BIOLOGICAL TECHNICAL REPORT

FOR

MERRILL COMMERCE CENTER SPECIFIC PLAN

LOCATED IN THE CITY OF ONTARIO SAN BERNARDINO COUNTY, CALIFORNIA

WITH

OFF-SITE IMPROVEMENTS LOCATED IN THE CITIES OF ONTARIO AND CHINO, SAN BERNARDINO COUNTY, CALIFORNIA

Project Applicants:

Merrill Commerce Center East LLC Merrill Commerce Center West LLC Liberty Property Limited Partnership

Prepared By:

Glenn Lukos Associates, Inc. 29 Orchard Lake Forest, California 92630 Phone: (949) 837-0404 Report Preparer: Zack West

September 19, 2019

INFORMATION SUMMARY

A. Report Date: September 19, 2019

B. Report Title: Biological Technical Report for the Merrill Commerce

Center Specific Plan

C. Project Site

Location: City of Ontario, San Bernardino County, California, with

off-site improvements located in the Cities of Ontario and

Chino, San Bernardino County, California

D. Owners/Applicants: Merrill Commerce Center East LLC

Merrill Commerce Center West LLC Liberty Property Limited Partnership

E. Principal

Investigator: Glenn Lukos Associates, Inc.

29 Orchard

Lake Forest, California 92630

Phone: (949) 837-0404 Fax: (949) 837-5834

Report Preparer: Zack West

F. Individuals Conducting Fieldwork: Jeff Ahrens, Tricia Campbell, Kevin Livergood, David Moskovitz, David Smith, Jillian Stephens, Amy Walters, Zack

West, Scott Cameron (Ecological Sciences, Inc.)

TABLE OF CONTENTS

	Page #
INFO	RMATION SUMMARY
1.0	INTRODUCTION
1.	8 · · · · · · · · · · · · · · · · · · ·
1.2	J
1.3	3 Project Description
2.0	METHODOLOGY
2.	1 Summary of Surveys
2.2	· · · · · · · · · · · · · · · · · · ·
2.3	
2.4	
3.0	REGULATORY SETTING
3.	State and/or Federally Listed Plants and Animals
3.2	· · · · · · · · · · · · · · · · · · ·
3.3	
3.4	
3.5	
4.0	RESULTS
4.	1 Existing Conditions
4.2	
4.3	
4.4	4 Special-Status Vegetation Communities (Habitats)
4.5	5 Special-Status Plants
4.0	6 Special-Status Animals
4.	7 Raptor Use
4.8	6
4.9	
4.	10 Wildlife Migration/Nurseries
4.	
5.0	IMPACT ANALYSIS
5.	1 California Environmental Quality Act (CEQA)
5.2	

5.3	Impacts to	Special-Status Plants
5.4		Special-Status Animals
5.5	Impacts to	Critical Habitat
5.6		Nesting Birds
5.7	Impacts to .	Jurisdictional Waters
5.8	Wildlife M	igration/Nurseries
5.9	Indirect Im	pacts to Biological Resources
5.9		e Impacts to Biological Resources
6.0	MITIGATION	N/AVOIDANCE MEASURES
6.1	Burrowing	Owl
6.2		rds
6.3		nal Waters
6.4		tus Bats
7.0	REFERENCE	S
8.0	CERTIFICAT	TION
TABLI	ES	
Table 2	2-1. Summary o	f Biological Surveys for the Project Study Area
	•	f Burrowing Owl Surveys
		as 1, 2, 3, and 4 and Threat Code Extensions
		f Vegetation/Land Cover Types for the Project Study Area
		tus Plants Evaluated for the Project Study Area
	-	tus Wildlife Evaluated for the Project Study Area
		f Vegetation/Land Use Impacts
EXHIE	BITS	
Exhibit	1	Regional Map
Exhibit		Vicinity Map
Exhibit		Study Area Map
Exhibit		Vegetation Map
Exhibit		Soils Map
Exhibit		Burrowing Owl Survey Map
Exhibit		Corps/Regional Board Jurisdictional Delineation Map
Exhibit		CDFW Jurisdictional Delineation Map
Exhibit		Corps/Regional Board Impacts Map
Exhibit		CDFW Impacts Map
Exhibit		Site Photographs

APPENDICES

Appendix A Appendix B Appendix C

Floral Compendium Faunal Compendium Focused Habitat Assessment for the Delhi Sands Flower-loving

Fly

1.0 INTRODUCTION

1.1 Background and Scope of Work

This document provides the results of general biological surveys and focused biological surveys for the approximately 371.4-acre Merrill Commerce Center Specific Plan (the Project) located in the City of Ontario, San Bernardino County, California, and approximately 113.2 acres of potential physical disturbance areas for off-site roadway and utility infrastructure improvements, which are planned to occur in various linear alignments in both the Cities of Ontario and Chino, San Bernardino County, California. Collectively, these 484.6 acres are referred to herein as "the Project site." This report identifies and evaluates impacts to biological resources associated with the proposed Project in the context of the California Environmental Quality Act (CEQA), State and Federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), the California Fish and Game Code and the City of Chino's The Preserve Resources Management Plan (RMP)(MBA 2003).

The scope of this report includes a discussion of existing conditions for the approximately 484.6-acre Project site and approximately 763-acre Project study area (which is defined as the approximately 484.6-acre Project site plus a 100-foot buffer), all methods employed regarding the general biological surveys and focused biological surveys, the documentation of botanical and wildlife resources identified (including special-status species), and an analysis of impacts to biological resources. Methods of the study include a review of relevant literature, field surveys, and a Geographical Information System (GIS)-based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

The field study focused on a number of primary objectives that would comply with CEQA requirements, including (1) general reconnaissance survey and vegetation mapping; (2) general biological surveys; (3) habitat assessments for special-status plant species; and (4) habitat assessments for special-status wildlife species. Observations of all plant and wildlife species were recorded during the general biological surveys and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium.

1.2 Project Location

The Project study area comprises approximately 763 acres in the Cities of Ontario and Chino, California [Exhibit 1 – Regional Map] and is depicted on the U.S. Geological Survey (USGS) Corona North, Ontario, and Prado Dam, California 7.5-minute topographic quadrangle maps (dated 1967 and photorevised in 1981) at Sections 15, 22 and unsectioned portions of Township 1 South and Township 2 South, Range 7 West [Exhibit 2 – Vicinity Map]. The Project study area is bordered by a combination of agriculture; residential, commercial, and industrial development; the Chino Airport; correctional institutions; flood control facilities; and public roadways.

1.3 Project Description

The Project consists of a Specific Plan that would allow for the future development of up to 5,814,000 square feet (s.f.) of industrial building space and up to 1,193,000 s.f. of business park building space to be constructed within the proposed 371.4-acre Specific Plan property. The Specific Plan is a policy-level entitlement approval; no building footprints are proposed at this time. Additionally, the Project would entail the construction of off-site utility and roadway infrastructure in the City of Ontario and the City of Chino to support development within the Specific Plan.

2.0 METHODOLOGY

In order to adequately identify biological resources in accordance with the requirements of CEQA, Glenn Lukos Associates (GLA) assembled biological data consisting of three main components:

- Delineation of aquatic resources (including wetlands and riparian habitat) subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and CDFW;
- Performance of vegetation mapping; and
- Performance of habitat assessments, and site-specific biological surveys, to evaluate the presence/absence of special-status species in accordance with the requirements of CEQA.

The focus of the biological surveys was determined through initial site reconnaissance, a review of the California Natural Diversity Database (CNDDB) [CDFW 2018 and 2019], CNPS 8th edition online inventory (CNPS 2018 and 2019), Natural Resource Conservation Service (NRCS) soil data, other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project study area were conducted on foot in the proposed development areas and proposed off-site infrastructure disturbance areas for each target plant or animal species identified below.

2.1 Summary of Surveys

GLA conducted biological studies in order to identify and analyze actual or potential impacts to biological resources associated with development of the Project site within the proposed Merrill Commerce Center Specific Plan and the installation of infrastructure within the potential off-site improvement areas of the Project site. Observations of all plant and wildlife species were recorded during each of the above-mentioned survey efforts [Appendix A: Floral Compendium and Appendix B: Faunal Compendium]. The studies conducted include the following:

- Performance of vegetation mapping;
- Performance of site-specific habitat assessments and biological surveys to evaluate the potential presence/absence of special-status species (or potentially suitable habitat) to the satisfaction of CEQA and federal and state regulations; and

• Delineation/evaluation of aquatic resources (including wetlands and riparian habitat) potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and CDFW.

Table 2-1 provides a summary list of survey dates, survey types and personnel.

Table 2-1. Summary of Biological Surveys for the Project Study Area.

Survey Type	Survey Dates	Biologists
General Biological Survey	4/4/18, 4/5/18, 4/11/18	ZW
Focused Burrowing Owl Surveys	4/4/18, 4/5/18, 4/11/18,	JA, TC, KL, DM, DS, JS, AW, ZW
	4/14/18, 5/11/18, 5/18/18,	
	5/22/18, 4/9/2019, 5/23/19,	
	6/19/19, 7/11/19	
Focused Special-status Plant	4/4/18, 4/5/18, 4/19/18,	DM, DS, JS, ZW
Surveys	5/18/18, 5/22/18, 7/13/18,	
	4/9/19, 5/23/19, 6/19/19	
Delhi Sands Flower-Loving Fly	September 2018, February	Ecological Sciences, Inc.
Focused Habitat Assessment	2019	
Jurisdictional Delineation	9/12/18	ZW

 $JA = Jeff \ Ahrens \ TC = Tricia \ Campbell \ KL = Kevin \ Livergood \ DM = David \ Moskovitz \ DS = David \ Smith \ JS = Jillian \ Stephens \ AW = Amy \ Walters \ ZW = Zack \ West$

Individual plants, wildlife species, and vegetation communities are evaluated in this report based on their "special-status."

For the purpose of this report, plants were considered "special-status" based on one or more of the following criteria:

- Listing through the Federal and/or State Endangered Species Act (ESA);
- Occurrence in the CNPS Rare Plant Inventory (Rank 1A/1B, 2A/2B, 3, or 4); and/or
- Occurrence in the CNDDB inventory.

Wildlife species were considered "special-status" based on one or more of the following criteria:

- Listing through the Federal and/or State ESA; and
- Designation by the State as a Species of Special Concern (SSC) or California Fully Protected (CFP) species.

Vegetation communities were considered "special-status" based on one or more of the following criteria:

- Occurrence in the CNDDB inventory; and
- Riparian/wetland vegetation communities.

2.2 Botanical Resources

A site-specific survey program was designed to accurately document the botanical resources within the Project study area, and consisted of five components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project study area; (3) general field reconnaissance surveys; (4) vegetation mapping; and (5) habitat assessments and focused surveys for special-status plants.

2.2.1 Literature Search

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included the following:

- California Native Plant Society, Rare Plant Program Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39) for the USGS 7.5' quadrangles: Black Star Canyon, Corona North, Corona South, Fontana, Guasti, Lake Matthews, Ontario, Orange, Prado Dam, Riverside West, and Yorba Linda, California (CNPS 2018 and 2019); and
- CNDDB for the USGS 7.5' quadrangles: Black Star Canyon, Corona North, Corona South, Fontana, Guasti, Lake Matthews, Ontario, Orange, Prado Dam, Riverside West, and Yorba Linda, California (CNDDB 2018 and 2019).

2.2.2 Vegetation Mapping

Due to highly disturbed site conditions there are no natural vegetation alliances or associations fitting or approaching criteria for membership rules in A Manual of California Vegetation, Second Edition (MCVII; Sawyer et al. 2009). Vegetation present is relatively sparse overall and reflects ornamental plantings (e.g. nonnative trees) or spontaneous, herb-dominated species strongly adapted to anthropogenic disturbance. Instead, mapping was based on the predominant land cover type, and was mapped directly onto a 200-scale (1"=200") aerial photograph.

A vegetation map is included as Exhibit 4. Representative site photographs are included as Exhibit 9.

2.2.3 Special-Status Plant Species and Habitats Evaluated for the Project Study Area

A literature search was conducted to obtain a list of special status plants with the potential to occur within the Project study area. The CNDDB was initially consulted to determine well-known occurrences of plants and habitats of special concern in the region. Other sources used to develop a list of target species for the survey program included the CNPS online inventory (2018 and 2019).

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur within the Project study area were developed and incorporated into a

mapping and survey program to achieve the following goals: (1) characterize the vegetation associations and land use; (2) prepare a detailed floristic compendium; (3) identify the potential for any special status plants that may occur within the Project study area; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Project study area, if applicable.

2.2.4 Botanical Surveys

Although special-status plant species are not expected to occur within the Project study area due to the absence of native vegetation communities and the high level of decades-long ongoing human disturbance, surveys for special-status plant species were performed for completeness of documentation under CEQA. GLA biologists Zack West, David Moskovitz, David Smith, and Jillian Stephens visited the study area on April 4, 5, and 19, 2018; May 18 and 22, 2018; July 13, 2018; and April 9, May 23, June 19, and July 11, 2019 to conduct general and focused plant surveys. Surveys were conducted in accordance with accepted botanical survey guidelines (CDFG 2009, CNPS 2001, USFWS 2000). As applicable, surveys were conducted at appropriate times based on precipitation and flowering periods. An aerial photograph, a soil map, and/or a topographic map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Project study area. Surveys were conducted by following meandering transects within target areas of suitable habitat. All plant species encountered during the field surveys were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984). A complete list of the plant species observed is provided in Appendix A. Scientific nomenclature and common names used in this report follow Baldwin et al (2012), and Munz (1974).

2.3 Wildlife Resources

Wildlife species were evaluated and detected during field surveys by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project study area by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit. A complete list of wildlife species observed within the Project study area is provided in Appendix B. Scientific nomenclature and common names for vertebrate species referred to in this report follow the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFG 2008), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians 6th Edition, Collins and Taggert (2009) for amphibians and reptiles, and the American Ornithologists' Union Checklist 7th Edition (2009) for birds. The methodology (including any applicable survey protocols) utilized to conduct general surveys, habitat assessments, and/or focused surveys for special-status animals are included below.

2.3.1 General Surveys

Birds

During the general biological and reconnaissance survey within the Project study area, birds were detected incidentally by direct observation and/or by vocalizations, with identifications recorded in field notes.

Mammals

During general biological and reconnaissance survey within the Project study area, mammals were identified and detected incidentally by direct observations and/or by the presence of diagnostic sign (i.e., tracks, burrows, scat, etc.).

Reptiles and Amphibians

During general biological and reconnaissance surveys within the Project study area, reptiles and amphibians were identified incidentally during surveys. Habitats were examined for diagnostic reptile sign, which include shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed, as well as diagnostic sign, were recorded in field notes.

2.3.2 Special-Status Animal Species Reviewed

A literature search was conducted in order to obtain a list of special-status wildlife species with the potential to occur within the Project study area. Species were evaluated based on two factors: 1) species identified by the CNDDB (2018 and 2019) as occurring (either currently or historically) on or in the vicinity of the Project study area, and 2) any other special-status animals that are known to occur within the vicinity of the Project study area, or for which potentially suitable habitat occurs on the Project study area.

2.3.3 Habitat Assessment for Special Status Animal Species

GLA biologists Zack West conducted habitat assessments for special-status animal species on April 4, 5, and 11, 2018. In addition, Scott Cameron of Ecological Sciences, Inc. conducted a focused habitat assessment for the federally listed as Endangered Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) in September 2018 and additional areas in February 2019. Refer to Appendix C for full details. An aerial photograph, soil map and/or topographic map were used to determine the vegetation community types and other physical features that may support special-status and uncommon taxa within the Project study area.

2.3.4 Focused Surveys for Special-Status Animals Species

Burrowing Owl

GLA biologists Jeff Ahrens, Tricia Campbell, Kevin Livergood, David Moskovitz, Amy Walters, and Zack West conducted focused surveys for the burrowing owl (*Athene cunicularia*)

for all suitable habitat areas within the Project study area. Surveys were conducted in accordance with survey guidelines described in the 2012 CDFG Staff Report on Burrowing Owl Mitigation. The guidelines stipulate that four focused survey visits should be conducted between February 15 and July 15, with the first visit occurring between February 15 and April 15. The remaining three visits should be conducted three weeks apart from each other, with at least one visit occurring between June 15 and July 15. Focused surveys were conducted on April 4, 5, 11, and 14, 2018; May 11, 18, and 22, 2018; June 7, 2018; July 2 and 13, 2018; and April 9, May 23, June 19, and July 11, 2019. As recommended by the survey guidelines, the survey visits were conducted between morning civil twilight and 10:00 AM, and between two hours before sunset and evening civil twilight. Weather conditions during the surveys were conducive to a high level of bird activity.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Exhibit 6 – Burrowing Owl Survey Map identifies the burrowing owl survey areas within the Project study area. Transects were spaced between 7 m and 20 m apart, adjusting for vegetation height and density, in order to provide adequate visual coverage of the survey areas. At the start of each transect, and at least every 100 m along transects, the survey area was scanned for burrowing owls using binoculars. All suitable burrows were inspected for diagnostic owl sign (e.g., pellets, prey remains, whitewash, feathers, bones, and/or decoration) in order to identify potentially occupied burrows. Exhibit 6 – Burrowing Owl Survey Map provides locations of suitable burrows mapped during the transect surveys. Table 2-2 summarizes the burrowing owl survey visits. The results of the burrowing owl surveys are documented in Section 4.0 of this report.

Table 2-2. Summary of Burrowing Owl Surveys

Survey Date	Biologist	Start/End Time	Start/End Temperature (Fahrenheit)	Wind Speed (mph)	Cloud Cover
4/4/18	AW, ZW	06:40-10:20	56-64	0-1	Mostly clear
4/5/18	KL, ZW	06:45-10:30	56-61	0-2	Overcast
4/11/18	JA, KL,	06:40-09:35	56-72	0-1	Mostly
	ZW				clear
4/14/18	TC	17:15-19:20	84-77	5-10	Clear
5/11/18	JA	05:30-10:30	58-62	1-2	Overcast
5/18/18	DM, ZW	06:10-10:55	60-62	0-2	Overcast
5/22/18	ZW	08:10-08:50	62	0-3	Overcast
6/7/18	JA	05:25-09:30	56-60	1-2	Overcast
7/2/18	JA	06:30-09:30	62-70	1-3	Overcast
7/13/18	DM, ZW	07:10-09:30	82-90	0-4	Mostly
					clear
4/9/19	DS	07:00-08:45	57-63	0-2	Clear
5/23/19	JS	06:45-08:15	52-56	0-3	Overcast
6/19/19	JS	05:30-07:30	60-65	0-1	Overcast

Survey Date	Biologist	Start/End Time	Start/End Temperature (Fahrenheit)	Wind Speed (mph)	Cloud Cover
7/11/19	ZW	07:05-09:50	74-81	0-1	Clear

 $\begin{array}{ll} JA = Jeff \; Ahrens & TC = Tricia \; Campbell & KL = Kevin \; Livergood & DM = David \; Moskovitz \\ AW = Amy \; Walters & ZW = Zack \; West \\ \end{array}$

2.4 <u>Jurisdictional Delineation</u>

Prior to beginning the field delineation a 200-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine the locations of potential areas of Corps/CDFW jurisdiction. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Potential wetland habitats at the subject study area were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual¹ (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement)². The presence of an Ordinary High Water Mark (OHWM) was determined using the 2008 Field Guide to Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States³ in conjunction with the Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.⁴ While in the field the limits of the OHWM, wetlands, and CDFW jurisdiction were recorded using GPS technology and/or on copies of the aerial photography. Other data were recorded onto the appropriate datasheets. The results of the Jurisdictional Delineation are described in Section 4.0 of this report and depicted on Exhibit 7a – Corps/Regional Board Jurisdictional Delineation Map and Exhibit 7b – CDFW Jurisdictional Delineation Map.

3.0 REGULATORY SETTING

The proposed Project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state- and federally listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-

_

¹ Environmental Laboratory. 1987. <u>Corps of Engineers Wetlands Delineation Manual</u>, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

² U.S. Army Corps of Engineers. 2008. <u>Regional Supplement to the Corps of Engineers Wetland Delineation</u> <u>Manual: Arid West Supplement (Version 2.0)</u>. Ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

³ Lichvar, R. W., and S. M. McColley. 2008. <u>A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States</u>. ERDC/CRREL TR-08-12. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. (http://www.crrel.usace.army.mil/library/technicalreports/ERDC-CRREL-TR-08-12.pdf).

⁴ Curtis, Katherine E. and Robert Lichevar. 2010. <u>Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States</u>. ERDC/CRREL TN-10-1. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory.

status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

3.1 State and/or Federally Listed Plants or Animals

3.1.1 State of California Endangered Species Act

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 the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate 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 the 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 memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

3.1.2 Federal Endangered Species Act

The FESA of 1973 defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that 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 in Section 3(18) of 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 that result in injury to, or death of

species as forms of "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.

3.1.3 State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).
- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the CESA require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

3.2 California Environmental Quality Act

3.2.1 CEQA Guidelines Section 15380

CEQA requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Sections 5.1.1 and 5.2.2 below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, CDFW recognizes that plants on Lists 1A, 1B, or 2 of the CNPS *Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 or 4.

3.2.2 Special-Status Plants, Wildlife and Vegetation Communities Evaluated Under CEQA

Federally Designated Special-Status Species

Within recent years, the USFWS instituted changes in the listing status of 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) 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. 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 this report the following acronyms are used for federal special-status species:

•	FE	Federally listed as Endangered
•	FT	Federally listed as Threatened
•	FPE	Federally proposed for listing as Endangered
•	FPT	Federally proposed for listing as Threatened
•	FC	Federal Candidate Species (former C1 species)
•	FSC	Federal Species of Concern (former C2 species)

State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC are designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDB project. Informally listed taxa are not protected, 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 this report the following acronyms are used for State special-status species:

•	SE	State-listed as Endangered
•	ST	State-listed as Threatened
•	SR	State-listed as Rare
•	SCE	State Candidate for listing as Endangered
•	SCT	State Candidate for listing as Threatened
•	SFP	State Fully Protected
•	SP	State Protected
•	SSC	State Species of Special Concern

California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS's Eighth Edition of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* separates plants of interest into five ranks. CNPS 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. The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS has developed five categories of rarity that are summarized in Table 3-1.

Table 3-1. CNPS Ranks 1, 2, 3, & 4, and Threat Code Extensions

CNPS Rank	Comments
Rank 1A – Plants Presumed	Thought to be extinct in California based on a lack of observation or
Extirpated in California and	detection for many years.
Either Rare or Extinct	
Elsewhere	
Rank 1B – Plants Rare,	Species, which are generally rare throughout their range that are also
Threatened, or Endangered in	judged to be vulnerable to other threats such as declining habitat.
California and Elsewhere	
Rank 2A – Plants presumed	Species that are presumed extinct in California but more common
Extirpated in California, But	outside of California
Common Elsewhere	
Rank 2B – Plants Rare,	Species that are rare in California but more common outside of
Threatened or Endangered in	California
California, But More	
Common Elsewhere	
Rank 3 – Plants About Which	Species that are thought to be rare or in decline but CNPS lacks the
More Information Is Needed	information needed to assign to the appropriate list. In most instances,
(A Review List)	the extent of surveys for these species is not sufficient to allow CNPS
	to accurately assess whether these species should be assigned to a
	specific rank. In addition, many of the Rank 3 species have associated
	taxonomic problems such that the validity of their current taxonomy is
	unclear.
Rank 4 – Plants of Limited	Species that are currently thought to be limited in distribution or range
Distribution (A Watch List)	whose vulnerability or susceptibility to threat is currently low. In
	some cases, as noted above for Rank 3 species, CNPS lacks survey
	data to accurately determine status in California. Many species have
	been placed on Rank 4 in previous editions of the "Inventory" and
	have been removed as survey data has indicated that the species are
	more common than previously thought. CNPS recommends that
	species currently included on this list should be monitored to ensure
	that future substantial declines are minimized.
Extension	Comments
.1 – Seriously endangered in	Species with over 80% of occurrences threatened and/or have a high
California	degree and immediacy of threat.
.2 – Fairly endangered in	Species with 20-80% of occurrences threatened.
California	
.3 – Not very endangered in	Species with <20% of occurrences threatened or with no current
California	threats known.

3.3 **Jurisdictional Waters**

3.3.1 **Army Corps of Engineers**

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a)⁵ 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.⁶ 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.

⁵ On October 9, 2015, the U.S. 6th District Circuit Court of Appeals ordered a nationwide stay on the Corps and EPA's definition of waters of the United States under the Clean Water Rule ("Clean Water Rule: Definition of 'Waters of the United States'; Final Rule," 80 Federal Register 124 (29 June 2015), pp. 37054-37127). As a result, the Corps' regulations that were in effect prior to the August 28, 2015 Clean Water Rule is again in effect until such a time as the Court order is satisfied, if this occurs. In addition, President Trump signed an Executive Order on February 28, 2017 that instructs the EPA and Corps to formally reconsider the Rule, which could lead to a re-write of the law or a complete repeal.

⁶ The term "prior converted cropland" is defined in the Corps' Regulatory Guidance Letter 90-7 (dated September 26, 1990) as "wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent that they no longer exhibit important wetland values. Specifically, prior converted cropland is inundated for no more than 14 consecutive days during the growing season..." [Emphasis added.]

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.

In the absence of wetlands, the limits of Corps 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.

1. Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, EPA asserted that Corps jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of "waters of the United States" in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the Clean Water Act.

The written opinion notes that the court's previous support of the Corps' expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that <u>abutted</u> a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.

Therefore, we believe that the court's opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act (regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

2. Rapanos v. United States and Carabell v. United States

On June 5, 2007, the U.S. Environmental Protection Agency (EPA) and Corps issued joint guidance that addresses the scope of jurisdiction pursuant to the Clean Water Act in light of the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* ("Rapanos"). The chart below was provided in the joint EPA/Corps guidance.

For project sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPMs) tributary to TNWs and/or their adjacent wetlands as set forth in the chart below, the Corps must apply the significant nexus standard.

For "isolated" waters or wetlands, the joint guidance also requires an evaluation by the Corps and EPA to determine whether other interstate commerce clause nexuses, not addressed in the SWANCC decision are associated with isolated features on project sites for which a jurisdictional determination is being sought from the Corps.

The agencies will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months)
- Wetlands that directly abut such tributaries

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters
- Significant nexus includes consideration of hydrologic and ecologic factors

3. 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 Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Delineation 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 manual and 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^{7 8};
- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the 1987 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.

3.3.2 Regional Water Quality Control Board

Section 401 of the Clean Water Act requires any applicant for a Section 404 permit to obtain certification from the State that the discharge (and the operation of the facility being constructed) will comply with the applicable effluent limitation and water quality standards. In California, this 401 certification is obtained from the Regional Water Quality Control Board. The Corps, by law, cannot issue a Section 404 permit until a 401 certification is issued or waived.

16

⁷ 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.

⁸ Note the Corps 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.

Subsequent to the SWANCC decision, the Chief Counsel for the State Water Resources Control Board issued a memorandum that addressed the effects of the SWANCC decision on the Section 401 Water Quality Certification Program. The memorandum states:

California's right and duty to evaluate certification requests under section 401 is pendant to (or dependent upon) a valid application for a section 404 permit from the Corps, or another application for a federal license or permit. Thus, if the Corps determines that the water body in question is not subject to regulation under the COE's 404 program, for instance, no application for 401 certification will be required...

The SWANCC decision does not affect the Porter Cologne authorities to regulate discharges to isolated, non-navigable waters of the states....

Water Code section 13260 requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the state to file a report of discharge (an application for waste discharge requirements)." (Water Code § 13260(a)(1) (emphasis added).) The term "waters of the state" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." (Water Code § 13050(e).) The U.S. Supreme Court's ruling in SWANCC has no bearing on the Porter-Cologne definition. While all waters of the United States that are within the borders of California are also waters of the state, the converse is not true—waters of the United States is a subset of waters of the state. Thus, since Porter-Cologne was enacted California always had and retains authority to regulate discharges of waste into any waters of the state, regardless of whether the COE has concurrent jurisdiction under section 404. The fact that often Regional Boards opted to regulate discharges to, e.g., vernal pools, through the 401 program in lieu of or in addition to issuing waste discharge requirements (or waivers thereof) does not preclude the regions from issuing WDRs (or waivers of WDRs) in the absence of a request for 401 certification....

In this memorandum, the SWRCB's Chief Counsel has made the clear assumption that fill material to be discharged into isolated waters of the United States is to be considered equivalent to "waste" and therefore subject to the authority of the Porter Cologne Water Quality Act.

3.4 California Department of Fish and Wildlife

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.

3.5 City of Chino, The Preserve Resource Management Plan

Off-site flood control improvements to the Grove Channel within the Chino Airport, which are necessary to accommodate proposed development in the Merrill Commerce Center Specific Plan area, are located within the boundary of the City of Chino's "The Preserve Specific Plan" (EDAW AECOM 2011[amended]) and The Preserve, Chino Sphere of Influence – Subarea 2, Environmental Impact Report (EIR) (Michael Brandman Associates, 2003a). A Resources Management Plan (RMP) (Michael Brandman Associates, 2003b) was adopted and provides the roadmap for successfully implementing the vision and requirements of the Specific Plan and the EIR. Therefore, this report provides analysis and mitigation consistent with the RMP for resources located within the RMP boundary; specifically, burrowing owl.

4.0 RESULTS

This section provides the results of general biological surveys, vegetation mapping, habitat assessments and focused surveys for special-status plants and animals, and a jurisdictional delineation for Waters of the United States (including wetlands) subject to the jurisdiction of the Corps and Regional Board, and streams (including riparian vegetation) and lakes subject to the jurisdiction of CDFW.

4.1 Existing Conditions

The Project study consists of a mix of active agriculture in the form of dairy operations and row crops, such as corn fields, and disturbed/developed areas consisting of residential and commercial development, processing facilities associated with agricultural operations, public road facilities, flood control facilities, and a portion of the Chino Airport property. The entirety of the Project study area is subject to decades-long human disturbance, such as farming, trucking operations, public roadways, and flood control facilities, which are all subject to ongoing maintenance activities.

Topography within the Project study area is generally flat, gently sloping from north to south. Elevations within the study area range from approximately 895 feet above mean sea level (amsl) in the north to approximately 595 feet amsl in the south.

4.2 <u>Vegetation</u>

During vegetation mapping of the Project study area, two different land cover types were identified. Table 4-1 provides a summary of land cover types and the corresponding acreage. Detailed descriptions of each land cover type follow the table. A Vegetation Map is attached as Exhibit 4. Photographs depicting the various vegetation types and land uses are attached as Exhibit 9.

Table 4-1. Summary of Vegetation/Land Cover Types for the Project Study Area

Land Cover Type	Area of Project	
	Study Area (acres)	
Agriculture	524.5	
Disturbed/Developed	238.8	
Total	763.3	

4.2.1 Agriculture

Agricultural areas within the Project study area consist of active dairy operations and row crops. Areas associated with the dairy operations include corrals, pastures, and treatment basins designed to retain all runoff from the associated facilities. Row crops include active production fields, such as corn.

4.2.2 Disturbed/Developed

Disturbed/developed areas within the Project study area consist of residential and commercial development, processing facilities associated with agricultural operations, public road facilities, flood control facilities, and a portion of the Chino Airport. These areas have been subject to decades-long maintenance and ongoing human disturbance.

4.3 Wildlife

Wildlife species detected consist of those typical to an urbanized agricultural setting, and include: western fence lizard (*Sceloporus occidentalis*), rock pigeon (*Columba livia*), Eurasian collared-dove (*Streptopelia decaocto*), house finch (*Carpodacus mexicanus*), lesser goldfinch (*Psaltriparus minimus*), white-crowned sparrow (*Zonotrichia leucophrys*), savannah sparrow (*Passerculus sandwichensis*), Anna's hummingbird (*Calypte anna*), Bewick's wren (*Thryomanes bewickii*), red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipiter cooperii*), American kestrel (*Falco sparverius*), turkey vulture (*Cathartes aura*), black phoebe (*Sayornis nigricans*), western kingbird (*Tyrannus verticalis*), Cassin's kingbird (*Tyrannus vociferus*), European starling (*Sturnus vulgaris*), Brewer's blackbird (*Euphagus cyanocephalus*), brown-headed cowbird (*Molothrus ater*), yellow-rumped warbler (*Setophaga coronata*), killdeer (*Charadrius vociferus*), northern mockingbird (*Mimus polyglottos*), common raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), Botta's pocket gopher (*Thomomys bottae*), desert cottontail

(Sylvilagus audubonii), California ground squirrel (Otospermophilus beecheyi), domestic cat (Felis silvestris), and domestic dog (Canis familiaris).

For a full list of wildlife species detected within the Project area, see Appendix B – Faunal Compendium.

4.4 Special-Status Vegetation Communities (Habitats)

A review of the CNDDB (2018 and 2019) identified the following eleven special-status habitats as occurring within the vicinity of the study area: California walnut woodland, Riversidean alluvial fan sage scrub, Southern California arroyo chub/Santa Ana sucker stream, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern interior cypress forest, southern riparian forest, southern riparian scrub, southern sycamore alder riparian woodland, southern willow scrub, and walnut forest. The study area does not support these or any other special-status habitats.

4.5 Special-Status Plants

No special-status plants were detected within the Project study area. Species with Table 4-2 provides a list of special-status plants evaluated for the Project study area through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors: 1) species identified by the CNDDB and CNPS as occurring (either currently or historically) on or in the vicinity of the Project study area, and 2) any other special-status plants that are known to occur within the vicinity of the Project study area, or for which potentially suitable habitat occurs within the study area.

Table 4-2. Special-Status Plants Evaluated for the Project Study Area

Status

Federal State

 $\begin{array}{ll} FE-Fe derally \ Endangered \\ FT-Fe derally \ Threatened \\ \end{array} \begin{array}{ll} SE-State \ Endangered \\ ST-State \ Threatened \\ \end{array}$

FC - Federal Candidate

CNPS

Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.

Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.

Rank 2A – Plants presumed extirpated in California, but common elsewhere.

Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.

Rank 3 – Plants about which more information is needed (a review list).

Rank 4 – Plants of limited distribution (a watch list).

CNPS Threat Code extension

- .1 Seriously endangered in California (over 80% occurrences threatened)
- .2 Fairly endangered in California (20-80% occurrences threatened)
- .3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

Occurrence

- Does not occur The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Absent The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Allen's pentachaeta Pentachaeta aurea ssp. allenii	Federal: None State: None CNPS: Rank 1B.1	Openings in coastal sage scrub, and valley and foothill grasslands.	Does not occur.
Brand's star phacelia Phacelia stellaris	Federal: None State: None CNPS: Rank 1B.1	Coastal dunes and coastal scrub.	Does not occur.
Braunton's milk-vetch Astragalus brauntonii	Federal: FE State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland. Usually carbonate soils. Recent burn or disturbed areas.	Does not occur.
California beardtongue Penstemon californicus	Federal: None State: None CNPS: Rank 1B.2	Sandy soils in chaparral, lower montane coniferous forest, and pinyon and juniper woodland.	Does not occur.
California saw-grass Cladium californicum	Federal: None State: None CNPS: Rank 2B.2	Alkali marsh, meadows, and seeps.	Does not occur.

Species Name	Status	Habitat Requirements	Potential for Occurrence
California muhly Muhlenbergia californica	Federal: None State: None CNPS: Rank 4.3	Chaparral, coastal scrub, lower montane coniferous forest, and meadows and seeps.	Does not occur.
Chaparral nolina Nolina cismontana	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub. Occurring on sandstone or gabbro substrates.	Does not occur.
Chaparral ragwort Senecio aphanactis	Federal: None State: None CNPS: Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Does not occur.
Chaparral sand-verbena Abronia villosa var. aurita	Federal: None State: None CNPS: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Absent.
Coulter's goldfields Lasthenia glabrata ssp. coulteri	Federal: None State: None CNPS: Rank 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur.
Coulter's saltbush Atriplex coulteri	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Does not occur.
Gambel's water-cress Nasturtium gambelii	Federal: FE State: ST CNPS: Rank 1B.1	Brackish marsh, freshwater marsh, and swamps.	Does not occur.
Heart-leaved pitcher sage Lepechinia cardiophylla	Federal: None State: None CNPS: Rank 1B.2	Closed-cone coniferous forest, chaparral, and cismontane woodland.	Does not occur.
Intermediate (foothill) mariposa-lily Calochortus weedii var. intermedius	Federal: None State: None CNPS: Rank 1B.2	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur.
Intermediate monardella Monardella hypoleuca ssp. intermedia	Federal: None State: None CNPS: Rank 1B.3	Usually in the understory of chaparral, cismontane woodland, and lower montane coniferous forest.	Does not occur.
Jokerst's monardella Monardella australis ssp. jokerstii	Federal: None State: None CNPS: Rank 1B.1	Chaparral and lower montane coniferous forest.	Does not occur.
Lucky morning-glory Calystegia felix	Federal: None State: None CNPS: Rank 1B.1	Meadows and seeps, riparian scrub.	Absent.
Long-spined spineflower Chorizanthe polygonoides var. longispina	Federal: None State: None CNPS: Rank 1B.2	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands	Does not occur.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Malibu baccharis Baccharis malibuensis	Federal: None State: None CNPS: Rank 1B.1	Chaparral, cismontane woodland, coastal sage scrub.	Does not occur.
Many-stemmed dudleya Dudleya multicaulis	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur.
Mesa horkelia Horkelia cuneata var. puberula	Federal: None State: None CNPS: Rank 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Does not occur.
Munz's onion Allium munzii	Federal: FE State: ST CNPS: Rank 1B.1	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands	Does not occur.
Palmer's grapplinghook Harpagonella palmeri	Federal: None State: None CNPS: Rank 4.2	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Does not occur.
Parish's bush-mallow Malacothamnus parishii	Federal: None State: None CNPS: 1A	Chaparral and coastal scrub.	Does not occur.
Parish's desert-thorn Lycium parishii	Federal: None State: - CNPS: 2B.3	Coastal scrub and Sonoran desert scrub.	Does not occur.
Parry's spineflower Chorizanthe parryi var. parryi	Federal: None State: None CNPS: 1B.1	This annual herb prefers sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Does not occur.
Plummer's mariposa lily Calochortus plummerae	Federal: None State: None CNPS: Rank 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur.
Prairie wedge grass Sphenopholis obtusata	Federal: None State: None CNPS: Rank 2B.2	Cismontane woodland, meadows, and seeps.	Does not occur.
Pringle's monardella Monardella pringleii	Federal: None State: None CNPS: Rank 1A	Coastal scrub.	Does not occur.
Prostrate vernal pool navarretia Navarretia prostrata	Federal: None State: None CNPS: Rank 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Does not occur.
Rigid fringe-pod Thysanocarus rigidus	Federal: None State: None CNPS: Rank 1B.2	Pinyon and juniper woodlands.	Does not occur.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Robinson's pepper grass Lepidium virginicum var. robinsonii	Federal: None State: None CNPS: Rank 4.3	Chaparral, coastal sage scrub.	Does not occur.
Salt marsh bird's-beak Chloropyron maritimum ssp. maritimum	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dunes, salt marshes, and swamps.	Does not occur.
Salt Spring checkerbloom Sidalcea neomexicana	Federal: None State: None CNPS: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur.
San Bernardino aster Symphyotrichum defoliatum	Federal: None State: None CNPS: Rank 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Does not occur.
San Diego ambrosia Ambrosia pumila	Federal: FE State: None CNPS: 1B.1	Occurs in open floodplain terraces or in the watershed margins of vernal pools. This species occurs in a variety of associations that are dominated by sparse nonnative grasslands or ruderal habitat in association with river terraces, vernal pools, and alkali playas. San Diego ambrosia generally occurs at low elevations generally less than 1,600 feet amsl in the Riverside County populations and less than 600 feet amsl in San Diego County.	Does not occur.
San Fernando Valley spineflower Chorizanthe parryi var. fernandina	Federal: Candidate State: SE CNPS: Rank 1B.1	Coastal sage scrub, occurring on sandy soils.	Does not occur.
Santa Ana River woolly star Eriastrum densifolium ssp. sanctorum	Federal: FE State: SE CNPS: Rank 1B.1	Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.	Does not occur.
Santiago Peak phacelia Phacelia keckii	Federal: None State: None CNPS: Rank 1B.3	Closed-cone coniferous forest, chaparral	Does not occur.
Smooth tarplant Centromadia pungens ssp. laevis	Federal: None State: None CNPS: Rank 1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Does not occur.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Southern tarplant Centromadia parryi ssp. australis	Federal: None State: None CNPS: Rank 1B.1	Disturbed habitats, margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools.	Does not occur.
Tecate cypress Hesperocyparis forbesii	Federal: None State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral.	Does not occur.
White rabbit-tobacco Pseudognaphalium leucocephalum	Federal: None State: None CNPS: Rank 2B.2	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Does not occur.

4.5.1 Special-Status Plants Detected at the Project Study Area

No special-status plant species were detected within the Project study area.

4.6 **Special-Status Animals**

Table 4-3 provides a list of special-status animals evaluated for the Project study area through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project study area, and 2) any other special-status animals that are known to occur within the vicinity of the Project study area, for which potentially suitable habitat occurs on the study area.

Table 4-3. Special Status Animals Evaluated for the Project Study Area

Status

Federal State

FE – Federally Endangered
FT – Federally Threatened
FPT – Federally Proposed Threatened
FPT – Federally Proposed Threatened
SC – State Candidate

FC – Federal Candidate CFP – California Fully-Protected Species BGEPA– Bald and Golden Eagle Protection Act SSC – Species of Special Concern

Occurrence

- Does not occur—The species is absent from the site, either because the site lacks suitable habitat for the species, the site is located outside of the known range of the species, or focused surveys has confirmed the absence of the species.
- Not expected to occur The species is not expected to occur onsite due to low habitat quality; however, absence cannot be ruled out.
- Potential to occur The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Foraging only The species has the potential to forage at the site; however, the site does not support live-in or breeding/nesting habitat for the species.
- Present The species was detected onsite incidentally or through focused surveys.

Species Name	Status	Habitat Requirements	Occurrence	
Invertebrates				
Delhi sands flower- loving fly Rhaphiomidas terminatus abdominalis	Federal: FE State: None	This specialist species occurs on inland sand dunes, including partially stabilized, which support native host plant species such as telegraph weed (<i>Heterotheca grandiflora</i>) and California croton (<i>Croton californicus</i>).	Not expected to occur.	
San Diego fairy shrimp Branchinecta sandiegonensis	Federal: FE State: None	Seasonal vernal pools	Does not occur.	
Fish				
Arroyo chub Gila orcutti	Federal: None State: SSC	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	Does not occur.	
Santa Ana speckled dace Rhinichthys osculus ssp. 3	Federal: None State: SSC	Occurs in the headwaters of the Santa Ana and San Gabriel Rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temperatures of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	Does not occur.	

Species Name	Status	Habitat Requirements	Occurrence
Santa Ana sucker Catostomus santaanae	Federal: FT State: None	Small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates.	Does not occur.
Amphibians			
Arroyo toad Anaxyrus californicus	Federal: FE State: SSC	Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats. Breeding pools must be open and shallow with minimal current, and with a sand or pea gravel substrate overlain with sand or flocculent silt. Adjacent banks with sandy or gravely terraces and very little herbaceous cover for adult and juvenile foraging areas, within a moderate riparian canopy of cottonwood, willow, or oak.	Does not occur.
Coast Range newt Taricha torosa	Federal: None State: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	Does not occur.
Northern leopard frog Lithobates pipiens	Federal: None State: SSC	Freshwater marshes and swamps.	Does not occur.
Western spadefoot Spea hammondii	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur.
Reptiles			
California glossy snake Arizona elegans occidentalis	Federal: None State: SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Does not occur.
Coastal whiptail Aspidoscelis tigris stejnegeri (multiscutatus)	Federal: None State: SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur.
Coast horned lizard Phrynosoma blainvillii	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Does not occur.
Coast patch-nosed snake Salvadora hexalepis virgultea	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Does not occur.
Red-diamond rattlesnake Crotalus ruber	Federal: None State: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Does not occur.
San Diego banded gecko Coleonyx variegatus abbotti	Federal: None State: SSC MSHCP	Primarily a desert species, but also occurs in cismontane chaparral, desert scrub, and open sand dunes.	Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
Southern California legless lizard Anniella stebbinsi	Federal: - State: SSC	Occurs primarily in areas with sandy or loose organic soil, or where there is plenty of leaf litter. Associated with broadleaved upland forest, coastal sage scrub, chaparral, and coastal dunes.	Does not occur.
Two-striped garter snake Thamnophis hammondii	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	Does not occur.
Western pond turtle Emys marmorata	Federal: None State: SSC	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	Does not occur.
Birds			
American peregrine falcon (nesting) Falco peregrinus anatum	Federal: Delisted State: Delisted, FP	Breeding habitat consists of high cliffs, tall buildings, and bridges along the coast and inland. Foraging habitat primarily includes open areas near wetlands, marshes, and adjacent urban landscapes.	Foraging only.
Bald eagle (nesting & wintering) Haliaeetus leucocephalus	Federal: Delisted State: SE, FP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	Foraging only.
Burrowing owl (burrow sites & some wintering sites) Athene cunicularia	Federal: None State: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a yearlong resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Present.
California black rail Laterallus jamaicensis coturniculus	Federal: None State: ST, FP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	Does not occur.
Coastal cactus wren (San Diego & Orange County only) Campylorhynchus brunneicapillus sandiegensis	Federal: BCC State: SSC	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Does not occur.
Coastal California gnatcatcher Polioptila californica californica	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Does not occur.
Golden eagle (nesting & wintering) Aquila chrysaetos	Federal: None State: FP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Foraging only.

Species Name	Status	Habitat Requirements	Occurrence
Grasshopper sparrow (nesting) Ammodramus savannarum	Federal: None State: SSC	Open grassland and prairies with patches of bare ground.	Does not occur.
Least Bell's vireo (nesting) Vireo bellii pusillus	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Does not occur.
Long-eared owl (nesting) Asio otus	Federal: None State: SSC	Riparian habitats are preferred by the long- eared owl, but it also uses live-oak thickets and other dense stands of trees. This species is sensitive to human disturbance, and generally does not inhabit urban areas.	Does not occur.
Southwestern willow flycatcher (nesting) Empidonax traillii extimus	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur.
Swainson's hawk (nesting) Buteo swainsoni	Federal: None State: ST	Summer in wide open spaces of the American West. Nest in grasslands, but can use sage flats and agricultural lands. Nests are placed in lone trees.	Foraging only.
Tricolored blackbird (nesting colony) Agelaius tricolor	Federal: None State: CE	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur.
western yellow-billed cuckoo Coccyzus americanus occidentalis	Federal: FT State: SE	Dense, wide riparian woodlands with well-developed understories.	Does not occur.
White-tailed kite (nesting) Elanus leucurus	Federal: None State: FP	Low elevation open grasslands, savannah- like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Potential to occur.
Yellow-breasted chat (nesting) Icteria virens	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Does not occur.
Yellow-headed blackbird (nesting) Xanthocephalus xanthocephalus	Federal: None State: SSC	Forages in open scrublands, fields, and pastures. Nests in freshwater marsh.	Present.
Yellow rail Coturnicops noveboracensis	Federal: None State: SSC	Freshwater marsh and meadows and seeps.	Does not occur.
Yellow warbler (nesting) Setophaga petechia	Federal: None State: SSC	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Present.

Species Name	Status	Habitat Requirements	Occurrence
Mammals		-	
American badger Taxidea taxus	Federal: None State: SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Does not occur.
Big free-tailed bat Nyctinomops macrotis	Federal: None State: SSC	Deserts, shrublands, and coniferous forests. Roosts in dry rocky habitats.	Foraging only.
Los Angeles pocket mouse Perognathus longimembris brevinasus	Federal: None State: SSC	Fine, sandy soils in coastal sage scrub and grasslands.	Not expected to occur.
Mexican long-tongued bat Choeronycteris mexicana	Federal: None State: SSC	Variety of habitats ranging from desert, montane, riparian, to pinyon-juniper habitats. Found roosting in desert canyons, deep caves, mines, or rock crevices. Can use abandoned buildings.	Not expected to occur.
Northwestern San Diego pocket mouse Chaetodipus fallax fallax	Federal: None State: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Does not occur.
Pallid bat Antrozous pallidus	Federal: None State: SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Foraging only.
pocketed free-tailed bat Nyctinomops femorosaccus	Federal: None State: SSC	Found rarely in southwestern California; found in southeastern deserts of California, with portions of western Riverside County apparently on the periphery of their range. Found in pinyon-juniper and Joshua tree woodlands, desert scrub, desert succulent scrub, desert riparian areas, desert washes, alkali desert scrub, and palm oases. Roosts in high rock crevices in cliffs, bridges, roofs, and buildings. The species must drop from roost to gain flight speed. Forages primarily on large moths, especially over open water.	Does not occur.
San Bernardino kangaroo rat Dipodomys merriami parvus	Federal: FE State: SSC	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	Does not occur.
San Diego black-tailed jackrabbit Lepus californicus bennettii	Federal: None State: SSC	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	Does not occur.
San Diego desert woodrat Neotoma lepida intermedia	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Absent. Middens confirmed absent during general biological surveys.
Stephens' kangaroo rat Dipodomys stephensi	Federal: FE State: ST	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Does not occur.

Species Name	Status	Habitat Requirements	Occurrence
Western mastiff bat	Federal: None	Occurs in many open, semi-arid to arid	Foraging only.
Eumops perotis	State: SSC	habitats, including conifer and deciduous	
californicus		woodlands, coastal scrub, grasslands, and	
		chaparral. Roosts in crevices in cliff faces,	
		high buildings, trees, and tunnels.	
Western red bat	Federal: None	Prefers riparian areas dominated by	Potential to occur.
Lasiurus blossevillii	State: SSC	walnuts, oaks, willows, cottonwoods, and	
		sycamores where they roost in broad-leafed	
		trees.	
Western yellow bat	Federal: None	Desert washes and fan palm oases.	Potential to occur.
Lasiurus xanthinus	State: SSC		

4.6.1 Special-Status Wildlife Species Observed within the Project Study Area

A single burrowing owl was detected within the Project study area, along the western bank of the Grove Channel within the Chino Airport property (Exhibit 6 – Burrowing Owl Survey Area Map). Although a single burrowing owl was detected, this owl is assumed to be breeding based upon its presence during the breeding season, and occurs within the portion of the Project study area located within the RMP.

Although yellow-headed blackbird (*Xanthocephalus xanthocephalus*; SSC) and yellow warbler (*Setophaga petechia*; SSC) were detected foraging within the study area, breeding/nesting habitat for these species, consisting of marsh habitats large enough to sustain breeding colonies of yellow-headed blackbirds and riparian scrub, woodland, and forest for yellow warbler, is not present within or adjacent to the Project study area.

4.6.2 Special-Status Wildlife Species not Observed but with a Potential to Occur at the Project Study Area

There is moderate potential for the state Fully Protected white-tailed kite (*Elanus leucurus*) to nest within large ornamental trees and forage throughout the Project study area.

The state listed as Endangered bald eagle (*Haliaeetus leucocephalus*) has the potential to forage within the Project study area; however, this species is not expected to nest within the Project study area, as it is located over a mile and a half from the nearest large body of open water.

The state listed as Threatened Swainson's hawk (*Buteo swainsoni*) has the potential to forage within the Project study area; however, the Project study area is located outside of the nesting range for this species.

The state Fully Protected golden eagle (*Aquila chrysaetos*) has the potential to forage within the Project study area; however, the Project study area does not contain the high cliffs and rocky escarpments used for nesting by this species.

The state Fully Protected American peregrine falcon (*Falco peregrinus anatum*) has the potential to forage within the Project study area; however, the Project study area does not contain the high cliffs, tall buildings, and bridges used for nesting by this species.

Five special-status bats have potential to forage within the Project study area: big free-tailed bat (*Nyctinomops macrotis*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus blossevillii*), and western yellow bat (*Lasiurus xanthinus*). None of these species are state or federally listed but all five are state Species of Special Concern. Of these, western red bat has the potential to roost and possibly breed within large ornamental trees throughout the Project study area, with the greatest roosting potential within groups of large Eucalyptus trees, and western yellow bat has the potential to roost and possibly breed within unmanicured palm trees located within the Project study area.

4.6.3 Critical Habitat

There is no federally designated Critical Habitat mapped within or adjacent to the Project study area. The nearest Critical Habitat (for least Bell's vireo) is located approximately one mile south of the Project study area.

4.7 Raptor Use

The Project study area provides suitable foraging and breeding habitat for a number of raptor species, including the state Fully Protected white-tailed kite; although, this species was not detected within the study area during field efforts.

Southern California holds a diversity of birds of prey (raptors), and many of these species are in decline. For most of the declining species, foraging requirements include extensive open, undisturbed, or lightly disturbed areas, especially grasslands. This type of habitat has declined severely in the region, affecting many species, but especially raptors. A few species, such as redtailed hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius*), are somewhat adaptable to low-level human disturbance and can be readily observed adjacent to neighborhoods and other types of development. These species still require appropriate foraging habitat and low levels of disturbance in the vicinity of nesting sites.

Appendix B (faunal compendium) provides a list of the raptors detected over the course of the field studies. These species were burrowing owl, American kestrel, red-tailed hawk, Cooper's hawk (*Accipiter cooperii*), turkey vulture (*Cathartes aura*), and barn owl (*Tyto alba*). Great horned owl (*Bubo virginianus*) may also forage at the study area.

4.8 Nesting Birds

The Project study area contains trees, shrubs, and ground cover that provide suitable habitat for nesting migratory birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.⁹

⁹ The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations

4.9 Soil Mapping

The Natural Resource Conservation Service (NRCS) identifies the following soil types (series) as occurring (currently or historically) within the Project study area [Exhibit 5 – Soils Map]: Chino silt loam; Delhi fine sand; Grangeville fine sandy loam; Hilmar loamy fine sand; Merrill silt loam; and Tujunga loamy sand, 0-5 percent slopes.

4.10 Wildlife Migration/Nurseries

The Project study area lacks migratory wildlife corridors, as it does not contain the structural topography and vegetative cover that facilitate regional wildlife movement, is subject to a high level of ongoing human disturbance, and much of the Project study area is fenced or consists of active public roadways, which act as inhibitors to wildlife movement.

The Project study area may potentially represent a nursery site if western red bat, western yellow bat, or other non-special-status lasiurine bat species are found to be utilizing the large ornamental trees within the Project study area as maternity roosts in a colonial or semi-colonial nature.

4.11 <u>Jurisdictional Delineation</u>

A. Corps Jurisdiction

Corps jurisdiction associated with the Project study area totals approximately 3.59 acres, 12,610 linear feet, of waters of the United States (WoUS), none of which consists of jurisdictional wetlands. The locations of the waters of the United States are depicted on the enclosed map [Exhibit 7A – Corps/Regional Board Jurisdictional Delineation Map]. A summary of Corps jurisdiction within the Project study area is provided below in Table 4-4.

B. Regional Water Quality Control Board Jurisdiction

All waters within the Project site that were determined to be potential WoUS pursuant to Section 404 of the Clean Water Act potentially fall within Santa Ana Regional Board jurisdiction pursuant to Section 401 of the Clean Water Act and/or the Porter Cologne Water Quality Act. None of the features at the Site were determined to be non-federal waters that would require separate analysis. A summary of Regional Board jurisdiction within the Project study area is provided below in Table 4-4.

C. <u>CDFW Jurisdiction</u>

CDFW jurisdiction associated with the Project site totals approximately 6.28 acres, 12,610 linear feet, none of which consists of jurisdictional riparian habitat. The locations of CDFW jurisdictional areas are depicted on the enclosed map [Exhibit 7B – CDFW Jurisdictional Delineation Map]. A summary of CDFW jurisdiction within the Project study area is provided below in Table 4-4.

(50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

33

Table 4-4. Summary of Corps, Regional Board, and CDFW Jurisdiction for the Project Study Area

		Corps/Regional Board			CDFW			
Drainage Feature	Resource Type	Wetland (acres)	Non- wetland Waters (acres)	Total (acres)	Riparian (acres)	Non- riparian Streambed (acres)	Total (acres)	Length (linear feet)
Cucamonga Channel	Intermittent	0.00	1.95	1.95	0.00	2.98	2.98	930
Grove Channel	Ephemeral	0.00	0.92	0.92	0.00	1.40	1.40	2,383
Ephemeral Drainage 1	Ephemeral	0.00	0.37	0.37	0.00	0.94	0.94	4123
Ephemeral Drainage 2	Ephemeral	0.00	0.35	0.35	0.00	0.95	0.95	5173
TOTAL		0.00	3.59	3.59	0.00	6.27	6.27	12,610

5.0 IMPACT ANALYSIS

The following discussion examines the potential impacts to plant and wildlife resources that would occur as a result of the proposed Project. Impacts (or effects) can occur in two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Indirect impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project, but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other off site areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasives, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. A cumulative impact can occur from multiple individual effects from the same project, or from several projects. The

cumulative impact from several projects is the change in the environment resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

5.1 <u>California Environmental Quality Act (CEQA)</u>

5.1.1 Thresholds of Significance

Environmental impacts to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California:

"Prevent the elimination of fish or 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..."

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

"The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species, ..."

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed project.

5.1.2 Criteria for Determining Significance Pursuant to CEQA

Appendix G of the 2017 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2 Impacts to Native Vegetation

No native vegetation communities are present within the Project study area, thus no impacts to native vegetation would occur. The proposed permanent physical disturbance of 484.6 acres of agriculture and disturbed/developed lands would not pose a significant impact under CEQA to biological resources.

Table 5-1. Summary of Vegetation/Land Use Impacts

Land Cover Type	Impacts	Avoided
Agriculture	375.3	149.2
Disturbed/Developed	109.3	129.5
Total	484.6	278.7

5.3 Impacts to Special-Status Plants

No special-status plants are present within the Project study area, thus no impacts to these resources would occur.

5.4 Impacts to Special-Status Animals

A single burrowing owl was detected within the Project study area, along the western bank of the Grove Channel within the Chino Airport property (Exhibit 6 – Burrowing Owl Survey Area Map). Although a single burrowing owl was detected, this owl is assumed to be breeding based upon its presence during the breeding season. As a large amount of burrowing owl habitat has been converted to developed property within cismontane San Bernardino County, including within the City boundaries of Ontario and Chino, causing a regional decline of this species. Therefore, impact to one individual or a pair of burrowing owls would be a potentially significant impact under CEQA. Refer to Section 6.0 for measures to reduce this impact to below a level of significance.

Scott Cameron of Ecological Sciences, Inc. conducted a focused habitat assessment for the federally listed as Endangered Delhi sands flower-loving fly. Mr. Cameron determined that the Project study area does not support potential habitat for this species; therefore, this species does not pose a constraint to the development of proposed Specific Plan area or the installation of its associated off-site infrastructure and would not require specific mitigation or avoidance measures. Refer to Appendix C for full details.

The proposed Project would remove 375.3 acres of potential foraging habitat (agriculture) for five special-status bats: big free-tailed bat, pallid bat, western red bat, western mastiff bat, and western yellow bat. However, based on the level of ongoing human disturbance within the Project study area, and the regional availability of foraging habitat in the vicinity of the Project site, such as the Prado Basin, Chino Hills State Park, and the Santa Ana Mountains, the loss of 375.3 acres of low-quality potential bat foraging habitat is not judged to be significant under CEOA.

Roosting and breeding (nursery) by western red bat, western yellow bat, and other non-special-status lasiurine bats may occur within large ornamental tress located within and adjacent to the Project impact footprint, with the highest likelihood occurring within the large Eucalyptus trees and unmanicured palm trees. The removal of potential roosting/breeding bat habitats would be a potentially significant impact under CEQA. The threshold of significance as determined by the best professional judgement of GLA would be if the population of bats potentially impacted is 25 or more individuals with no special status and one individual bat with a special status. The threshold of significance is set at 25 or more individuals for non-special-status bats because the loss of 25 individuals would not pose a significant loss to the regional population of any non-special status species with potential to roost at the Project. Refer to Section 6.0 to address this potential impact.

Yellow warbler and yellow-headed blackbird, both an SSC, were observed foraging within ornamental plantings within the study area. As nesting habitat for the yellow warbler and yellow-headed blackbird is not present within the Project study area, impacts to nesting yellow warbler and yellow-headed blackbird would not occur. Additionally, as these species are habitat generalists during migration and foraging, the loss of foraging habitat from development of the Project would be less than significant under CEQA. As these species' special status is limited to

a nesting role, these species do not pose a constraint to the development of the Project site and would not require specific mitigation or avoidance measures.

There is moderate potential for the state Fully Protected white-tailed kite to nest within large ornamental trees and forage throughout the Project study area. As this species is state Fully Protected, no take of this species is permissible under the California Fish and Game Code, and direct take or any impact to this species under a nesting role would be a potentially significant impact under CEQA. Refer to Section 6.0 to address this potential impact. Based on the high level of decades-long ongoing human disturbance, the Project study area represents limited foraging opportunities for this species; therefore, Project impacts to foraging by this species are not judged to be significant under CEQA.

The state listed as Endangered and Fully Protected bald eagle, state listed as Threatened Swainson's hawk, state Fully Protected golden eagle, and state Fully Protected American peregrine falcon have the potential to forage within the Project study area; however, these species are not expected to nest within the Project study area, as it is located outside of the known nesting range or does not contain suitable nesting habitat. Based on the high level of decades-long ongoing human disturbance, as with white-tailed kite, the Project study area represents limited foraging opportunities for these species; therefore, Project impacts to foraging by these species are not judged to be significant under CEQA.

5.5 <u>Impacts to Critical Habitat</u>

The proposed Project will not impact lands designated or proposed as critical habitat by the USFWS, as none are present within the Project Study Area.

5.6 Impacts to Nesting Birds

The Project has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to August 31). Impacts to nesting birds are prohibited by the MBTA and California Fish and Game Code. A Project-specific mitigation measure is identified in Section 6.0 of this report to avoid impacts to nesting birds.

5.7 <u>Impacts to Jurisdictional Waters</u>

5.7.1 Impacts to Corps/Regional Board Jurisdiction

For the purpose of analysis of Project impacts for this report, all impacts to jurisdictional aquatic resources have been considered as permanent at this time. As Project-specific design plans are further developed, portions of these impacts may be determined to be temporary in nature, or not required for the development of the Project, thereby reducing permanent impacts associated with development of the Project.

Proposed impacts to Corps waters of the United States totals 2.14 acres, none of which consists of jurisdictional wetlands. The remainder of Corps waters within the Project study area would be avoided, and would not be impacted by the Project as proposed. Proposed impacts to Regional

Board jurisdiction are identical to that of the Corps. Although the drainages proposed for impacts are heavily denuded flood control facilities that are subject to ongoing maintenance and do not support jurisdictional wetlands or riparian vegetation communities, impacts to 2.14 acres of waters is potentially significant under CEQA due to the potential for this quantity of loss of surface waters to effect the hydrology supporting downstream wetland and/or riparian resources. CWA Section 404 authorization from the Corps and a CWA Section 401 Water Quality Certification and authorization for discharges under Porter-Cologne from the Regional Board would be required for proposed impacts to waters. Refer to Section 6.0 Mitigation/Avoidance Measures for measures to offset these impacts to a level less than significant.

5.7.2 Impacts to CDFW Jurisdiction

Proposed impacts to CDFW streambed totals 4.15 acres; none of which consists of riparian habitat. As with impacts to Corps and Regional Board jurisdiction, although the drainages proposed for impacts are heavily denuded flood control facilities that are subject to ongoing maintenance and do not support jurisdictional wetlands or riparian vegetation communities, impacts to 4.15 acres of streambed is potentially significant under CEQA due to the potential for this quantity of loss of surface streambeds to effect the hydrology supporting downstream wetland and/or riparian resources. A CDFW Section 1602 Streambed Alteration Agreement would be required for proposed impacts to waters. Refer to Section 6.0 Mitigation/Avoidance Measures for measures to offset these impacts to a level less than significant.

5.8 Wildlife Migration/Nurseries

The Project study area lacks migratory wildlife corridors. Therefore, the proposed Project will not result in an impact to wildlife migration.

The Project study area may potentially represent a nursery site if western red bat, western yellow bat, or other non-special-status lasiurine bat species are found to be utilizing the large ornamental trees within the Project study area as maternity roosts in a colonial or semi-colonial nature; therefore, the proposed Project may result in an impact to wildlife nurseries if colonial or semi-colonial maternally roosting bats are present, which would be a potentially significant impact under CEQA. Refer to Section 6.0 Mitigation/Avoidance Measures for measures to offset these potential impacts.

5.9 Indirect Impacts to Biological Resources

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to adjacent native open space. Potential indirect effects associated with development include water quality impacts from associated with drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities.

The Project has the potential for both temporary and permanent indirect effects such as noise and dust during construction and increased lighting and vehicular traffic once constructed. The Project could result in potentially significant indirect impacts if failure of colonial or semi-colonial maternal bat roosts or raptor nests within large ornamental trees adjacent to the Project impact footprint were to occur as a result of construction of the Project. No other potentially significant indirect impacts are expected. Refer to Section 6.0 Mitigation/Avoidance Measures for measures to reduce potential indirect impacts to bat roots and raptor nests to a level less than significant.

5.10 Cumulative Impacts to Biological Resources

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project.

Native vegetation. Development of the Project would not result in the removal of native vegetation, as no native vegetation communities are present within the Project study area; therefore, the Project would not contribute to cumulative impacts to native vegetation.

Raptor Use. The Project study area is used by nesting red-tailed hawk. Other species of raptors may also use the site for foraging, and other common raptor species, such as American kestrel, may use the site for nesting. These species are common to the region and the removal of nesting habitat for these or other common species of raptors would not make a potentially cumulatively considerable contribution to the regional decline of raptors. The Project would remove 375.3 acres of potential raptor foraging habitat through development of the active agriculture. Although the agriculture may provide foraging habitat for raptors, it is not expected to be valuable, as the lands are actively maintained to minimize use by small mammals (prey for raptors) and active ground squirrel management programs are continually implemented. This loss of 375.3 acres of potential raptor foraging habitat would not make a cumulatively considerable contribution to the regional decline of raptors.

Special-Status Wildlife. A single burrowing owl was detected within the Project study area, along the western bank of the Grove Channel within the Chino Airport property. Although a single burrowing owl was detected, this owl is assumed to be breeding based upon its presence during the breeding season. Over the last several decades, a large amount of burrowing owl habitat has been developed within cismontane San Bernardino County, including within the City boundaries of Ontario and City of Chino. Impact to one individual or a pair of burrowing owls is judged to be a cumulatively considerable contribution to the regional decline of this species. Refer to Section 6.0 for measures to address this potential cumulative impact.

There is potential for bats to roost in large ornamental trees within the Project study area (including western red bat and western yellow bat, both an SSC). The proposed Project would directly remove potential roosting/nursery habitat. As stated in Section 5.4, this would be judged as a potentially significant impact under CEQA if the population of bats potentially impacted is

25 or more individuals of non-special-status species, and one individual of special-status species. Given the regional decline of bats over the past several decades, this potential direct impact would make a cumulatively considerable contribution to the regional decline of bats. Refer to Sections 6.0 and for measures to address this potential cumulative impact.

The Project study area was determined by Ecological Sciences, Inc. not to support suitable habitat for the Delhi sands flower-loving fly (See Appendix C for full detail). Therefore, development of the Project would not make a cumulatively considerable contribution to the regional decline of this species.

Yellow warbler and yellow-headed blackbird were observed foraging within ornamental trees during field efforts. The yellow warbler is strongly tied to riparian habitats for nesting and the yellow-headed blackbird is strongly tied to marsh habitats for nesting, both of which are not present within the Project study area. During migration these species can be seen in a wide variety of native and non-native vegetation, including residential landscaping and native upland vegetation. The yellow warbler and yellow-headed blackbird are both an SSC. Development of the Project would not directly impact yellow warbler or yellow-headed blackbird, as no nesting habitat for these species is present. Therefore, development of the Project would not result in the loss of nesting habitat for yellow warbler or yellow-headed blackbird. In addition, these species are both habitat generalist in a foraging role. Therefore, development of the Project would not make a cumulatively considerable contribution to the regional decline of these species.

Native Nesting Birds. There is potential for native nesting birds to be affected by development of the Project. As discussed in Section 5.6, the types of birds potentially affected are common to the region and the number of individuals would be limited given the type of vegetation proposed for removal (agriculture, ornamental plantings). Based on the types of species and expected limited number of nesting pairs potentially affected and the types of species, development of the project would not make a cumulatively considerable contribution to the regional decline of native nesting bird populations. However, because native birds are protected by MBTA and similar provisions under FGC, mortality to a single native bird due to the project would be in violation of both of these laws. Refer to Section 6.0 for measures to address this potential impact.

Federal and Status Jurisdictional Waters. The jurisdictional waters proposed for removal are heavily denuded flood control facilities and do not provide the functions and values of natural drainages/streambeds, as no riparian or other native vegetation communities are present within the facilities proposed for impacts within the Project study area. As such, the removal of 2.14 acres of Corps non-wetland waters, 2.14 acre of Regional Board non-wetland waters, and 4.15 acres of CDFW non-riparian streambed would not make a cumulatively considerable contribution to the regional decline of jurisdictional waters.

6.0 MITIGATION/AVOIDANCE MEASURES

The following discussion provides project-specific mitigation/avoidance measures for actual or potential impacts to special-status resources.

6.1 Burrowing Owl

A qualified biologist will conduct a pre-construction presence/absence survey for burrowing owls within 14 days prior to site disturbance.

If the species is absent, no additional mitigation will be required. If burrowing owl(s) is(are) detected within the Project's disturbance footprint in the City of Chino RMP boundary, the owl(s) are required to be handled as indicated by the RMP:

The RMP addresses mitigation requirements for impacts to burrowing owls. The RMP states that the 1995 CDFG Staff Report on Burrowing Owl Mitigation (as supplemented by the RMP) shall be followed when burrowing owls are detected on properties. If avoidance of occupied habitat is infeasible, provisions shall be made to passively relocate owls from sites in accordance with the current 2012 CDFG Staff Report (supersedes 1995 CDFG Staff Report).

According to the Preserve EIR and RMP, Burrowing Owls to be relocated from properties within the City's Subarea 2 are intended to be accommodated within a "300-acre conservation area" and/or additional Candidate Relocation Areas as described on Page 4-16 and 4-21 of the RMP. One such contingency conservation area is identified in the RMP as "Drainage Area B".

Drainage Area B consists of a series of Natural Treatment System (NTS) facilities that were constructed south of Kimball Avenue and west of Mill Creek Road. When the NTS facilities were constructed, approximately 50 artificial owl burrows were installed within the basins to accommodate relocated owls and additional owls dispersing to the site. This location was given top priority as an owl relocation site by the RMP due to its proximity to areas that have been and will be converted to urban development. If Burrowing Owls are present at the Project site at time of site disturbance, the Burrowing Owls would be more likely to initially relocate to the immediately surrounding properties, including additional locations within the Chino Airport. However, the NTS basins represent the nearest conservation area providing regional mitigation for the loss of burrowing owl habitat.

Consistent with the RMP, the following measures shall apply to the portion of the Project site within the RMP boundary regarding burrowing owl mitigation:

- Prior to disturbance of the occupied burrows, suitable and unoccupied replacement burrows shall be provided at a ratio of 2:1 within the City of Chino designated relocation area (e.g. the NTS basins). A qualified biologist through coordination with the City shall confirm that the artificial burrows are currently unoccupied and suitable for use by owls.
- Until suitable replacement burrows have been provided/confirmed within the designated relocation area (e.g. the NTS basins), no disturbance shall occur within 50 meters (approximately 160 feet) of occupied burrows during the nonbreeding season (September 1 through January 31) or within 75 meters (approximately 250 feet) during the breeding season (February 1 through August 31).

- Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg-laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.
- If Burrowing Owls are present at the time that the occupied burrows are to be disturbed, then the owls shall be excluded from the site following the 2012 CDFG Staff Report and Table 4-6 of the RMP.
- Pursuant to mitigation measure B-3(8) of The Preserve EIR, and as noted on Page 4-39 of the RMP, the Project shall pay the required mitigation fee prior to initiation of ground disturbing activities. One priority for funding supported by the mitigation fees is the establishment and long-term management of burrowing owl habitat within the Drainage Area B conservation area.

If burrowing owl(s) is(are) detected within the Project's proposed disturbance footprint outside of the RMP boundary:

- Prior to disturbance of the occupied burrows, suitable and unoccupied replacement burrows shall be provided at a ratio of 2:1 within designated off-site conserved lands to be identified through coordination with CDFW and the City in which the burrowing owl(s) is(are) detected (either the City of Ontario or the City of Chino). A qualified biologist shall confirm that the artificial burrows are currently unoccupied and suitable for use by owls.
- Until suitable replacement burrows have been provided/confirmed within the off-site conserved lands to be identified through coordination with CDFW and the City of Ontario or the City of Chino, no disturbance shall occur within 50 meters (approximately 160 feet) of occupied burrows during the nonbreeding season (September 1 through January 31) or within 75 meters (approximately 250 feet) during the breeding season (February 1 through August 31).
- Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg-laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.
- If burrowing owls are present at the time that the occupied burrows are to be disturbed, then the owls shall be excluded from the site following the 2012 CDFG Staff Report.

With the implementation of these mitigation measures, impacts to burrowing owls will be reduced to below a level of significance.

6.2 <u>Nesting Birds</u>

Development of the Project site does not pose a biologically significant impact to native nesting birds under CEQA. This is because the species of native birds with potential to nest on the Project site are very common to abundant to the region (e.g. house finch) and the number of individuals possibly impacted would not substantially reduce existing populations. The MBTA and the Fish and Game Code do not make a distinction based upon the stability and/or abundance of populations, but instead prohibit the "take" of any native bird. As such, the following is a recommendation for complying with the MBTA and the Fish and Game Code. Vegetation clearing should be conducted outside of the nesting season (February 1 through August 31) to avoid impacts to nesting birds, including raptors. If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a nesting bird survey within three days prior to any disturbance of the site, including disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests (generally a minimum of 200 feet up to 500 feet for raptors and a minimum of 50 feet up to 300 feet for passerine species, with specific buffer widths to be determined by a qualified biologist), and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests.

There are no specific protocols for nesting bird surveys or for buffering requirements once nests are found. The key is to ensure that no direct mortality of a native bird, which when nesting includes eggs and young. Implementation of this measure will ensure the Project applicant is not in violation of the MBTA and Fish and Game Code.

6.3 **Jurisdictional Waters**

The Project will permanently impact 2.14 acres of non-wetland WoUS and 4.15 acres of CDFW non-riparian streambed. These proposed impacts would be potentially significant under CEQA. The following mitigation measure is recommended:

- To mitigate the loss of Corps, Regional Board, and CDFW jurisdiction, the Project Applicant shall purchase credits from an approved mitigation bank/in-lieu fee program at a minimum of a 1:1 ratio, for a minimum of 4.15 acres (inclusive of the 2.14 acres of non-wetland WoUS) of mitigation credits, or a number of mitigation credits equal to Project impacts based on final Project design during aquatic permitting.
- If an approved mitigation bank/in-lieu fee program cannot be identified to mitigate the
 loss of Corps, Regional Board, and CDFW jurisdiction, the Project Applicant shall
 enhance, re-establish, or establish Corps, Regional Board, and CDFW jurisdictional areas
 on off-site conserved lands at a minimum of a 1:1 ratio, for a minimum of 4.15 acres
 (inclusive of the 2.14 acres of non-wetland WoUS) of enhancement, re-establishment, or
 establishment, or a number acres equal to Project impacts based on final Project design
 during aquatic permitting.
- Compensatory mitigation should be coordinated with CWA 401 and 404 permitting and CDFW 1602 Streambed Alteration Agreement acquisition to ensure efficiencies with the mitigation effort.

6.4 Special-Status Bats

For large ornamental trees suitable for bat roosting/nursery, exit counts and acoustic surveys shall be performed prior to initial ground disturbance and vegetation removal to determine whether the Project footprint and a 300-foot buffer supports a nursery or roost, and by which species. This survey work will occur between late-spring and late summer and/or in the fall (generally mid-March through late October).

If the results of the bat survey finds a total of a single roosting individual of a special-status bat species or 25 or more individuals of non-special-status bat species with potential to be present in the Study area (i.e., western Mastiff bat, big free-tailed bat, pallid bat, western red bat, and western yellow bat), a Bat Management Plan shall be developed to ensure mortality to bats does not occur. For each location confirmed to be occupied by bats, the plan will provide details both in text and graphically where exclusion devices/and or staged tree removal will need to occur, the timing for exclusion work, and the timeline and methodology needed to exclude the bats. The plan will need to be reviewed and approved by CDFW prior to disturbance of the roost(s).

7.0 REFERENCES

- American Ornithologists' Union (AOU). 2009. Checklist of North American Birds, (7th Edition; 1998-2009).
- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken. 2012. The Jepson Manual: Vascular Plants of California. University of California Press. 1,568 pp.
- [CDFG] California Department of Fish and Game. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Dated September 2008.
- [CDFG] California Department of Fish and Game. 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. State of California, California Natural Resources Agency, Department of Fish and Game. Dated November 24, 2009.
- [CDFW] California Department of Fish and Wildlife. 2016. Special Animals. State of California Resources Agency, Sacramento, California.
- [CDFW] California Department of Fish and Wildlife. 2016. State and Federally Listed Endangered and Threatened Animals of California. State of California Resources Agency. Sacramento, California.
- California Department of Fish and Wildlife. 2018 and 2019. California Natural Diversity Database: RareFind 5. Records of occurrence for U.S.G.S. 7.5- minute Quadrangle maps: Black Star Canyon, Corona North, Corona South, Fontana, Guasti, Lake Matthews, Ontario, Orange, Prado Dam, Riverside West, and Yorba Linda, California. California Department of Fish and Wildlife, State of California Resources Agency. Sacramento, California.
- [Cal-IPC] California Invasive Plant Council. California Invasive Plant Inventory Database. Website: http://cal-ipc.org/paf/. [accessed April 2018 and April 2019]
- EDAW AECOM. 2011. The Preserve Specific Plan. March 2013. Amended August 2011.

 Prepared for the City of Chino. Prepared by The Planning Center. Amended by EDAW AECOM.
- [MBA] Michael Brandman Associates. 2003a. Final Environmental Impact Report for the Preserve Chino Sphere of Influence Subarea 2. State Clearing House #2000121036. Prepared for City of Chino. March 2003.
- Michael Brandman Associates. 2003b. City of Chino SubArea 2. Resources Management Plan. "The Preserve". Prepared for the City of Chino. Dated January 2003.

- [CNPS] California Native Plant Society. 2001. Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA. x + 388pp.
- [CNPS] California Native Plant Society. 2018. Inventory of Rare and Endangered Plants (online edition, v8-02). Rare Plant Program. California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org [accessed April and September 2018]
- Collins, Joseph T. and Travis W. Taggart. 2009. Standard Common and Current Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians. Sixth Edition. Publication of The Center For North American Herpetology, Lawrence. iv+44p.
- [Dudek] Dudek & Associates. 2003. Western Riverside County Multiple Species Habitat Conservation Plan. Volumes 1 5. Prepared for the Transportation and Land Management Agency, County of Riverside, California as part of the Riverside County Integrated Project. Adopted June 2003, currently available at http://www.rcip.org/conservation.htm.
- Ecological Sciences, Inc. 2018. Focused Habitat Evaluation for the Delhi Sands Flower-loving Fly for the Merrill Commerce Center Specific Plan.
- Garrett, K. and J. Dunn. 1981. Birds of Southern California: Status and Distribution. Los Angeles Audubon Society. 407 pp.
- Holland, R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, California Department of Fish and Wildlife.
- Munz, P.A. 1974. A Flora of Southern California. University of California Press. 1,086 pp.
- Nelson, J. 1984. Rare plant survey guidelines. In: Inventory of rare and endangered vascular plants of California. J. Smith and R. York (eds.). Special Publication No. 1. California Native Plant Society.
- [RCHCA] Riverside County Habitat Conservation Agency. 1996. Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California. Riverside, CA: Riverside County Habitat Conservation Agency.
- Sawyer, J.O, T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation. Second Edition (MCVII). California Native Plant Society Press. Sacramento, California. 1,300 pp.
- Stebbins, R. C. 1954. Amphibians and reptiles of western North America. McGraw-Hill, New York. 536pp.

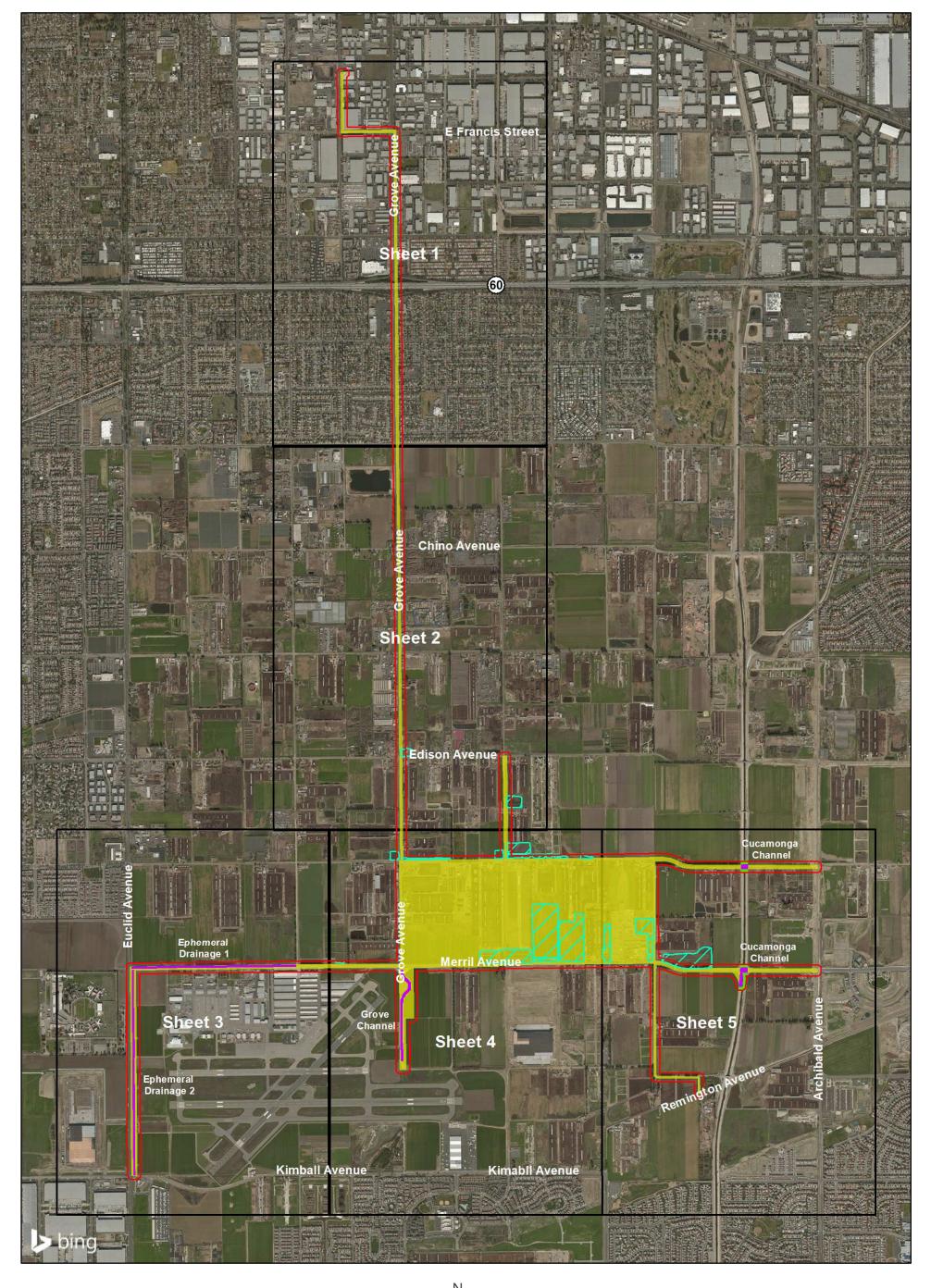
Stebbins, R.C. 1985. A field guide to western reptiles and amphibians, 2nd ed. Houghton Mifflin Co., Boston, Massachusetts.

[USFWS] U.S. Fish and Wildlife Service. 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants. Sacramento, CA: U.S. Fish and Wildlife Service. Unpublished memorandum, dated January 2000.

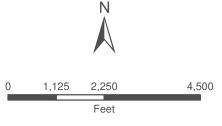
8.0 CERTIFICATION

I hereby certify that the statements f	furnished above and in the attached exhibits present data and
information required for this biologic	ical evaluation, and that the facts, statements, and
information presented are true and o	correct to the best of my knowledge and belief.
Signed:	Date: September 19, 2019

p:0849-32c.bio.rpt.docx





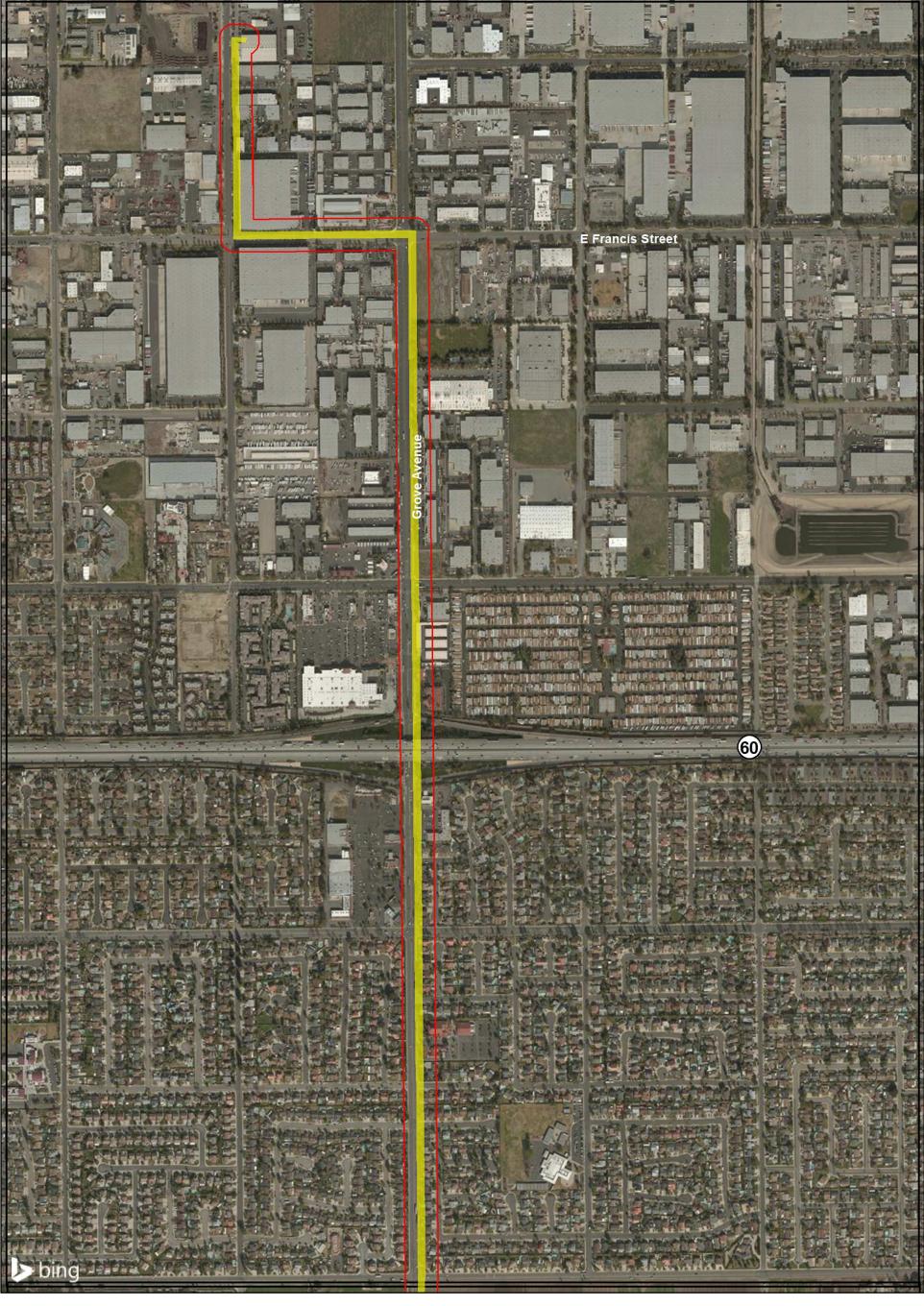


MERRILL COMMERCE CENTER SPECIFIC PLAN

CDFW Jurisdictional Delineation/Impact Map

GLENN LUKOS ASSOCIATES

Exhibit 8B - Key Map



Project Study Area

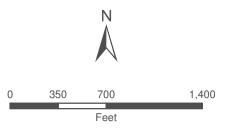
Project Footprint

CDFW Non-Riparian Stream

Impacted CDFW Non-Riparian Stream

Non-jurisdictional Waste Treatment Basin

Width in Feet

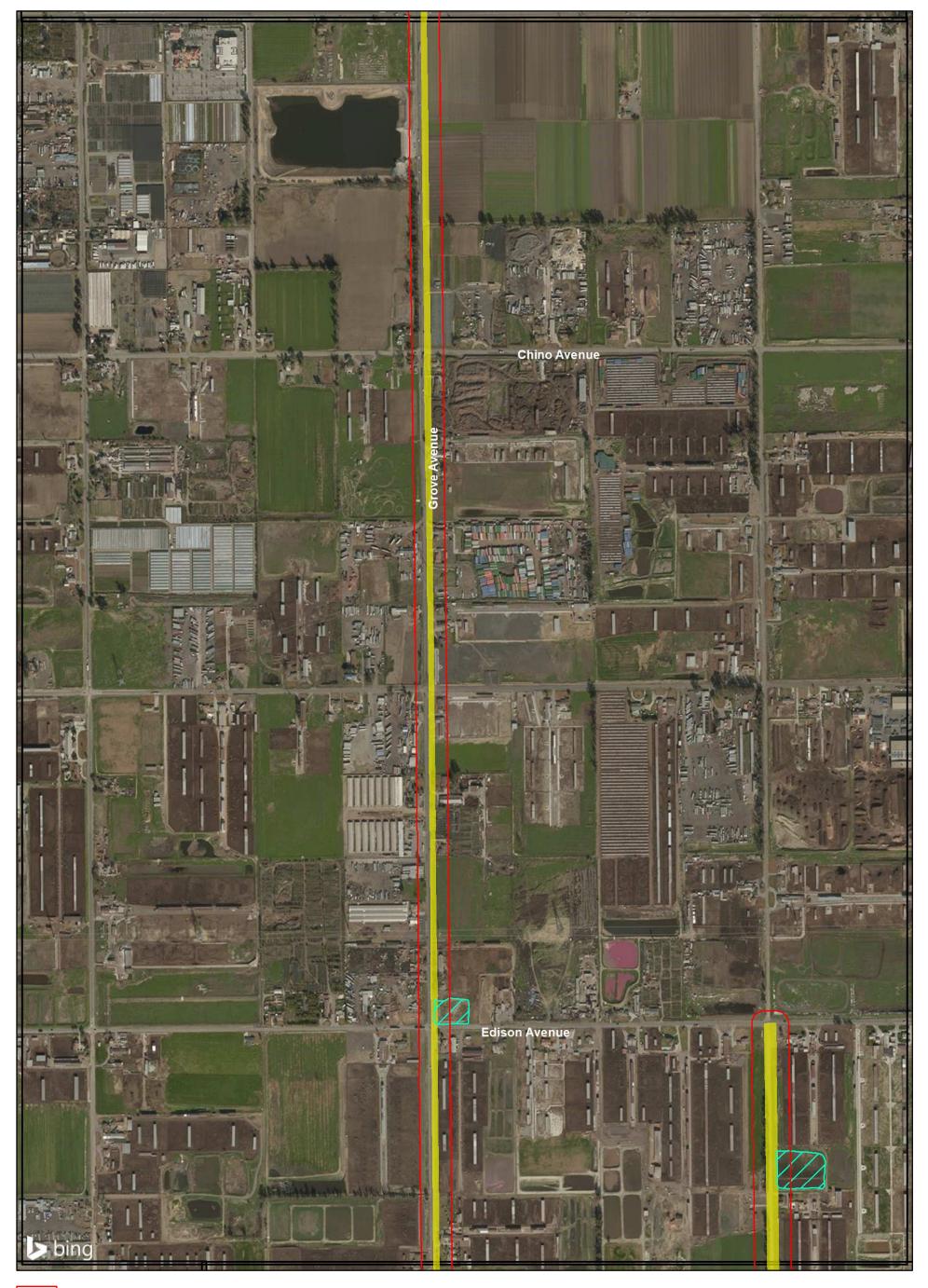


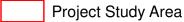
MERRILL COMMERCE CENTER SPECIFIC PLAN

CDFW Jurisdictional Delineation/Impact Map

GLENN LUKOS ASSOCIATES







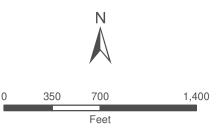
Project Footprint

CDFW Non-Riparian Stream

Impacted CDFW Non-Riparian Stream

Non-jurisdictional Waste Treatment Basin

Width in Feet



MERRILL COMMERCE CENTER SPECIFIC PLAN

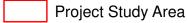
CDFW Jurisdictional Delineation/Impact Map

GLENN LUKOS ASSOCIATES



1 inch = 700 feet





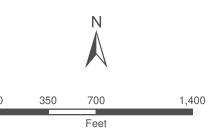
Project Footprint

CDFW Non-Riparian Stream

Impacted CDFW Non-Riparian Stream

Non-jurisdictional Waste Treatment Basin

Width in Feet

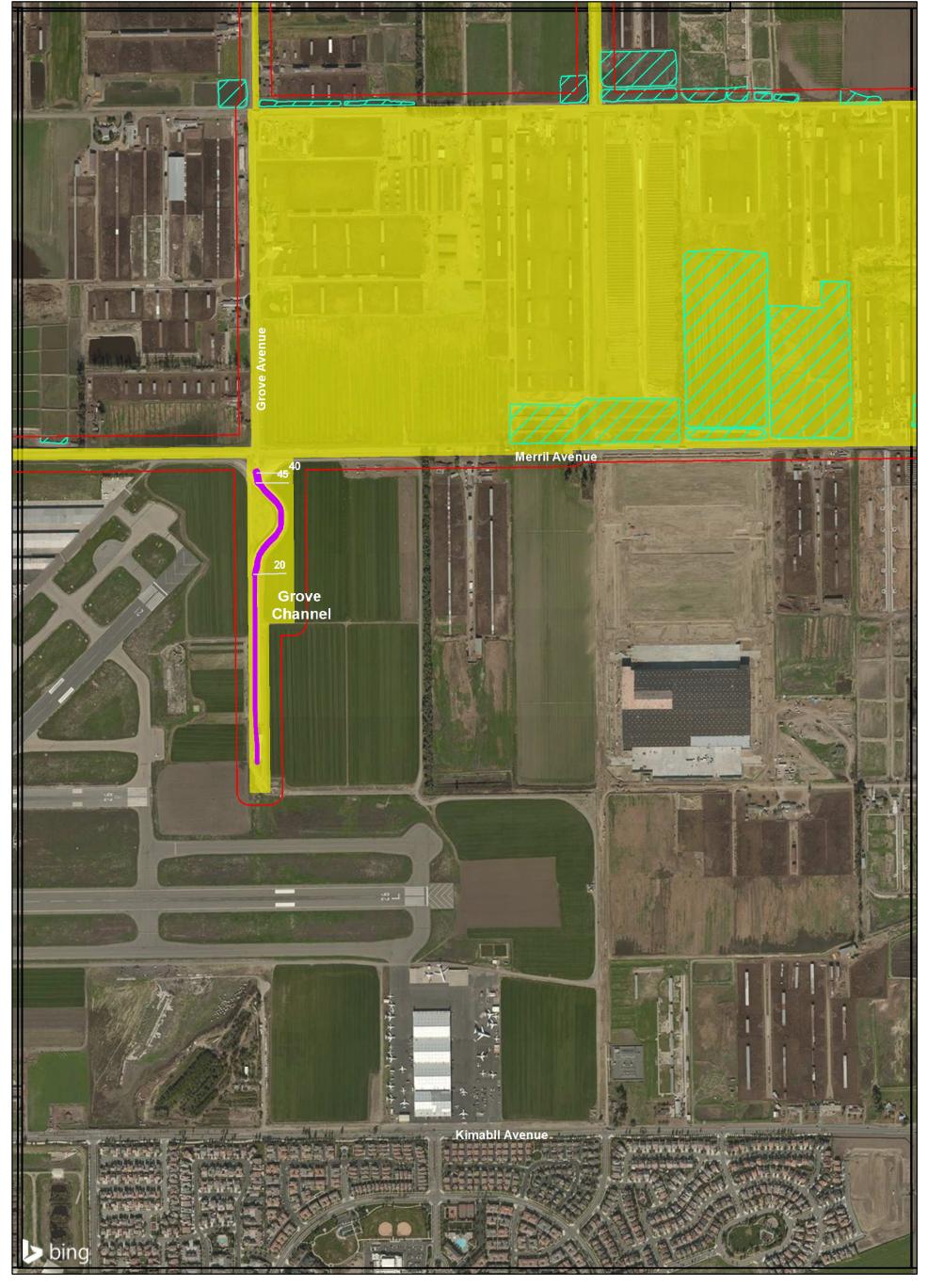


MERRILL COMMERCE CENTER SPECIFIC PLAN

CDFW Jurisdictional Delineation/Impact Map







Project Study Area
Project Footprint

CDFW Non-Riparian Stream

Impacted CDFW Non-Riparian Stream

Non-jurisdictional Waste Treatment Basin Width in Feet

0 350 700 1,400 Feet

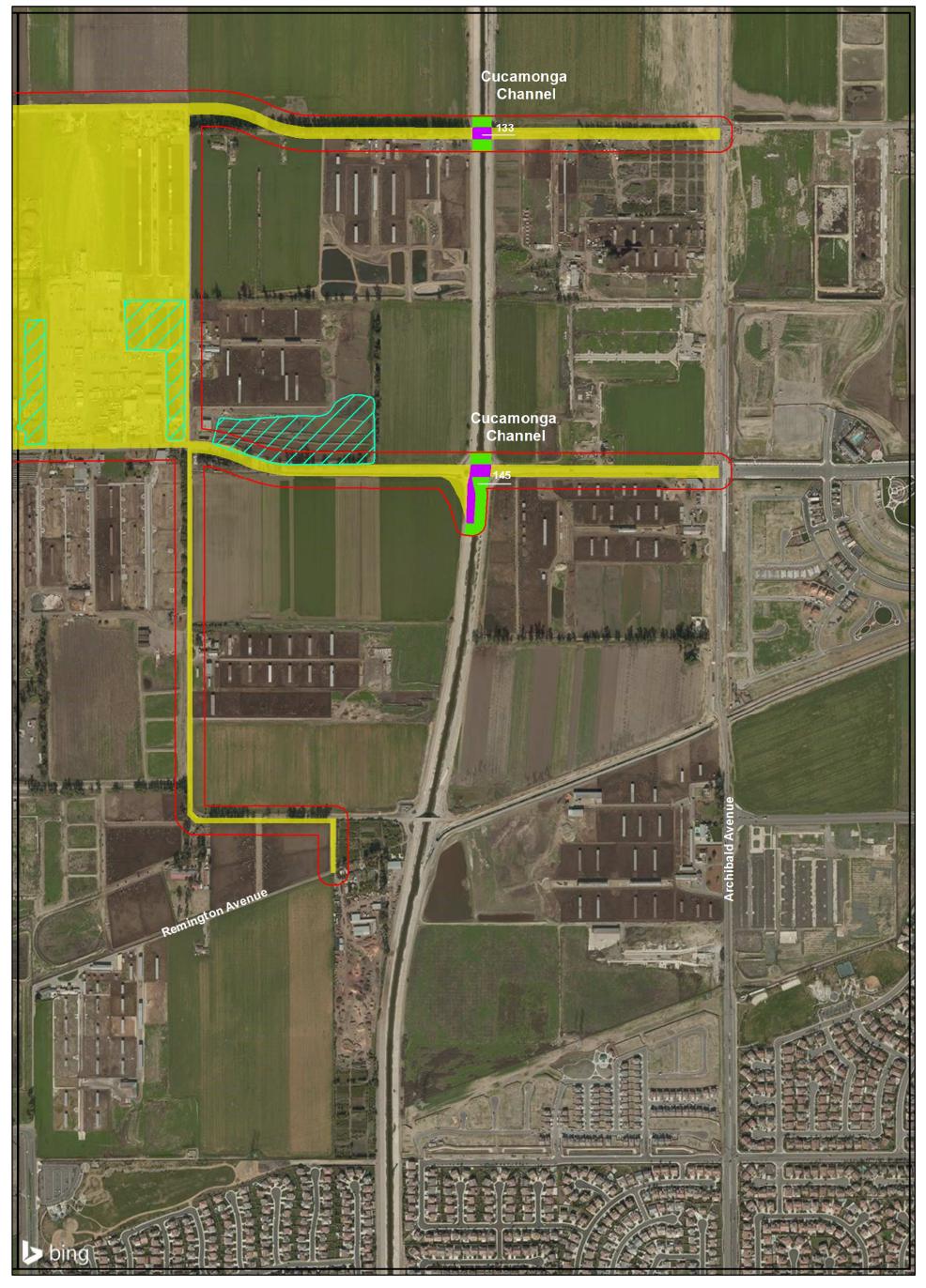
MERRILL COMMERCE CENTER SPECIFIC PLAN

CDFW Jurisdictional Delineation/Impact Map

CLENINI LLIVOC ACCOCIATEC









Project Footprint

CDFW Non-Riparian Stream

Impacted CDFW Non-Riparian Stream

Non-jurisdictional Waste Treatment Basin Width in Feet

Ν 1,400 350 700 Feet

1 inch = 700 feet

MERRILL COMMERCE CENTER SPECIFIC PLAN

CDFW Jurisdictional Delineation/Impact Map

GLENN LUKOS ASSOCIATES







CENTER

MERCE

Photographs





Photograph 2: View to the west of areas of open ground within existing dairy operations.



Photograph 4: View to the south of large Eucalyptus trees, which could potentially be used by roosting lasiurine bat species and nesting raptors.





Photograph 3: View to the north of debris piles that could potentially be used by burrowing owls beneath large Eucalyptus trees, which could potentially be used by roosting lasiurine bat species and nesting raptors.



Photograph 5: View to the northwest of a non-jurisdictional dairy waste treatment basin. Note the large Eucalyptus trees in the background, which could potentially be used by roosting lasiurine bat species and nesting raptors.



Photograph 7: View to the west of a non-jurisdictional dairy waste treatment basin. Note the complex of California ground squirrel burrows located along the upper margins of the basin.



Photograph 6: View to the west of a non-jurisdictional dairy waste treatment basin. Note the complex of California ground squirrel burrows located along the upper margins of the basin.



Photograph 8: View to the south of the Cucamonga Channel from the existing Merrill Avenue Bridge crossing.

7||T||

GLENN LUKOS ASSOCIATES

Exhibit 9, Sheet 2

MERRILL COMMERCE CENTER SPECIFIC PLAN



Photograph 9: View to the south of a concrete-lined portion of the Grove Channel, located within a portion of the Chino Airport.



Photograph 11: View to the east of Ephemeral Drainage 1, located along the northern shoulder of Merrill Avenue.



Photograph 10: View to the south of a rip rap/earthen portion of the Grove Channel, located within a portion of the Chino Airport. Note that a single burrowing owl was observed within a burrow located atop the rip rap.



Photograph 12: View to the south of Ephemeral Drainage 2, located along the eastern shoulder of Euclid Avenue.



GLENN LUKOS ASSOCIATES

Exhibit 9, Sheet 3

MERRILL COMMERCE CENTER SPECIFIC PLAN

Appendix A

Floral Compendium

FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows the Angiosperm Phylogeny Group (APG), which in some cases differs from The Jepson Manual (1993). Common plant names are taken from Hickman (1993), Munz (1974), and Roberts et al (2004) and Roberts (2008). An asterisk (*) denotes a non-native species.

SCIENTIFIC NAME

MAGNOLIOPHYTA

MAGNOLIIDS

MAGNOLIACEAE

Magnolia grandiflora

MONOCOTYLEDONS

AGAVACEAE

* Yucca baccata

AMARYLLIDACEAE

* Clivia miniata

ARECACEAE

Washingtonia filifera

* Washingtonia robusta

POACEAE

* Bromus diandrus

* Cynodon dactylon

* Echinochloa colona

* Hordeum murinum

* Lolium perenne

* Polypogon monspeliensis

TYPHACEAE

Typha domingensis

EUDICOTYLEDONS

CELASTRACEAE

* Euonymus cultivar.

COMMON NAME

FLOWERING PLANTS

MAGNOLIID CLADE

Magnolia Family

southern magnolia

MONOCOTS

Agave Family

Spanish dagger

Amaryllis Family

bush lily

Palm Family

California fan palm Mexican fan palm

Grass Family

ripgut grass

Bermuda grass

jungle rice

foxtail barley

perennial ryegrass

rabbitfoot grass

Cat-Tail Family

southern cat-tail

EUDICOTS

Staff Vine Family

winter creeper

AMARANTHACEAE

- * Amaranthus albus Amaranthus blitoides Atriplex lentiformis subsp. lentiformis
- * Bassia hyssopifolia
- * Chenopodium album
- * Salsola tragus

ANACARDIACEAE

* Schinus molle

ASTERACEAE

- * Cirsium vulgare
- * Lactuca serriola
- * Silybum marianum
- * Sonchus oleraceus Verbesina encelioides

BRASSICACEAE

- * Raphanus sativus
- * Sisymbrium irio

CACTACEAE

* Opuntia ficus-indica

FABACEAE

* Parkinsonia aculeata

GERANIACEAE

* Erodium cicutarium

LYTHRACEAE

* Punica granatum

MALVACEAE

* Malva parviflora Malvella leprosa

MORACEAE

- * Ficus carica
- * Morus alba

MYRTACEAE

* Eucalyptus sp.

Amaranth Family

tumbling pigweed prostrate pigweed Brewer's saltbush five-hook bassia lamb's quarters Russian-thistle

Sumac Family

Peruvian pepper tree

Sunflower Family

bull thistle prickly lettuce milk thistle common sow-thistle earless crownbeard

Mustard Family

wild radish London rocket

Cactus Family

Indian fig

Legume Family

Mexican palo verde

Geranium Family

red-stemmed filaree

Loosestrife Family

pomegranate

Mallow Family

cheeseweed alkali-mallow

Mulberry Family

common fig white mulberry

Myrtle Family

gum tree

NYCTAGINACEAE

* Bougainvillea sp.

OLEACEAE

- * Fraxinus uhdei
- * Olea europaea

POLYGONACEAE

- * Polygonum aviculare
- * Rumex crispus

PORTULACACEAE

* Portulaça oleracea

ROSACEAE

* *Pyrus* cultivar.

SIMAROUBACEAE

* Ailanthus altissima

SOLANACEAE

- * Datura stramonium Datura wrightii
- * Nicotiana glauca
- * Nicotiana glauca
- * Solanum elaeagnifolium

ULMACEAE

* *Ulmus* sp.

URTICACEAE

* Urtica urens

VITACEAE

* Parthenocissus quinquefolia

ZYGOPHYLLACEAE

* Tribulus terrestris

Four O'Clock Family

bougainvillea

Olive Family

Shamel ash European olive

Buckwheat Family

prostrate knotweed curly dock

Purslane Family

common purslane

Rose Family

ornamental pear

Simarouba Family

tree of Heaven

Nightshade Family

thorn-apple jimsonweed tree tobacco tree tobacco

horse nettle

Elm Family

elm species

Nettle Family

dwarf nettle

Grape Family

Virginia creeper

Caltrop Family

puncture vine

Appendix B

Faunal Compendium

FAUNAL COMPENDIA

Vertebrates identified in the field by sight, calls, tracks, scat, or other signs are cited according to the nomenclature of Collins (1997) for amphibians and reptiles, AOU (1998) for birds, and Jones et al. (1992) for mammals. Species were noted by direct observation, call identification, or detection of tracks, scat, or other diagnostic signs.

LEGEND

- † Denotes special-status species
- * Denotes non-native species

TERRESTRIAL INVERTEBRATES

NYMPHALIDAE - BRUSH-FOOTED BUTTERFLIES

Vanessa atlanta red admiral

PIERIDAE - WHITES AND SULPHURS

*Pieris rapae cabbage white

FORMICIDAE - ANTS

Pogonomyrmex sp. harvester ant

SCARABAEIDAE - SCARAB BEETLES

*Popillia japonica
Japanese green beetle

THERIDIIDAE - TANGLE-WEB AND COBWEB SPIDERS

Latrodectus sp. black widow spider

ACRIDIDAE - GRASSHOPPERS

Trimerotropis pallidipennis pallid-winged grasshopper

TERRESTRIAL VERTEBRATES

REPTILES

IGUANIDAE - IGUANID LIZARDS

Sceloporus occidentalis western fence lizard

BIRDS

ANATIDAE - SWANS AND GEESE

Branta canadensis
Canada goose
Aythya americana
redhead
Anas platyrhynchos
mallard
Anas americana
American wigeon
Anas cyanoptera
cinnamon teal

CATHARTIDAE - NEW WORLD VULTURES

Cathartes aura turkey vulture

ACCIPITRIDAE - HAWKS

Accipiter cooperi Cooper's hawk Buteo jamaicensis red-tailed hawk

PHASIANIDAE - PHEASANTS & QUAILS

*Gallus domesticus domestic chicken *Pavo cristatus Indian peafowl

RALLIDAE - RAILS

Fulica Americana

American coot

CHARADRIIDAE - SHOREBIRDS

Charadrius vociferus killdeer

SCOLOPACIDAE - SHOREBIRDS

Numenius phaeopus
whimbrel
Limnodromus sp.
dowitcher
Calidris minutilla
least sandpiper
Gallinago delicata
Wilson's snipe

ARDEIDAE - HERONS AND STORKS

Ardea alba great egret

THRESKIORNITHIDAE - IBIS

Plegadis chihi white-faced ibis

RECURVIROSTRIDAE - STILTS AND AVOCETS

Himantopus mexicanus black-necked stilt Recurvirostra Americana American avocet

PHALACROCORACIDAE - CORMORANTS

Phalacrocorax auritus double-crested cormorant

COLUMBIDAE - PIGEONS & DOVES

Zenaida macroura
mourning dove
*Streptopelia decaocto
Eurasian collared dove
*Columba livia
rock pigeon

APODIDAE - SWIFTS

Aeronautes saxatalis

white-throated swift

TROCHILIDAE - HUMMINGBIRDS

Calypte anna Anna's hummingbird

FALCONIDAE - FALCONS

Falco sparverius
American kestrel

TYTONIDAE - BARN OWLS

Tyto alba barn owl

STRIGIDAE - TRUE OWLS

†Athene cunicularia burrowing owl

TYRANNIDAE - TYRANT FLYCATCHERS

Sayornis nigricans
black phoebe
Sayornis saya
Say's phoebe
Tyrranis verticalis
western kingbird
Tyrranis vociferans
Cassin's kingbird

CORVIDAE - JAYS & CROWS

Corvus brachyrhynchos
American crow
Corvus corax
common raven

HIRUNDINIDAE - SWALLOWS

Hirundo rustica
barn swallow
Hirundo pyrrhonota
cliff swallow
Stelgidopteryx serripennis
northern rough-winged swallow

TROGLODYTIDAE - WRENS

Thryomanes bewickii
Bewick's wren

MIMIDAE - THRASHERS

Mimus polyglottos

Northern mockingbird

STURNIDAE - STARLINGS

*Sturnus vulgaris
European starling

MOTACILLIDAE - PIPITS

Anthus rubescens
American pipit

PARULIDAE - WOOD WARBLERS

Setophaga coronata
yellow-rumped warbler
†Setophaga petechia
yellow warbler
Geothlypis trichas
common yellowthroat

EMBERIZIDAE - SPARROWS, BUNTINGS, WARBLERS, & RELATIVES

Melospiza melodia
song sparrow
Passerculus sandwichensis
savannah sparrow
Zonotrichia leucophrys
white-crowned sparrow

ICTERIDAE - BLACKBIRDS AND ORIOLES

Sturnella neglecta
western meadowlark
Euphagus cyanocephalus
Brewer's blackbird
Agelaius phoeniceus
red-winged blackbird
Xanthocephalus xanthocephalus
yellow-headed blackbird
*Molothrus ater
brown-headed cowbird

Quiscalus mexicanus great-tailed grackle

FRINGILLIDAE - FINCHES

Carpodacus mexicanus house finch Carduelis psaltria lesser goldfinch

CARDINALIDAE - CARDINALS AND ALLIES

Piranga ludoviciana western tanager

PASSERIDAE - OLD WORLD SPARROWS

*Passer domesticus house sparrow

PASSERELLIDAE - AMERICAN SPARROWS

Zonotrichia leucophrys
White-crowned sparrow

ALAUDIDAE - AMERICAN SPARROWS

Eremophila alpestris actia California horned lark

MAMMALS

MEPHITIDAE - SKUNKS AND STINK BADGERS

Mephitis mephitis striped skunk

GEOMYIDAE - POCKET GOPHERS

Thomomys bottae

Botta's pocket gopher

CANIDAE - CANINES

*Canis familiaris domestic dog

LEPORIDAE - RABBITS AND HARES

Sylvilagus audubonii desert cottontail

FELIDAE - WILD CATS

*Felis silvestris domestic cat

SCIURIIDAE - SQUIRRELS

Otospermophilus beecheyi California ground squirrel

CAMELIDAE - CAMELS, LLAMAS, AND ALPACAS

*Lama glama domestic llama

BOVIDAE - CATTLE

*Ovis aries
domestic sheep
*Capra aegagrus hircus
domestic goat
*Bos taurus
domestic cow

Appendix C

Focused Habitat Assessment for the Delhi Sands Flower-loving Fly



--DRAFT--

Delhi Sands Flower-loving Fly Habitat Suitability Evaluation Merrill Commerce Center Specific Plan

Site Location:

City of Ontario
County of San Bernardino
"Corona North", "Prado Dam", Guasti", and "Ontario"
7.5-minute USGS Quadrangle Maps

Prepared for:

Zack West Principal/Senior Biologist Glenn Lukos Associates, Inc. 29 Orchard Lake Forest, California 92630

Prepared by:

Scott Cameron Ecological Sciences, Inc. 24307 Magic Mountain Parkway, #538 Valencia, CA 91355 scameron@ecosciencesinc.com 805.921.0583

Total Area Surveyed:

 \pm 536 acres

Survey Conducted by:

Scott Cameron Principal Biologist

Survey Conducted On:

September 4, 2018 September 5, 2018

Report Date:

January 8, 2019



January 8, 2019

Zack West Senior Biologist/Regulatory Specialist Glenn Lukos Associates, Inc. 29 Orchard Lake Forest, California 92630

SUBJECT: Results of a Habitat Suitability Evaluation, Merrill Commerce Center Specific Plan,

City of Ontario, San Bernardino County, California

Dear Zack:

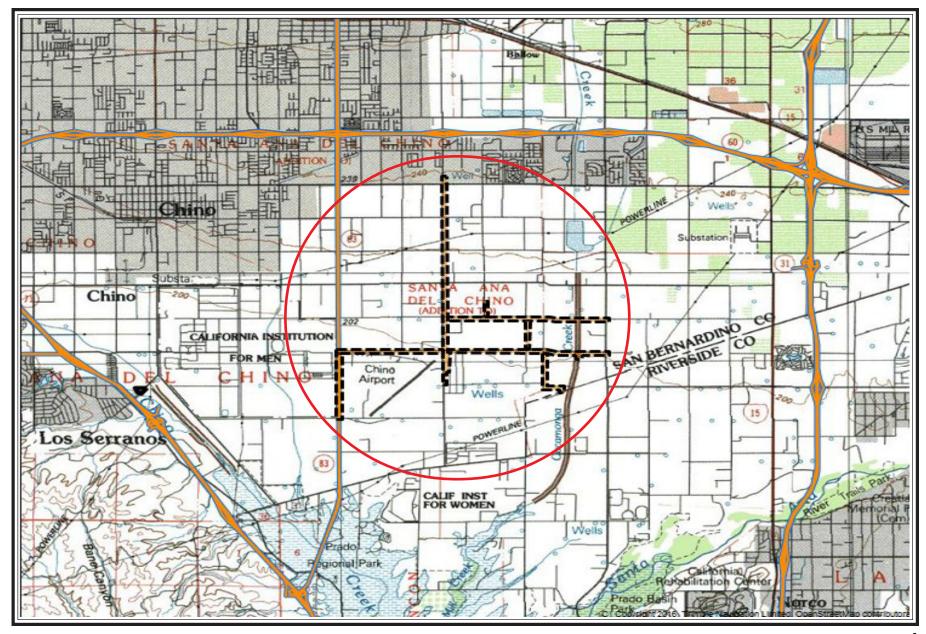
This letter report presents findings of a reconnaissance-level survey conducted to generally evaluate the suitability of a ±536-acre linear site (Merrill Commerce Center Specific Plan-herein site or study area) to support the federally-listed endangered Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*-herein DSFF).

Introduction

The study area is regionally located in San Bernardino County, California (*Plate 1*). Specifically, the project site is located in the City of Ontario (City), generally south of the Pomona Freeway (60), north of Kimball Avenue, east of Euclid Avenue, and west of Archibald Avenue. The site occurs on the "Corona North", "Prado Dam", Guasti", and "Ontario" USGS 7.5-minute topographic maps (*Plate 2*). *Plate 3-0* provides an regional aerial photograph of the study area followed by vicinity aerial *Plates 3-1* to *3-6*. Projects proposed in the area that contain potentially suitable habitat to support sensitive biological resources such as the DSFF must demonstrate to reviewing agencies that potential project-related impacts to sensitive biological resources are avoided or minimized. In order to meet the environmental documentation and review requirements, potentially occurring sensitive biological resources must be addressed to demonstrate the applicant's conformance to California Environmental Quality Act (CEQA) and the federal Endangered Species Act (ESA) of 1973, as amended. As such, this report is intended to provide biological information to the applicant and reviewing agencies in support of the environmental review process.

As a federally listed endangered species, the DSFF is protected under the ESA. As such, federal law prohibits "take" of listed species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct. In some cases, habitat modification can constitute prohibitive "take". A section 10(a) permit is required for projects where a determination of "take" is likely to occur during a proposed non-federal activity. If the project were to require a federal permit (e.g., USACE 404 permit), the federal agency issuing the permit would consult with the FWS to determine how the action may affect the DSFF under Section 7 of the Act.

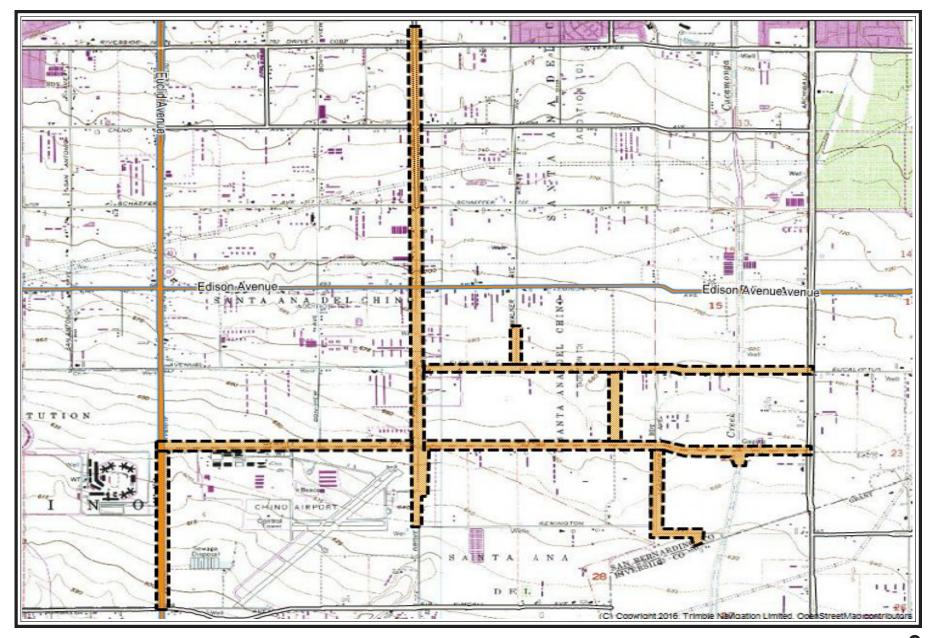
The U.S. Fish and Wildlife Service (FWS) routinely reviews environmental documentation for proposed development projects in the area, and as such, would recommend that any impacts to sensitive biological resources be adequately addressed and mitigated pursuant to the ESA and CEQA. Due to the inherent limitations of unseasonal or habitat-based data, definitive conclusions regarding the actual presence or absence of DSFF cannot be made in this evaluation, although these limitations do not affect our conclusion that the property does not contain suitable habitat for the DSFF. Accordingly, this report is intended to provide the applicant with general information relative to the potential occurrence of DSFF based solely on the nature and condition of habitat present.





= Specific Study Area

plate 1



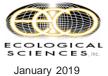
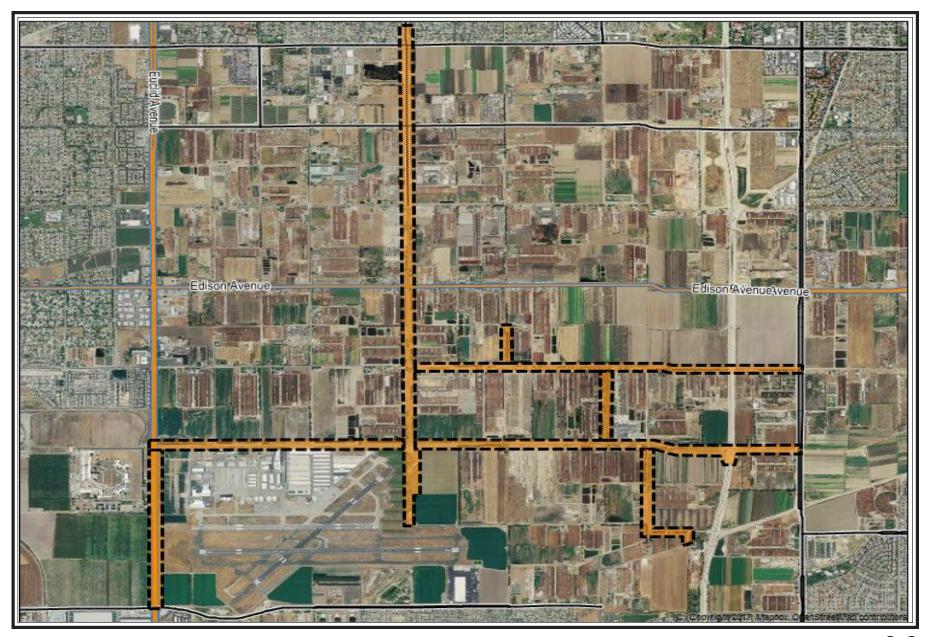
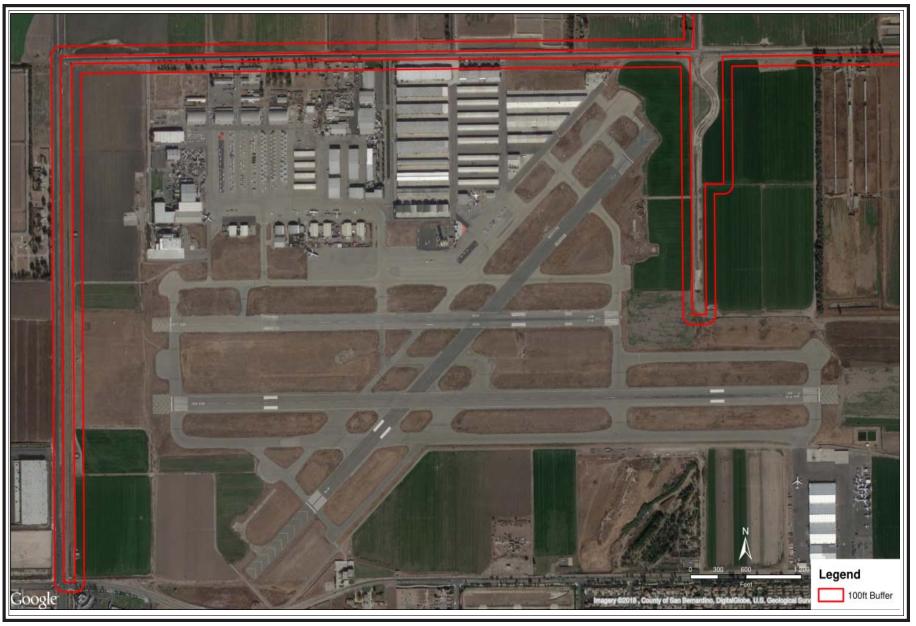


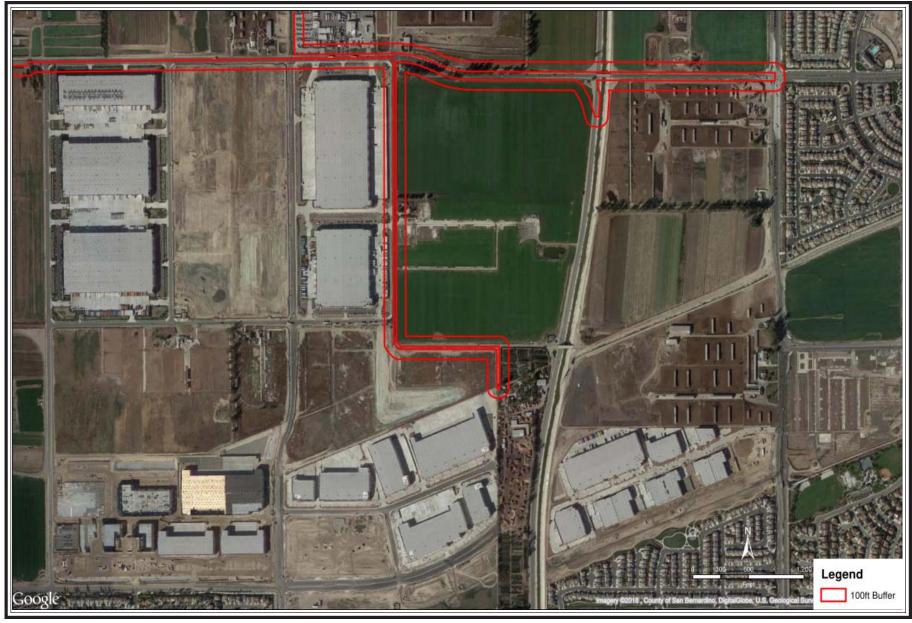
plate 2



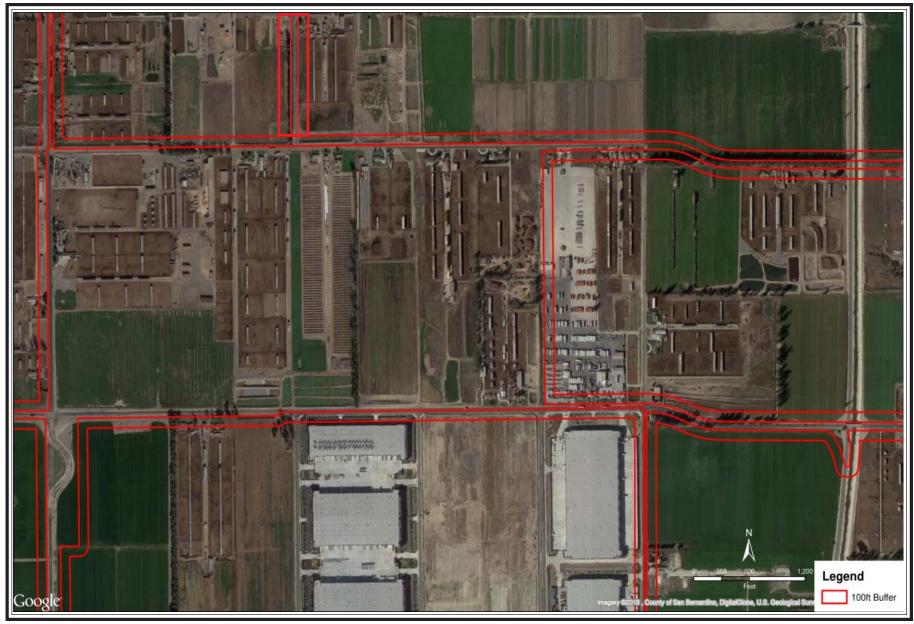








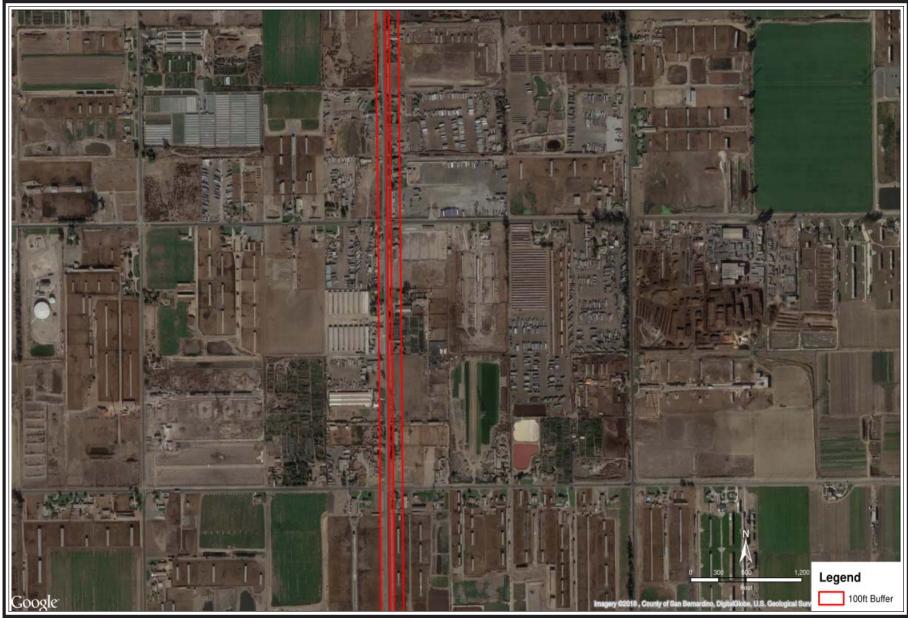
ECOLOGICAL SCIENCES, inc.
January 2019 Source: Glenn Lukos Associates (2018)











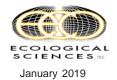
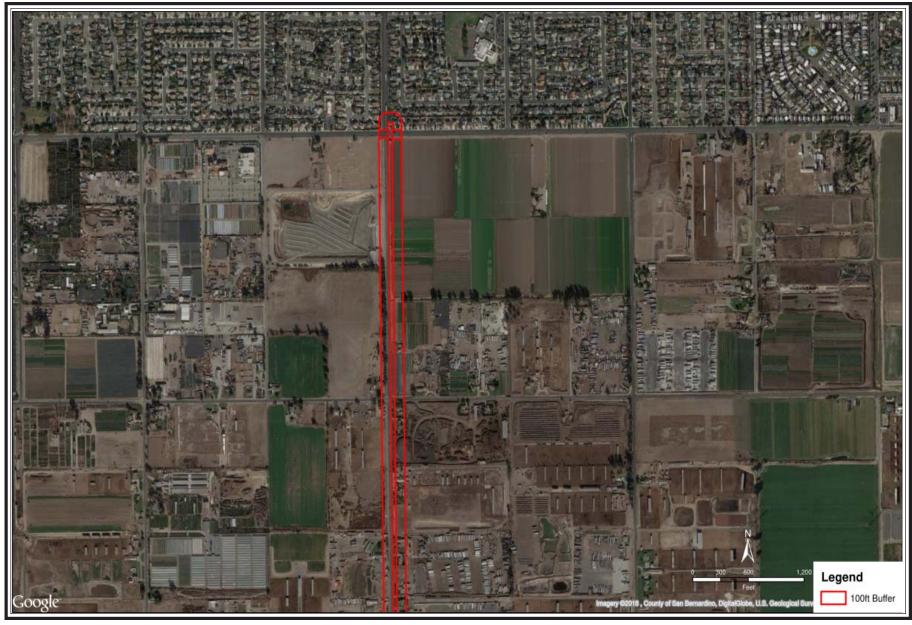


plate 3-5

Site Vicinity Aerial



ECOLOGICAL SCIENCES, inc.
January 2019 Source: Glenn Lukos Associates (2018)

plate 3-6

Site Vicinity Aerial

Selected Species Overview

The FWS listed the DSFF as an endangered species on September 23, 1993. This species is only known to occur in association with Delhi sand deposits (USFWS 1997), primarily on twelve disjunct sites within a radius of about eight miles in the cities of Colton, Rialto, and Fontana in southwestern San Bernardino and northwestern Riverside counties. However, recent survey data (1997-03) indicates that DSFF occur in low numbers in Ontario, and also in sub-optimal habitat conditions. The DSFF is restricted to the Colton Dunes, which covers approximately 40 square miles. More than 95 percent of the formerly known habitat has been converted to human uses or severely affected by human activities, rendering it apparently unsuitable for occupation by the species (Smith 1993, USFWS 1997 in Kingsley 1996).

General Habitat Characteristics

Areas containing sandy substrates with a sparse cover of perennial shrubs and other vegetation constitute the primary habitat requirements for Rhaphiomidas flies (USFWS 1997). Potential habitat for the DSFF is typically defined as areas comprised of sandy soil (Delhi series) in open areas commonly dominated by three indicator plant species: California buckwheat (Eriogonum fasciculatum), California croton (Croton californica), and telegraph weed (Heterotheca grandiflora). Annual bur-sage (Ambrosia acanthicarpa), Rancher's fireweed (Amsinckia menziesii), autumn vinegar weed (Lessingia glandulifera), sapphire eriastrum (Eriastrum sapphirinum), primrose (Oenothera sp.), and Thurber's buckwheat (Eriogonum thurberi) are also commonly present at occupied DSFF sites. In addition, insect indicator species such as Apiocera and Nemomydas are also typically associated with occupied DSFF habitat. It is also important to note that the presence or absence of indicator species does not determine presence/absence of DSFF. Rather, these indicator species exhibit a strong correlation to habitats occupied by DSFF. A gradient of habitat suitability exists for DSFF, composed of varying degrees of both natural and artificial conditions.

Federal DSF Recovery Units / Core Reserves

Subregional areas encompassing smaller areas known to be inhabited by the DSFF or encompassing areas that contain restorable habitat for the DSFF have been grouped into three Recovery Units (RUs) by the FWS based on geographic proximity, similarity of habitat, and potential genetic exchange (USFWS 1997). The subject site is located within an area designated as the Ontario RU. The Ontario RU historically contained the largest block of the Colton Dunes; however, most lands in this RU have been converted to agriculture, or developed for commercial and residential projects (USFWS 1997). The Ontario RU contains several areas that currently support DSFF, and additional areas have been proposed for restoration in the DSFF Recovery Plan. The occupied and/or potentially restorable habitat in the RUs includes only those areas that, at a minimum, contain Delhi Series soils. Further, RUs do not include residential and commercial development, or areas that have been otherwise permanently altered by human actions (USFWS 1997). DSFF will continue to exist in the Ontario RU only with land conservation, a cessation of current habitat-degrading land management practices and recreational uses, and/or a restoration or natural reversion of ecologically damaged lands back to an ecological community typical of Delhi sands formations.

Potentially suitable habitats remaining in the Ontario RU are highly fragmented, and as such, the establishment of a permanent long-term reserve in this RU is currently unresolved. While many degraded sites are currently unsuitable to support DSFF, DSFF have been recorded on certain properties that have been heavily disturbed in the past (e.g., previously graded and/or scraped sites where a cessation of disturbance-related land uses have occurred such that a degree of natural conditions now occur). Accordingly, DSFF may persist on, or disperse to, certain properties that have not been exposed to recurring and/or recent land disturbances. These previously disturbed properties may be important for future preservation of the species in the region. In addition, individual DSFF have been recorded in areas generally considered unsuitable to support this taxon, and with no apparent connectivity to occupied DSFF habitats.



Additional data will be needed on reproduction and mortality rates, dispersal, and habitat variables before further refinement of RU boundaries, development of alternative RU preserve designs, and analyses of population can be made (USFWS 1997). Until such data is obtained, the highest priority will be to protect existing populations of the DSFF (USFWS 1997). To achieve downlisting, areas containing occupied and/or restorable habitat and dispersal corridors need to be evaluated relative to the extent of distribution patterns necessary to support secure populations. Sites to be protected should be selected based on habitat needs of adults and larvae, and willingness of landowners to participate in recovery efforts (USFWS 1997). Several "Core Reserve Areas" have been initially identified by the FWS, but to our knowledge, the actual extent of the proposed reserve areas has not been finalized.

Focused DSFF Survey Guidelines

The FWS prepared Presence/Absence Survey Guidelines for the DSFF in December 1996 (FWS 1996), with revisions in April 2004. In general, the guidelines maintain that in order to more fully determine the presence or absence of DSFF such that the results are acceptable to the FWS, a survey following these guidelines must be conducted. The guidelines require that surveys be conducted in all areas containing Delhi sands twice weekly (two days per week) during the single annual flight period from July 1 to September 20. However, at the discretion of the FWS, survey guidelines may be modified depending upon individual site circumstances (e.g., highly degraded sites that don't support constituent elements of potential DSFF habitat or early seasonal emergence periods). During the environmental review process, recommendations to perform focused DSFF surveys are evaluated by reviewing agencies on a site-by-site basis.

Methodology

Literature Search

Documentation pertinent to the biological resources in the vicinity of the site was reviewed and analyzed. Information reviewed included: (1) the Federal Register listing package for the federally listed endangered DSFF; (2) literature pertaining to habitat requirements of DSFF; (3) the California Natural Diversity Data Base (CNDDB 2019) information regarding sensitive species potentially occurring on the site for the "Corona North", "Prado Dam", "Guasti", and "Ontario" USGS 7.5-minute quadrangle maps, and (4) review of any available reports from the general vicinity of the site.

2018 Habitat-Suitability Evaluation

Ecological Sciences conducted a reconnaissance-level field survey on the subject site to evaluate potential habitat for DSFF on September 4-5, 2018. The survey was conducted by Scott Cameron, Principal Biologist (TE-808642-8) of Ecological Sciences, Inc. Ecological Sciences biologists have observed numerous DSFF in the field since 1995, and have extensive experience conducting both focused surveys and habitat evaluations for this sensitive taxon. Ecological Sciences is well versed with the biotic characteristics of a range of habitats occupied by DSFF, as well as other sensitive wildlife species potentially occurring in the area. The linear site was examined on foot (transects) and by vehicle along areas proposed for development. As mentioned, the primary objective of the two-day field visit was to generally evaluate the site's potential to support DSFF. Dominant plant species and other habitat characteristics present at the site were identified to assess the overall habitat value. Weather conditions included relatively clear skies, 1-3 breezes, and ambient temperatures of 76-87 °F.

Existing Biological Environment

The subject site is generally characterized as a highly disturbed agricultural area under various forms of development. Active dairy farms and dairy-related infrastructure (sheds, corrals, etc.), feeding preparation areas, detention basins, ruderal pastureland, debris dumping areas, equipment storage areas, and cultivated crops are present. Much of the open pasture areas are exposed to routine discing activities. Manure, associated with ongoing agricultural operations, is present throughout much of the



dairy and pasture areas. The study area is located along existing asphalt/dirt roadways, some with deep, incised adjacent channels. Numerous single-family residences and commercial development are also present within the study area. The western portion of the site is located within the Chino Airport boundaries. Surrounding land uses include areas similar to the subject site such as agricultural, rural residential, and commercial.

Vegetation

The ruderal/disturbed areas support mostly invasive, non-native annual species. Dense non-native grasses generally covers on-site irrigated pasturelands and manure spreading areas. Cattle feeding areas were barren ground covered in manure and mud. Ruderal plants recorded on site included non-native grasses and weedy species such as foxtail chess (*Bromus madritensis* spp. *rubens*), ripgut grass (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), Mediterranean grass (*Schismus barbatus*), filaree (*Erodium* sp.), Lamb's quarter's (*Chenopodium album*), milk thistle (*Silybum marianum*), Russian thistle (*Salsola tragus*), golden crownbeard (*Verbesina encelioides*), puncture vine (*Tribulus terrestris*), black mustard (*Brassica nigra*), cheeseweed (*Malva parviflora*), pigweed (*Chenopodium* sp.), gum tree windrows (*Eucalyptus* sp.), salt cedar (*Tamarix* sp.), and Mexican fan palm (*Washingtonia robusta*). Native plant was recorded on site included common sunflower (*Helianthus annuus*), Jimsonweed (*Datura wrightii*), and rough cocklebur (*Xanthium strumarium*). *Appendix A* provides site photographs from various and representative locations throughout the study area.

General Soils Analysis / Soil Conservation Map Review

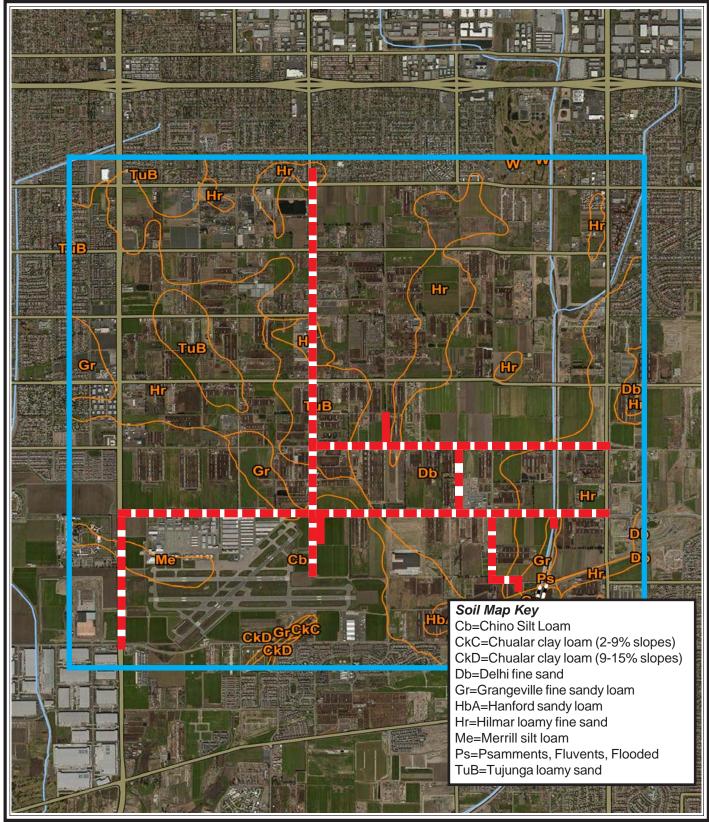
A review of soil maps prepared for the area by the Natural Resource Conservation Service (NRCS 2018) indicate that the subject site is located within an area mapped as containing Chino Silt Loam (Cb), Chualar clay loam (CkC 2-9% slopes), Chualar clay loam (CkD 9-15% slopes) Delhi fine sand (Db), Grangeville fine sandy loam (Gr), Hanford sandy loam (HbA), Hilmar loamy fine sand (Hr), Merrill silt loam (Me); Psamments, Fluvents, Flooded (Ps), and Tujunga loamy sand (TuB). Various long-standing anthropogenic site disturbances such as agriculture have significantly altered the site's mapped surface soil characteristics. A general soils analysis was conducted due to the close association of DSFF to mostly open, sandy friable soils. *Plate 4-0* illustrates regional soils. *Plates 4-1* to *4-6* illustrate site vicinity soils.

Discussion

DSFF have relatively narrow habitat requirements that are determined by appropriate plant species and open sand as defining characteristics (Kingsley 1996). It has long been established that a gradient of suitability exists composed of varying degrees of natural and artificial conditions. Observations such as the DSFFs apparent avoidance of dense (both native and non-native) vegetation (>75% coverage) or general avoidance of vegetation that is sparse or not present at all (<5% coverage) appear to suggest that DSFF generally select habitats with a combination of some vegetation, including several species of plants, and some open space with bare sand (Kiyani 1996). The presence of Delhi soils appears to be the most determinative factor of whether an area can provide suitable DSFF habitat. Delhi sands constitute the primary component of a complex ecosystem. A variety of microhabitat characteristics generally constitute potential DSFF habitat (e.g., Delhi soils, vegetation composition, soil chemistry, topography, percent vegetative cover, frequency of non-native plant species, exposure to disturbances, etc.).

While the aforementioned microhabitat conditions are considered optimal/essential to support DSFF, DSFF sometimes occur in areas not typically considered suitable for this taxon. Although individual DSFF have been recorded from sites supporting mostly ruderal, non-native vegetation, most known DSFF-occupied sites contain areas, or are adjacent to areas, of relatively undisturbed exposed patches of friable, sandy soils in association with selected native plant species. History of DSFF colony sites indicates that previously disturbed (by grading, certain types of agriculture, etc.) Delhi sands formations may revert over a few years (through erosion, aeolian processes, fossorial animal activity, and natural





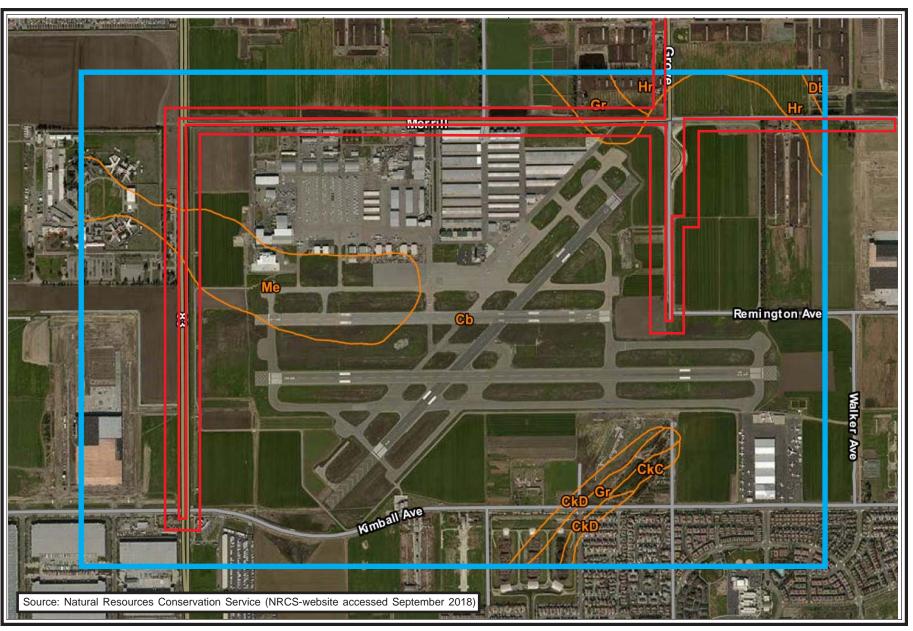
Source: Natural Resources Conservation Service (NRCS-website accessed September 2018)



= = Study Areas= Extent of Soil Analysis

plate **4-0**

Regional Soils





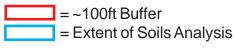
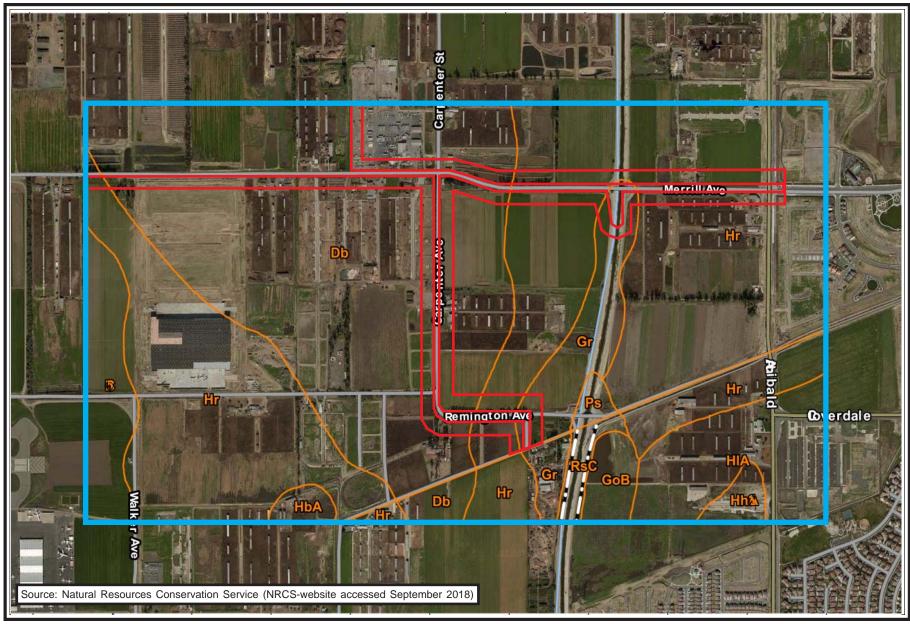
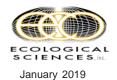
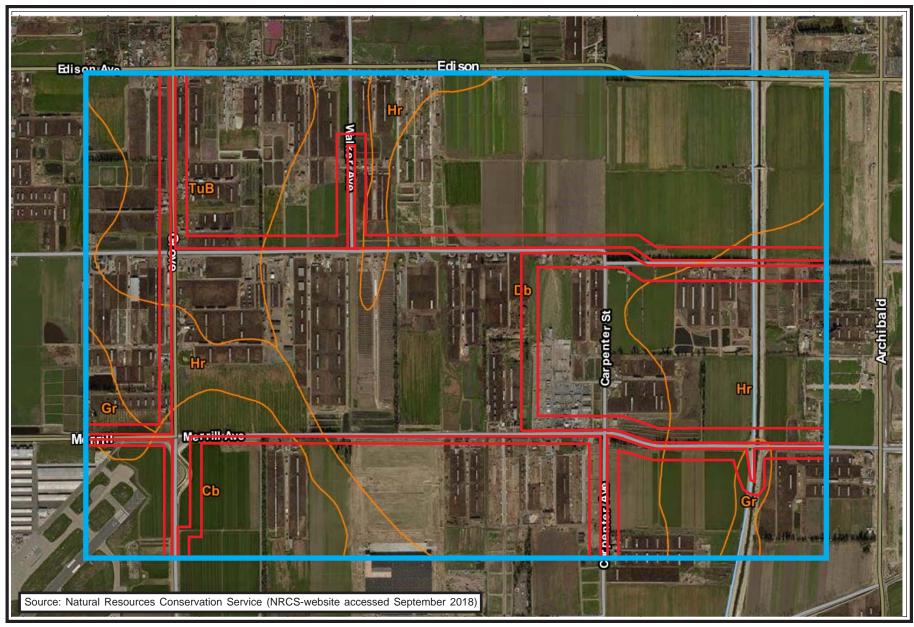


plate 4-1





= ~100ft Buffer = Extent of Soils Analysis plate 4-2





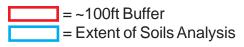
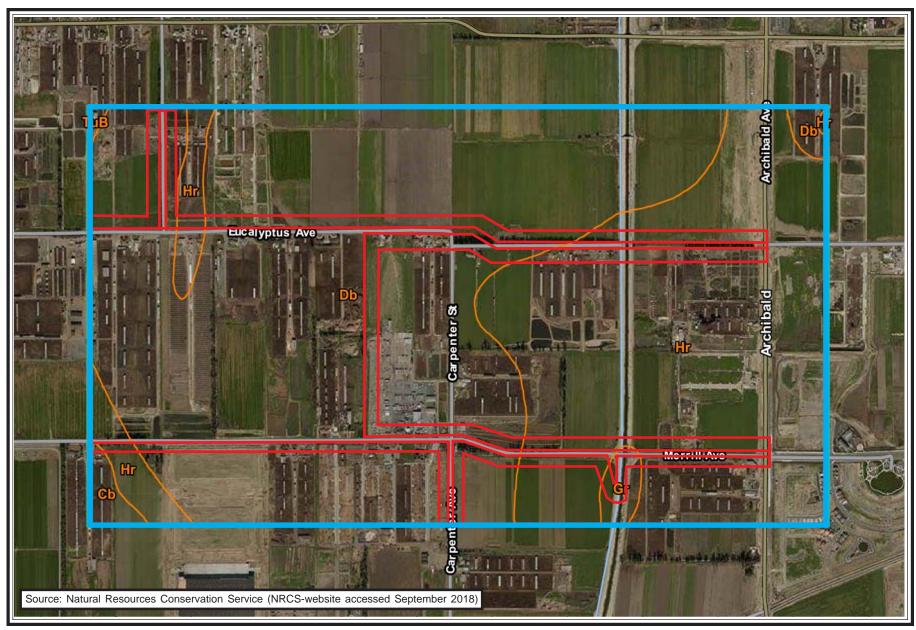
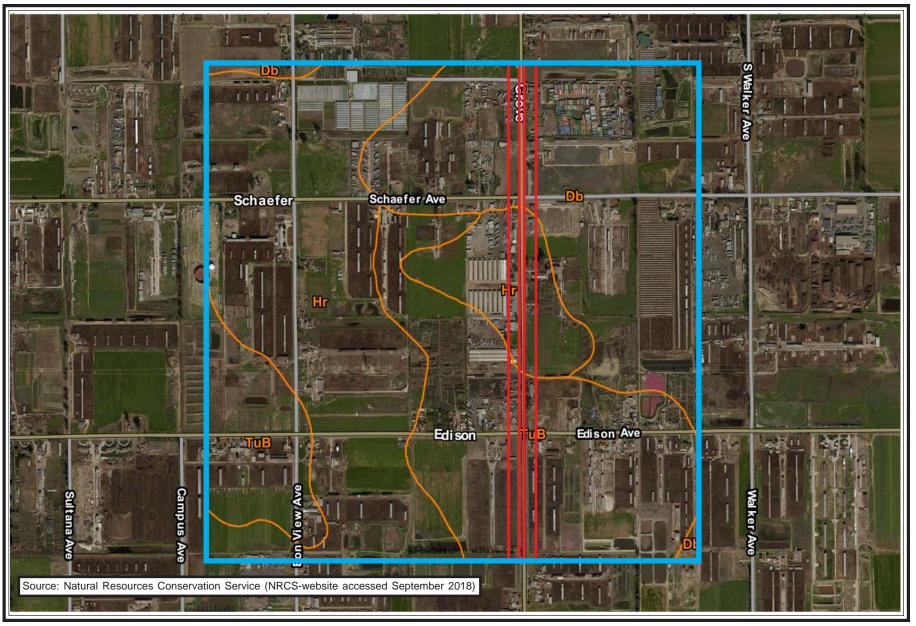


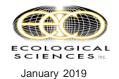
plate **4-3**





= ~100ft Buffer = Extent of Soils Analysis plate 4-4





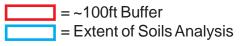
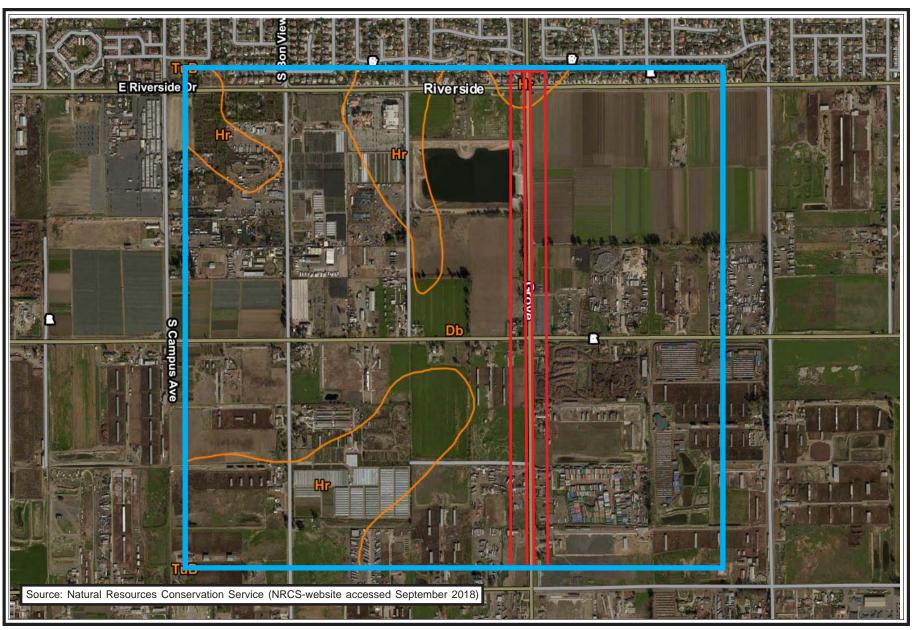
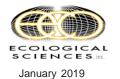


plate 4-5





= ~100ft Buffer = Extent of Soils Analysis plate 4-6

vegetative succession) back to conditions capable of supporting DSFF populations. However, these natural processes are dependent upon a cessation of disturbance-related land uses, which prevent the natural reestablishment of a more characteristic Delhi sand community (associated with potential DSFF habitat).

Absent changes in existing land uses, or implementation of an extensive revegetation/restoration effort, the establishment of a more characteristic Delhi sand community (associated with potential DSFF habitat) within the study area would be prevented due to deleterious changes in soil chemistry and/or recurring soil disturbances associated with long standing and routine dairy/agricultural operations. Approaches to habitat restoration would vary from simple, relatively inexpensive, and predictably successful (in cases of enhancing partially occupied sites that are weed overgrown) to complex, costly, and unpredictable (in cases of manured or imported fill sites). Disruption of substrate is deleterious to DSFF habitat because it destroys the cryptoflora crust, which is important to resisting microorganisms and maintaining ecosystem integrity (Belnap 1994 in FWS 1997). Similarly, the presence of extensive amounts of manure greatly reduces or eliminates the potential use of the site by DSFF. The presence of manure degrades potential DSFF habitat, as manure smothers animals, plants, and habitat where it is dumped (FWS 1997). According to the DSFF Recovery Plan (FWS 1997), manure also provides high levels of nutrients for invasive exotic plants such as those recorded in dense coverages on the site. Moreover, restoration of manured sites, although possible, is of the lowest priority according to the DSFF Recovery Plan (FWS 1997). There exists, in our opinion, no possibility of DSFF to occur within the subject study area or on such habitats as exemplified by this site, and were DSFF introduced to the study area in its current condition, DSFF would not become established or persist on site.

There is no connectivity to the subject site from the nearest known (to us) DSFF population (± 4 -5 miles northeast of the site) due to the presence of existing development that entirely surrounds the site. While this species likely has the capability of dispersing over relatively large distances of seemingly unsuitable habitats under certain circumstances, it would be reasonable to assume (based on our current knowledge of the species) that the likelihood of DSFF dispersing to the subject site from the nearest known off-site occupied (or historically occupied) site would be extremely low despite the fact that variables such as the length, width, and structural characteristics of dispersal corridors are not fully understood. Accordingly, the subject site would not be considered a viable property for preservation or restoration due to current land use, absence of suitable habitat, geographic location. isolation from undeveloped areas or areas supporting DSFF populations, and surrounding land uses which have long since fragmented potential DSFF habitat in the area.

Conclusion

Based on results of the September 2018 DSFF habitat suitability evaluation, existing conditions present within the study area are not consistent with those known or expected to support DSFF. No exposed natural or semi-natural open areas with unconsolidated wind-worked granitic soils or dunes are present. Exposure to intensive and recurring substrate disturbances (e.g. active dairy operations, rural residential, commercial, agriculture activities) have substantial negative effects on potential DSFF habitat and prevents potentially suitable DSFF microhabitat conditions from developing. Substrate conditions are not consistent with those most often correlated with potential DSFF habitat and no DSFF plant associations are present on site.

Under current conditions, the site would generally be considered prohibitive to DSSF occupation. The underlying soil environment appears to be the most definitive factor of whether an area could potentially support DSFF. Accordingly, the quality of Delhi soils present within the study area was rated for its potential to support DSFF. The areas mapped as Delhi soils were visually inspected and rated based on a scale of 1 to 5, with 5 being the best quality and most suitable habitat in the biologist's judgment:

1. Soils dominated by heavy deposits of alluvial material including coarse sands and gravels with little or no Delhi sands and evidence of soil compaction. *Unsuitable*.



- 2. Delhi sands are present but the soil characteristics include a predominance of alluvial materials (Tujunga Soils). *Very Low Quality*.
- 3. Although not clean, sufficient Delhi sands are present to prevent soil compaction. Some sandy soils exposed on the surface due to fossorial animal activity. *Low Quality*.
- 4. Abundant clean Delhi sands with little or no alluvial material or Tujunga soils present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. *Moderate Quality*
- 5. Sand dune habitat with clean Delhi sands. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. *High Quality*

Based on the above ratings and existing site conditions, the ±536-acre study area (Merrill Commerce Center Specific Plan) would be considered *Unsuitable* for DSFF. In view of the site's highly disturbed and isolated condition, exposure to extensive and recurring surface disturbances, and analyses of correlative habitat information from a wide range (e.g., relatively disturbed to more natural habitats) of occupied DSFF habitats in the region, the subject site does not contain habitat suitable to support or sustain a viable DSFF population. Therefore, no impacts to DSFF are expected and no mitigation is required for less than significant impacts under CEQA.

Φ

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

Sincerely,

Ecological Sciences, Inc.

Scott D. Cameron Principal Biologist



References

California Natural Diversity Data Base (CNDDB). 2018. Online Reports for the "Corona North", "Prado Dam", "Guasti", and "Ontario" USGS 7.5-minute quadrangle maps.

Glenn Lukos Associates. 2018. Project-related maps.

Kingsley, Kenneth J. 1996. Behavior of the Delhi Sands Flower-Loving Fly (Diptera: Mydidae), a Little Known Endangered Species. Ann. Entomol. Soc. Am. 89(6): 883-891.

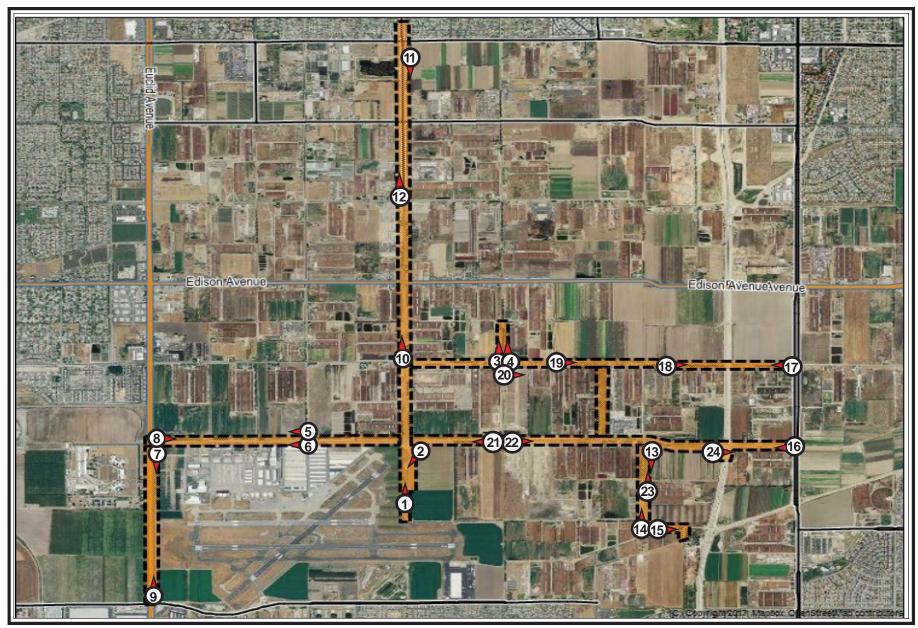
Natural Resource Conservation Service (NRCS). 2019. Custom Soil Resource Report for San Bernardino County, Southwestern Part, California. U.S. United States Department of Agriculture. NRCS website accessed September 2018.

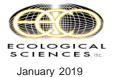
- U.S. Fish and Wildlife Service. 1993. Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for the Delhi Sands Flower-loving Fly. U.S. Department of Interior. Federal Register, 58 (183): 49881-49887.
- U.S. Fish and Wildlife Service. 1996. Interim General Survey Guidelines for the Delhi Sands Flower-loving Fly. December 30.
- U.S. Fish and Wildlife Service (FWS). 1997. Delhi sands Flower-loving Fly (*Rhaphiomidas terminatus abdominalis*) Recovery Plan. U.S. Fish and Wildlife Service, Portland, OR. 51 pp.
- U.S. Fish and Wildlife Service. 2004. General Survey Guidelines for the Delhi Sands Flower-loving Fly. April 30.



Appendix A Site Photographs







Appendix A-O

Photograph Locations



Photo 1.

View to north



Photo 2.

View to southwest





Photo 3.

View to north



Photo 4.

View to north





Photo 5.

View to west



Photo 6.

View to west





Photo 7.

View to south



Photo 8.

View to east





Photo 9.

View to north



Photo 10.

View to north





Photo 11.

View to south



Photo 12.

View to north





Photo 13.

View to south



Photo 14.

View to north





Photo 15.

View to east



Photo 16.

View to west





Photo 17.

View to west



Photo 18.

View to east





Photo 19.

View to east



Photo 20.

View to east





Photo 21.

View to east



Photo 22.

View to west





Photo 23.

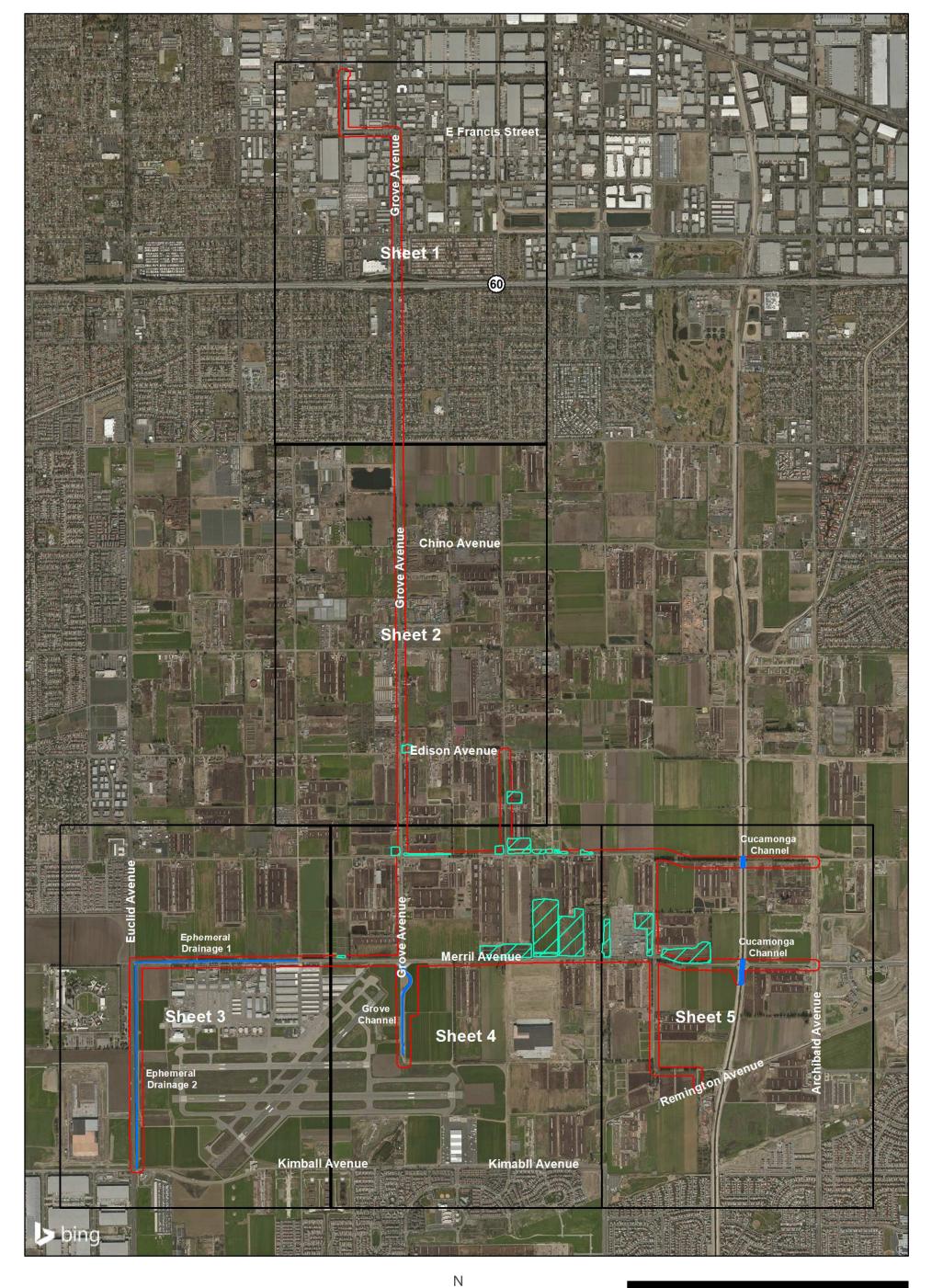
View to north

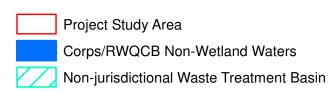


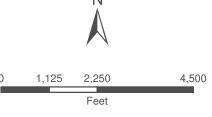
Photo 24.

View to east









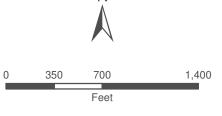
Corps/Regional Board Jurisdictional Delineation Map







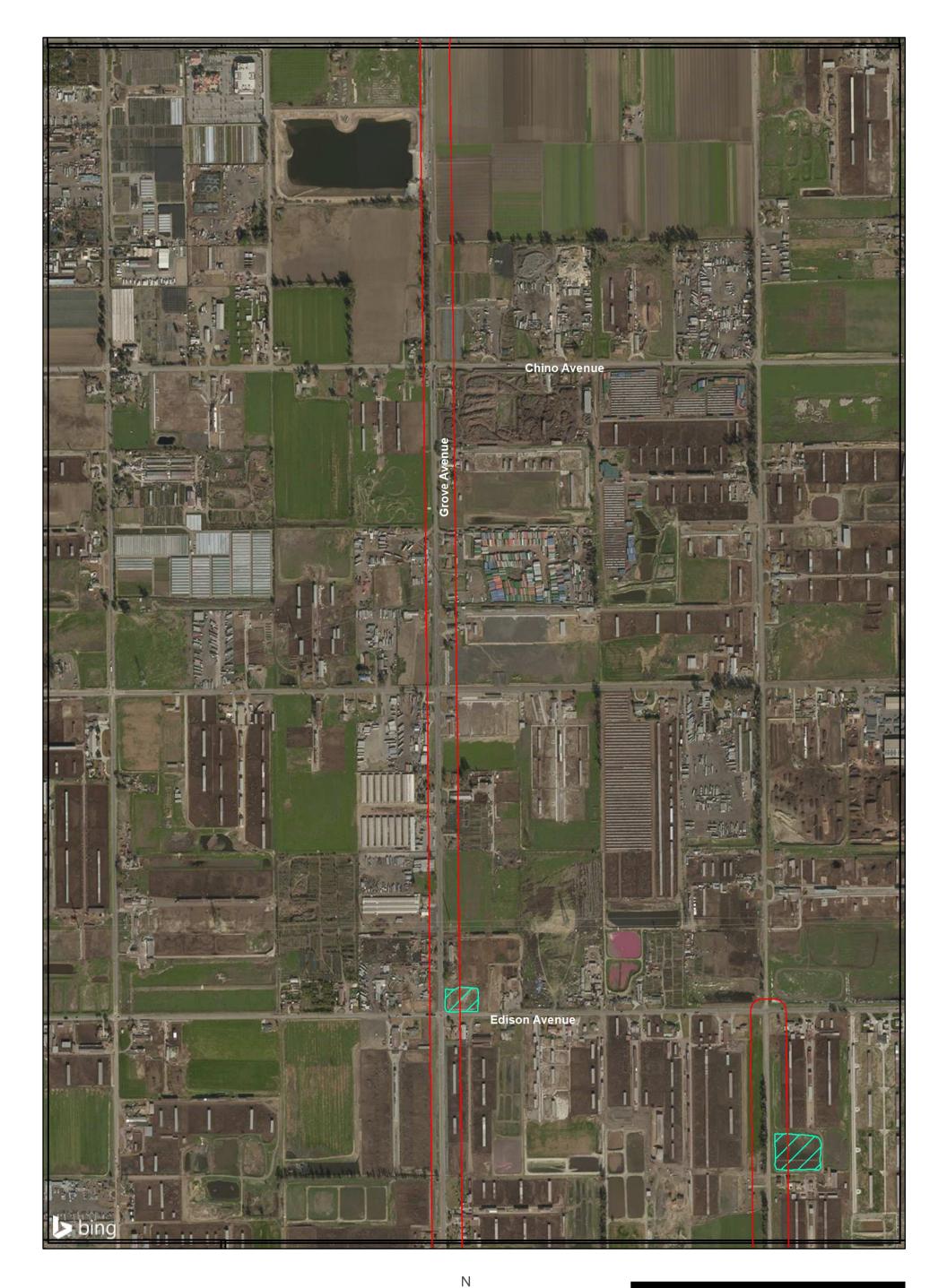
Non-jurisdictional Waste Treatment Basin Width in Feet



MERRILL COMMERCE CENTER SPECIFIC PLAN

Corps/Regional Board Jurisdictional Delineation Map







Non-jurisdictional Waste Treatment Basin

Width in Feet



MERRILL COMMERCE CENTER SPECIFIC PLAN

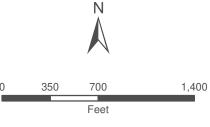
Corps/Regional Board Jurisdictional Delineation Map







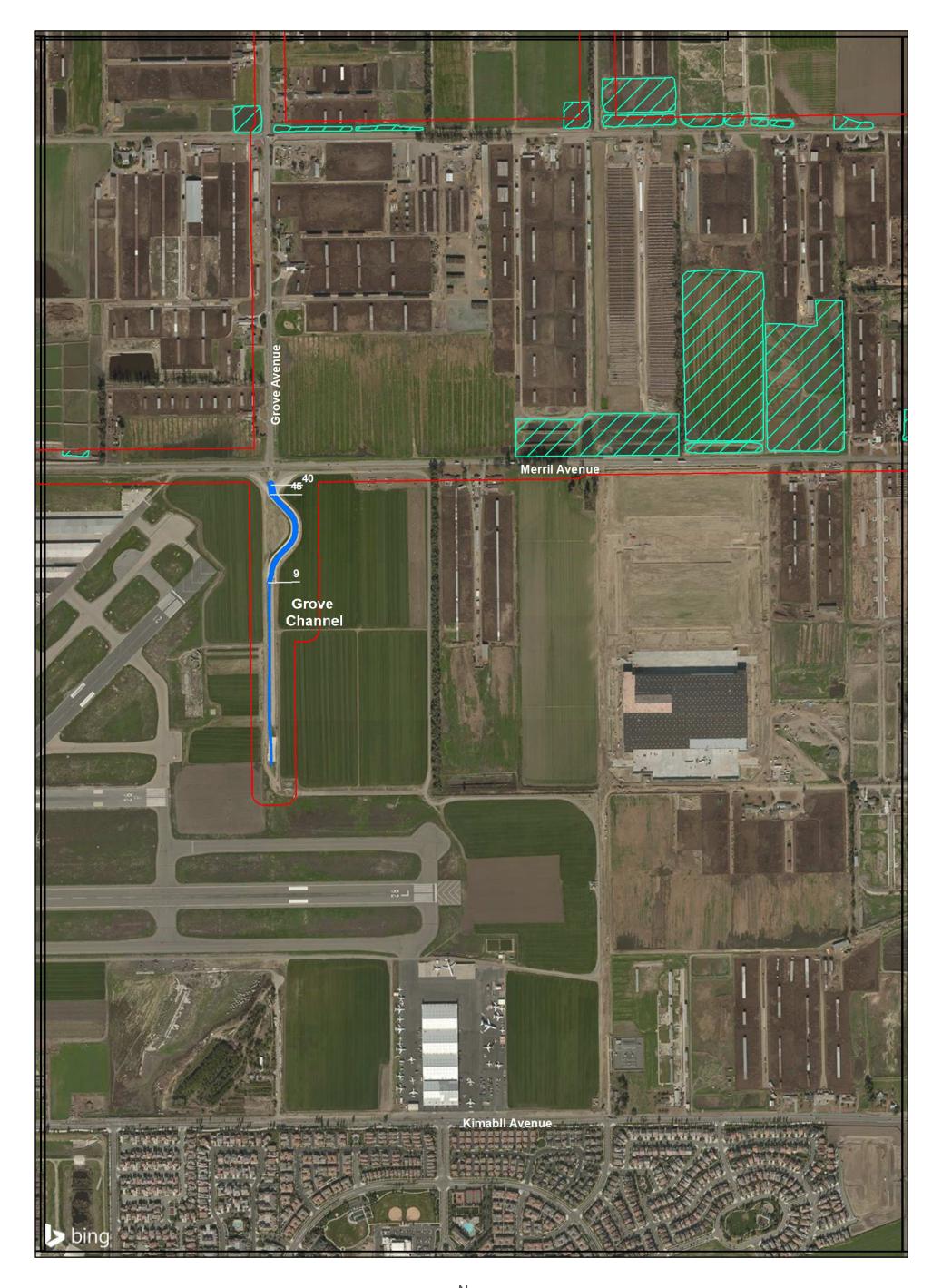
Non-jurisdictional Waste Treatment Basin Width in Feet

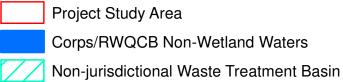


MERRILL COMMERCE CENTER SPECIFIC PLAN

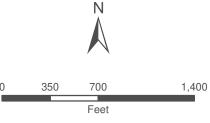
Corps/Regional Board Jurisdictional Delineation Map







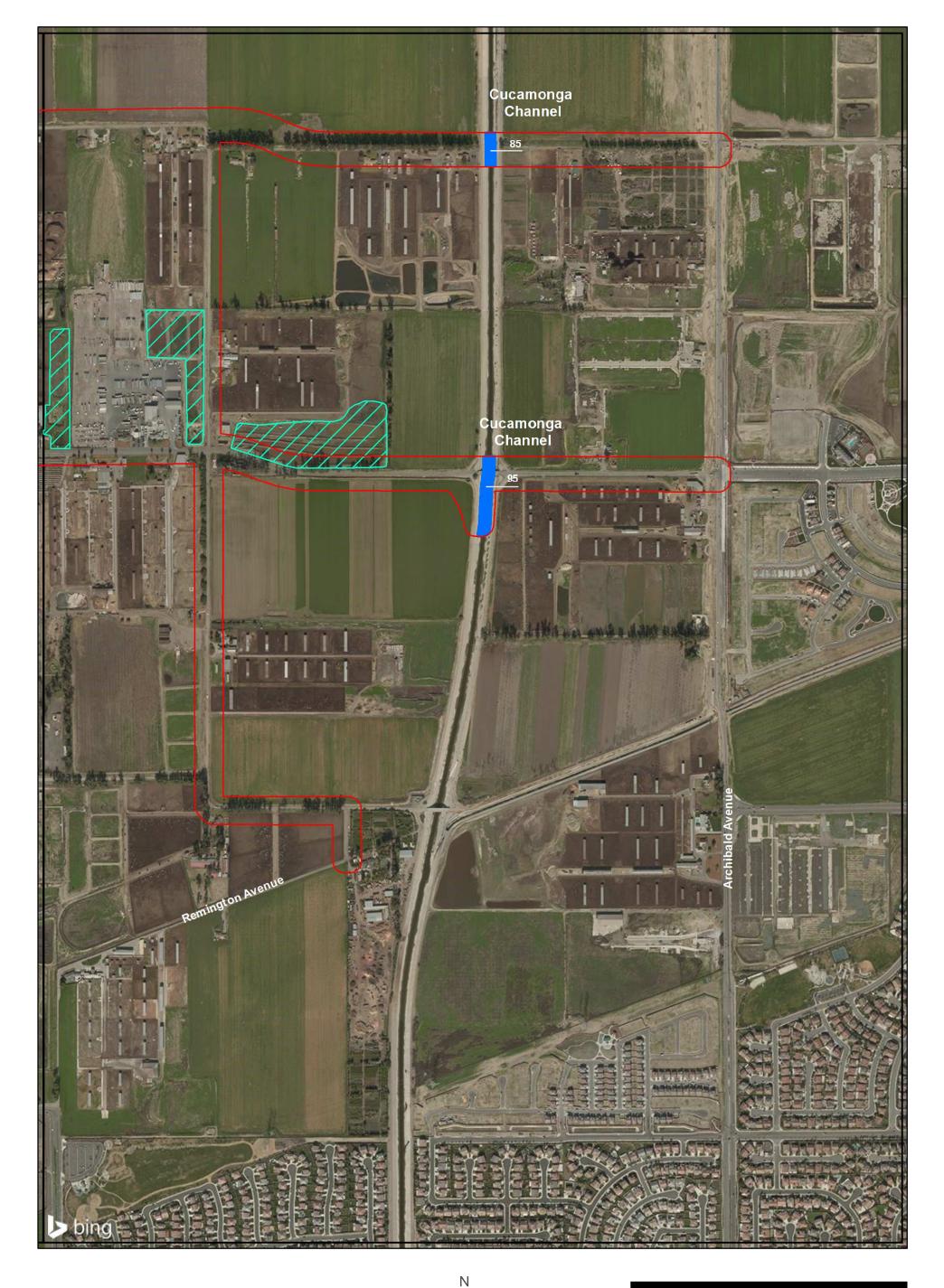
Width in Feet

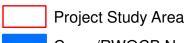


MERRILL COMMERCE CENTER SPECIFIC PLAN

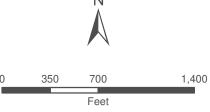
Corps/Regional Board Jurisdictional Delineation Map







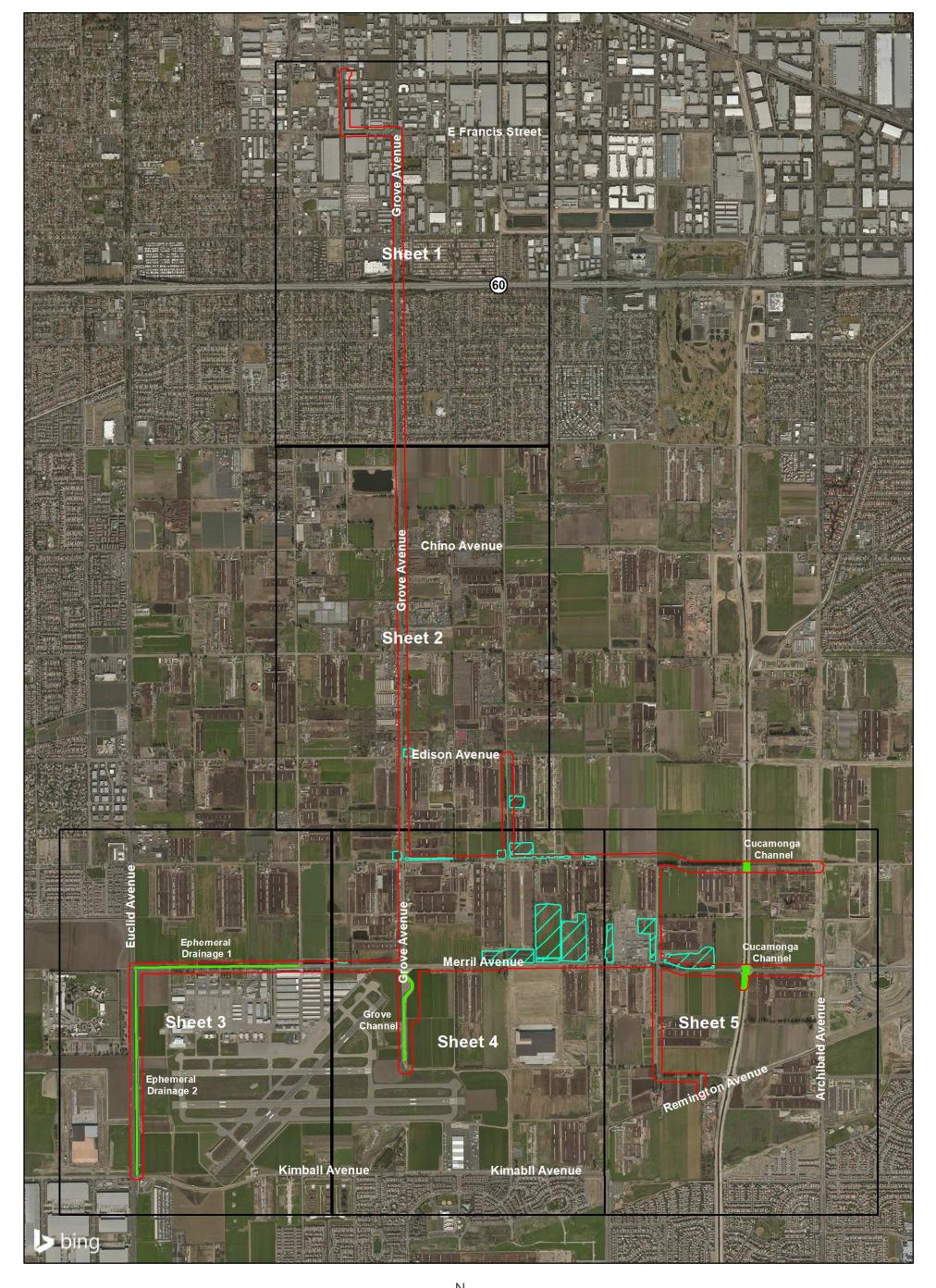
Non-jurisdictional Waste Treatment Basin Width in Feet

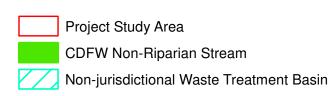


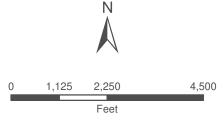
MERRILL COMMERCE CENTER SPECIFIC PLAN

Corps/Regional Board Jurisdictional Delineation Map









CDFW Jurisdictional Delineation Map

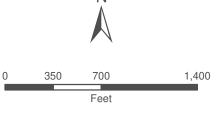








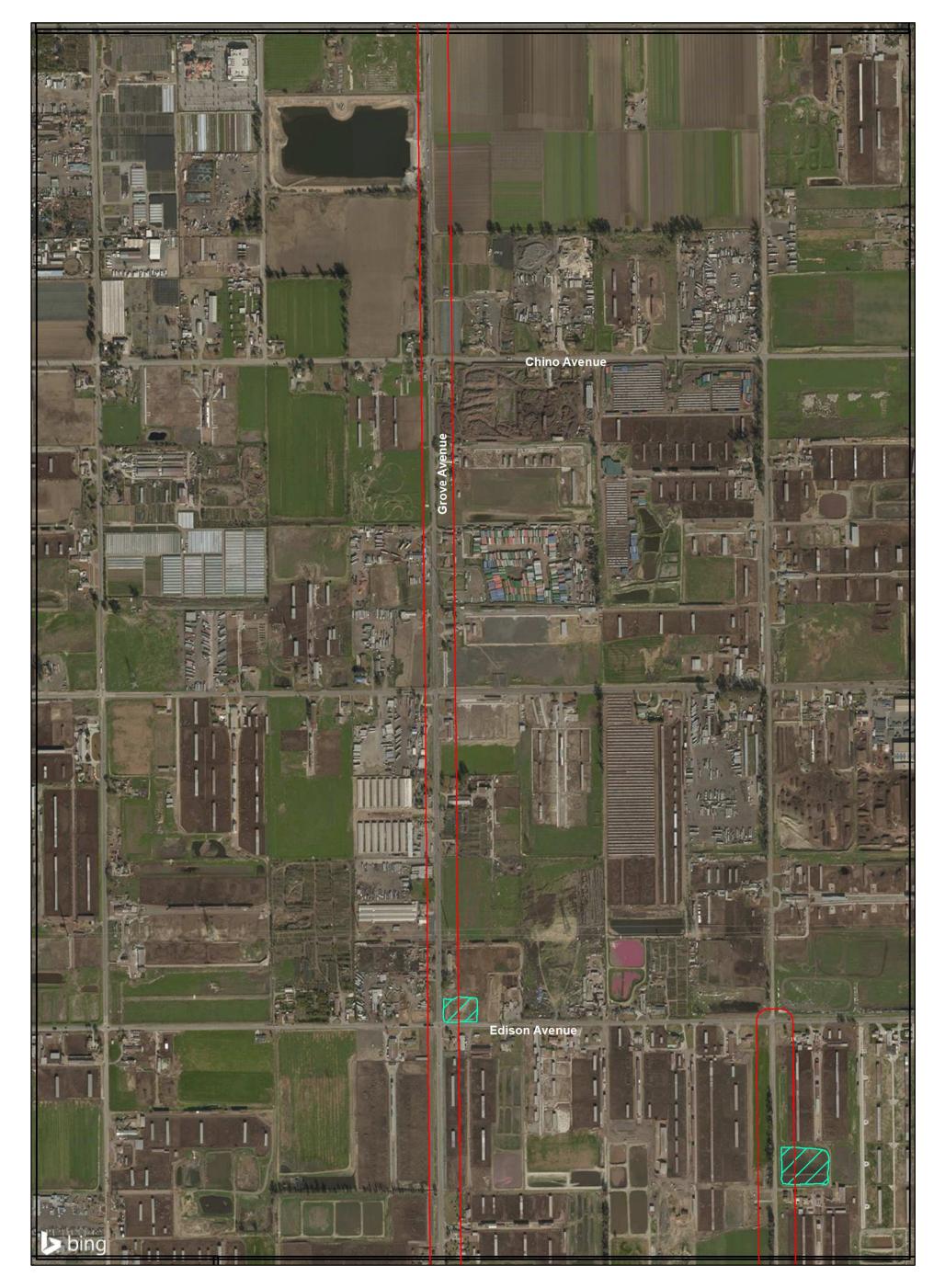
Non-jurisdictional Waste Treatment Basin Width in Feet



MERRILL COMMERCE CENTER SPECIFIC PLAN

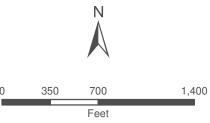
CDFW Jurisdictional Delineation Map





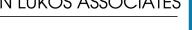


Non-jurisdictional Waste Treatment Basin
Width in Feet



MERRILL COMMERCE CENTER SPECIFIC PLAN

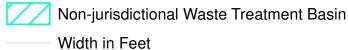
CDFW Jurisdictional Delineation Map

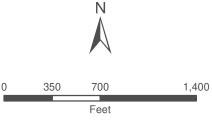






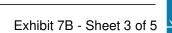


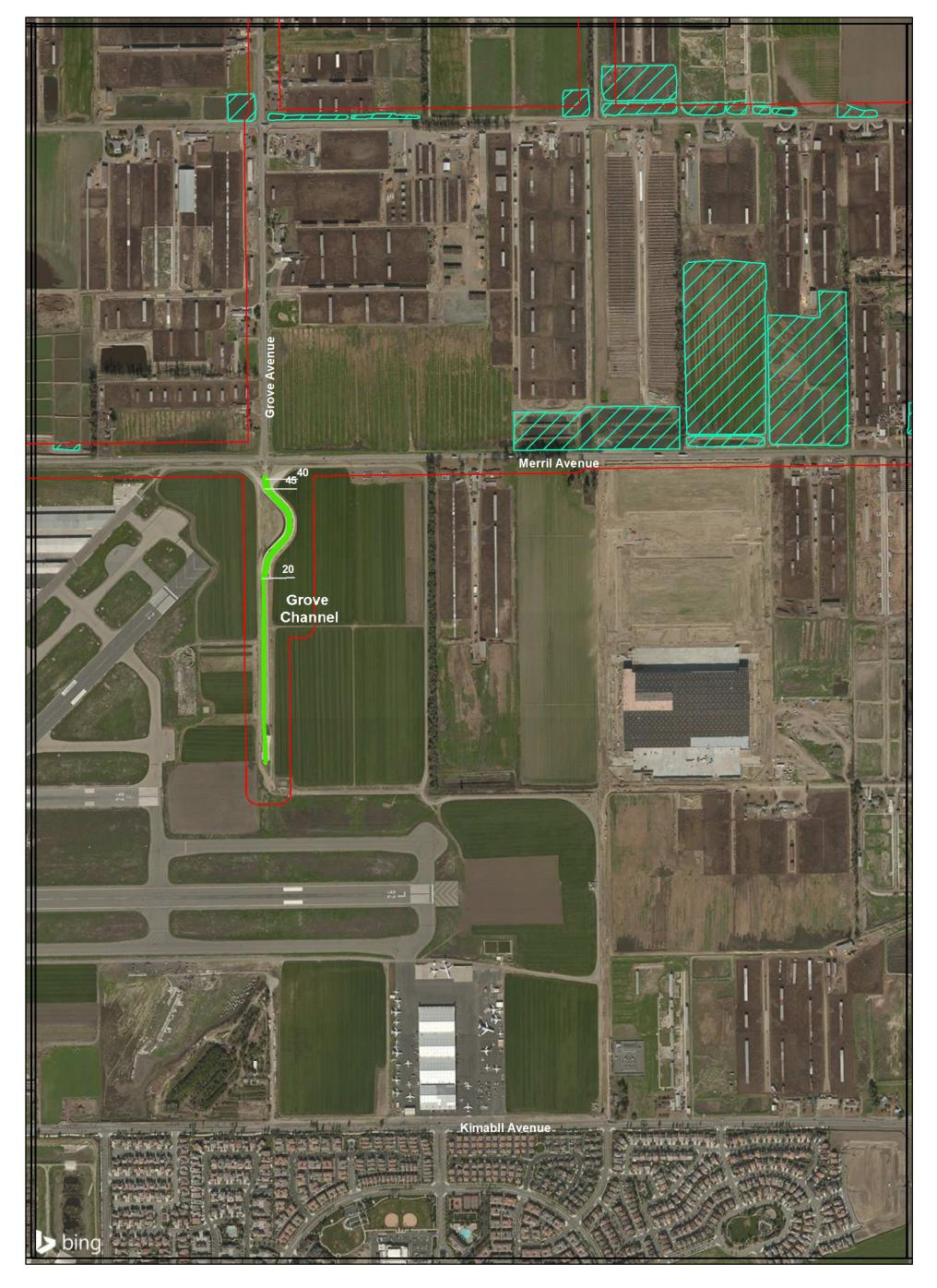


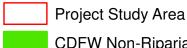


MERRILL COMMERCE CENTER SPECIFIC PLAN

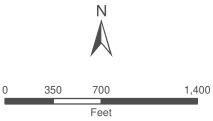
CDFW Jurisdictional Delineation Map





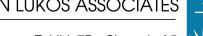


Non-jurisdictional Waste Treatment Basin Width in Feet

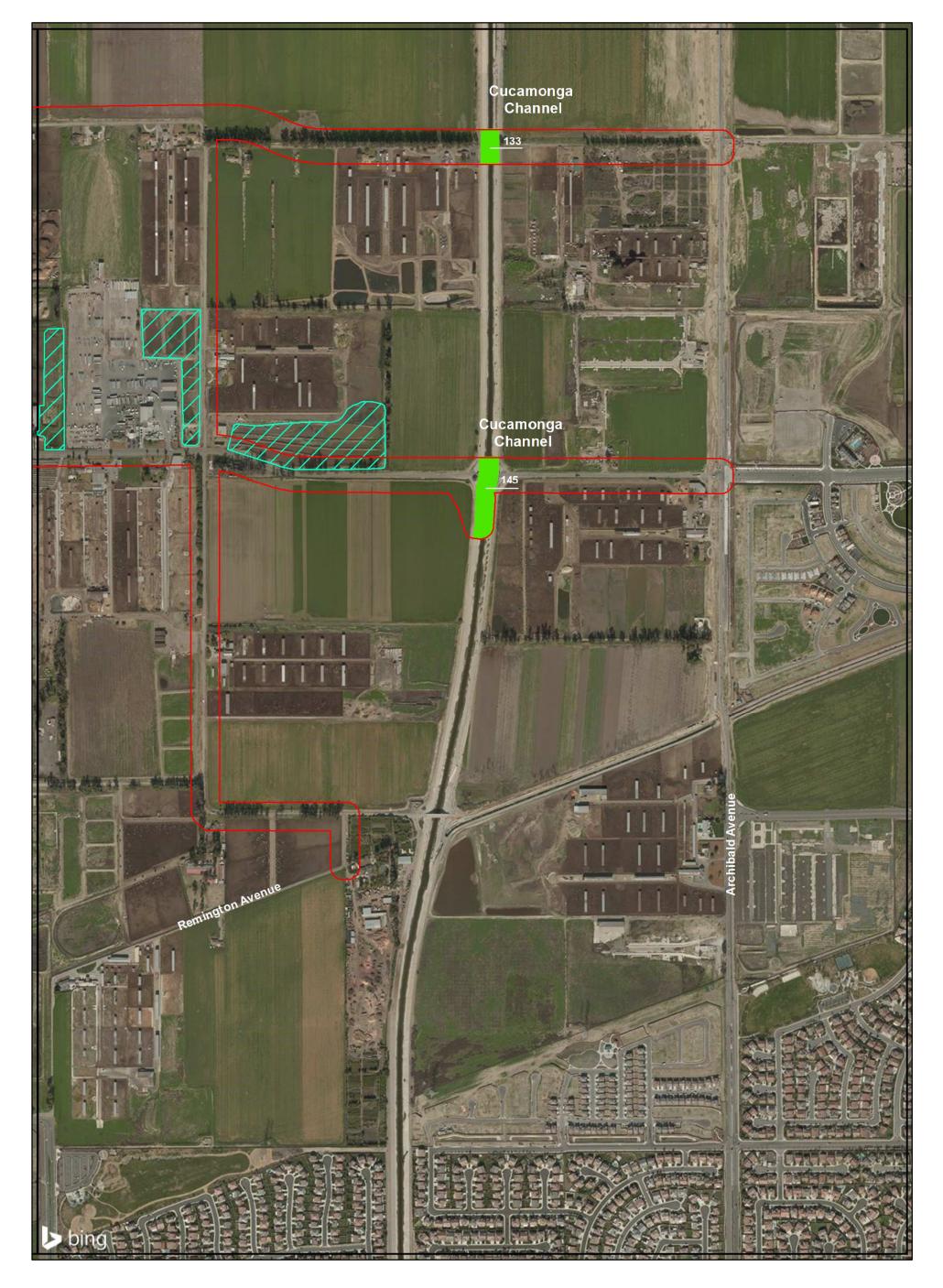


MERRILL COMMERCE CENTER SPECIFIC PLAN

CDFW Jurisdictional Delineation Map

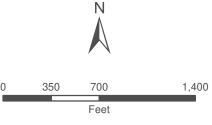






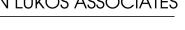


Non-jurisdictional Waste Treatment Basin
Width in Feet

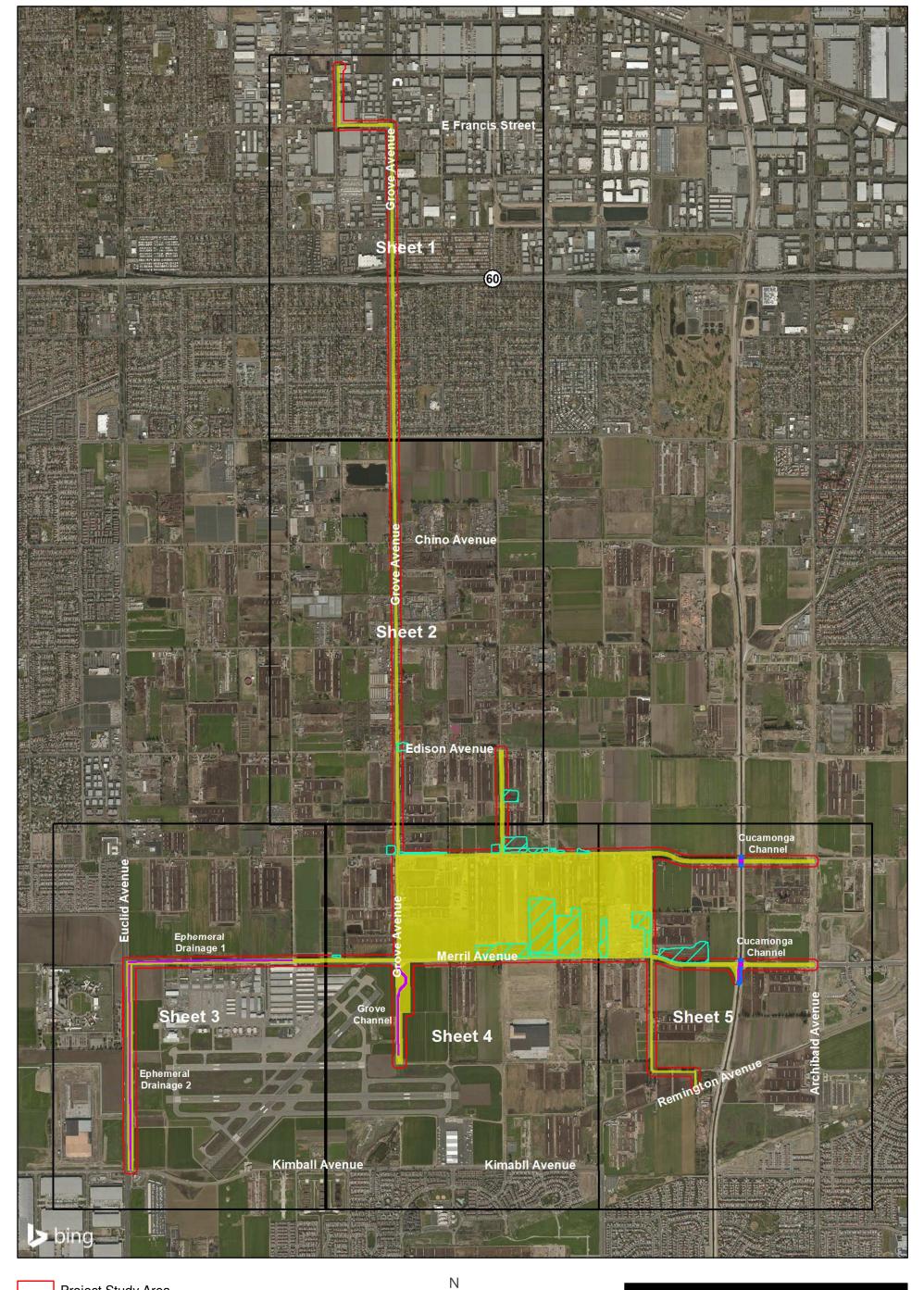


MERRILL COMMERCE CENTER SPECIFIC PLAN

CDFW Jurisdictional Delineation Map



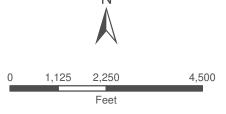






Impacted Corps/RWQCB Non-Wetland Waters

Non-jurisdictional Waste Treatment Basin

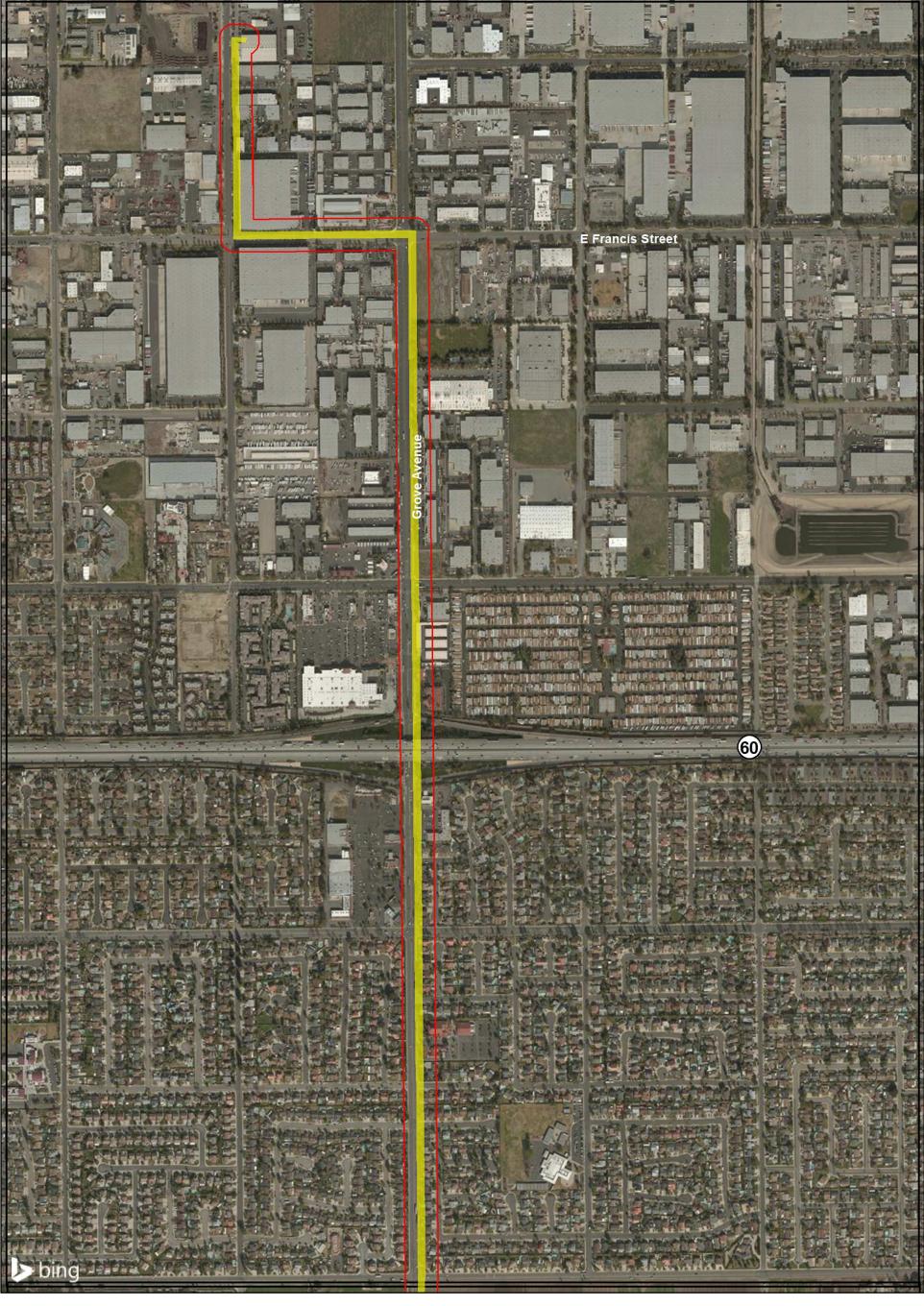


MERRILL COMMERCE CENTER SPECIFIC PLAN

Corps/Regional Board Jurisdictional Delineation/Impact Map



ap W



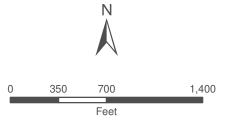


Corps/RWQCB Non-Wetland Waters

Impacted Corps/RWQCB Non-Wetland Waters

Non-jurisdictional Waste Treatment Basin

Width in Feet

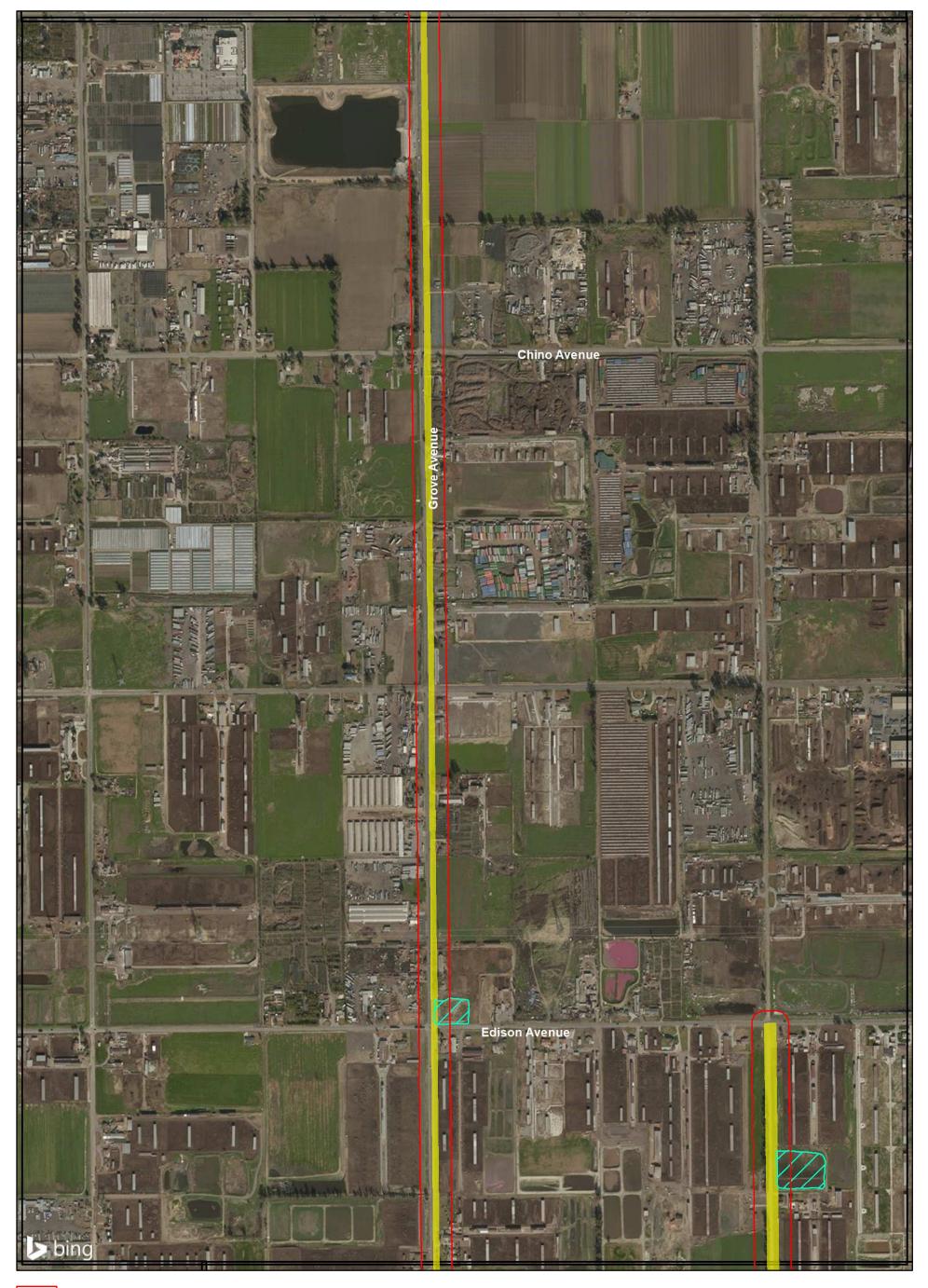


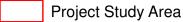
MERRILL COMMERCE CENTER SPECIFIC PLAN

Corps/Regional Board Jurisdictional Delineation/Impact Map

GLENN LUKOS ASSOCIATES

Exhibit 8A - Sheet 1 of 5



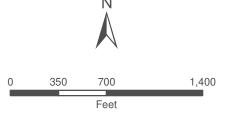


Corps/RWQCB Non-Wetland Waters

Impacted Corps/RWQCB Non-Wetland Waters

Non-jurisdictional Waste Treatment Basin

Width in Feet



MERRILL COMMERCE CENTER SPECIFIC PLAN

Corps/Regional Board Jurisdictional Delineation/Impact Map





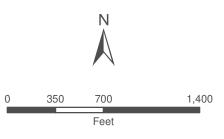


Corps/RWQCB Non-Wetland Waters

Impacted Corps/RWQCB Non-Wetland Waters

Non-jurisdictional Waste Treatment Basin

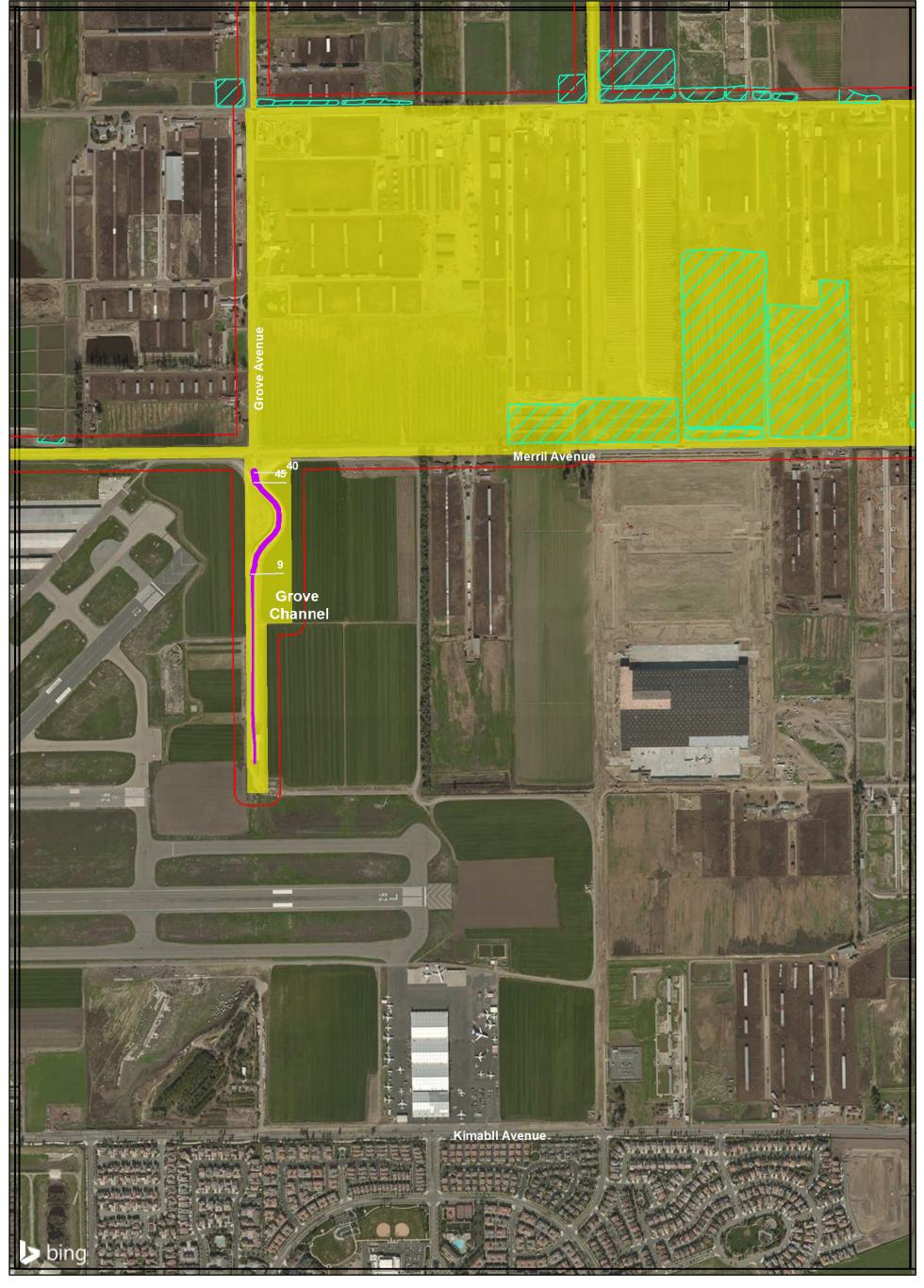
Width in Feet



MERRILL COMMERCE CENTER SPECIFIC PLAN

Corps/Regional Board Jurisdictional Delineation/Impact Map





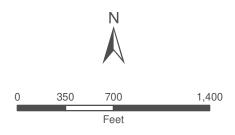


Corps/RWQCB Non-Wetland Waters

Impacted Corps/RWQCB Non-Wetland Waters

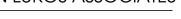
Non-jurisdictional Waste Treatment Basin

Width in Feet

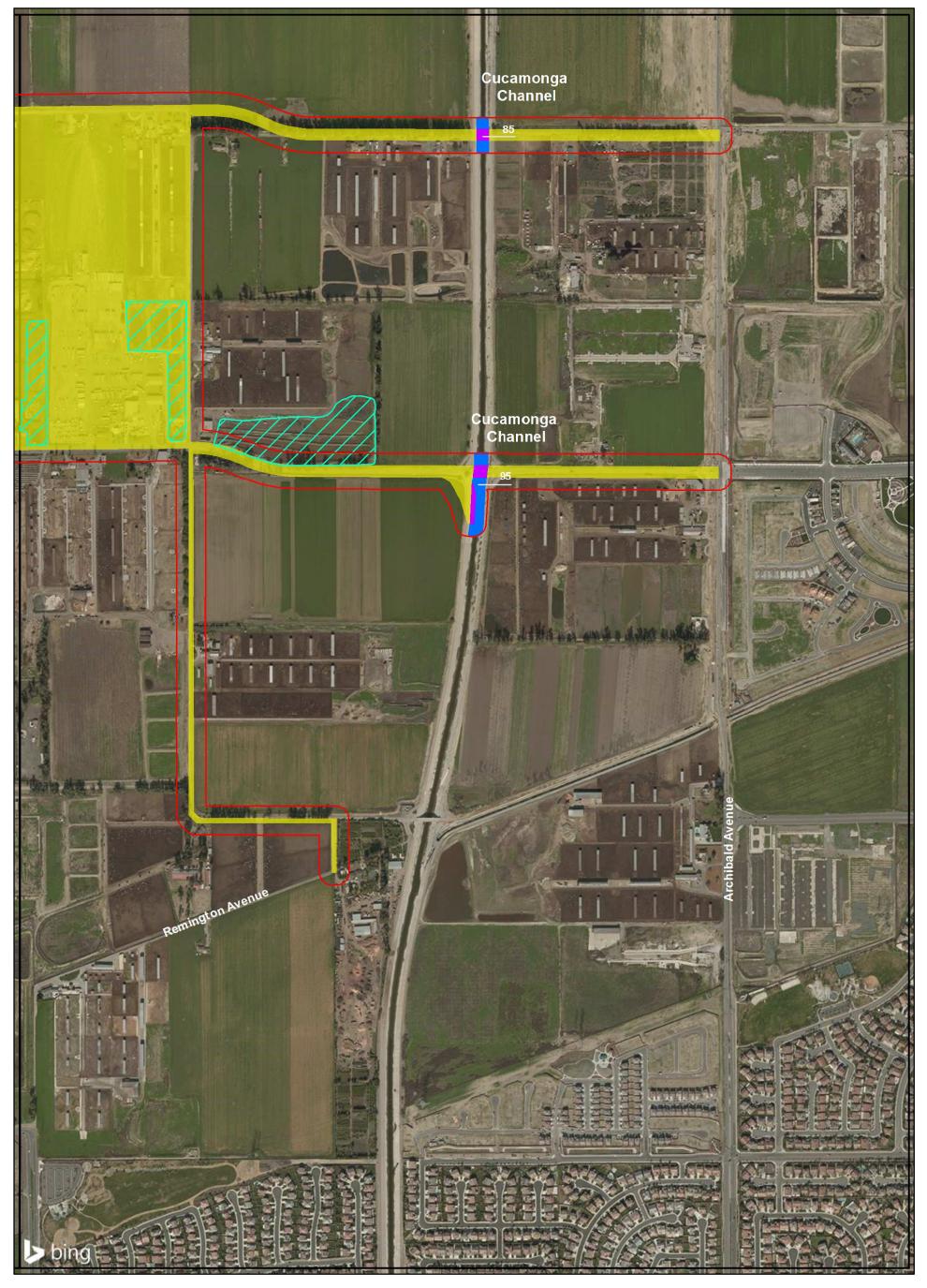


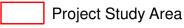
MERRILL COMMERCE CENTER SPECIFIC PLAN

Corps/Regional Board Jurisdictional Delineation/Impact Map







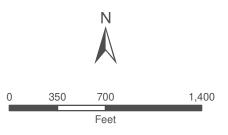


Corps/RWQCB Non-Wetland Waters

Impacted Corps/RWQCB Non-Wetland Waters

Non-jurisdictional Waste Treatment Basin

Width in Feet



MERRILL COMMERCE CENTER SPECIFIC PLAN

Corps/Regional Board Jurisdictional Delineation/Impact Map

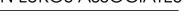
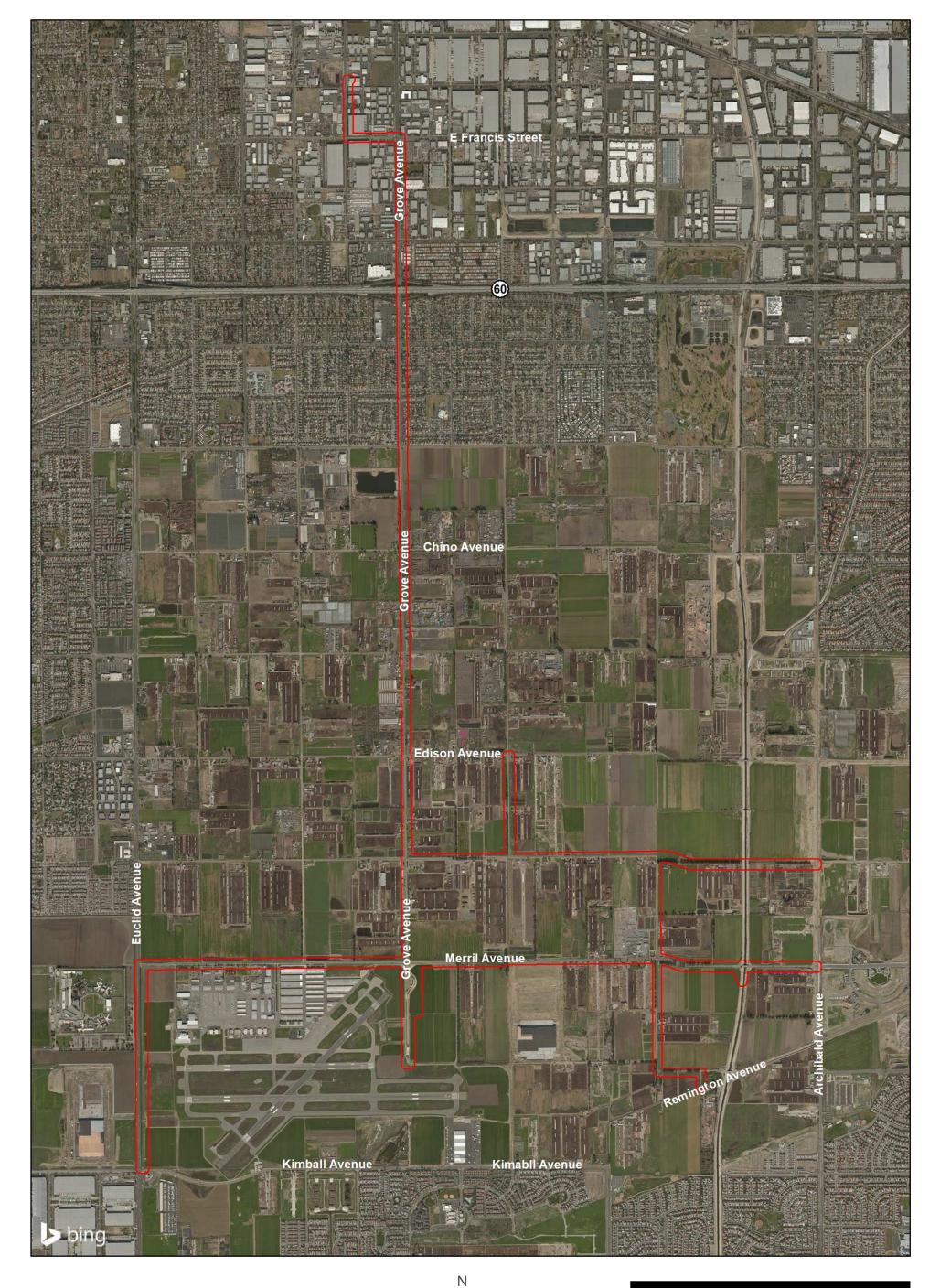




Exhibit 2

Vicinity Map



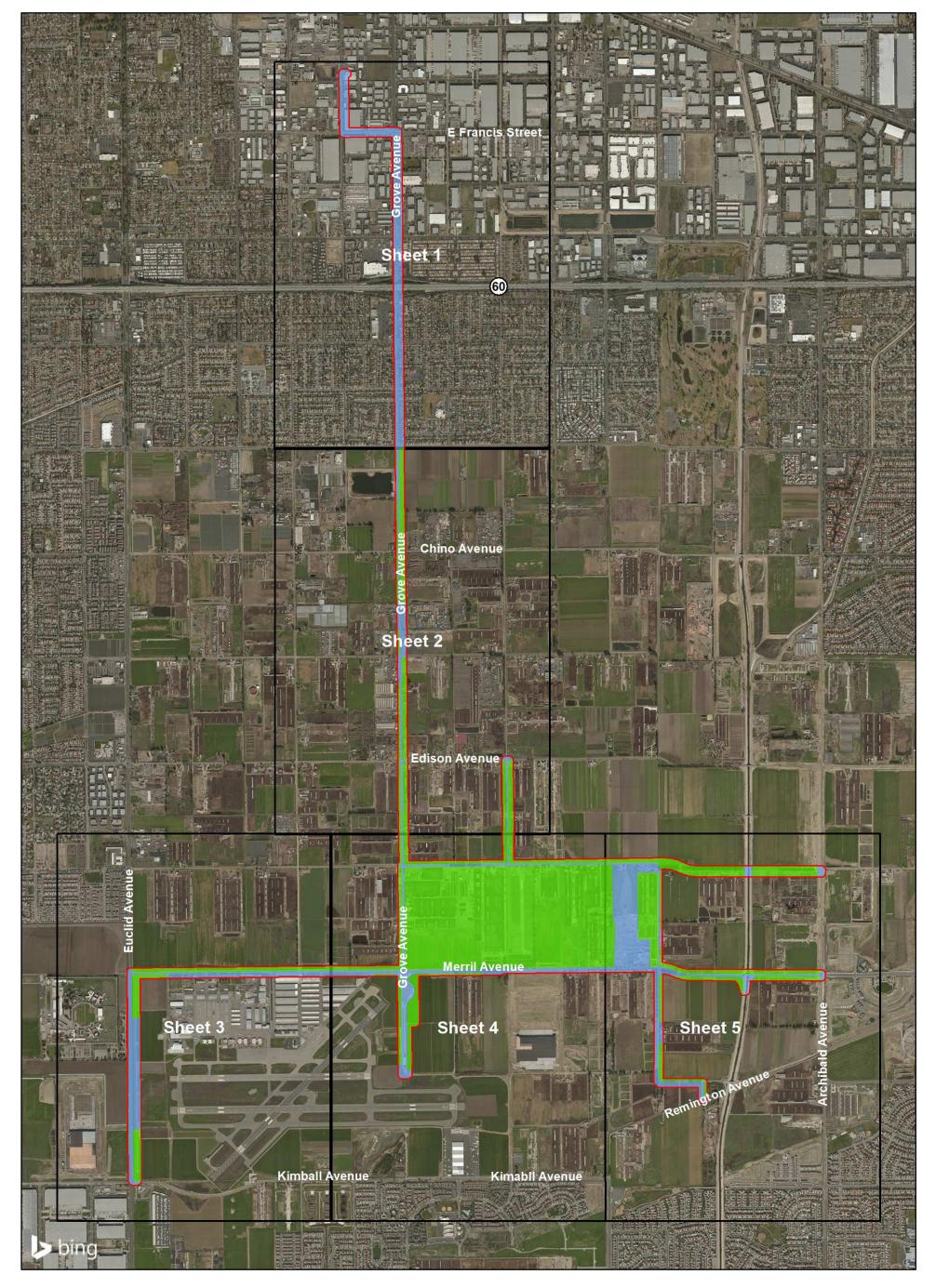


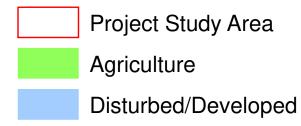


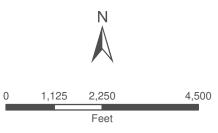


Study Area Map



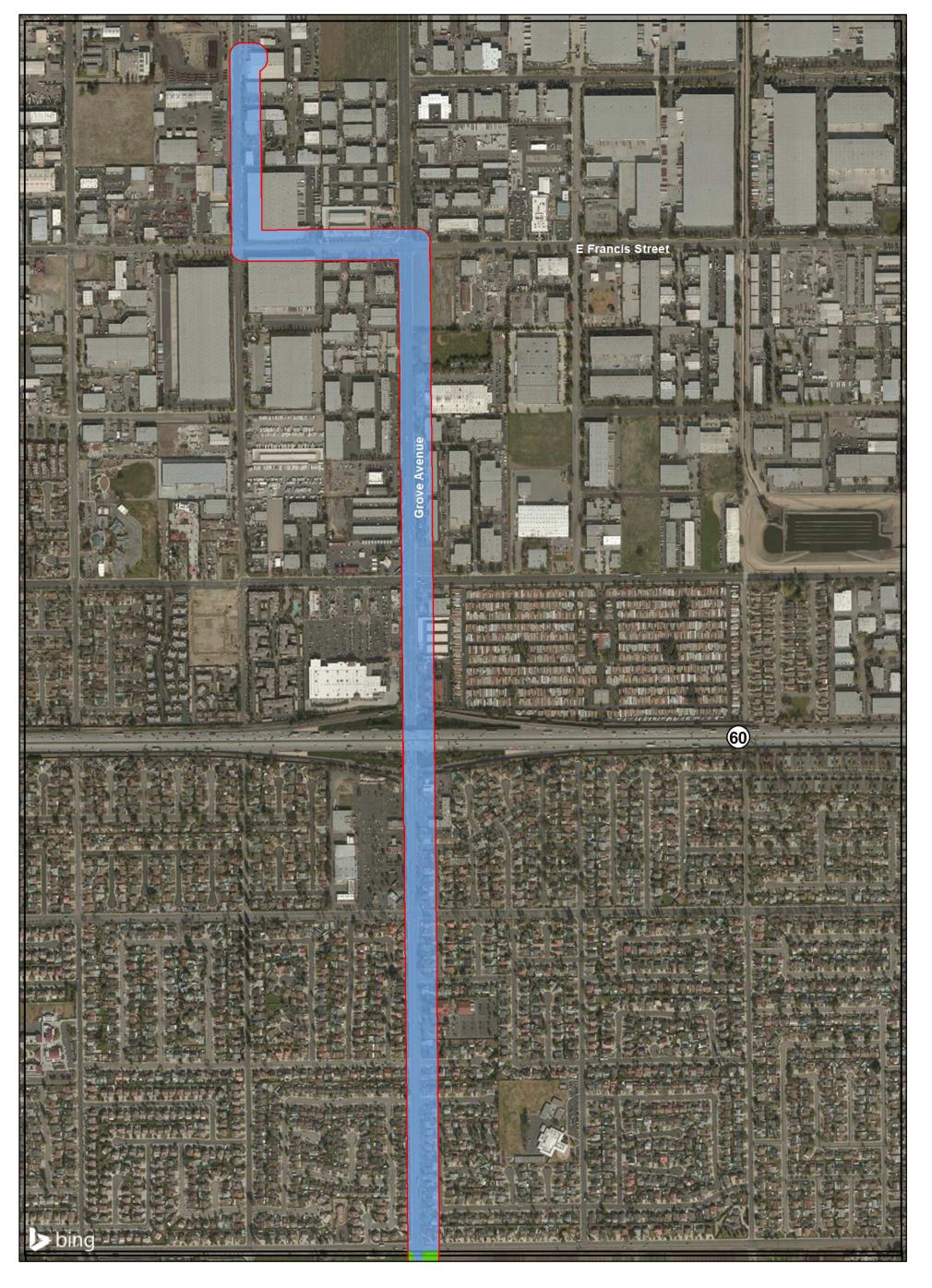


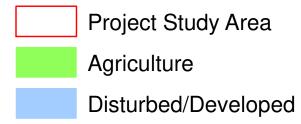


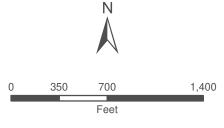










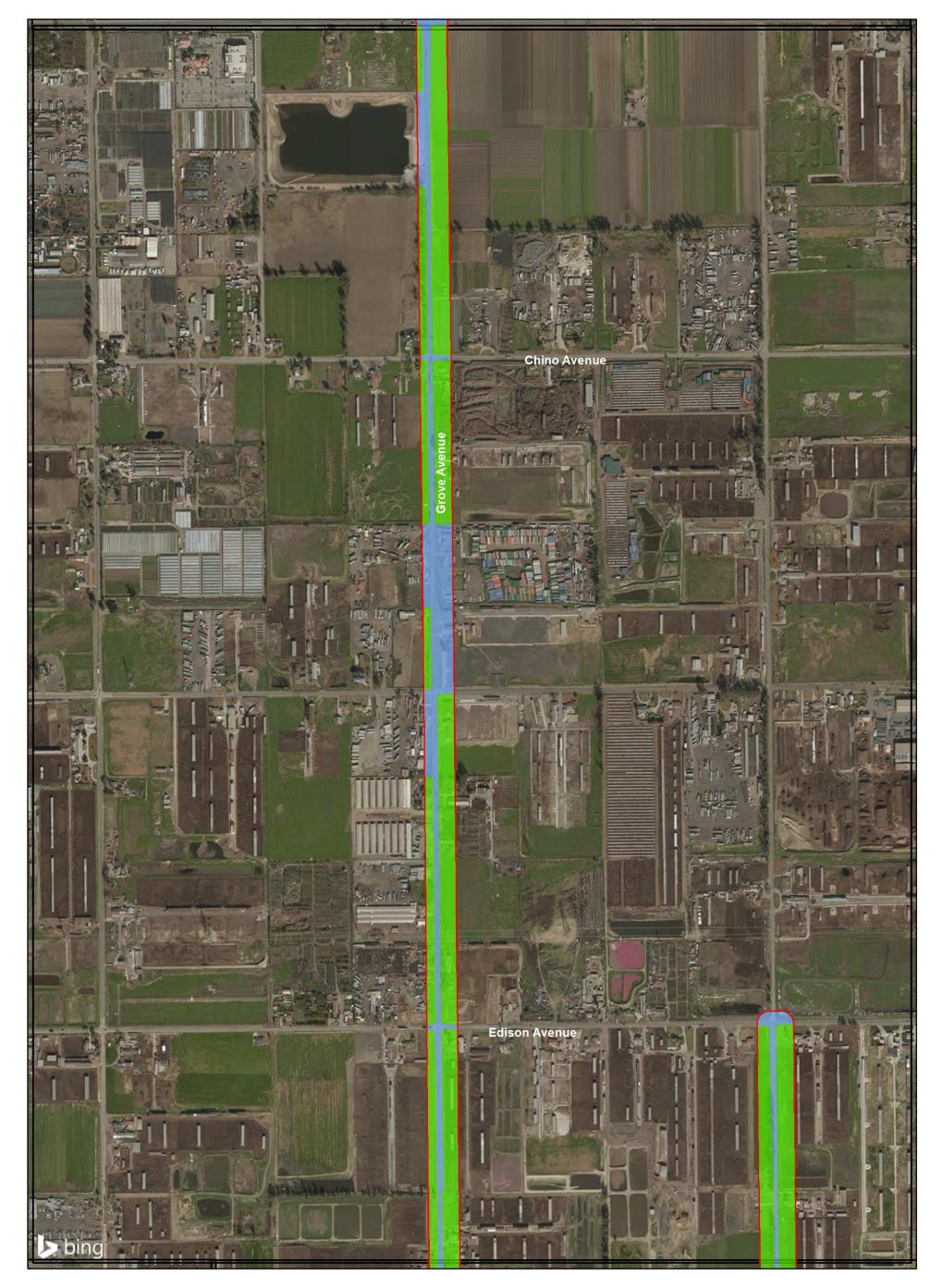


Vegetation Map

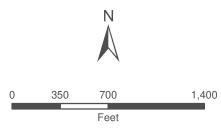
GLENN LUKOS ASSOCIATES



Exhibit 4 - Sheet 1 of 5

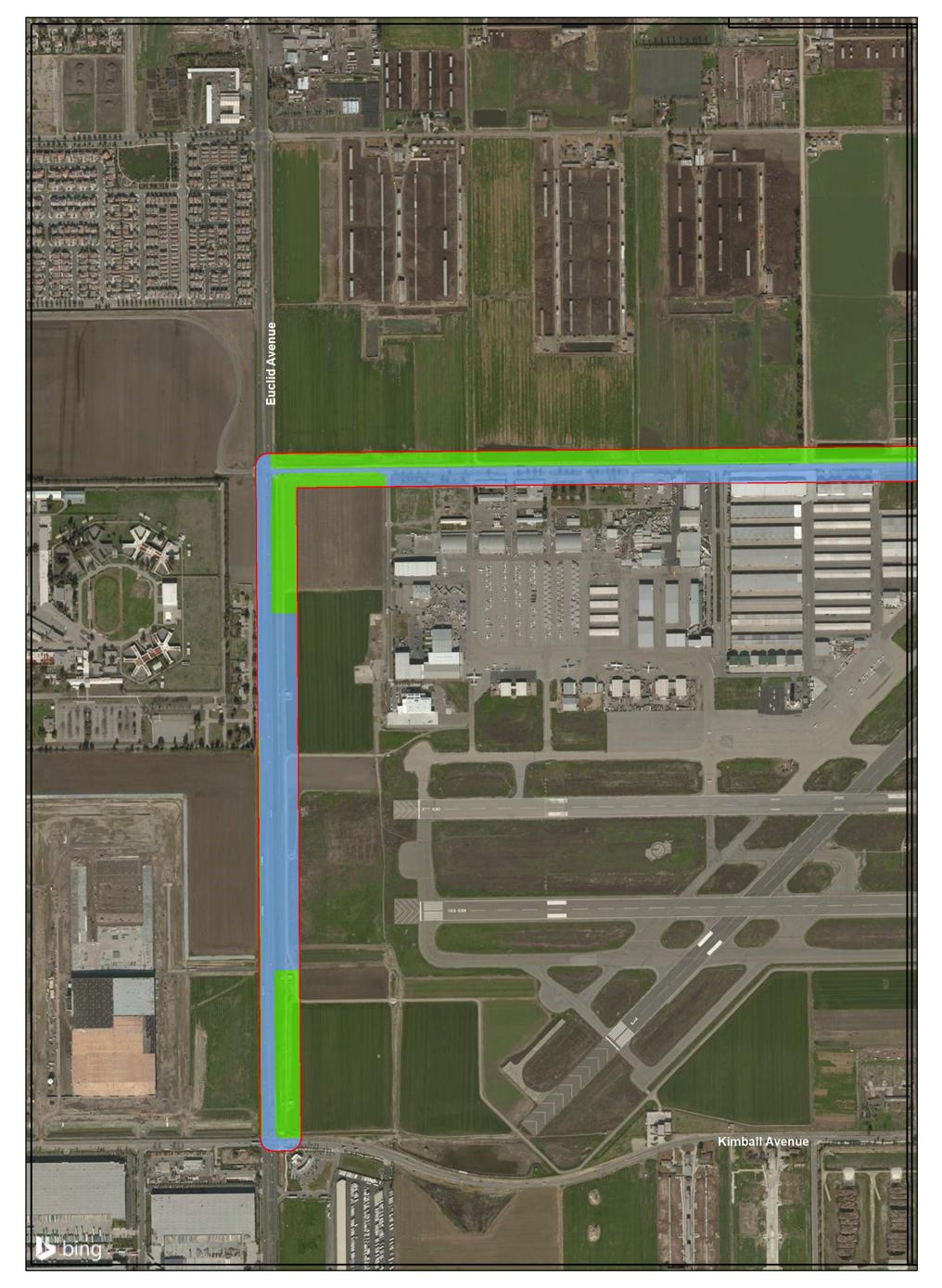


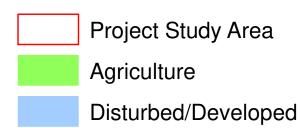


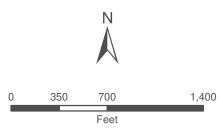


Vegetation Map







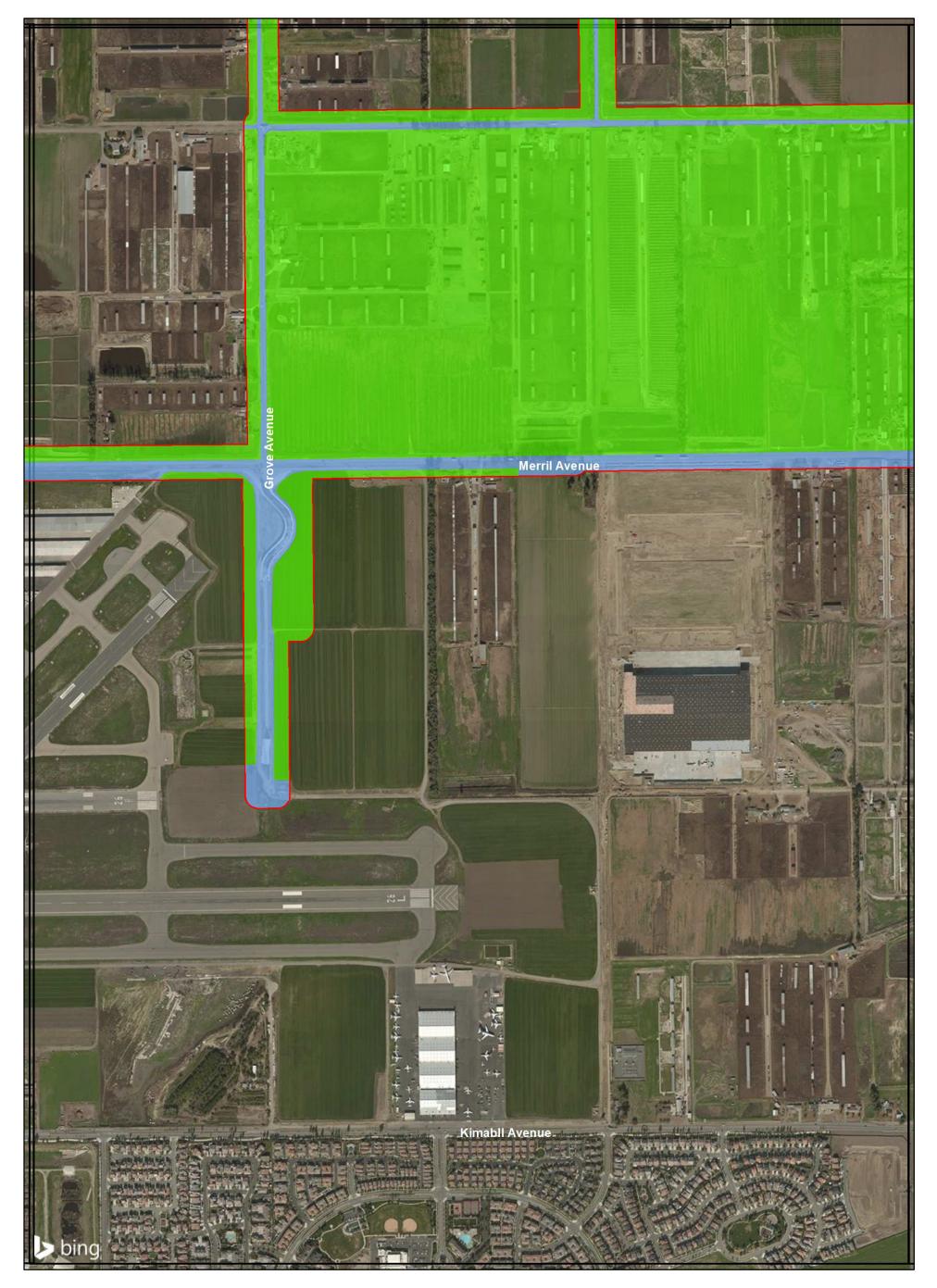


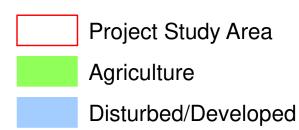
Vegetation Map

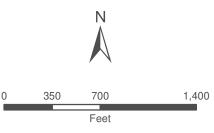
GLENN LUKOS ASSOCIATES



Exhibit 4 - Sheet 3 of 5



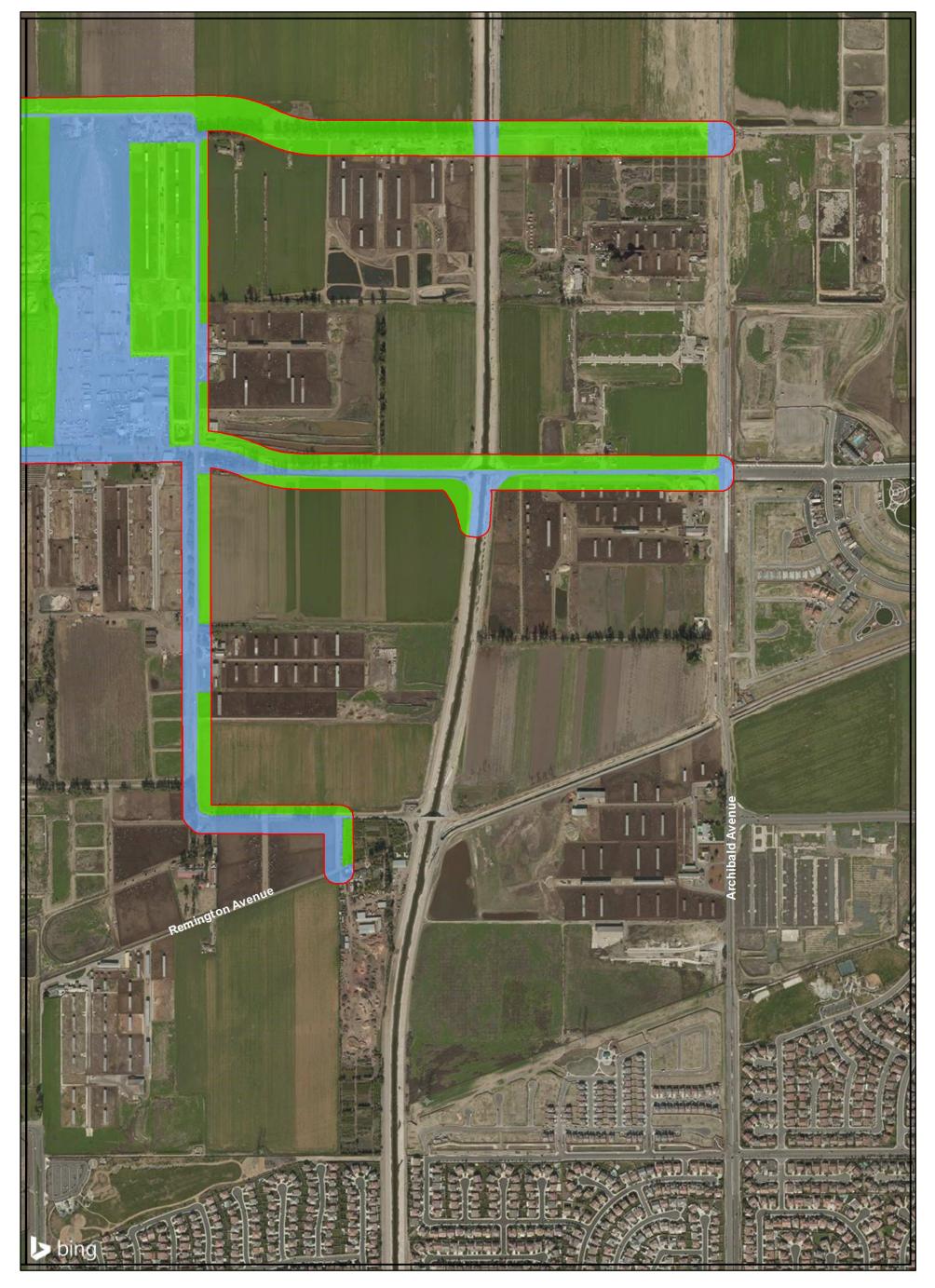




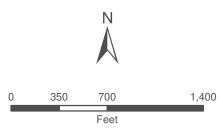
MERRILL COMMERCE CENTER
SPECIFIC PLAN
Vegetation Map

GLENN LUKOS ASSOCIATES

Exhibit 4 - Sheet 4 of 5





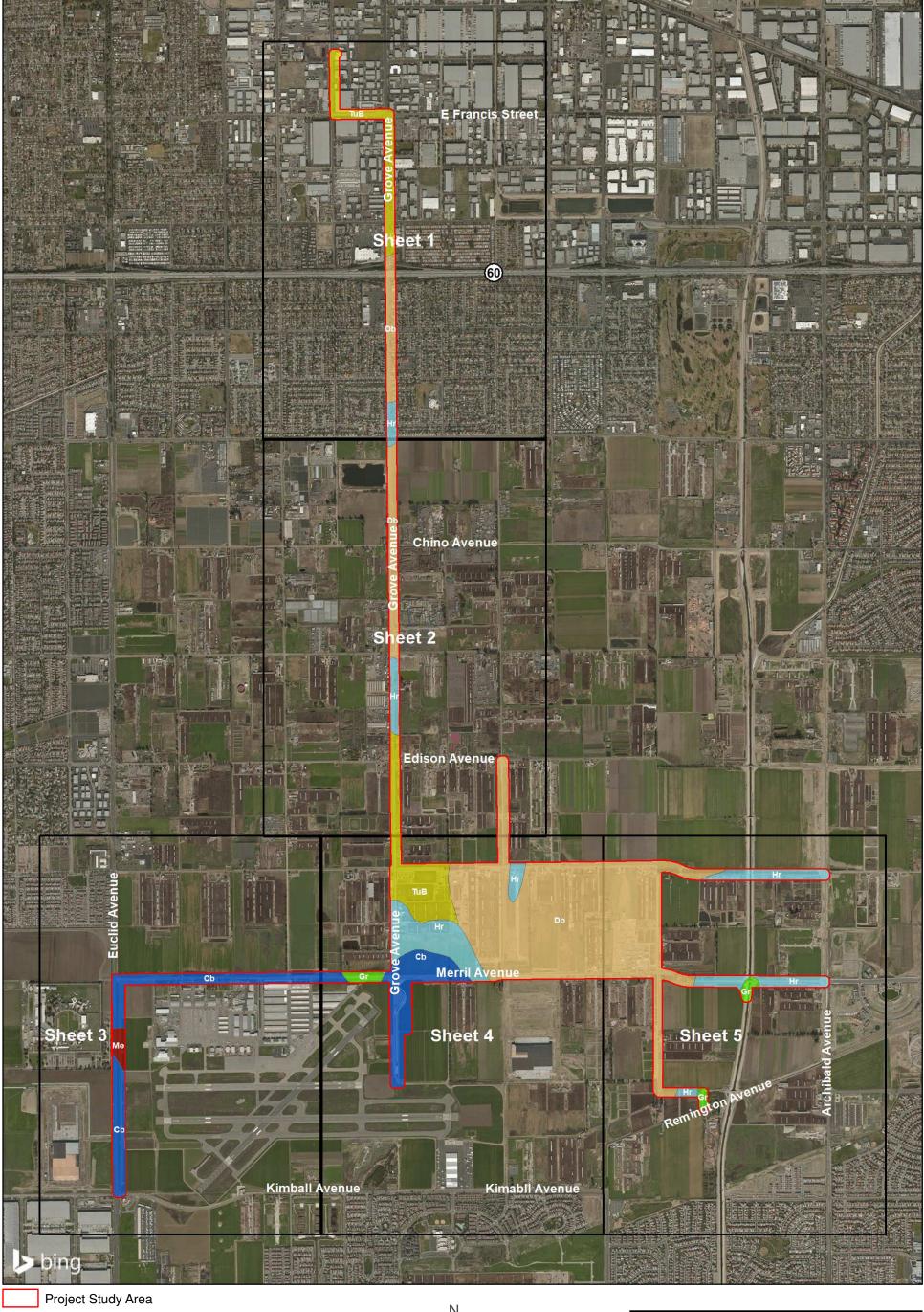


Vegetation Map

GLENN LUKOS ASSOCIATES

X:\0363-THE REST\0849-32BORB\849-32_GIS\Vegetation\849-32VegetationL





Db - Delhi Fine Sand

Gr - Grangeville Fine Sandy Loam

Hr - Hilmar Loamy Fine Sand

Me - Merrill Silt Loam

TuB - Tujunga Loamy Sand, 0-5% Slopes

1 125 2 250

0 1,125 2,250 4,500

1 inch = 2,250 feet

MERRILL COMMERCE CENTER SPECIFIC PLAN

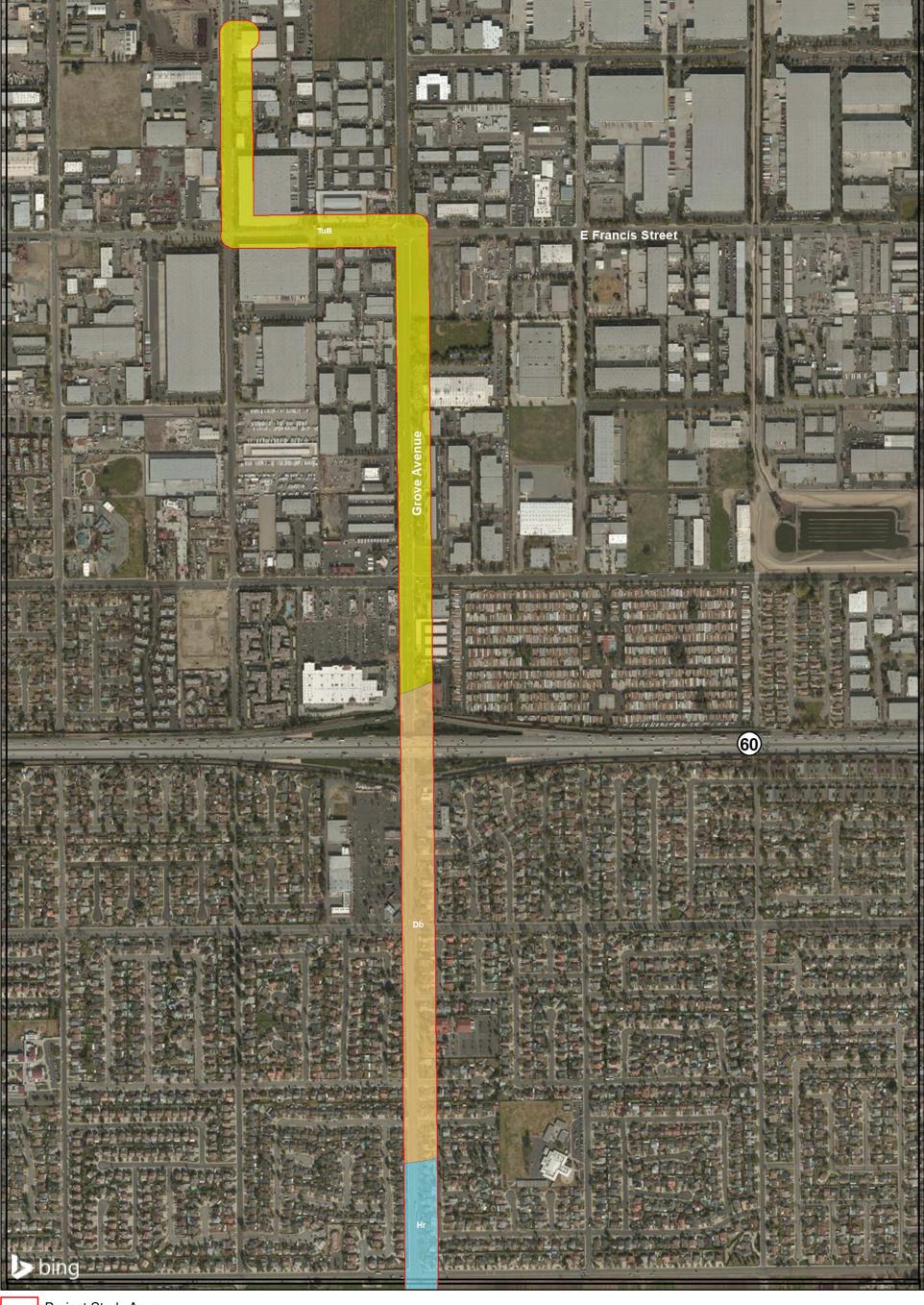
Soils Map

GLENN LUKOS ASSOCIATES



Exhibit 5 - Key Map

X:\0363-THE REST\0849-32BORB\849-32_GIS\Soils\849-32Soils\ayoutKEY.mx



Project Study Area

Cb - Chino Silt Loam

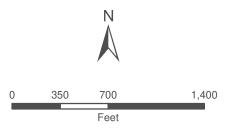
Db - Delhi Fine Sand

Gr - Grangeville Fine Sandy Loam

Hr - Hilmar Loamy Fine Sand

Me - Merrill Silt Loam

TuB - Tujunga Loamy Sand, 0-5% Slopes



1 inch = 700 feet

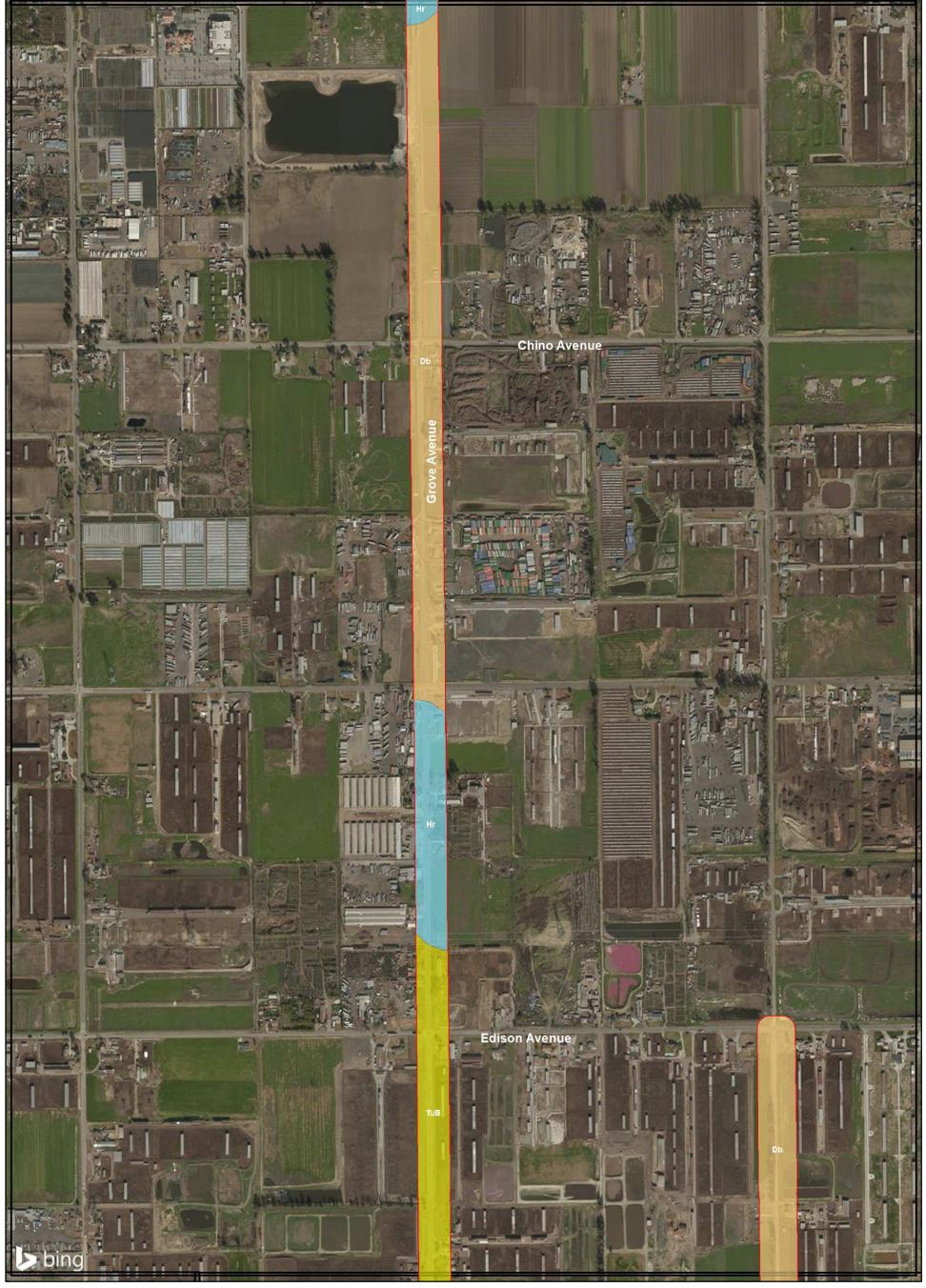
MERRILL COMMERCE CENTER SPECIFIC PLAN

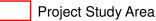
Soils Map

GLENN LUKOS ASSOCIATES



Exhibit 5 - Sheet 1 of 5 X:\0363-THE REST\0849-32BORB\849-32_GIS\Soils\849-32Soil





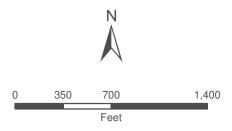
Db - Delhi Fine Sand

Gr - Grangeville Fine Sandy Loam

Hr - Hilmar Loamy Fine Sand

Me - Merrill Silt Loam

TuB - Tujunga Loamy Sand, 0-5% Slopes



1 inch = 700 feet

MERRILL COMMERCE CENTER SPECIFIC PLAN

Soils Map

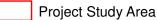
GLENN LUKOS ASSOCIATES



Exhibit 5 - Sheet 2 of 5

X:\0363-THE REST\0849-32BORB\849-32_GIS\Soils\849-32Soil





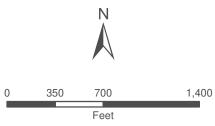
Db - Delhi Fine Sand

Gr - Grangeville Fine Sandy Loam

Hr - Hilmar Loamy Fine Sand

Me - Merrill Silt Loam

TuB - Tujunga Loamy Sand, 0-5% Slopes



1 inch = 700 feet

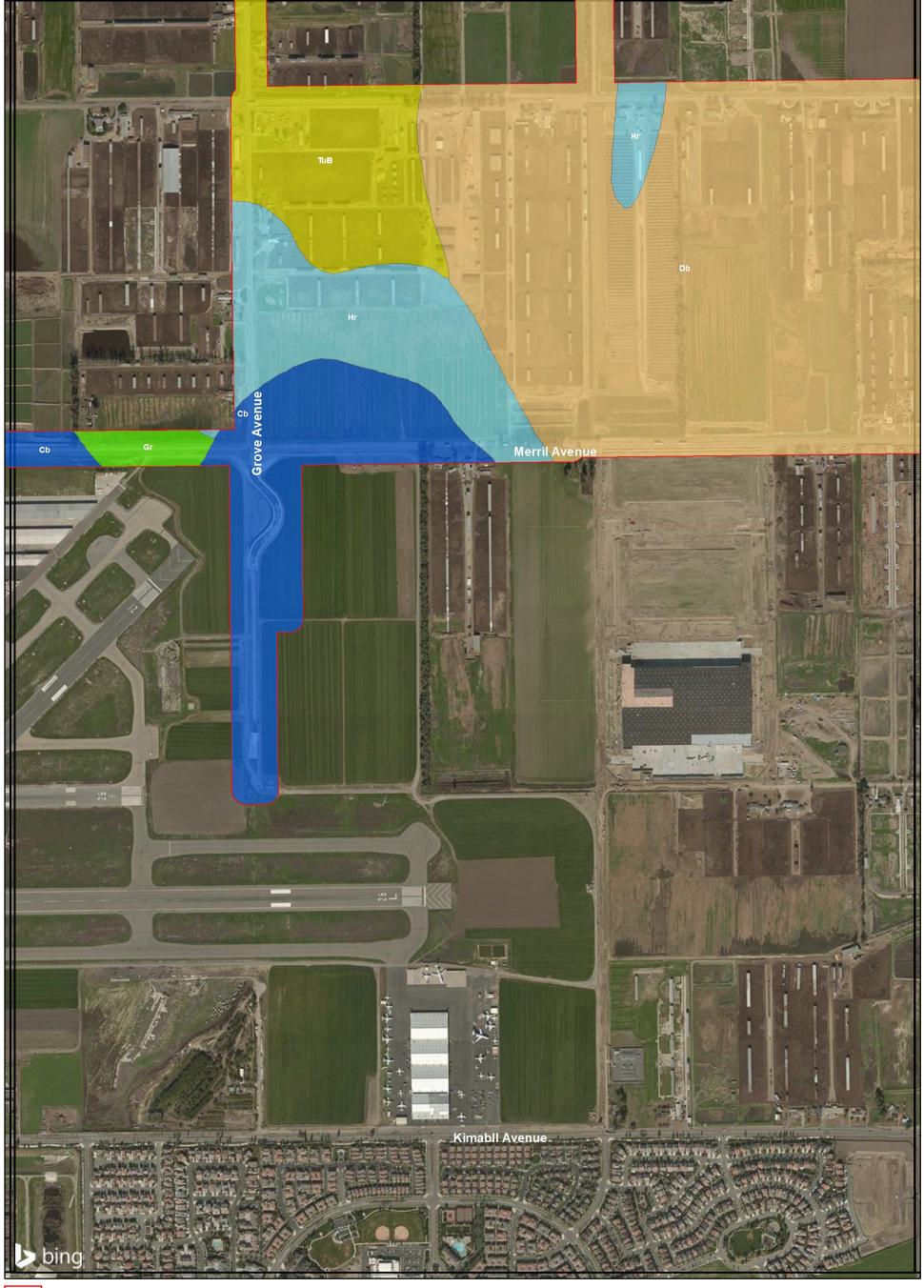
MERRILL COMMERCE CENTER SPECIFIC PLAN

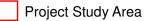
Soils Map

GLENN LUKOS ASSOCIATES



Exhibit 5 - Sheet 3 of 5





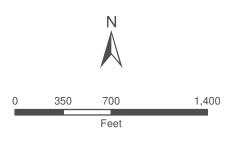
Db - Delhi Fine Sand

Gr - Grangeville Fine Sandy Loam

Hr - Hilmar Loamy Fine Sand

Me - Merrill Silt Loam

TuB - Tujunga Loamy Sand, 0-5% Slopes



1 inch = 700 feet

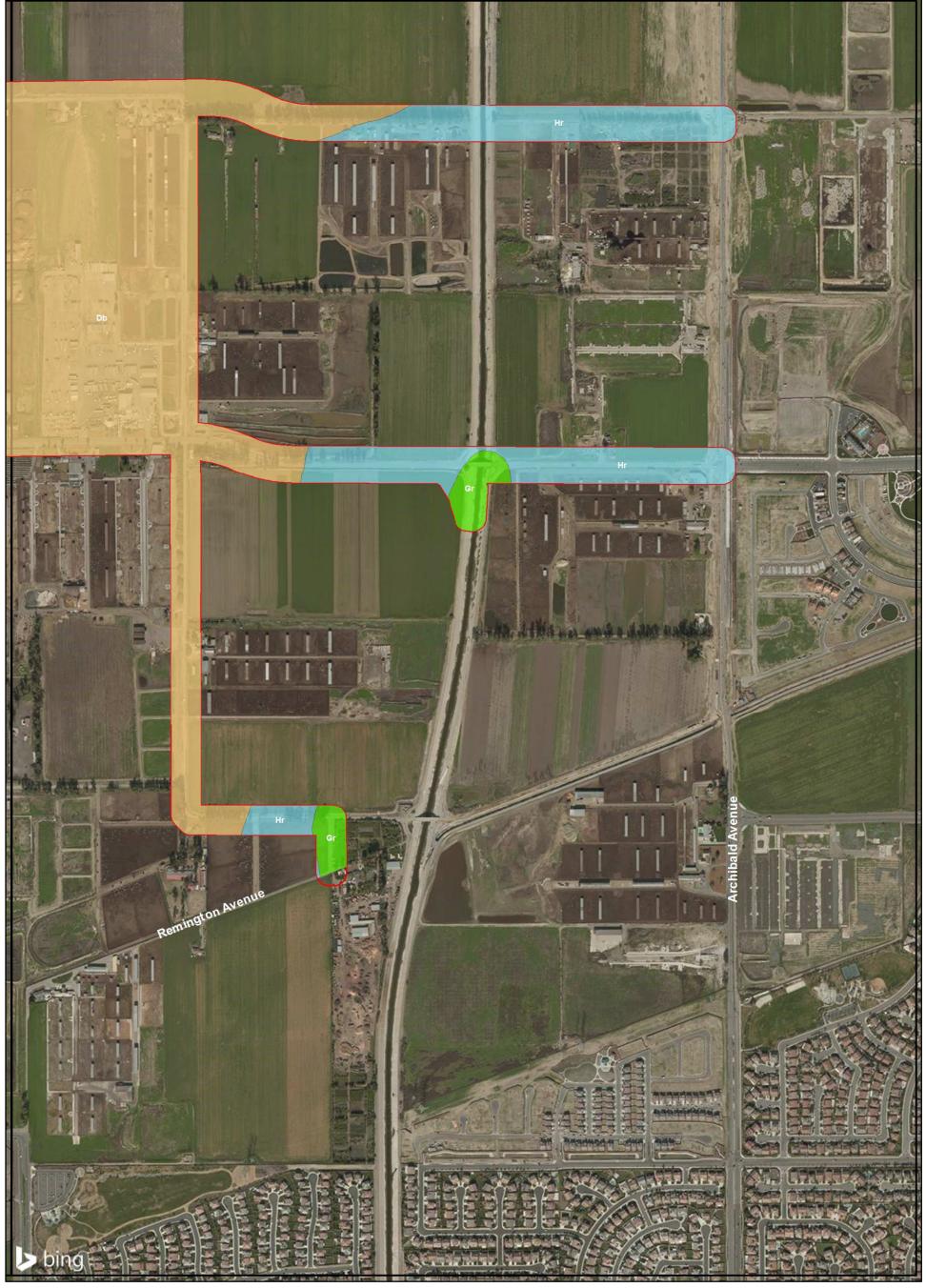
MERRILL COMMERCE CENTER SPECIFIC PLAN

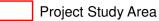
Soils Map

GLENN LUKOS ASSOCIATES



Exhibit 5 - Sheet 4 of 5





Cb - Chino Silt Loam

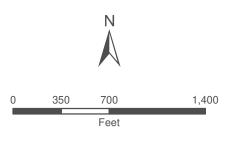
Db - Delhi Fine Sand

Gr - Grangeville Fine Sandy Loam

Hr - Hilmar Loamy Fine Sand

Me - Merrill Silt Loam

TuB - Tujunga Loamy Sand, 0-5% Slopes



1 inch = 700 feet

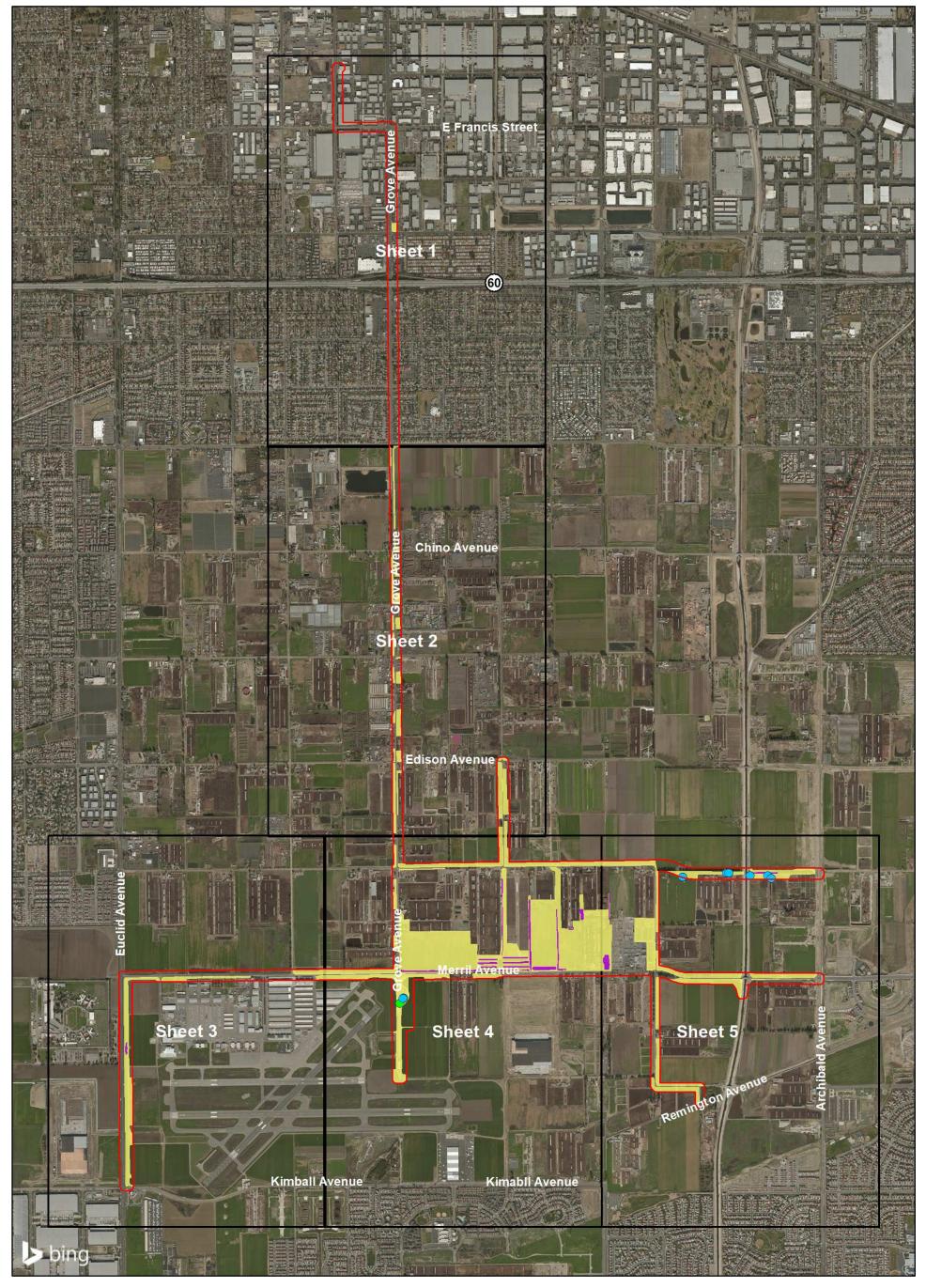
MERRILL COMMERCE CENTER SPECIFIC PLAN

Soils Map

GLENN LUKOS ASSOCIATES



Exhibit 5 - Sheet 5 of 5



Project Study Area

Concentration of Potentially Suitable Burrows

Potentially Suitable Habitat

Burrowing Owl

Potentially Suitable Burrow



MERRILL COMMERCE CENTER SPECIFIC PLAN

Burrowing Owl Survey Area Map

GLENN LUKOS ASSOCIATES



Feet

1,125



Project Study Area

No Access Parcels - Visually Surveyed From Adjacent Areas

Concentration of Potentially Suitable Burrows

Potentially Suitable Habitat

Potentially Suitable Burrow

Burrowing Owl



1 inch = 700 feet

350 700 1,400 Feet

MERRILL COMMERCE CENTER SPECIFIC PLAN

Burrowing Owl Survey Area Map

GLENN LUKOS ASSOCIATES

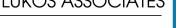
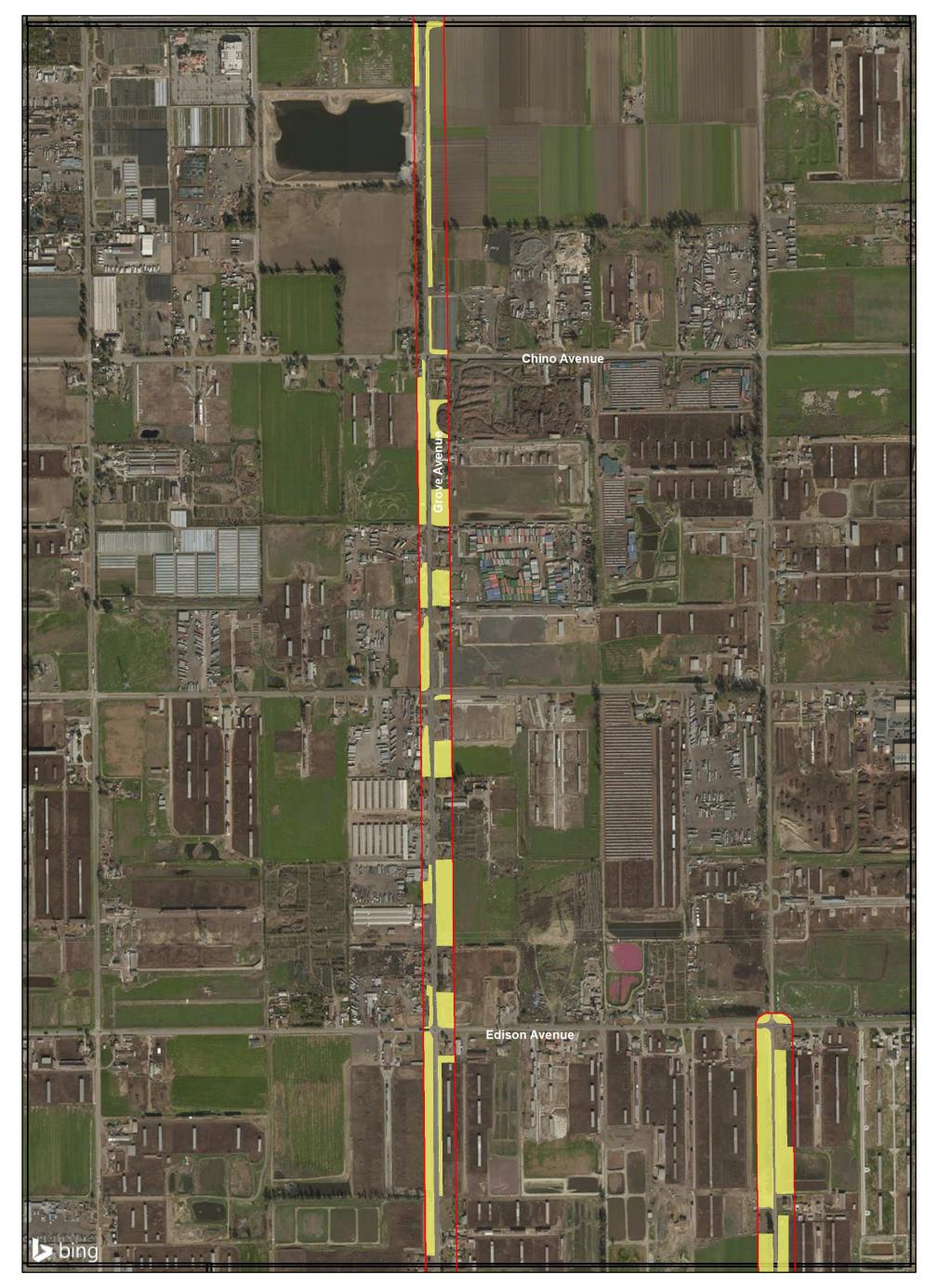
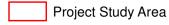


Exhibit 6 - Sheet 1 of 5





Concentration of Potentially Suitable Burrows

Potentially Suitable Habitat

Burrowing Owl

Potentially Suitable Burrow

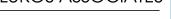


350 700 1,400 Feet

MERRILL COMMERCE CENTER SPECIFIC PLAN

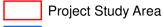
Burrowing Owl Survey Area Map

GLENN LUKOS ASSOCIATES









Concentration of Potentially Suitable Burrows

Potentially Suitable Habitat

Burrowing Owl

Potentially Suitable Burrow



350 700 1,400 Feet

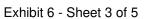
1 inch = 700 feet

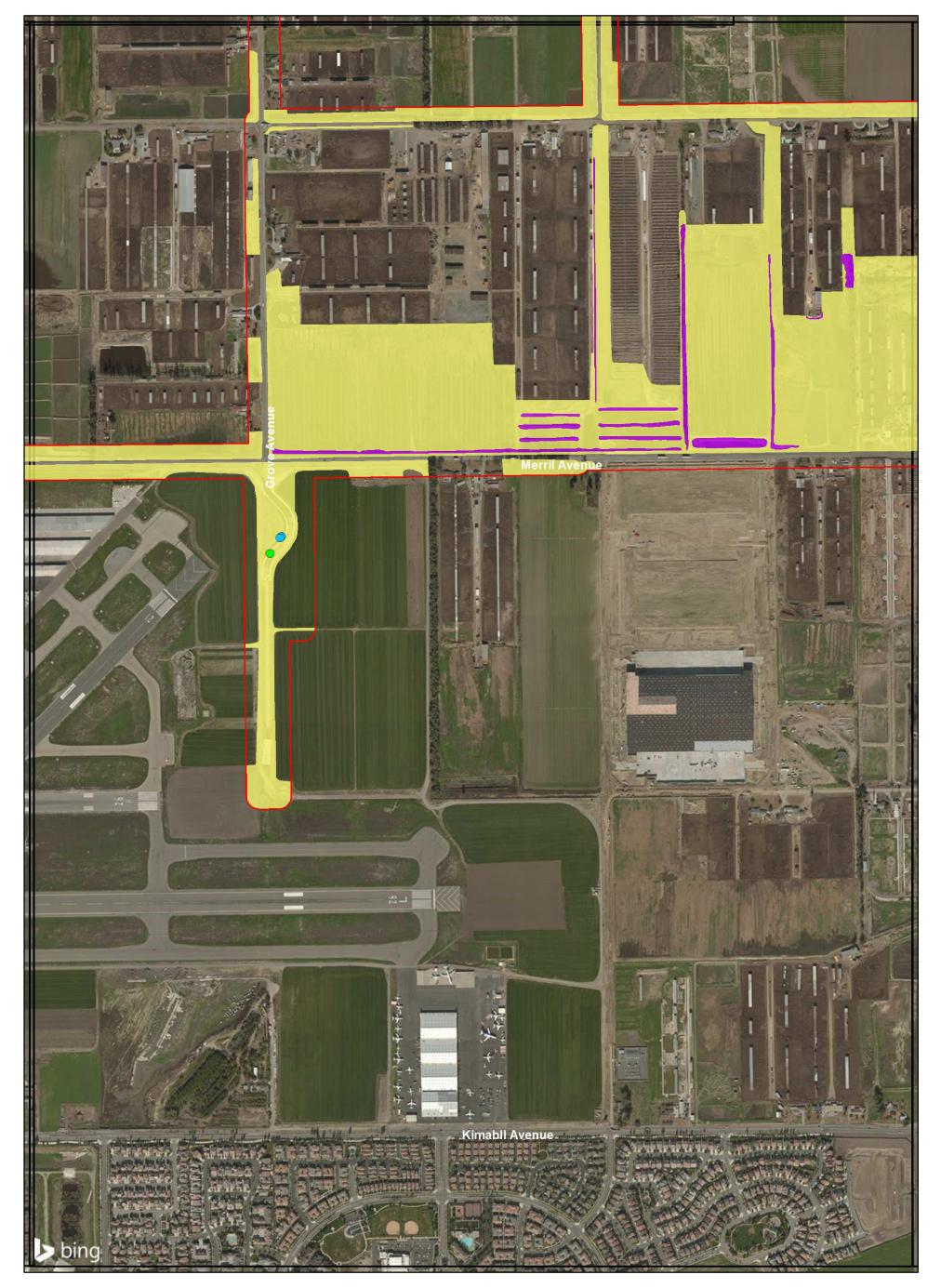
MERRILL COMMERCE CENTER SPECIFIC PLAN

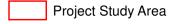
Burrowing Owl Survey Area Map

GLENN LUKOS ASSOCIATES









Concentration of Potentially Suitable Burrows

Potentially Suitable Habitat

Burrowing Owl

Potentially Suitable Burrow



1,400

MERRILL COMMERCE CENTER SPECIFIC PLAN

Burrowing Owl Survey Area Map

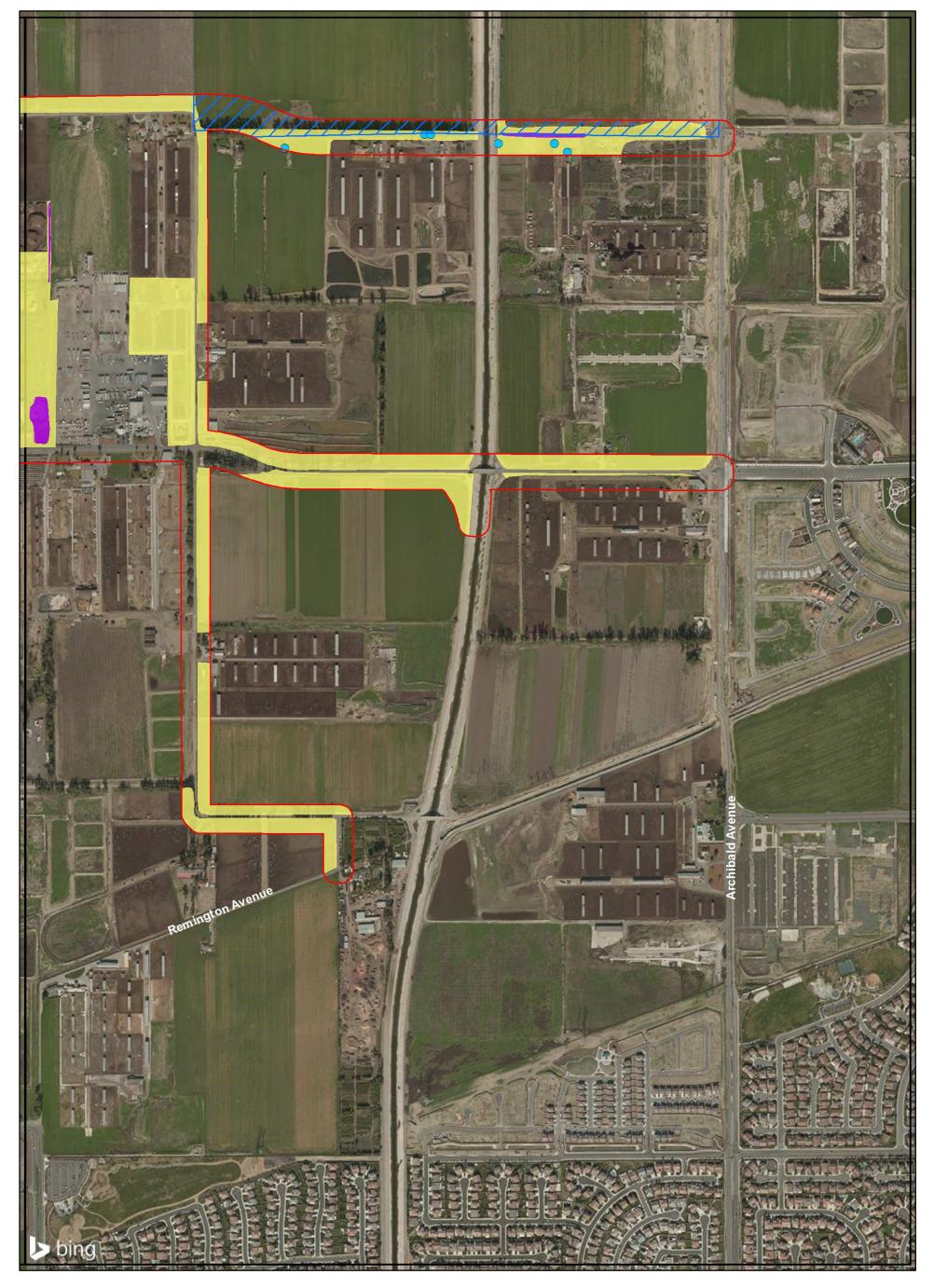
GLENN LUKOS ASSOCIATES

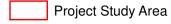
X:\0363-THE REST\0849-32BORB\849-32_GIS\BUOW GIS\849-32BUOWLayoutShe



Feet

350





Concentration of Potentially Suitable Burrows

Potentially Suitable Habitat

Burrowing Owl

Potentially Suitable Burrow



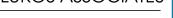
350 700 1,400 Feet

1 inch = 700 feet

MERRILL COMMERCE CENTER SPECIFIC PLAN

Burrowing Owl Survey Area Map

GLENN LUKOS ASSOCIATES







GENERAL BIOLOGICAL ASSESSMENT FOR ONTARIO RANCH BUSINESS CENTER

CITY OF ONTARIO SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for: EPD Solutions, Inc. 2030 Main Street, Suite 1200 Irvine, CA 92614

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

SEPTEMBER 2018

(Updated July 2019)

Table of Contents

		itents			
1.0	Introduction				
1.1		ject Description			
2.0		odology			
2.1	3				
2.2	Fie	ld Survey	4		
3.0	Existi	ng Conditions and Results	4		
3.1	Env	vironmental Setting	4		
3.2	Soi	ls	4		
3.3	Pla	nt and Habitat Communities	5		
3.	.3.1	Agriculture Fields	5		
3.	.3.2	Disturbed Agriculture Infrastructure	5		
3.	.3.3	Stock/Retention Ponds	5		
3.	.3.4	Disturbed Non-Vegetated	5		
4.0	Sensi	tive Biological Resources	5		
4.1	Thi	reatened and Endangered Species	5		
4.	1.1	Threatened and Endangered Plants	6		
4.	1.2	Threatened and Endangered Animals	9		
4.	1.3	Sensitive Plant Communities	14		
4.2	Cri	tical Habitats	14		
4.3	Nes	sting Birds	15		
4.4	Idlife Movement Corridors	15			
4.5 City, County, Regional, State, or Federal Conservation Plans					
4.6	Sta	te and Federal Jurisdictional Drainages	16		
5.0	Projec	ct Impacts	17		
5.1	Imp	pacts to Existing Habitats	17		
5.2 Impacts to Sensitive Species					
5.3 Impacts to Nesting Birds					
5.4	5.4 Impacts to Critical Habitat				
5 5	Imi	pacts to Wildlife Movement Corridors	19		

5.6	Conflict with Local Policies or Ordinances Protecting Biological Resources	. 19
5.7	Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community	
Con	servation Plan, or Other Approved Local, Regional, or State Habitat Conservation plan	. 20
6.0	Recommendations	. 20
6.1	Sensitive Species	. 20
7.0	Certification	. 23
8.0	References	. 24

FIGURES

Figure 1 – Location Map

Figure 2 – Vicinity Map

Figure 3 – Project Plans

Figure 4 – Habitat Map

APPENDICES

Appendix A – Species List

Appendix B – Species Probability of Occurrence List

Appendix C – Site Photographs

Appendix D – Soils Survey

1.0 Introduction

EPD Solutions, Inc. contracted Hernandez Environmental Services (HES) to conduct a General Biological Assessment (GBA) on Assessor's Parcel Numbers (APN) 1054-011-01, 1054-011-02, 1054-011-04, 1054-021-01, 1054-021-02, 1054-271-01, 1054-271-02, 1054-271-03, 1054-281-01, 1054-281-02, and 1054-281-03 located in the city of Ontario, San Bernardino County, California. The purpose of the GBA is to document the presence/absence of sensitive resources that may be present on the site, to document existing habitats, and generally address biological questions that may be needed for project approval. This GBA will present the results obtained from the July 27, 2018 field survey and will provide recommendations that may be needed to mitigate potential biological impacts from project activities.

1.1 Project Site Location

The approximately 84.1-acre project site is located at the southeast corner of Eucalyptus Avenue and Euclid Avenue in the city of Ontario, San Bernardino County, California (Figure 1). Specifically, the site is located within the Santa Ana del Chino Land Grant of the *Prado Dam* 7.5' U.S. Geological Survey (USGS) topographic quadrangle (Figure 2). Surrounding land uses include residential development to the west and agricultural uses to the north, east, and south. The entire 84.1-acre site has been disturbed by agricultural use.

1.2 Project Description

The proposed project consists of the development of an approximate 1,787,000 square foot industrial park. The proposed industrial park will consist of eight buildings containing office and warehouse space. The proposed project also includes associated parking, landscaping, access roads, and utilities (Figure 3). The proposed industrial park development will impact the entire 84.1-acre project site.

2.0 Methodology

2.1 Literature Review

HES conducted a literature review and reviewed aerial photographs and topographic maps of the project site and surrounding areas. The *Prado Dam* 7.5' USGS topographic quadrangle and eight surrounding quadrangles were used to identify sensitive species in the California Natural Diversity Data Base (CNDDB). Additional resources reviewed during the literature search included the United States Fish and Wildlife (USFWS) Endangered Species Lists, and the California Native Plant Society's (CNPS) Rare plant lists to obtain species information for the project area.

2.2 Field Survey

On July 27,2018, HES conducted a field survey of the approximate 84.1-acre project site. Ambient temperature during the field survey was 82° Fahrenheit, sunny, with zero to three mile per hour winds from the southwest. The purpose of the field survey was to document the existing habitat conditions, obtain plant and animal species information, view the surrounding uses, assess the potential for state and federal waters, assess potential for wildlife movement corridors, and if critical habitat is present, assess for the presence of constituent elements.

The entire 84.1-acre project site was surveyed. Linear transects approximately 50 feet apart were walked for 100 percent coverage. All species observed were recorded and Global Positioning System (GPS) way points were taken to delineate specific habitat types, species locations, state or federal waters, or any other information that would be useful for the assessment of the project site. A comprehensive list of all plant and wildlife species that were detected during the field survey within the project site is included in Appendix A. Sensitive plant and wildlife species with the potential to occur within the project area are listed in Appendix B. Representative site photographs were taken and are included within Appendix C.

3.0 Existing Conditions and Results

3.1 Environmental Setting

The approximately 84.1-acre project site consists of a dairy farm and agricultural fields. At the time of the survey, the agricultural fields were being used to grow corn (*Zea* sp.). The entire site has been disturbed by agricultural use and no native habitat was present. The project site also contains two man-made stock/retention ponds. Elevations on the site range from 661 feet above mean sea level (AMSL) to 690 feet AMSL.

3.2 Soils

According to the USDA Web Soil Survey, one soil class occurs on the project site (Appendix D). Soils on the project site are classified as: Chino silt loam (Cb).

3.3 Plant and Habitat Communities

The project site is dominated by four habitat types, including 46.0 acres of agriculture fields, 31.9 acres of disturbed agriculture infrastructure, 5.22 acres of stock/retention ponds, and 1.06 acres of disturbed non-vegetated areas. Following are descriptions of each habitat type.

3.3.1 Agriculture Fields

The project site contains approximately 46.0 acres of agriculture fields. These fields are currently used to grow corn. Small portions are utilized for cattle grazing. The agriculture fields are disturbed and dominated by non-native species of grasses and plants. Species observed include *Avena* sp., *Bromus* sp., and alfalfa (*Medicago sativa*).

3.3.2 Disturbed Agriculture Infrastructure

The project site contains approximately 31.9 acres of disturbed agriculture infrastructure. These areas contain no native habitat and are currently used for containing livestock. These areas are mostly developed with agricultural use structures or residential buildings. The majority of these areas consist of bare ground associated with active livestock pens. Vegetation within these areas consists of non-native ornamental plant species.

3.3.3 Stock/Retention Ponds

The project site contains approximately 5.22 acres of areas stock/retention ponds. These ponds are man-made and fed by wells. The ponds are dominated by rushes (*Juncus* sp.) and sedges (*Carex* sp.).

3.3.4 Disturbed Non-Vegetated

The project site contains approximately 1.06 acres of dirt roads and pull-outs that are well maintained and devoid of vegetation.

4.0 Sensitive Biological Resources

4.1 Threatened and Endangered Species

A total of 45 sensitive species of plants and 57 sensitive species of animals have the potential to occur on or within the vicinity of the project area. These include those species listed or candidates for listing by the USFWS, California Department of Fish and Wildlife (CDFW) and CNPS. All

habitats with the potential to be used by sensitive species were evaluated during the site visit and a determination has been made for the presence or probability of presence within this report. This section will address those species listed as Candidate, Rare, Threatened, or Endangered under the state and federal endangered species laws. Other special status species will be reported in Appendix B and individually discussed in the Recommendations Section of this report.

4.1.1 Threatened and Endangered Plants

A total of 17 plant species are listed as state and/or federal Threatened, Endangered, or Candidate species; are 1B.1 listed plants on the CNPS Rare Plant Inventory; or have been found to have a potential to exist on the project site. The site visit was not conducted during the blooming season for the majority of these plant species. However, based on current site conditions and continual anthropogenic disturbances, it was determined that the project site does not provide suitable habitat, and the 17 plant species are presumed absent. Below are descriptions of these species:

Chaparral sand-verbena

Chaparral sand-verbena (*Abronia villosa var. aurita*) is ranked 1B.1 in the CNPS rare plant inventory. It is found in sandy areas of chaparral, coastal scrub, and desert dunes habitats. No habitat for this species is present on the project site. **This species is not present.**

Braunton's milk-vetch

Braunton's milk-vetch (*Astragalus brauntonii*) is a federally listed endangered species and is ranked 1B.1 in the CNPS rare plant inventory. It is usually found in recently burned or disturbed areas, usually on sandstone with carbonate layers. Its habitat includes chaparral, coastal scrub, valley, and foothill grassland. No habitat for this species is present on the project site. **This species is not present.**

Malibu baccharis

Malibu baccharis (*Baccharis malibuensis*) is ranked 1B.1 in the CNPS rare plant inventory. It is found in Conejo volcanic substrates and often on exposed roadcuts. It sometimes occupies oak woodland habitat and grows at elevations of 150 to 320 meters. Its habitat includes chaparral, cismontane woodland, coastal scrub, and Riparian woodland. No habitat for this species is present on the project site. **This species is not present.**

Lucky morning-glory

Lucky morning-glory (*Calystegia felix*) is ranked 1B.1 in the CNPS rare plant inventory. It is often found in disturbed sites near the coast, at marsh edges. It is also found in alkaline soils and sometimes with saltgrass. This species is sometimes found on vernal pool margins. Its habitat

includes meadow and seep, and riparian scrub. No habitat for this species is present on the project site. **This species is not present.**

Southern tarplant

Southern tarplant (*Centromadia parryi ssp. australis*) is ranked 1B.1 in the CNPS rare plant inventory. It is often in disturbed sites near the coast, at marsh edges. It is also grows in alkaline soils, sometimes with saltgrass, and on vernal pool margins. Its habitat includes marsh and swamp, salt marsh, valley and foothill grassland, vernal pool, and wetland. No habitat for this species is present on the project site. **This species is not present.**

Smooth tarplant

Smooth tarplant (*Centromadia pungens ssp. laevis*) is ranked 1B.1 in the CNPS rare plant inventory. Its habitat includes alkali playa, chenopod scrub, meadows and seeps, riparian woodlands, wetlands, and valley and foothill grasslands. No habitat for this species is present on the project site. **This species is not present.**

San Fernando Valley spineflower

San Fernando Valley spineflower (*Chorizanthe parryi var. Fernandina*) is a federally proposed threatened species, a state listed endangered species, and is ranked 1B.1 in the CNPS rare plant inventory. It is found in sandy soils. Its habitat includes coastal scrub, and valley and foothill grassland. No habitat for this species is present on the project site. **This species is not present.**

Parry's spineflower

Parry's spineflower (*Chorizanthe parryi var. parryi*) is ranked 1B.1 in the CNPS rare plant inventory. The species occurs in dry, sandy soils on dry slopes and flats, sometimes at the interface of two vegetations types, such as chaparral and oak woodland. Its habitat includes coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. No habitat for this species is present on the project site. **This species is not present.**

Slender-horned spineflower

Slender - horned spineflower (*Dodecahema leptoceras*) is a federally and state listed endangered species and is ranked 1B.1 in the CNPS rare plant inventory. This species is typically found near flood deposited terraces and washes. Its habitat includes chaparral, cismontane woodland, and coastal scrub (alluvial fan sage scrub). No habitat for this species is present on the project site.

This species is not present.

Santa Ana River woollystar

Santa Ana River woollystar (*Eriastrum densifolium ssp. sanctorum*) is a federally and state listed endangered species and is ranked 1B.1 in the CNPS rare plant inventory. It is typically found in

sandy soils on river floodplains or terraced fluvial deposits. Its habitat includes chaparral and coastal scrub. No habitat for this species is present on the project site. **This species is not present.**

Tecate cypress

Tecate cypress (*Hesperocyparis forbesii*) is ranked 1B.1 in the CNPS rare plant inventory. It is found on clay or gabbro, primarily on north-facing slopes and in groves often associated with chaparral habitat. Its habitat includes closed-cone coniferous forest, and chaparral. No habitat for this species is present on the project site. **This species is not present.**

Mesa horkelia

Mesa horkelia (*Horkelia cuneate var. puberula*) is ranked 1B.1 in the CNPS rare plant inventory. It is typically found in sandy or gravelly sites. Its habitat includes chaparral, cismontane woodland, and coastal scrub. No habitat for this species is present on the project site. **This species is not present.**

Jokerst's monardella

Jokerst's monardella (*Monardella australis ssp. jokerstii*) is ranked 1B.1 in the CNPS rare plant inventory. It is found on steep scree or talus slopes between breccia. Its habitat includes chaparral, and lower montane coniferous forest. No habitat for this species is present on the project site. **This species is not present.**

Gambel's water cress

Gambel's water cress (*Nasturtium gambelii*) is federally listed endangered species, a state listed threatened species, and is ranked 1B.1 in the CNPS rare plant inventory. It is found in freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Its habitat includes brackish marsh, freshwater marsh, marsh and swamp, and wetland. No marshes or swamps are present on the project site. Only man-made stock ponds are present on the project site. **This species is not present.**

Prostrate vernal pool navarretia

Prostrate vernal pool navarretia (*Navarretia prostrata*) is ranked 1B.1 in the CNPS rare plant inventory. It is typically found in alkaline soils in grassland habitat, or in vernal pools. Its habitat includes coastal scrub, valley and foothill grasslands, vernal pools, meadows, and seeps. No habitat for this species is present on the project site. **This species is not present.**

Allen's pentachaeta

Allen's pentachaeta (*Pentachaeta aurea ssp. allenii*) is ranked 1B.1 in the CNPS rare plant inventory. It is found on openings in scrub or grassland areas. Its habitat includes coastal scrub,

and valley and foothill grassland. No habitat for this species is present on the project site. **This** species is not present.

Brand's star phacelia

Brand's star phacelia (*Phacelia stellaris*) is ranked 1B.1 in the CNPS rare plant inventory. It habitat includes coastal dunes and coastal scrub. No habitat for this species is present on the project site. **This species is not present.**

4.1.2 Threatened and Endangered Animals

A total of 27 animal species are listed as state and/or federal Threatened, Endangered, or Candidate will be reviewed in this section. Sensitive species which have a potential to occur will also be discussed in this section. All sensitive species within the Prado Dam 7.5' USGS topographic quadrangle and eight surrounding quadrangles were reviewed and a complete list of those species are discussed within Appendix B. Below are descriptions of these species:

Cooper's Hawk

The Cooper's hawk (*Accipiter cooperii*) is a CDFW watch list wildlife species. It is found is riparian areas with stands of willow and cottonwoods. It nests in trees and its nesting season is between February 15 and August 15. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. **Potential to be present.**

Tricolored blackbird

Tricolored blackbird (*Agelaius tricolor*) is a state listed candidate endangered species and listed by the CDFW as a species of special concern. Its habitat includes freshwater marsh, marsh and swamp, swamp, and wetland. This species is largely endemic to California and is most numerous in and around Central Valley. This species requires open accessible water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony. There is potential habitat for this species to be present in the stock ponds. **Potential to be present.**

Grasshopper sparrow

Grasshopper sparrow (*Ammodramus savannarum*) is a CDFW Species of Special Concern. It favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Its habitat includes valley and foothill grassland. There is potential habitat for this species to be present in the agricultural fields. **Potential to be present.**

Arroyo Toad

Arroyo Toad (*Anaxyrus californicus*) is a federally listed endangered species and a CDFW Species of Special Concern. The most favorable breeding habitat for this species consists of slow-moving

shallow pools, nearby sandbars, and adjacent stream terraces. Its habitat includes desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. There is no habitat for this species on the project site. **The species is not present.**

Southern California legless lizard

Southern California legless lizard (*Anniella stebbinsi*) is a CDFW Species of Special Concern. It is found in a variety of habitats, generally around moist, loose soil. This species is generally found south of the Transverse Range, extending to northwestern Baja California, with disjunct populations found in the Tehachapi and Piute Mountains in Kern County. Its habitat includes broadleaved upland forest, chaparral, coastal dunes, and coastal scrub. There is potential habitat for this species to be present in the stock ponds. **Potential to be present.**

Great blue heron

Great blue heron (*Ardea Herodias*) is a CDF Sensitive Species. It is found in rookery sites near foraging areas. It is a colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Its habitat includes brackish marsh, estuary, freshwater marsh, marsh and swamp, riparian forest, and wetland. There is potential habitat for this species to be present in the stock ponds. **Potential to be present.**

California glossy snake

California glossy snake (*Arizona elegans occidentalis*) is a CDFW Species of Special Concern. This species is found in arid scrub, rocky washes, grassland and chaparral habitats, often with loose or sandy soils. There is potential habitat for this species to be present on the project site. **Potential to be present.**

Burrowing owl

Burrowing owl (*Athene cunicularia*) is a CDFW Species of Special Concern. Its habitat includes coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grassland. This species is typically found in open and dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is a subterranean nester and is dependent upon burrowing mammals, most notably the California ground squirrel. There is potential habitat for this species to be present on the project site. **Potential to be present.**

San Diego fairy shrimp

San Diego fairy shrimp (*Branchinecta sandiegonensis*) is a federally listed endangered species. This species is found in chaparral, coastal scrub, vernal pool, and wetland habitats. The project site consists of a disturbed agriculture area. There is no habitat for this species on the project site. **The species is not present.**

Swainson's hawk

Swainson's hawk (*Buteo swainsoni*) is a state listed threatened species. This species favors open grasslands for foraging but also occurs in agricultural settings. It relies on scattered stands of trees near agricultural fields and grasslands for nesting sites. Its habitats include great basin grassland, riparian forest, riparian woodland, and valley and foothill grassland. This species is not known to nest within the region of the project site. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. **Potential to be present.**

Santa Ana sucker

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

Western yellow-billed cuckoo

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is a federally listed threatened and state listed endangered species. This species typically nests in riparian jungles of willows, often mixed with cottonwoods, with a lower story of blackberry, nettles, or wild grape. It is found in riparian forest habitat. The project site does not contain suitable habitat for this species. **This species is not present.**

Yellow rail

Yellow rail (*Coturnicops noveboracensis*) is a CDFW Species of Special Concern. It is a summer resident in eastern Sierra Nevada in Mono County. Its habitat includes freshwater marsh and meadow and seep. There is potential habitat for this species to be present in the stock ponds. **Potential to be present.**

San Bernardino kangaroo rat

San Bernardino kangaroo rat (*Dipodomys merriami parvus*) is a federally listed endangered species and a CDFW Species of Special Concern. It is found in coastal scrub habitat. This species is found in alluvial scrub vegetation on sandy loam substrates, characteristic of alluvial fans and flood plains. It needs early to intermediate seral stages. The project site does not contain suitable habitat for this species. **This species is not present.**

Stephen's kangaroo rat

Stephens' kangaroo rat (*Dipodomys stephensi*) is a federally listed endangered and state listed threatened species. This species is found in coastal sage scrub with sparse vegetation cover, and in valley and foothill grasslands. This species prefers buckwheat, chamise, brome grass, and

filaree, and will burrow into firm soil. The project site does not contain suitable habitat for this species. **This species is not present.**

White-tailed kite

The white-tailed kite (*Elanus leucurus*) is a CDFW fully protected species and is found in coastal and valley lowlands. It forages in grasslands, wetlands, and meadows and nests in oak trees, willows, or other tree stands between February and October. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. **Potential to be present.**

Southwestern willow flycatcher

Southwestern willow flycatcher (*Empidonax traillii extimus*) is a federally and state listed endangered species. It is found in riparian woodland habitat in southern California. The project site does not contain suitable habitat for this species. **This species is not present.**

Western pond turtle

Western pond turtle (*Emys marmorata*) is a CDFW Species of Special Concern. This species needs basking sites and suitable upland habitat consisting of sandy banks or grassy open fields up to 0.5 kilometers from water for egg-laying. It is a thoroughly aquatic turtle of ponds, marshes, rivers, sreams, and irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation. Its habitat includes aquatic, artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, marsh and swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, and wetland. There is potential habitat for this species to be present in the stock ponds. **Potential to be present.**

California horned lark

California horned lark (*Eremophila alpestris actia*) is listed on the CDFW Watch List. It is found in coastal regions, chiefly from Sonoma County to San Diego County, as well as in parts of the San Joaquin Valley and east to foothills. This species is found in areas with short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, and/or alkali flats. Its habitat includes marine intertidal and splash zone communities, and meadow and seep. There is potential habitat for this species to be present on the project site. **Potential to be present.**

Western mastiff bat

Western mastiff bat (*Eumops perotis californicus*) is a CDFW Species of Special Concern. It roosts in crevices in cliff faces, high buildings, trees, and tunnels. It is found in open, semi-arid to arid habitats. Its habitat includes chaparral, cismontane woodland, coastal scrub, and valley and

foothill grassland. The project site provides suitable foraging opportunities but does not provide suitable roosting opportunities. **Potential to be present.**

Merlin

Merlin (*Falco columbarius*) is listed on the CDFW Watch List. It is found in areas with clumps of trees or windbreaks for roosting in open county. Its habitat includes estuary, Great Basin grassland, and valley and foothill grassland. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. **Potential to be present.**

Bald eagle

Bald eagle (*Haliaeetus leucocephalus*) is a state listed endangered and CDFW fully protected species. This species is found in lower montane coniferous forest and old-growth. They nest in large old-growth or tress with open branches, especially ponderosa pine. The project site does not contain suitable habitat for this species. **This species is not present.**

California black rail

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

Coastal California gnatcatcher

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

Delhi Sands flower-loving fly

Delhi Sands flower-loving fly (*Rhaphiomidas terminates abdominalis*) is a federally listed endangered species. It requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation. It is found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties. This species is found in interior dune habitat. The project site does not have suitable habitat for this species. **This species is not present.**

Least Bell's vireo

Least Bell's vireo (*Vireo bellii pusillus*) is a federal and state listed endangered species. This species is found in riparian forest, riparian scrub, and riparian woodland. Nesting habitat of this species is restricted to willow and/or mulefat dominated riparian scrub along permanent or nearly permanent streams. The project site does not contain suitable habitat for this species. **This species is not present.**

American peregrine falcon

American peregrine falcon (*Falco peregrinus anatum*) is a CDFW Fully Protected Species. It is found near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. It nests in scrapes, depressions, or ledges in open areas. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. **Potential to be present.**

4.1.3 Sensitive Plant Communities

According to the literature search of the *Prado Dam* 7.5' USGS topographic quadrangle and eight surrounding quadrangles, 10 sensitive plant communities have the potential to occur on or within the vicinity of the project site. However, none of the sensitive plant communities identified were found on the project site during the field survey. Therefore, it was determined that no sensitive plant communities occur on the project site.

4.2 Critical Habitats

Critical habitat is defined as areas of land, water, and air space that contain the physical and biological features essential for the survival and recovery of endangered and threatened species. Designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Critical habitat is designated by USFWS for endangered and threatened species per the federal ESA (16 U.S.C. § 1533 (a)(3)), and to the extent prudent and determinable. Special management of critical habitat, including measures for water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types is required to ensure the long-term survival and recovery of the identified species. Critical habitat designation delineates all suitable habitat for the species, whether or not it is occupied. The project site is not located within or adjacent to designated critical habitat for endangered species. Designated critical habitat for least Bell's vireo occurs approximately two miles south of the project site.

4.3 Nesting Birds

Migratory non-game native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. The project site contains non-native shrubs and trees that can support nesting song birds or raptors and can be used by nesting song birds or raptors during the nesting bird season of February 1 to September 15.

4.4 Wildlife Movement Corridors

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

The project site is not located within a designated wildlife corridor or linkage. The project site consists of a dairy farm and agricultural fields. The project site is surrounded by development and/or existing agricultural and livestock land uses. Further, the site is separated from regional wildlife movement corridors associated with the Prado Damn Flood Control Basin and Santa Ana River. Therefore, the project site does not function as a wildlife movement corridor.

4.5 City, County, Regional, State, or Federal Conservation Plans

The project site is not within any state or federal Habitat Conservation Plans or Habitat Conservation Plans. The Ontario Plan is a Policy Plan that serves as the City of Ontario's General Plan.

The project site is located within the boundaries of the City's Ontario Plan. The Ontario Plan's Environmental Resources Element outlines goals and policies related to Water & Wastewater, Solid Waste & Recycling, Energy, Air Quality, and Biological, Agricultural & Mineral Resources. The biological goal is to protect high value habitat. The Ontario Plan includes policies to support the protection of biological resources through habitat conservation areas and to comply with state and federal regulations regarding protected species.

The City's Municipal Code, Volume II, Chapter 2 contains a provision for "Parkway Tree Regulations" (Ordinance 1664), to preserve parkway trees and to regulate the maintenance and removal of such trees. Parkway is defined as "...that portion of any public street right-of-way between the right-of-way boundary line and the curb line, and also the area enclosed within the curblines of a medial divider." The property owner abutting upon public rights-of-way is responsible to water any tree located in the parkway and for trimming that can be done from the ground to preserve the neat appearance and non-obstructed use of the parkway, while the City is responsible for all major pruning. Removal or relocation of any parkway tree requires prior authorization from the Public Works Agency of the City through a permit process, and planting of a replacement tree, whenever feasible, shall be a condition included in any permit issued by the City for the removal of any parkway tree. Alternatively, a cash-in-lieu deposit may be accepted by the City as an alternate to the actual planting of any required parkway tree based on a fair value established by the Public Facilities Manager.

4.6 State and Federal Jurisdictional Drainages

The project site contains approximately 5.22 acres of stock/retention ponds. These ponds are manmade, for agricultural use, and fed by wells. The man-made ponds are not connected to a natural stream, nor do they divert natural flow from any river, stream or lake.

Since the source of the water for these man-made features are not part of a natural stream, river, or lake, the stock ponds are not considered jurisdictional under the California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Program. The program states: "An entity shall not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake...". Therefore, the stock ponds on the project site are not a "natural flow" of a stream, river, or lake, and would not be considered jurisdictional by CDFW.

Further, the man-made stock ponds are not adjacent to and are not considered Waters of the United States (WUS). Therefore, the man-made ponds on the project site would not be considered federally jurisdictional under the Clean Water Act.

5.0 Project Impacts

5.1 Impacts to Existing Habitats

Implementation of the proposed project will impact the entire 84.1-acre project site, including 46.0 acres of agriculture fields, 31.9 acres of disturbed agriculture infrastructure, 5.22 acres of stock/retention ponds, and 1.06 acres of disturbed non-vegetated areas.

5.2 Impacts to Sensitive Species

The species discussed below have the potential to occur on site. Project activities were evaluated to determine the potential for impacts to these species.

Cooper's Hawk

The Cooper's hawk is a CDFW watch list wildlife species. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. The proposed project has the potential to result in impacts to this species.

Tricolored blackbird

Tricolored blackbird is a state listed candidate endangered species and listed by the CDFW as a species of special concern. There is potential habitat for this species to be present in the stock ponds. The proposed project has the potential to result in impacts to this species.

Grasshopper sparrow

Grasshopper sparrow is a CDFW Species of Special Concern. There is potential habitat for this species to be present in the agricultural fields. The proposed project has the potential to result in impacts to this species.

Southern California legless lizard

Southern California legless lizard is a CDFW Species of Special Concern. There is potential habitat for this species to be present in the stock ponds. The proposed project has the potential to result in impacts to this species.

Great blue heron

Great blue heron is a CDF Sensitive Species. There is potential habitat for this species to be present in the stock ponds. The proposed project has the potential to result in impacts to this species.

California glossy snake

California glossy snake is a CDFW Species of Special Concern. There is potential habitat for this species to be present on the project site. The proposed project has the potential to result in impacts to this species.

Burrowing owl

Burrowing owl is a CDFW Species of Special Concern. There is potential habitat for this species to be present on the project site. The proposed project has the potential to result in impacts to this species. Protocol burrowing owl surveys are recommended to determine the presence and use of the site by burrowing owls.

Swainson's hawk

Swainson's hawk is a state listed threatened species. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. The proposed project has the potential to result in impacts to this species.

White-tailed kite

The white-tailed kite is a CDFW fully protected species. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. The proposed project has the potential to result in impacts to this species.

Yellow rail

Yellow rail is a CDFW Species of Special Concern. There is potential habitat for this species to be present in the stock ponds. The proposed project has the potential to result in impacts to this species.

Western pond turtle

Western pond turtle is a CDFW Species of Special Concern. There is potential habitat for this species to be present in the stock ponds. The proposed project has the potential to result in impacts to this species.

California horned lark

California horned lark is listed on the CDFW Watch List. There is potential habitat for this species to be present on the project site. The proposed project has the potential to result in impacts to this species.

Western mastiff bat

Western mastiff bat is a CDFW Species of Special Concern. The project site provides suitable foraging opportunities but does not provide suitable roosting opportunities. The proposed project has the potential to result in impacts to this species.

Merlin

Merlin is listed on the CDFW Watch List. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. The proposed project has the potential to result in impacts to this species.

American peregrine falcon

American peregrine falcon is a CDFW Fully Protected Species. The project site provides suitable foraging opportunities but does not provide suitable nesting opportunities. The proposed project has the potential to result in impacts to this species.

5.3 Impacts to Nesting Birds

Potential impacts to nesting birds may occur if ground disturbing activities or vegetation removal occur during the bird nesting season of February 1 through September 15.

5.4 Impacts to Critical Habitat

The project is not located within designated federal critical habitat. No impact to critical habitat is expected.

5.5 Impacts to Wildlife Movement Corridors

The project site does not contain any wildlife movement corridors. No impacts are expected.

5.6 Conflict with Local Policies or Ordinances Protecting Biological Resources

The Ontario Plan supports the protection of high value habitat areas by establishing habitat conservation areas and complying with state and federal regulations regarding protected species. Since the project site does not support high value habitats or protected species, the project will not conflict with these policies.

The City's Municipal Code has a provision to protect parkway trees within public rights-of-way and requires a permit to remove or relocate any trees, and planting of replacement trees or a cash-

in-lieu fee compensation for any tree removed. Should the project result in the removal of trees that are considered parkway trees, a permit will be required.

5.7 Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation plan

No impacts to any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation plan are anticipated.

6.0 Recommendations

In order to mitigate any potential impacts from project activities, the project should incorporate the following recommendations:

6.1 Sensitive Species

Cooper's hawk, Tricolored blackbird, Grasshopper sparrow, Great blue heron, Swainson's hawk, White-tailed kite, Yellow rail, California horned lark, Merlin, American peregrine falcon

- It is recommended that vegetation removal be conducted outside of the nesting season for migratory birds to avoid direct impacts.
- If vegetation removal will occur during the migratory bird nesting season, between February 1 and September 15, it is recommended that pre-construction nesting bird surveys be performed within three days prior to vegetation removal.
- If active nests are found during nesting bird surveys, they shall be flagged. A 250-foot buffer shall be fenced around song bird nests and a 500-foot buffer shall be fenced around raptor nests.

Southern California legless lizard and California glossy snake

• Three days prior to any ground disturbing activities or vegetation removal, a qualified biological monitor should conduct a preconstruction survey to identify any sensitive biological resources. Any reptile species that may be present within the project area shall be relocated outside of the impact areas.

• Biological monitors shall be on-call to relocate any reptile or amphibian that is encountered during construction activities.

Burrowing owl

• A protocol burrowing owl survey is recommended to determine the presence and use of the site by burrowing owls.

Western mastiff bat

- Prior to implementation of project activities, a qualified biologist shall be retained to
 determine whether potential roosting sites for special-status bats may be affected. If
 potential roosting sites are identified, a preconstruction survey shall be conducted prior to
 the end of April to determine the presence or absence of roosting bats. If the survey does
 not identify the presence of occupied roosts, no further action is necessary.
- If day roosts or maternity roosts occupied by special-status bat species are documented within construction areas, the bats shall be safely flushed from the sites where roosting habitat is planned to be removed prior to the month of May (maternity roosts are generally occupied from May to August) and prior to the onset of construction activities. The removal of the roosting sites shall occur during the time of day when the roost is unoccupied. The loss of each roost will be compensated for by the construction and installation of two bat boxes suitable to the bat species and colony size excluded from the original roosting site. The bat boxes shall be installed in the vicinity prior to removal of the original day/maternity roost sites. A detailed program for bat flushing, roosting site removal, and installation of bat boxes shall be developed in consultation with a qualified biologist.

Western pond turtle

• Within 14 days prior to the onset of construction activities, a qualified biologist shall conduct pre-construction surveys for Western pond turtle within all areas that fall within 100 feet of any suitable aquatic and upland nesting habitat for this species (stock/retention ponds). If Western pond turtles are observed during the pre-construction survey, the California Department of Fish and Wildlife shall be contacted. If no Western pond turtles are observed during the pre-construction survey, then construction activities may begin. If construction is delayed or halted for more than 30 days, another pre-construction survey for Western pond turtle shall be conducted. Within seven days of the pre-construction

survey, a report of findings from the survey shall be submitted to the California Department of Fish and Wildlife.

• During construction, a qualified biological monitor who has been approved by the California Department of Fish and Wildlife to relocate Western pond turtles shall be onsite to ensure that no Western pond turtles are harmed. If Western pond turtles are observed in the construction area at any time during construction, the onsite biological monitor shall be notified and construction in the vicinity of the sighting shall be halted until such a time as a turtle has been removed from the construction zone and relocated by an approved biologist. If a siting occurs during construction, the biologist shall prepare a report of the event and submit it to California Department of Fish and Wildlife.

7.0 Certification

PRINCIPAL BIOLOGIST

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

Date	07-01-19	Signed	June Hannel		
			PROJECT MANAGER		
Fieldwo	ork Performed By:				
Juan Jo	ose Hernandez				

8.0 References

American Ornithologists' Union. 1983 (and supplements 1985, 1987, 1989, 1991, 1993, and 1995). *The A.O.U. Check-List of North American Birds*. 6th ed. Allen Press. Lawrence, Kansas.

Burt, W. H., 1986. A Field Guide to the Mammals in North American North of Mexico. Houghton Mifflin Company, Boston, Massachusetts.

CDFG (California Department of Fish and Game). 1988a. California's Wildlife, Volume I: Amphibians and Reptiles. State of California Resources Agency. Sacramento, California.

CDFG (California Department of Fish and Game). 1988b. California's Wildlife, Volume II: Birds. State of California's Resource Agency. Sacramento, California.

CDFG (California Department of Fish and Game). 1988c. California's Wildlife, Volume III: Mammals. State of California Resources Agency. Sacramento, California.

CDFG (California Department of Fish and Game). 2014 (October). Natural Communities List. The Resources Agency of California, Department of Fish and Game, Natural Diversity Data Base. Sacramento, California.

CDFG (California Department of Fish and Game). 2014 (October). Endangered and Threatened Animals List. The Resources Agency of California, Department of Fish and Game, Natural Diversity Data Base. Sacramento, California.

CDFG (California Department of Fish and Game). 2014 (October). Endangered Threatened and Rare Plants. The Resources Agency of California, Department of Fish and Game, Natural Diversity Data Base. Sacramento, California.

CDFG (California Department of Fish and Game). 2014 (October). Special Animals List. The Resources Agency of California, Department of Fish and Game, Natural Diversity Data Base. Sacramento, California.

CDFW (California Department of Fish and Wildlife), Natural Diversity Database (CNDDB). Accessed August 2018. California Department of Fish and Wildlife, Sacramento, California.

California Native Plant Society, California Native Plant Status Report, 1985a. Centrostegia leptoceras.

California Native Plant Society, California Native Plant Status Report, 1985b. Eriastrum densifolium var. sanctorum.

Garrett, K. and J. Dunn, 1981. Birds of Southern California. Los Angeles Audubon Society. The Artisan Press, Los Angeles, California.

Grenfell, W. E., M. D. Parisi, and D. McGriff, 2003. A Check-list of the Amphibians, Reptiles, Birds and Mammals of California. California Wildlife Habitat Relationship System, California Department of Fish and Game, Sacramento, California.

Grinnell, J., 1933. Review of the Recent Mammal Fauna of California. University of California Publications in Zoology, 40:71-234.

Hall, E. R., 1981. The Mammals of North America, Volumes I and II. John Wiley and Sons, New York, New York.

Hickman, J. C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press.

Holland, R.F. 1986 (updated 1996). Preliminary Descriptions of the Terrestrial Natural Communities of California. Non-game Heritage Program. California Department of Fish and Game. Sacramento, California.

Ingles, L. G., 1965. Mammals of the Pacific States. Stanford University Press, Stanford, California.

Jameson, jr., E. W. and H. J. Peters. California Mammals. University of California Press, Berkeley, Los Angeles, London. 403 pp.

Lackey, J. 1996. Chaetodipus fallax. Mammalian Species No. 517. American Society of Mammalogists.

List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September 2010.

Munz, P.A., 1974. A Flora of Southern California. University of California Press, Berkeley, California.

Peterson, R. 1990 A Field Guide to Western Birds. Houghton Mifflin Company, Boston, MA.

Sawyer, J.O. and T. Keeler-Wolf. 1995. *A Manual of California Vegetation*. California Native Plant Society. Sacramento, California.

Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California*. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration.

Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. 2nd ed. Houghton Mifflin Company. Boston, Massachusetts.

Tibor, D.P. 2001. California Native Plant Society's Inventory of Rare and Endangered Plants of California. California Native Plant Society. Special Publication, No. 1, 6th ed.

Udvardy, M.D. 1994. *National Audubon Society Field Guide to North American Birds*. Alfred A. Knopf, Inc. New York, New York.

U.S Fish and Wildlife Service, 2014. Endangered and Threatened Wildlife and Plants. https://www.fws.gov/endangered/species/us-species.html; Accessed August 2018.

USGS (United States Geological Survey). *Prado Dam* 7.5' Topographic Quadrangle. 1973, revised 2018.

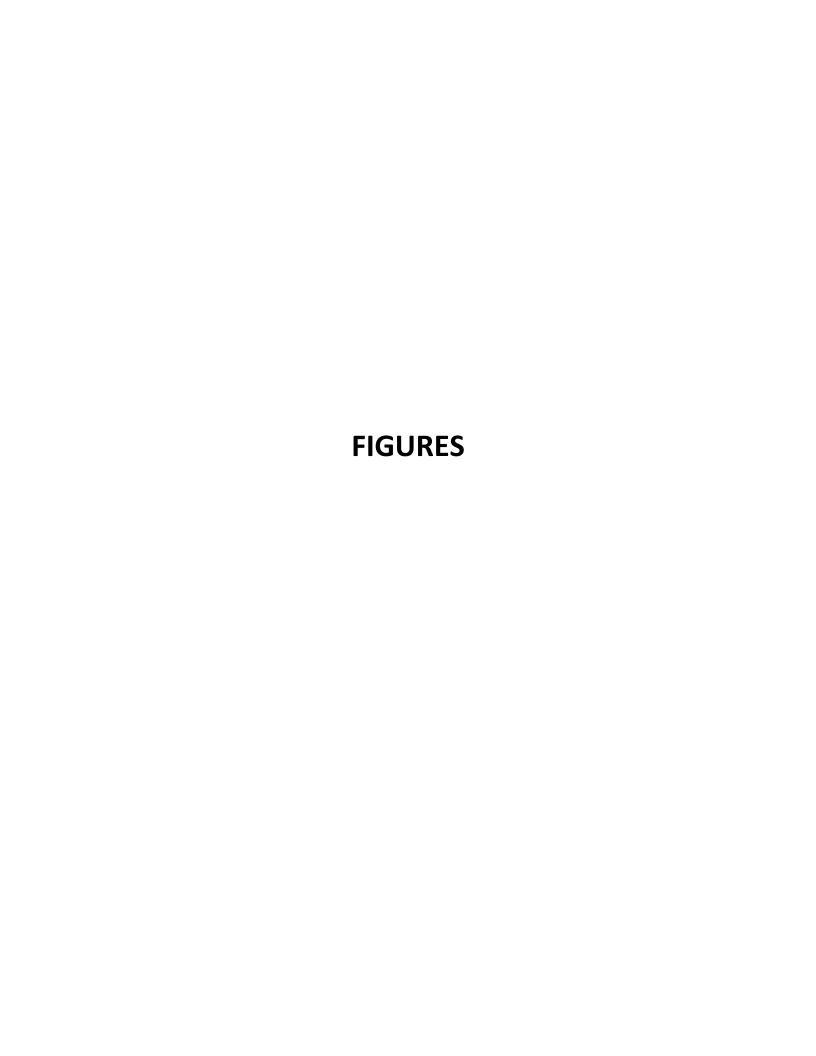
Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed August 2018.

Wheeler, J., 1988. Recent Ecological Investigations and Present Status of the Endangered Santa Ana River Wooly-Star, Eriastrum densifolium spp. sanctorum (Milliken) Mason. Crossosoma, Vol 14, No. 3. pp. 1-17.

Williams, D. F., 1986. Mammalian Species of Special Concern in California. Wildlife Management Division Administrative Report 86-1. Prepared for The Resources Agency, California Department of Fish and Game.

Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer and M. White, 1990. California's Wildlife, Volume III Mammals, The Resources Agency, Department of Fish and Game, Sacramento, California.

Zembal, R. and K.J. Kramer, 1984. The known distribution and unknown future of Santa Ana River woolly-star (Eriastrum). Crossosoma, Vol. 10, No. 5.



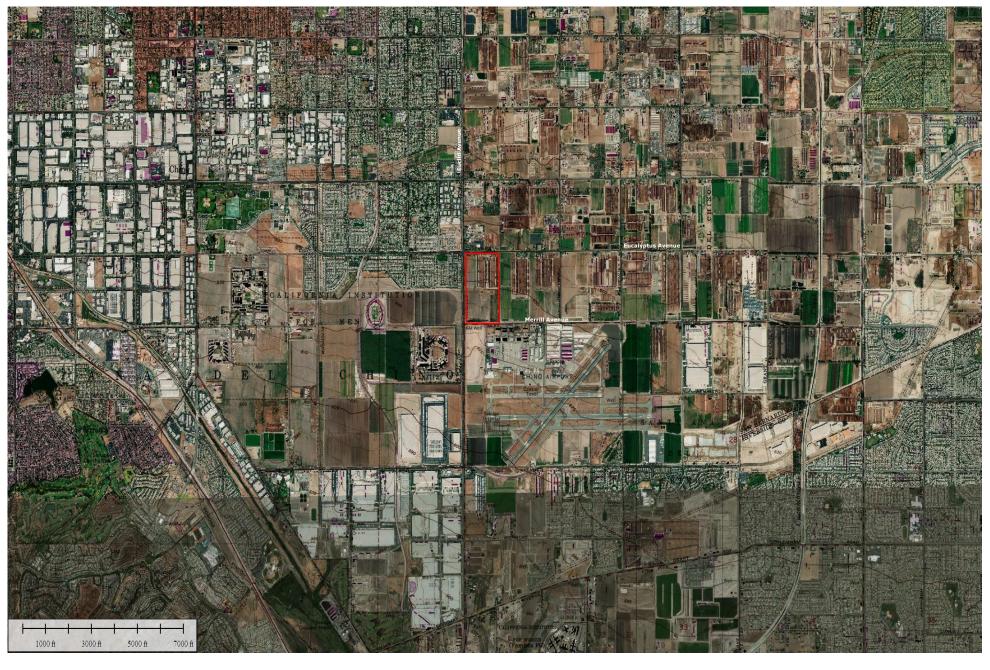


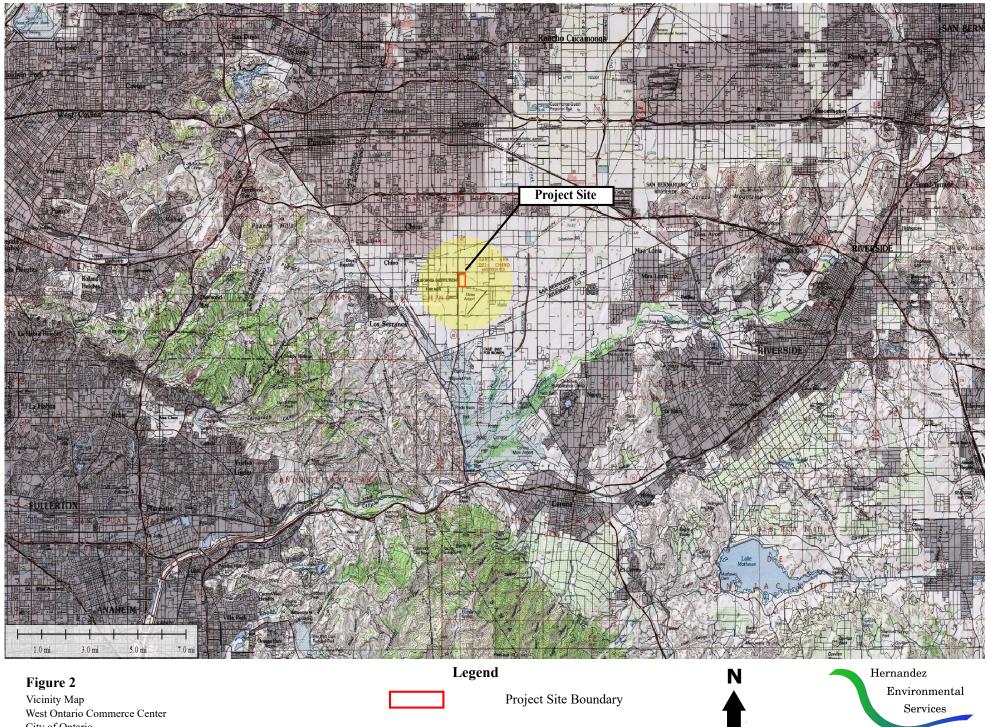
Figure 1
Location Map
West Ontario Commerce Center
City of Ontario
San Bernardino County, California

Legend

Project Site Boundary



Hernandez Environmental Services



City of Ontario San Bernardino County, California

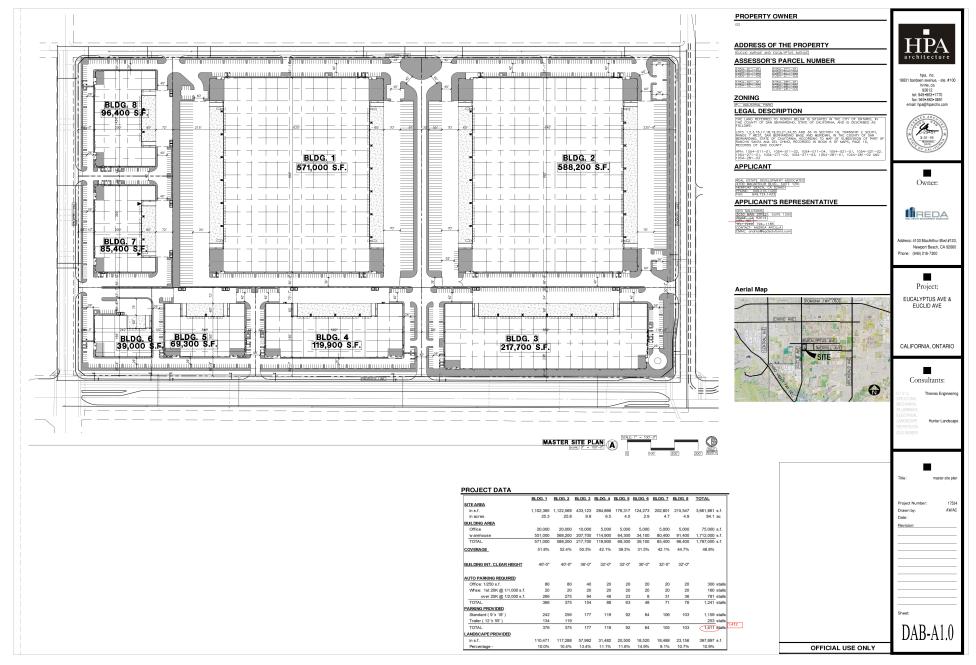
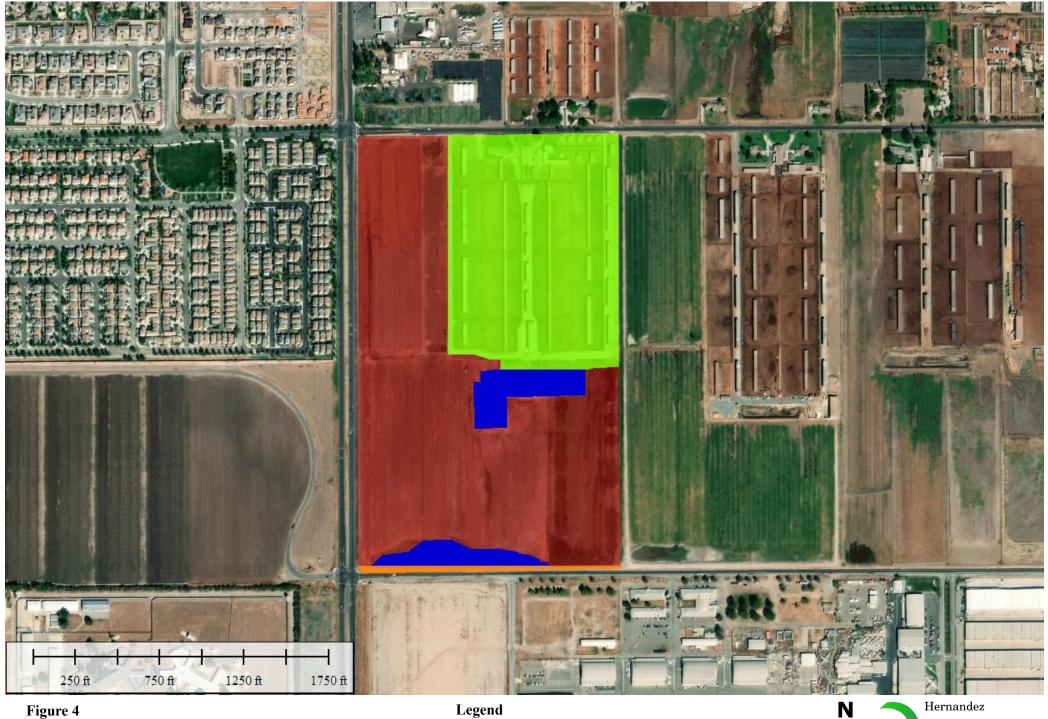


Figure 3

Site Plans West Ontario Commerce Center City of Ontario San Bernardino County, California Hernandez Environmental Services



Habitat Map
West Ontario Commerce Center
City of Ontario
San Bernardino County, California

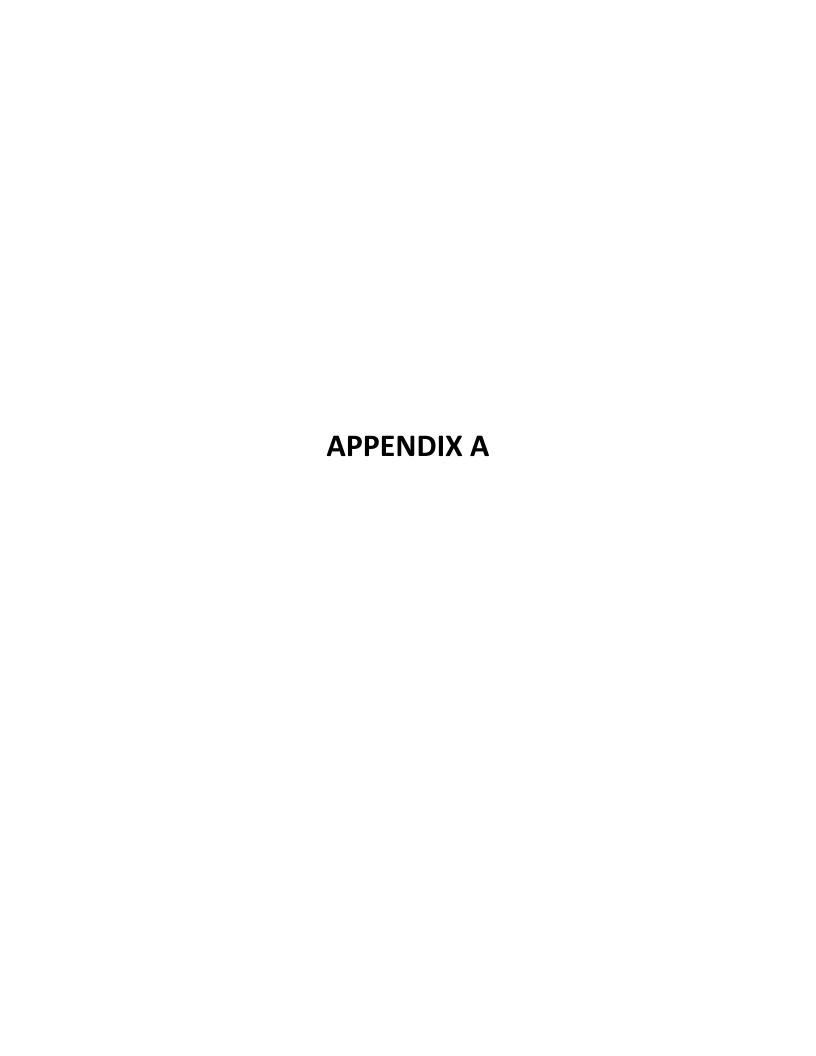
 $31.9\,Acres\ of\ Disturbed\ Agricultural\ Infrastructure$

1.06 Acres of Disturbed Non-Vegetated

5.22 Acre of Stock/Retention Ponds

46.0 Acres of Agricultural Fields

Hernandez Environmental Services



Species List

Plant List

Amaranthus albus Tumbleweed

Ambrosia psilostachya Western ragweed

Amsinckia intermedia Common fiddleneck

Brassica nigra Black mustard

Brassica tournefortii Saharan mustard

Calystegia sp. Bindweed

Carax sp. Sedged

Cynodon dactylon Bermuda grass

Chenopodium album Lambs quarters

Datura stramonium Jimson weed

Erigeron canadensis Horseweed

Euphorbia maculate Spotted spurge

Helianthus annus Common sunflower

Heterotheca grandiflora Telegraph weed

Juncus sp. Rushes

Malva parviflora Cheeseweed

Medicago sativa Alfalfa

Nicotina glauca Tree tobacco

Salsola tragus Russian thistle

Schismus barbatus Common Mediterranean grass

Tamarisk Tamarisk

Tribulus terrestris Puncture weed

Zea sp. Maiz

Animal List

Buteo jamaicensis Red-tailed hawk

Corvas brachyrhynchos American crow

Corvus corax Raven

Haemorhous mexicanus House finch

Himantopus mexicanus Black-necked stilt

Hirundo rustica Barn swallow

Melozone crissalis California towee

Otospermophilus beecheyi California ground squirrel

Sayornis nigricans Black phoebe

Sayornis saya Say's phoebe

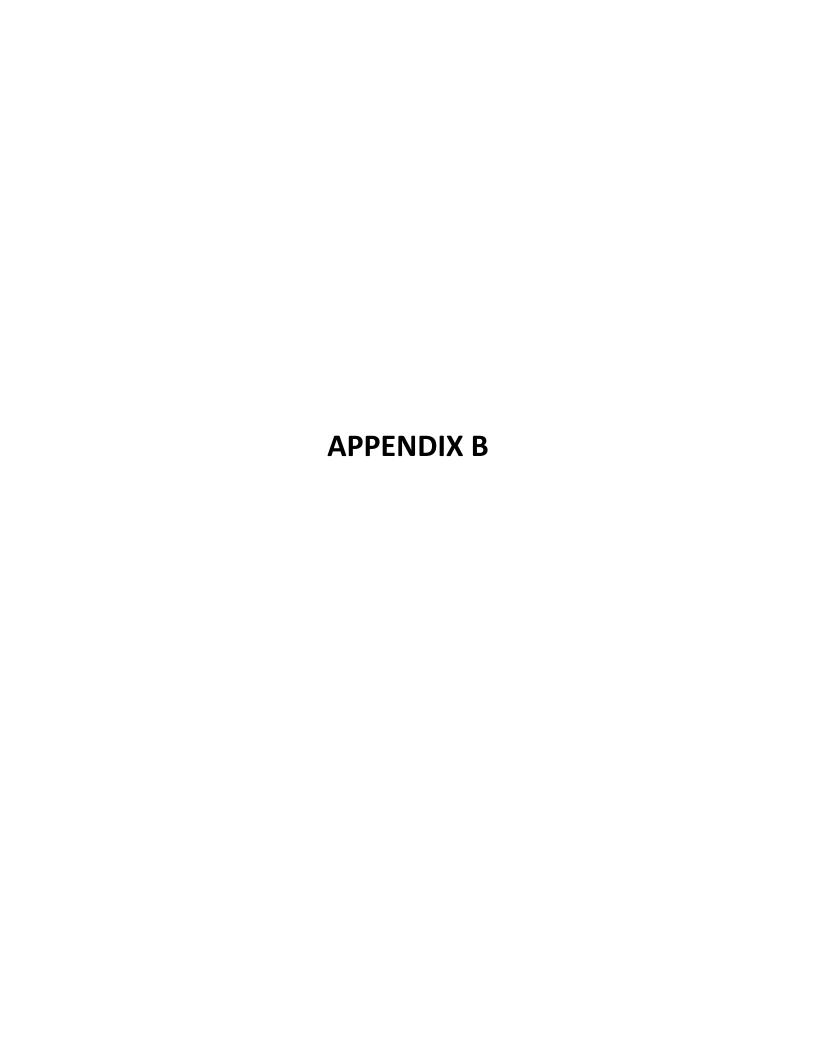
Streptopelia decaocto Eurasian collard dove

Tyrannus verticalis Western kingbird

Uta stansburiana Common side-blotched Lizard

Zenaida macroura Mourning Dove

Zonotrichia leucophrys White-crowned sparrow



Scientific Name	Common Name	Federal Listing	State Listing	CNPS Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Abronia villosa var. aurita	chaparral sand- verbena	None	None	1B.1	BLM_S- Sensitive USFS_S- Sensitive	Chaparral Coastal scrub Desert dunes	Chaparral, coastal scrub, desert dunes.	Sandy areas60- 1570 m.	No habitat for this species. Not present
Astragalus brauntonii	Braunton's milk- vetch	Endangered	None	18.1	SB_RSABG- Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden	Chaparral Coastal scrub Limestone Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 3-640 m.	No habitat for this species. Not presen
Atriplex coulteri	Coulter's saltbush	None	None	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden	Coastal bluff scrub Coastal dunes Coastal scrub Valley & foothill grassland	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland.	Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2-460 m.	No habitat for this species. Not presen t
Baccharis malibuensis	Malibu baccharis	None	None	18.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral Cismontane woodland Coastal scrub Riparian woodland	Coastal scrub, chaparral, cismontane woodland, riparian woodland.	In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. 150-320 m.	No habitat for this species. Not presen

Scientific Name	Common Name	Federal Listing	State Listing	CNPS Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Calochortus plummerae	Plummer's mariposa-lily	None	None	4.2	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral Cismontane woodland Coastal scrub Lower montane coniferous forest Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	No habitat for this species. Not present.
Calochortus weedii var. intermedius	intermediate mariposa-lily	None	None	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden USFS_S- Sensitive	Chaparral Coastal scrub Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland.	Dry, rocky calcareous slopes and rock outcrops. 60-1575 m.	No habitat for this species. Not present.
Calystegia felix	lucky morning-glory	None	None	1B.1		Meadow & seep Riparian scrub	Meadows and seeps, riparian scrub.	Sometimes alkaline, alluvial. 9- 205 m.	No habitat for this species. Not present.
Centromadia parryi ssp. australis	southern tarplant	None	None	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Marsh & swamp Salt marsh Valley & foothill grassland Vernal pool Wetland	Marshes and swamps (margins), valley and foothill grassland, vernal pools.	Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 m.	No habitat for this species. Not present.
Centromadia pungens ssp. laevis	smooth tarplant	None	None	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Alkali playa Chenopod scrub Meadow & seep Riparian woodland Valley & foothill grassland Wetland	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland.	Alkali meadow, alkali scrub; also in disturbed places. 5- 1170 m.	No habitat for this species. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	CNPS Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Proposed Threatened	Endangered	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden USFS_S- Sensitive	Coastal scrub Valley & foothill grassland	Coastal scrub, valley and foothill grassland.	Sandy soils. 15- 1015 m.	No habitat for this species. Not present.
Chorizanthe parryi var. parryi	Parry's spineflower	None	None	1B.1	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden USFS_S- Sensitive	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90- 1220 m.	No habitat for this species. Not present.
Chorizanthe polygonoides var. Iongispina	long-spined spineflower	None	None	1B.2	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral Coastal scrub Meadow & seep Ultramafic Valley & foothill grassland Vernal pool	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools.	Gabbroic clay. 30- 1540 m.	No habitat for this species. Not present.
Cladium californicum	California saw-grass	None	None	2B.2	USFS_S- Sensitive	Alkali marsh Freshwater marsh Meadow & seep Wetland	Meadows and seeps, marshes and swamps (alkaline or freshwater).	Freshwater or alkaline moist habitats20-2135 m.	No meadows or seeps present. Just manmade stock ponds. Not present.
Dodecahema leptoceras	slender-horned spineflower	Endangered	Endangered	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral Cismontane woodland Coastal scrub	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	include Encelia,	No habitat for this species. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	CNPS Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Dudleya multicaulis	many-stemmed dudleya	None	None	18.2	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden USFS_S- Sensitive	Chaparral Coastal scrub Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	In heavy, often clayey soils or grassy slopes. 1- 910 m.	No habitat for this species. Not present.
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Endangered	Endangered	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral Coastal scrub	Coastal scrub, chaparral.	In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	No habitat for this species. Not present.
Hesperocyparis forbesii	Tecate cypress	None	None	1B.1	BLM_S- Sensitive SB_RSABG- Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S- Sensitive	Chaparral Closed-cone coniferous forest	Closed-cone coniferous forest, chaparral.	Primarily on north- facing slopes; groves often associated with chaparral. On clay or gabbro. 60-1650 m.	No habitat for this species. Not present.
Horkelia cuneata var. puberula	mesa horkelia	None	None	1B.1	USFS_S- Sensitive	Chaparral Cismontane woodland Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	No habitat for this species. Not present.
Lepechinia cardiophylla	heart-leaved pitcher sage	None	None	18.2	SB_RSABG- Rancho Santa Ana Botanic Garden USFS_S- Sensitive	Chaparral Cismontane woodland Closed-cone coniferous forest	Closed-cone coniferous forest, chaparral, cismontane woodland.	115-1345 m.	No habitat for this species. Not present.
Lepidium virginicum var. robinsonii	Robinson's pepper- grass	None	None	4.3		Chaparral Coastal scrub	Chaparral, coastal scrub.	Dry soils, shrubland. 4-1435 m.	No habitat for this species. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	CNPS Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Monardella australis ssp. jokerstii	Jokerst's monardella	None	None	1B.1	USFS_S- Sensitive	Chaparral Lower montane coniferous forest	Lower montane coniferous forest, chapparal.	Steep scree or talus slopes between breccia. Secondary alluvial benches along drainages and washes. 1350- 1750 m.	No habitat for this species. Not present.
Monardella hypoleuca ssp. intermedia	intermediate monardella	None	None	1B.3		Chaparral Cismontane woodland Lower montane coniferous forest	Chaparral, cismontane woodland, lower montane coniferous forest (sometimes).	Often in steep, brushy areas. 195- 1675 m.	No habitat for this species. Not present.
Muhlenbergia californica	California muhly	None	None	4.3		Chaparral Coastal scrub Lower montane coniferous forest Meadow & seep	Coastal scrub, chaparral, lower montane coniferous forest, meadows and seeps.	Usually found near streams or seeps. 100-2000 m.	No habitat for this species. Not present.
Nasturtium gambelii	Gambel's water cress	Endangered	Threatened	18.1	SB_RSABG- Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden	Brackish marsh Freshwater marsh Marsh & swamp Wetland	Marshes and swamps.	Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-305 m.	No marshes or swamps present. Just manmade stock ponds. Not present.
Navarretia prostrata	prostrate vernal pool navarretia	None	None	1B.1		Coastal scrub Meadow & seep Valley & foothill grassland Vernal pool Wetland	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps.	Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m.	No habitat for this species. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	CNPS Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Nolina cismontana	chaparral nolina	None	None	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden USFS_S- Sensitive	Ultramafic	Chaparral, coastal scrub.	Primarily on sandstone and shale substrates; also known from gabbro. 140-1100 m.	No habitat for this species. Not present.
Penstemon californicus	California beardtongue	None	None	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S- Sensitive	Chaparral Lower montane coniferous forest Pinon & juniper woodlands	Chaparral, lower montane coniferous forest, pinyon and juniper woodland.	Stony slopes and shrubby openings; sandy or granitic soils. 1170-2300 m.	No habitat for this species. Not present.
Pentachaeta aurea ssp. allenii	Allen's pentachaeta	None	None	1B.1		Coastal scrub Valley & foothill grassland	Valley and foothill grasslands, coastal scrub.	Openings in scrub or grassland. 75- 520 m.	No habitat for this species. Not present.
Phacelia keckii	Santiago Peak phacelia	None	None	1B.3	USFS_S- Sensitive	Chaparral Closed-cone coniferous forest	Closed-cone coniferous forest, chaparral.	Open areas, sometimes along creeks. 545-1525 m.	No habitat for this species. Not present.
Phacelia stellaris	Brand's star phacelia	None	None	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Coastal dunes Coastal scrub	Coastal scrub, coastal dunes.	Open areas. 3-370 m.	No habitat for this species. Not present.
Pseudognaphaliu m leucocephalum	white rabbit- tobacco	None	None	2B.2		Chaparral Cismontane woodland Coastal scrub Riparian woodland	Riparian woodland, cismontane woodland, coastal scrub, chaparral.	Sandy, gravelly sites. 35-515 m.	No habitat for this species. Not present.
Senecio aphanactis	chaparral ragwort	None	None	2B.2		Chaparral Cismontane woodland Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Drying alkaline flats. 20-855 m.	No habitat for this species. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	CNPS Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Sidalcea neomexicana	salt spring checkerbloom	None	None	2B.2	USFS_S- Sensitive	Alkali playa Chaparral Coastal scrub Lower montane coniferous forest Mojavean desert scrub Wetland	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.	Alkali springs and marshes. 3-2380 m.	No habitat for this species. Not present.
Symphyotrichum defoliatum	San Bernardino aster	None	None	1B.2	BLM_S- Sensitive USFS_S- Sensitive	Cismontane woodland Coastal scrub Lower montane coniferous forest Marsh & swamp Meadow & seep Valley & foothill grassland	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3- 2045 m.	No habitat for this species. Not present.
Thysanocarpus rigidus	rigid fringepod	None	None	1B.2	BLM_S- Sensitive USFS_S- Sensitive	Pinon & juniper woodlands	Pinyon and juniper woodland.	Dry, rocky slopes and ridges of oak and pine woodland in arid mountain ranges. 425-2165	No habitat for this species. Not present.
California Walnut Woodland	California Walnut Woodland	None	None			Cismontane woodland			Not present.
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	None	None			Coastal scrub			Not present.
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	None	None			Riparian forest			Not present.
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	None	None			Riparian forest			Not present.

Scientific Name	Common Name	Federal Listing	State Listing	CNPS Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Southern Interior Cypress Forest	Southern Interior Cypress Forest	None	None			Closed-cone coniferous forest			Not present.
Southern Riparian Forest	Southern Riparian Forest	None	None			Riparian forest			Not present.
Southern Riparian Scrub	Southern Riparian Scrub	None	None			Riparian scrub			Not present.
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	None	None			Riparian woodland			Not present.
Southern Willow Scrub	Southern Willow Scrub	None	None			Riparian scrub			Not present.
Walnut Forest	Walnut Forest	None	None			Broadleaved upland forest			Not present.

Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Accipiter cooperii	Cooper's hawk	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern	Cismontane woodland Riparian forest Riparian woodland Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	No nesting habitat for this species present; however, potential foraging habitat occurs on the site. Potential to be present.
Agelaius tricolor	tricolored blackbird	None	Candidate Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN- Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Freshwater marsh Marsh & swamp Swamp Wetland	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Habitat is present in the stock ponds. Potential to be present.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None	None	CDFW_WL-Watch List	Chaparral Coastal scrub	Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	No habitat for this species present. Not present.
Ammodramus savannarum	grasshopper sparrow	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Valley & foothill grassland	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes.	Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	Habitat is present in the agricultural fields. Potential to be present.
Anaxyrus californicus	arroyo toad	Endangered	None	CDFW_SSC-Species of Special Concern IUCN_EN- Endangered	Desert wash Riparian scrub Riparian woodland South coast flowing waters South coast standing waters	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	No habitat for this species present. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Anniella stebbinsi	southern California legless lizard	None	None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Broadleaved upland forest Chaparral Coastal dunes Coastal scrub	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County.	Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Habitat is present in the stock ponds. Potential to be present.
Antrozous pallidus	pallid bat	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S- Sensitive WBWG_H- High Priority	Chaparral Coastal scrub Desert wash Great Basin grassland Great Basin scrub Mojavean desert scrub Riparian woodland Sonoran desert scrub Upper montane coniferous forest Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	No habitat for this species present. Not present.
Aquila chrysaetos	golden eagle	None	None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest Cismontane woodland Coastal prairie Great Basin grassland Great Basin scrub Lower montane coniferous forest Pinon & juniper woodlands Upper montane coniferous forest Valley & foothill grassland	Rolling foothills, mountain areas, sage- juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	No habitat for this species present. Not present.
Ardea herodias	great blue heron	None	None	CDF_S-Sensitive IUCN_LC-Least Concern	Brackish marsh Estuary Freshwater marsh Marsh & swamp Riparian forest Wetland	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes.	Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Habitat is present in the stock ponds. Potential to be present.

Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Arizona elegans occidentalis	California glossy snake	None	None	CDFW_SSC-Species of Special Concern		Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California.	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Habitat is present. Potential to be present.
Artemisiospiza belli belli	Bell's sage sparrow	None	None	CDFW_WL-Watch List USFWS_BCC-Birds of Conservation Concern	Chaparral Coastal scrub	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	No habitat for this species present. Not present.
Asio otus	long-eared owl	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Cismontane woodland Great Basin scrub Riparian forest Riparian woodland Upper montane coniferous forest	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses.	Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	No habitat for this species present. Not present.
Aspidoscelis hyperythra	orange-throated whiptail	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern USFS_S- Sensitive	Chaparral Cismontane woodland Coastal scrub	Inhabits low-elevation coastal scrub, chaparral, and valley- foothill hardwood habitats.	Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	No habitat for this species present. Not present.
Aspidoscelis tigris stejnegeri	coastal whiptail	None	None	CDFW_SSC-Species of Special Concern		Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.	Ground may be firm soil, sandy, or rocky.	No habitat for this species present. Not present.
Athene cunicularia	burrowing owl	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Coastal prairie Coastal scrub Great Basin grassland Great Basin scrub Mojavean desert scrub Sonoran desert scrub Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low- growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Habitat is present. Potential to be present.

Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Branchinecta sandiegonensis	San Diego fairy shrimp	Endangered	None	IUCN_EN- Endangered	Chaparral Coastal scrub Vernal pool Wetland	Endemic to San Diego and Orange County mesas.	Vernal pools.	Project area is disturbed agriculture area. No habitat for this species present. Not present.
Buteo swainsoni	Swainson's hawk	None	Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Great Basin grassland Riparian forest Riparian woodland Valley & foothill grassland	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Habitat is present. Potential to be present.
Campylorhynch us brunneicapillus sandiegensis	coastal cactus wren	None	None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	Coastal scrub	Southern California coastal sage scrub.	Wrens require tall opuntia cactus for nesting and roosting.	No habitat for this species present. Not present.
Catostomus santaanae	Santa Ana sucker	Threatened	None	AFS_TH-Threatened IUCN_VU- Vulnerable	Aquatic South coast flowing waters	Endemic to Los Angeles Basin south coastal streams.	Habitat generalists, but prefer sand-rubble- boulder bottoms, cool, clear water, and algae.	No habitat for this species present. Not present.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None	None	CDFW_SSC-Species of Special Concern	Chaparral Coastal scrub	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	No habitat for this species present. Not present.
Choeronycteris mexicana	Mexican long-tongued bat	None	None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened WBWG_H-High Priority	Pinon & juniper woodlands Riparian scrub Sonoran thorn woodland	Occasionally found in San Diego County, which is on the periphery of their range.	Feeds on nectar and pollen of night-blooming succulents. Roosts in relatively well-lit caves, and in and around buildings.	No habitat for this species present. Not present.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Threatened	Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S- Sensitive USFWS_BCC-Birds of Conservation Concern	Riparian forest	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	No habitat for this species present. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Coleonyx variegatus abbotti	San Diego banded gecko	None	None	CDFW_SSC-Species of Special Concern	Chaparral Coastal scrub	Coastal & cismontane Southern California.	Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	No habitat for this species present. Not present.
Coturnicops noveboracensis	yellow rail	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least	Freshwater marsh Meadow & seep	Summer resident in eastern Sierra Nevada in Mono County.	Freshwater marshlands.	Habitat is present in the stock ponds. Potential to be present.
Crotalus ruber	red-diamond rattlesnake	None	None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Chaparral Mojavean desert scrub Sonoran desert scrub	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains.	Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	No habitat for this species present. Not present.
Diplectrona californica	California diplectronan caddisfly	None	None		Aquatic			No stream present. Not present.
Dipodomys merriami parvus	San Bernardino kangaroo rat	Endangered	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	Needs early to intermediate seral stages.	No habitat for this species present. Not present.
Dipodomys stephensi	Stephens' kangaroo rat	Endangered	Threatened	IUCN_EN- Endangered	Coastal scrub Valley & foothill grassland	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover.	Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	No habitat for this species present. Not present.
Elanus leucurus	white-tailed kite	None	None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC- Least Concern	Cismontane woodland Marsh & swamp Riparian woodland Valley & foothill grassland Wetland	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Habitat is present. Potential to be present.

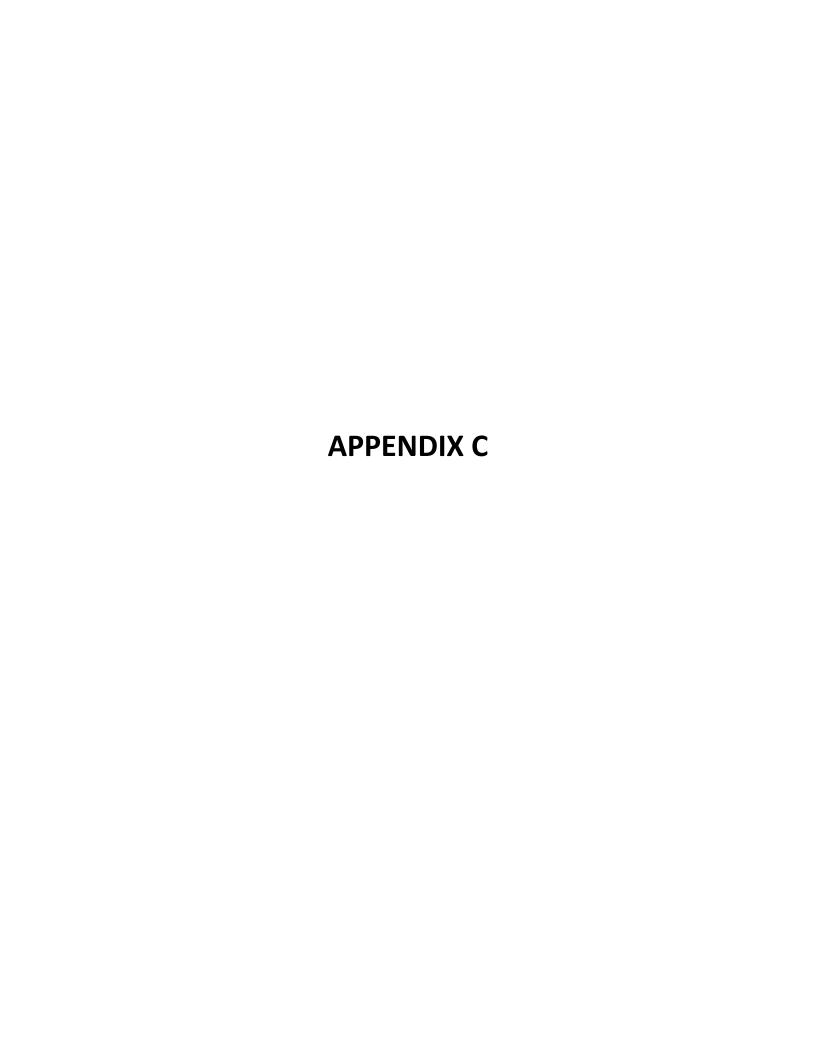
Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Empidonax traillii extimus	southwestern willow flycatcher	Endangered	Endangered	NABCI_RWL-Red Watch List	Riparian woodland	Riparian woodlands in Southern California.		No habitat for this species present. Not present.
Emys marmorata	western pond turtle	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	Aquatic Artificial flowing waters Klamath/North coast flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg- laying.	Habitat is present in the stock ponds. Potential to be present.
Eremophila alpestris actia	California horned lark	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern	Marine intertidal & splash zone communities Meadow & seep	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Habitat is present. Potential to be present.
Eumops perotis californicus	western mastiff bat	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern WBWG_H-High Priority	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Habitat is present. Potential to be present.
Falco columbarius	merlin	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern	Estuary Great Basin grassland Valley & foothill grassland	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches.	Clumps of trees or windbreaks are required for roosting in open country.	Habitat is present. Potential to be present.
Falco peregrinus anatum	American peregrine falcon	Delisted	Delisted	CDF_S-Sensitive CDFW_FP-Fully Protected USFWS_BCC-Birds of Conservation Concern		Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human- made structures.	Nest consists of a scrape or a depression or ledge in an open site.	No nesting habitat for this species present; however, potential foraging habitat occurs on the site. Potential to be present.

Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Gila orcuttii	arroyo chub	None	None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Aquatic South coast flowing waters	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	No habitat for this species present. Not present.
Haliaeetus leucocephalus	bald eagle	Delisted	Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC- Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	Lower montane coniferous forest Oldgrowth	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Nests in large, old- growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	No habitat for this species present. Not present.
Icteria virens	yellow-breasted chat	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Riparian forest Riparian scrub Riparian woodland	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	No habitat for this species present. Not present.
Lampropeltis zonata (pulchra)	California mountain kingsnake (San Diego population)	None	None	BLM_S-Sensitive CDFW_WL-Watch List	Chaparral Cismontane woodland Meadow & seep Riparian forest Riparian woodland Upper montane coniferous forest Wetland	Restricted to the San Gabriel and San Jacinto mountains of Southern California.	Inhabits a variety of habitats, including valley-foothill hardwood, coniferous, chaparral, riparian, and wet meadows.	No habitat for this species present. Not present.
Lasiurus xanthinus	western yellow bat	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H- High Priority	Desert wash	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	Roosts in trees, particularly palms. Forages over water and among trees.	No habitat for this species present. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Laterallus jamaicensis coturniculus	California black rail	None	Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_NT- Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Brackish marsh Freshwater marsh Marsh & swamp Salt marsh Wetland	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays.	Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	No habitat for this species present. Not present.
Lithobates pipiens	northern leopard frog	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Freshwater marsh Great Basin flowing waters Great Basin standing waters Marsh & swamp Wetland	Native range is east of Sierra Nevada-Cascade Crest. Near permanent or semi-permanent water in a variety of habitats.	Highly aquatic species. Shoreline cover, submerged and emergent aquatic vegetation are important habitat characteristics.	No habitat for this species present. Not present.
Myotis yumanensis	Yuma myotis	None	None	BLM_S-Sensitive IUCN_LC-Least Concern WBWG_LM-Low- Medium Priority	Lower montane coniferous forest Riparian forest Riparian woodland Upper montane coniferous forest	Optimal habitats are open forests and woodlands with sources of water over which to feed.	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	No habitat for this species present. Not present.
Neotoma lepida intermedia	San Diego desert woodrat	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	No habitat for this species present. Not present.
Nyctinomops femorosaccus	pocketed free-tailed bat	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_M- Medium Priority	Joshua tree woodland Pinon & juniper woodlands Riparian scrub Sonoran desert scrub	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Rocky areas with high cliffs.	No habitat for this species present. Not present.
Nyctinomops macrotis	big free-tailed bat	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_MH-Medium- High Priority		Low-lying arid areas in Southern California.	Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	No habitat for this species present. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin.	Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	No habitat for this species present. Not present.
Phrynosoma blainvillii	coast horned lizard	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Chaparral Cismontane woodland Coastal bluff scrub Coastal scrub Desert wash Pinon & juniper woodlands Riparian scrub Riparian woodland Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	No habitat for this species present. Not present.
Polioptila californica californica	coastal California gnatcatcher	Threatened	None	CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List	Coastal bluff scrub Coastal scrub	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	No habitat for this species present. Not present.
Rhaphiomidas terminatus abdominalis	Delhi Sands flower- loving fly	Endangered	None		Interior dunes	Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties.	Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. shade.	No habitat for this species present. Not present.
Salvadora hexalepis virgultea	coast patch-nosed snake	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Brushy or shrubby vegetation in coastal Southern California.	Require small mammal burrows for refuge and overwintering sites.	No habitat for this species present. Not present.
Setophaga petechia	yellow warbler	None	None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	Riparian forest Riparian scrub Riparian woodland	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	No habitat for this species present. Not present.
Spea hammondii	western spadefoot	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	Cismontane woodland Coastal scrub Valley & foothill grassland Vernal pool Wetland	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg- laying.	No habitat for this species present. Not present.

Scientific Name	Common Name	Federal Listing	State Listing	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Taricha torosa	Coast Range newt	None	None	CDFW_SSC-Species of Special Concern		Coastal drainages from Mendocino County to San Diego County.	Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	No habitat for this species present. Not present.
Taxidea taxus	American badger	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Alkali marsh Alkali playa Alpine Alpine dwarf scrub Bog & fen Brackish marsh Broadleaved upland forest Chaparral Chenopod scrub Cismontane woodland Closed-cone coniferous forest Coastal bluff scrub Coastal dunes Coastal prairie Coastal scrub Desert dunes Desert wash Freshwater marsh Great Basin grassland Great Basin scrub Interior dunes Ione formation Joshua tree woodland Limestone Lower montane coniferous forest Marsh & swamp Meadow & seep Mojavean desert scrub Montane dwarf scrub North coast coniferous forest Oldgrowth Pavement plain Redwood Riparian forest Riparian scrub Riparian woodland Salt marsh Sonoran desert scrub Sonoran thorn woodland	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	No habitat for this species present. Not present.
Thamnophis hammondii	two-striped gartersnake	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S- Sensitive	Marsh & swamp Riparian scrub Riparian woodland Wetland	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	No habitat for this species present. Not present.
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	Riparian forest Riparian scrub Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	No habitat for this species present. Not present.





View of agricultural fields on the site.

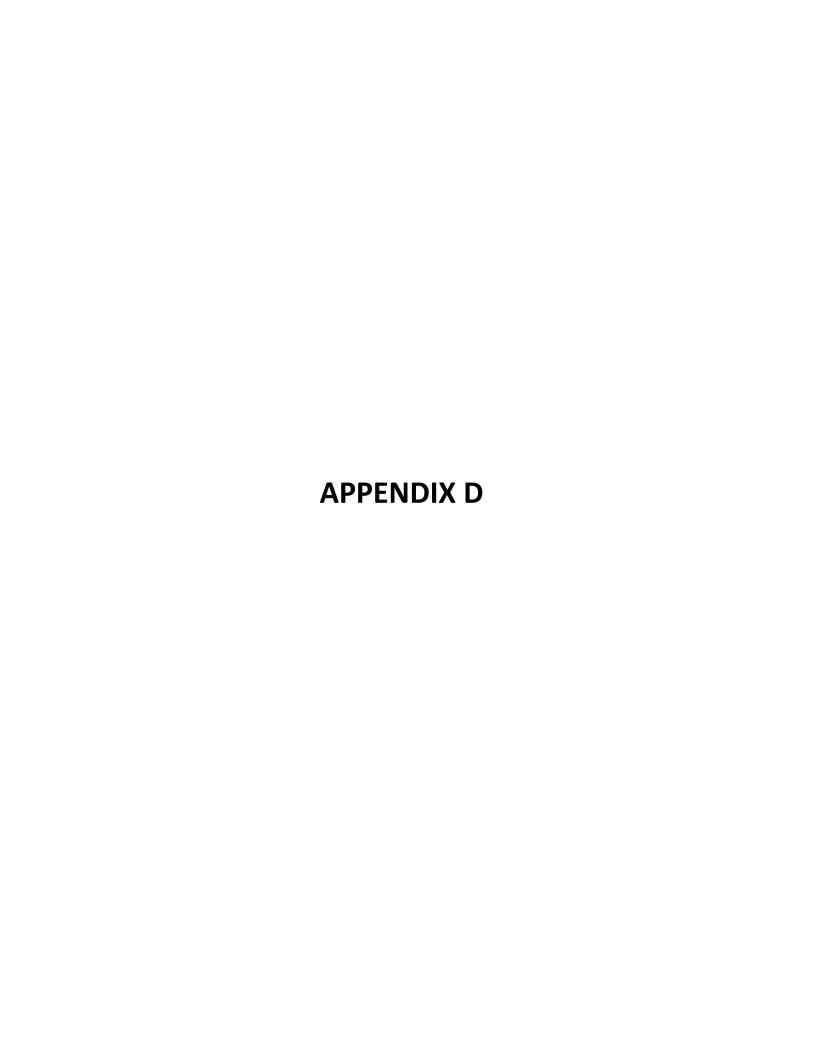


View of disturbed, agricultural infrastructure on the site.



disturbed, non-vegetated areas on the site.

Hernandez
Environmental
Services





MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Saline Spot
Sandy Spot

Severely Eroded Spot

Sinkhole

Sinkhole

Slide or Slip

Sodic Spot

OLIVE

Spoil Area

Stony Spot

Wery Stony Spot

Wet Spot
 Other

Special Line Features

Water Features

Δ

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County Southwestern Part, California

Survey Area Data: Version 10, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 10, 2018—Jun 5, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cb	Chino silt loam	89.8	100.0%
Totals for Area of Interest		89.8	100.0%