitation events. At the time of the surveys they were observed to have standing water. They are not vernal pools nor do they contain fairy shrimp habitat. No vernal pool or fairy shrimp habitat occurs within the proposed project site; and therefore, no further actions related to vernal pools are required pursuant to the MSHCP.

#### 4.2.2 BUOW Habitat Assessment

Burrowing owls are small crepuscular (active primarily during dusk and dawn) owls that typically modify and use burrows made by fossorial (adapted for burrowing or digging) mammals, such as California ground squirrels or American badgers (*Taxidea taxus*). Burrowing owls use a variety of natural and modified habitats for nesting and foraging, typically characterized by low growing vegetation. Burrowing owl habitat includes, but is not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf-courses, drainage ditches, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. They also often utilize manmade structures, such as earthen berms; cement culverts; cement, asphalt, rock, or wood debris piles; or openings beneath cement or asphalt pavement. Reasons for their decline include habitat destruction, insecticide poisoning, rodenticide (particularly squirrel eradication), and shooting.

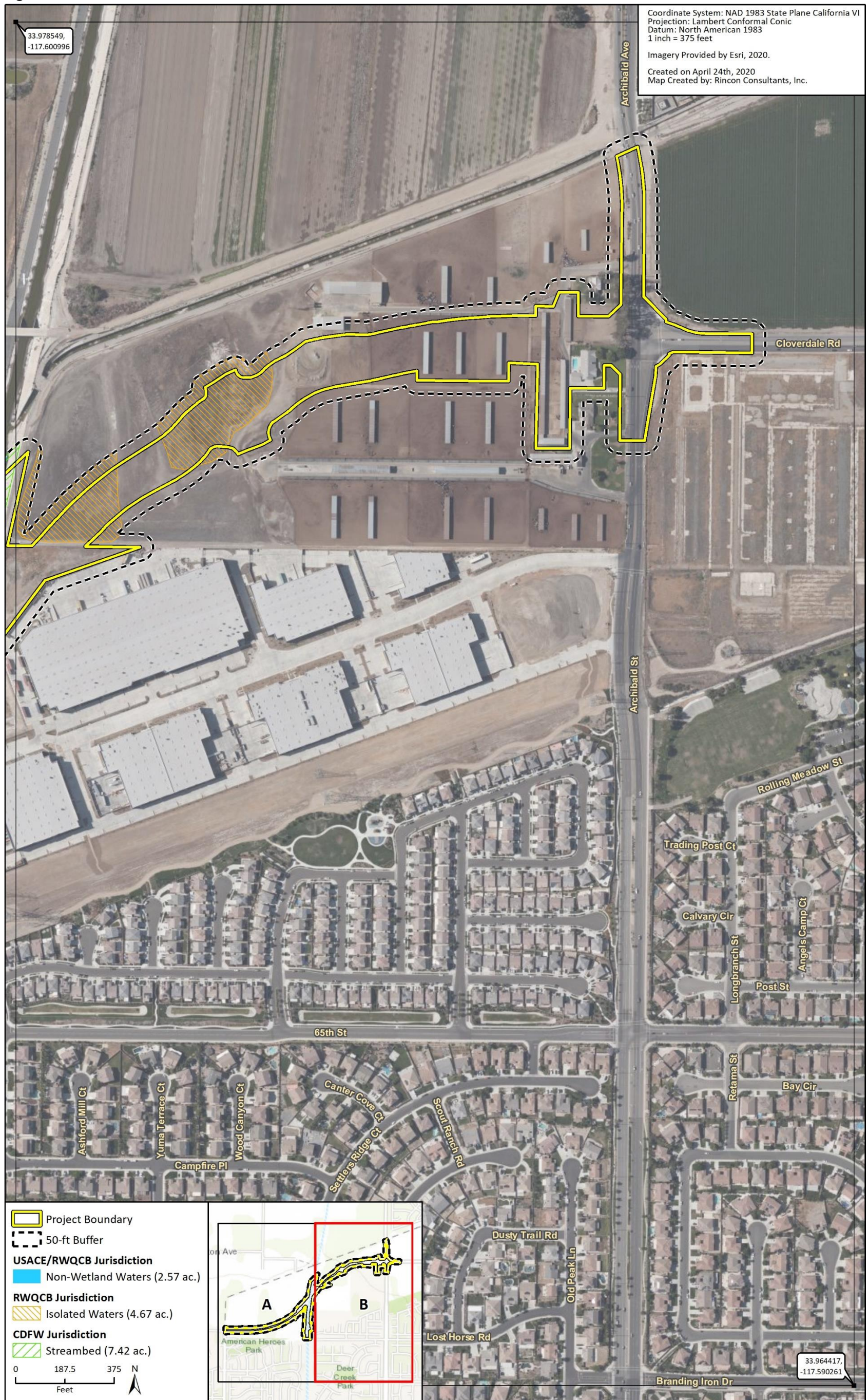
The BUOW habitat assessment occurred concurrently with the field surveys on January 13 and 30. This assessment involved walking through potentially suitable habitat within the survey area to achieve 100 percent visual coverage of the ground surface. Areas of particular interest included all topographic relief, areas characterized by low growing vegetation, grasslands, shrub lands with low density shrub cover, earthen berms, and any large debris piles. Potential burrows, BUOW individuals, and/or sign (if observed) were recorded and mapped using GPS coordinates.

In total, six potential burrow sites were recorded within the project site and several others were observed within the study area. The potential BUOW burrow sites consisted of currently active California ground squirrel burrows located within earthen embankments, soil storage piles, concrete debris piles, and small soil spoils. Ground squirrels were observed to have very high-density populations throughout the study area. Pursuant to MSHCP requirements, focused burrowing owl surveys and pre-construction surveys are required on all project sites containing burrows or suitable habitat whether owls were found or not. Focused surveys are to be conducted during the breeding season March 1 - August 31. The focused surveys consist of four surveys with the initial survey serving as a systematic survey for burrows located within 500 feet of the project site. Survey transects need to be spaced to allow 100% visual coverage of the ground surface within the study area. Preconstruction surveys should be conducted prior to 30 days of ground disturbance to avoid direct take of burrowing owls, regardless of whether owls were initially found. Additionally, if the site is occupied, 90 percent of habitat must be avoided in order to provide long-term conservation value for the species. If avoidance is not feasible, a Determination of Biologically Equivalent or Superior Preservation report must be prepared.

Figure 5a Jurisdictional Waters



Figure 5b Potential Jurisdictional Waters



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Should BUOW be found during preconstruction surveys, buffers for occupied burrows must be established at approximately 500 feet during the breeding season (February 1 to August 31) and at approximately 150 feet for the non-breeding season. These buffers may be adjusted in consultation with the Regional Conservation Authority of Western Riverside County (RCA) and monitored at the discretion of a qualified biologist. The buffer zone will be clearly marked with flagging and/or construction fencing.

If it is determined that an occupied burrow cannot be avoided and the burrowing owls must be moved, passive relocation techniques will be implemented. Passive relocation includes encouraging owls to move from occupied burrows to alternate natural burrows outside of the 500-foot buffer. The MSHCP and CDFW guidance indicates that passive relocation be conducted between September 1 and February 1 (CDFW 2012). Occupied burrows will not be disturbed during the breeding season.

If work is delayed (does not occur within 30 days of the initial pre-construction survey) or if project activities are halted for 30 days or more, additional pre-construction burrowing owl surveys may be required.

### 4.2.3 Criteria Area Species

The proposed project site does not occur within the required habitat assessment area for Criteria Area Species. Further, the project site does not contain habitat conducive to supporting criteria area species due to the high level of development as well as presence of non-native grasses found in the limited vacant and open space areas. As a result, no further actions related to criteria area species are required pursuant to the MSHCP.

### 4.2.4 Narrow Endemic Plants

The proposed project site does not occur within the required habitat assessment area for Narrow Endemic Plant Species. Further, the project site does not contain habitat conducive to supporting narrow endemic plant species due to the high level of development as well as presence of non-native grasses found in the limited vacant and open space areas. As a result, no further actions related to narrow endemic plant species are required pursuant to the MSHCP.

## 4.3 Urban/Wildlands Interface Guidelines

According to section 6.1.4 of the MSHCP, the Urban/Wildlands Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. The study area is not near a conservation area (the closest is located approximately 2.5 miles southeast of the study area) therefore the Urban/Wildlife Interface Guidelines are not applicable. The study area is also separated from the nearest conservation area by residential areas, agriculture, commercial, and industrial developments. The proposed project would be confined to the existing developed, non-annual grasslands, and agricultural areas. Additionally, the project site is not within any cores and linkages areas covered by the MSHCP, nor is it within any wildlife movement corridors. The proposed project site is isolated from urban/wildlands interfaces and does not propose any impacts to these types of resources; and therefore, no further actions related to urban/wildlands interface guidelines are required pursuant to the MSHCP.

## 4.4 Other Sensitive Biological Resources

Sensitive biological resources not addressed by the MSHCP but addressed under CEQA include United States Fish and Wildlife Service (USFWS) critical habitat, nesting birds, and protected trees.

### 4.4.1 Critical Habitat

As indicated by the USFWS Critical Habitat Portal (USFWS 2020c) and the CDFW Biogeographic Information and Observation System (CDFW 2020a) critical habitat for least Bell's vireo (*Vireo belli pusillus*) and Santa Ana Sucker (*Catostomus santaanae*) is located approximately 2.4 miles south of the project site along the Santa Ana River.

The least Bell's vireo is listed as Endangered in California and was listed as Endangered by the USFWS. Least Bell's vireo generally prefers riparian woodland habitats dominated by native willows (*Salix* sp.), western sycamore (*Platanus racemosa*), and Fremont's cottonwood (*Populus fremontii*) as found along the Santa Ana River and Prado Basin. Based on the distance of critical habitat from the project site and lack of suitable nesting and foraging habitat, the proposed project is not expected to affect Critical Habitat for Least Bell's vireo.

The Santa Ana Sucker is listed as a Threatened in California. Santa Ana suckers inhabit the Santa Ana River and Prado Basin. Based on the distance of critical habitat from the project site and lack of suitable river habitat, the proposed project is not expected to affect Critical Habitat for Santa Ana sucker.

### 4.4.2 Nesting Birds

California Fish and Game Code 3503 and the MBTA protect native birds and their nests from direct take. The project site and adjacent properties contains trees, shrubs, and ground surfaces suitable for nesting birds. To avoid impacts to nesting birds, project activities should be performed outside the nesting bird season (February 1 to August 31). If project activities must occur during the season, a pre-construction nesting bird survey should be performed 3 days prior to the start of ground-disturbing activities.

### 4.4.3 Protected Trees

The City has a tree preservation ordinance (City of Eastvale 2019) that provides for the protection of native oak trees, heritage trees, landmark trees, regulated trees, and street trees, as defined herein occurring within the city limits. Protected trees include the following:

- **Native Oaks.** Native oaks exceeding six inches in diameter when measured at 4.5 feet trunk height. Includes hybrids of native oaks.
- **Heritage Trees.** A tree on the City's Master Tree List over 30 inches in DBH or a multitrunked tree on the Master Tree List having a combined DBH of 50 inches or more.
- **Landmark Trees.** A tree or group of trees determined by the City Council to confer a significant community benefit to the general public due to its size, age, location, historic association or ecological value.
- **Regulated Trees.** Trees required in accordance with the standards of the Zoning Code, such as Parking Lot Shading Trees, or required as conditions of development project approval, such as landscape buffer or screening trees.



- **Street Trees.** A tree of an approved species in accordance with the Eastvale Master Tree List located within 12.5' of a street or sidewalk, measured from the back of the curb or back of the sidewalk. Street Trees can be either privately or publicly owned.

The project site contains numerous ornamental tree plantings, and most are not likely to meet the City criteria as a protected tree. These trees were recently planted in 2018. Additionally, no native oak trees were observed within the project site. However, other species considered by the City as protected may occur along Kimball Avenue. Therefore, a tree removal permit maybe required from the City if street trees are proposed for removal to accommodate the construction of the project along Kimball Avenue.

## 4.5 MSHCP Consistency

Based on this analysis, with implementation of focused and pre-construction surveys for BUOW the proposed project would be consistent with the MSHCP.

## 5 Limitations, Assumptions, and Use Reliance

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An MSHCP consistency analysis and habitat assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis, or re-establish populations in the future. Additionally, plants may not be identifiable outside the normal blooming period and it may not be possible to detect them during surveys. Plants could also become present if environmental conditions change, such as rain events, and dormant individual blooms. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, review of CNDDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDDB, may vary with regard to accuracy and completeness. In particular, the CNDDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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City of Eastvale  
**Limonite Gap Closure Project**

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## 7 Certification and List of Preparers

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

Date: February 7, 2020

Signed:



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Ryan Gilmore, Senior Biologist

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# Appendix A

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The Riverside County Integrated Project (RCIP) Conservation Summary Report





## Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

APN	Cell	Cell Group	Acres	Area Plan	Sub Unit
144010023	None	None	11.25	Eastvale	None
144010020	None	None	36.26	Eastvale	None
144010015	None	None	5.18	Eastvale	None
144010010	None	None	13.52	Eastvale	None
144010009	None	None	20.93	Eastvale	None
144010073	None	None	0.06	Eastvale	None
144010075	None	None	1.11	Eastvale	None
144010060	None	None	11.93	Eastvale	None
144010072	None	None	7.62	Eastvale	None
144010041	None	None	7.68	Eastvale	None
144020011	None	None	1.70	Eastvale	None
144020009	None	None	7.79	Eastvale	None
144020010	None	None	3.23	Eastvale	None

### Habitat Assessments

Habitat assessment shall be required and should address at a minimum potential habitat for the following species:

APN	Amphibia Species	Burrowing Owl	Criteria Area Species	Mammalian Species	Narrow Endemic Plant Species	Special Linkage Area
144010023	No	Yes	No	No	No	No
144010020	No	Yes	No	No	No	No
144010015	No	Yes	No	No	No	No
144010010	No	Yes	No	No	No	No
144010009	No	Yes	No	No	No	No
144010073	No	Yes	No	No	No	No
144010075	No	Yes	No	No	No	No
144010060	No	Yes	No	No	No	No
144010072	No	Yes	No	No	No	No
144010041	No	Yes	No	No	No	No
144020011	No	Yes	No	No	No	No
144020009	No	Yes	No	No	No	No
144020010	No	No	No	No	No	No

## Criteria Area Species

The project site is not in a criteria area species study area.

## Background

The final MSHCP was approved by the County Board of Supervisors on June 17, 2003. The federal and state permits were issued on June 22, 2004 and implementation of the MSHCP began on June 23, 2004.

For more information concerning the MSHCP, contact your local city or the County of Riverside for the unincorporated areas. Additionally, the Western Riverside County Regional Conservation Authority (RCA), which oversees all the cities and County implementation of the MSHCP, can be reached at:

Western Riverside County Regional Conservation Authority  
3403 10th Street, Suite 320  
Riverside, California 92501  
Phone: (951) 955-9700  
Fax: (951) 955-8873  
www.wrc-rca.org

## Introduction

As urbanization has increased within western Riverside County, state and federal regulations have required that public and private developers obtain "Take permits" from Wildlife Agencies for impacts to endangered, threatened, and rare species and their Habitats. This process, however, has resulted in costly delays in public and private Development projects and an assemblage of unconnected Habitat areas designated on a project-by-project basis. This piecemeal and uncoordinated effort to mitigate the effects of Development does not sustain wildlife mobility, genetic flow, or ecosystem health, which require large, interconnected natural areas.

**A variety of capitalized terms are used in this report. Definitions for those terms are provided at the end of this report.**

The MSHCP is a criteria-based plan, focused on preserving individual species through Habitat conservation. The MSHCP is one element of the Riverside County Integrated Project (RCIP), a comprehensive regional planning effort begun in 1999. The purpose of the RCIP is to integrate all aspects of land use, transportation, and conservation planning and implementation in order to develop a comprehensive vision for the future of the County. The overall goal of the MSHCP is rooted in the RCIP Vision Statement and supporting policy directives. The MSHCP will enhance maintenance of biological diversity and ecosystem processes while allowing future economic growth. Preserving a quality of life characterized by well-managed and well-planned growth integrated with an open-space system is a component of the RCIP vision. The MSHCP proposes to conserve approximately 500,000 acres and 146 different species. Approximately 347,000 acres are anticipated to be conserved on existing Public/Quasi-Public Lands, with additional contributions on approximately 153,000 acres from willing sellers. The overall goal of the MSHCP can be supported by the following:

- **Biological Goal:** In the MSHCP Plan Area, conserve Covered Species and their Habitats.

- **Economic Goal:** Improve the future economic development in the County by providing an efficient, streamlined regulatory process through which Development can proceed in an efficient way. The MSHCP and the General Plan will provide the County with a clearly articulated blueprint describing where future Development should and should not occur.
- **Social Goal:** Provide for permanent open space, community edges, and recreational opportunities, which contribute to maintaining the community character of Western Riverside County.

This report has been generated to summarize the guidance in the MSHCP Plan that pertains to this property. Guidelines have been incorporated in the MSHCP Plan to allow applicants to evaluate the application of the MSHCP Criteria within specific locations in the MSHCP Plan Area. Guidance is provided through Area Plan Subunits, Cell Criteria, Cores and Linkages and identification of survey requirements. The guidance and Criteria incorporate flexibility at a variety of levels. The information within this report is composed of three parts: a summary table, Reserve Assembly guidance and survey requirements within the MSHCP Plan Area. The summary table provides specific information on this property to help determine whether it is located within the MSHCP Criteria Area or any study areas. The Reserve Assembly guidance provides direction on assembly of the MSHCP Conservation Area if the property is within the Criteria Area. The survey requirements section describes the surveys that must be conducted on the property if Habitat is present for certain identified species within the Criteria Area or mapped study areas.

### **Reserve Assembly Guidance Within the Criteria Area**

The Reserve Assembly guidance only pertains to properties that are within the Criteria Area. Please check the summary table to determine whether this property is within the Criteria Area. If it is located inside of the Criteria Area, please read both this section and the section about survey requirements within the MSHCP Plan Area. If the property is located outside the Criteria Area, only read the survey requirements within the MSHCP Plan Area section.

The Area Plan Subunits, Cell Criteria and Cores and Linkages provide guidance on assembly of the MSHCP Conservation Area. The Area Plan Subunits section lists Planning Species and Biological Issues and Considerations that are important to Reserve Assembly within a specific Area Plan Subunit. The Cell Criteria identify applicable Cores or Linkages and describe the focus of desired conservation within a particular Cell or Cell Group. Cores and Linkages guidance includes dimensional data and biological considerations within each identified Core or Linkage.

The following is the Area Plan text and Cell Criteria that pertains specifically to this property. The Area Plan text includes the target acreage for conservation within the entire Area Plan, identification of Cores and Linkages within the entire Area Plan and Area Plan Subunit Planning Species and Biological Issues and Considerations. It is important to keep in mind that the Area Plan Subunits, Cell Criteria and Cores and Linkages are drafted to provide guidance for a geographic area that is much larger than an individual property. The guidance is intended to provide context for an individual property and, therefore, all of the guidance and Criteria do not apply to each individual property.

### **Eastvale Area Plan**

This section identifies target acreages, applicable Cores and Linkages, Area Plan Subunits and Criteria for the Eastvale Area Plan. For a summary of the methodology and map resources used to

develop the target acreages and Criteria for the MSHCP Conservation Area, including this Area Plan, see Section 3.3.1.

### *Target Acreages*

The target conservation acreage for the Eastvale Area Plan is 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.

### *Applicable Cores and Linkages*

The MSHCP Conservation Area comprises a variety of existing and proposed Cores, Linkages, Constrained Linkages and Noncontiguous Habitat Blocks (referred to here as “Cores and Linkages”). For descriptions of these Cores and Linkages and more information about the biologically meaningful elements of the MSHCP Conservation Area within the Eastvale Area Plan, see Section 3.2.3 and MSHCP Volume II, Section A.

## **Cores and Linkages Within the Eastvale Area Plan**

- Contains a small portion of Existing Core A

Descriptions of Planning Species, Biological Issues and Considerations and Criteria for each Area Plan Subunit within the Eastvale Area Plan are presented later in this section. These descriptions, combined with the descriptions of the Cores and Linkages referred to above, provide information about biological issues to be considered in conjunction with Reserve Assembly within the Eastvale Area Plan. As noted in Section 3.1, the Area Plan boundaries established as part of the Riverside County General Plan were selected to provide an organizational framework for the Area Plan Subunits and Criteria. While these boundaries are not biologically based, unlike the Cores and Linkages, they relate specifically to General Plan boundaries and the jurisdictional boundaries of incorporated Cities and were selected to facilitate implementation of the MSHCP in the context of existing institutional and planning boundaries.

### *Area Plan Subunits*

The Eastvale Area Plan contains one Subunit. Target conservation acreages for this Subunit are established, as are a description of the Planning Species, Biological Issues and Considerations, and Criteria for this Subunit. For more information regarding specific conservation objectives for the Planning Species, see Section 9.0. Subunit boundaries are depicted on the Cells and Cell Groupings map displays (Figures 3-4 and 3-5). Table 3-3 presents the Criteria for the Eastvale Area Plan.

## **Surveys Within the MSHCP Plan Area**

Of the 146 species covered by the MSHCP, no surveys will be required by applicants for public and private projects for 106 of these Covered Species. Covered Species for which surveys may be required by applicants for public and private Development projects include 4 birds, 3 mammals, 3 amphibians, 3 crustaceans, 14 Narrow Endemic Plants, and 13 other sensitive plants within the Criteria Area. Of these 40 species, study area maps are provided for 34 species, and surveys will be undertaken within suitable Habitat areas in locations identified on these maps in the MSHCP Plan. The remaining six species are associated with riparian/riverine areas and vernal pools and include least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, Riverside fairy shrimp, Santa Rosa Plateau fairy shrimp, and vernal pool fairy shrimp. Although there are no study

area maps for these six species, surveys for these species, if necessary, will be undertaken as described below. It is the goal of the MSHCP to provide for conservation of Covered Species within the approximately 500,000 acre MSHCP Conservation Area (comprised of approximately 347,000 acres of existing Public/Quasi-Public Lands and 153,000 acres of new conservation on private lands). Conservation that may be identified to be desirable as a result of survey findings is not intended to increase the overall 500,000 acres of conservation anticipated under the MSHCP. Please refer to Section 6.0 of the MSHCP Plan, Volume I for more specific information regarding species survey requirements.

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 will be performed as currently required by the California Environmental Quality Act (CEQA) using available information augmented by project-specific mapping. If the mapping identifies suitable habitat for any of the six species associated with riparian/riverine areas and vernal pools listed above and the proposed project design does not incorporate avoidance of the identified habitat, focused surveys for these six species will be conducted, and avoidance and minimization measures will be implemented in accordance with the species-specific objectives for these species. For more specific information regarding survey requirements for species associated with riparian/riverine areas and vernal pools, please refer to Section 6.1.2 of the MSHCP Plan, Volume I.

Habitat conservation is based on the particular Habitat requirements of each species as well as the known distribution data for each species. The existing MSHCP database does not, however, provide the level of detail sufficient to determine the extent of the presence or distribution of Narrow Endemic Plant Species within the MSHCP Plan Area. Since conservation planning decisions for these plant species will have a substantial effect on their status, additional information regarding the presence of these plant species must be gathered during the long-term implementation of the MSHCP to ensure that appropriate conservation of the Narrow Endemic Plants occurs. For more specific information regarding survey requirements for Narrow Endemic Plants, please refer to Section 6.1.3 of the MSHCP Plan, Volume I.

In addition to the Narrow Endemic Plant Species, additional surveys may be needed for certain species in conjunction with Plan implementation in order to achieve coverage for these species. The MSHCP must meet the Federal Endangered Species Act issuance criteria for Habitat Conservation Plans (HCP) which require, among other things, that the HCP disclose the impacts likely to result from the proposed Taking, and measures the applicant will undertake to avoid, minimize and mitigate such impacts. For these species in which coverage is sought under the MSHCP, existing available information is not sufficient to make findings necessary to satisfy these issuance criteria for Take authorization. Survey requirements are incorporated in the MSHCP to provide the level of information necessary to receive coverage for these species in the MSHCP.

Efforts have been made prior to approval of the MSHCP and will be made during the early baseline studies to be conducted as part of the MSHCP management and monitoring efforts to collect as much information as possible regarding the species requiring additional surveys. As data are collected and conclusions can be made regarding the presence of occupied Habitat within the MSHCP Conservation Area for these species, it is anticipated that survey requirements may be modified or waived. Please refer to Sections 6.1.3 and 6.3.2 of the MSHCP Plan, Volume I for more specific information regarding survey requirements.

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# Appendix B

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Jurisdictional Delineation Report

# Appendix C

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Site Photographs





**Photograph 1.** Western boundary of project site at Kimball Avenue. View to the west.



**Photograph 2.** Western portion of the project site at eastern end of Kimball Avenue. View to the north.



**Photograph 3.** Western portion of the project site at eastern end of Kimball Avenue. View to the south.



**Photograph 4.** Western portion of the project site at eastern end of Kimball Avenue. View to the east into construction site and garden nursery.



**Photograph 5.** View into Cucamonga Creek Channel from the eastern bank. View to the west.



**Photograph 6.** Upstream Cucamonga Creek Channel from the eastern bank. View to the north.



**Photograph 7.** Downstream Cucamonga Creek Channel from the eastern bank. View to the south.



**Photograph 8.** View from eastern bank of Cucamonga Creek Channel. View to the east.



**Photograph 9.** View from eastern bank of Cucamonga Creek Channel into proposed road location. View to the north.



**Photograph 10.** Proposed road location on east side of Cucamonga Creek Channel. View to the east.



**Photograph 11.** View into agricultural pond on east side of Cucamonga Creek Channel. View to the southeast.



**Photograph 12.** View into agricultural field with active ground squirrel complex located south of Kimball Avenue. View to the north.



**Photograph 13.** View of active ground squirrel complex within concrete debris pile located at the dairy. View to the north.



**Photograph 14.** View of active ground squirrel complex within concrete soil spoil pile located at the dairy. View to the east.



**Photograph 15.** View of burrow with BUOW sign located within the study area. Note pellets circled in red.



**Photograph 16.** View of burrow with BUOW sign located along north perimeter fence of the dairy within the study area. Note pellets on paper .





# Appendix D

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Observed Plant Species List

## Observed Plant Species List

Scientific Name <sup>1</sup>	Common Name	Indicator Status <sup>2</sup> : Arid West Region
<i>Amsinckia intermedia</i>	common fiddleneck	NL (UPL)
<i>Avena fatua</i>	wildoats	NL (UPL)
<i>Bromus madritensis</i> ssp. <i>rubens</i>	red brome	UPL
<i>Croton setiger</i>	doveweed	NL (UPL)
<i>Erodium cicutarium</i>	red stemmed filaree	NL (UPL)
<i>Eucalyptus globulus</i>	blue gum	NL (UPL)
<i>Heterotheca grandiflora</i>	telegraph weed	NL (UPL)
<i>Nicotiana glauca</i>	tree tobacco	FAC
<i>Salsola tragus</i>	Russian thistle	FACU

<sup>1</sup> Scientific Name as listed in the State of California 2016 Wetland Plant List for listed species, or from Jepson eFlora for taxa not currently included in the State of California 2016 Wetland Plant List

<sup>2</sup> Indicator Status Codes:

FAC Equally likely to occur in wetlands and non-wetlands.

FACU Plants that typically occur in xeric or mesic non-wetland habitats but may frequently occur in standing water or saturated soils.

UPL Plants that rarely occur in water or saturated soils.

NL (UPL) Species is not listed and therefore treated as an upland plant in this region

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