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 CITIIES OF ONTARIO AND CHINO, SAN BERNARDINO COUNTY, CALIFORNIA

Project Applicants:

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

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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
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Liberty Property Limited Partnership

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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, 4/14/18, 5/11/18, 5/18/18, 5/22/18, 4/9/2019, 5/23/19, 6/19/19, 7/11/19	JA, TC, KL, DM, DS, JS, AW, ZW
Focused Special-status Plant Surveys	4/4/18, 4/5/18, 4/19/18, 5/18/18, 5/22/18, 7/13/18, 4/9/19, 5/23/19, 6/19/19	DM, DS, JS, ZW
Delhi Sands Flower-Loving Fly Focused Habitat Assessment	September 2018, February 2019	Ecological Sciences, Inc.
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, ZW	06:40-09:35	56-72	0-1	Mostly 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

JA = Jeff Ahrens TC = Tricia Campbell KL = Kevin Livergood DM = David Moskovitz
AW = Amy Walters ZW = Zack West

2.4 Jurisdictional Delineation

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 Manual[1] (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 States[3] 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. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

[2] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Version 2.0). 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. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. 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. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. 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 Extirpated in California and Either Rare or Extinct Elsewhere	Thought to be extinct in California based on a lack of observation or detection for many years.
Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere	Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.
Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere	Species that are presumed extinct in California but more common outside of California
Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere	Species that are rare in California but more common outside of California
Rank 3 – Plants About Which More Information Is Needed (A Review List)	Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, 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 Distribution (A Watch List)	Species that are currently thought to be limited in distribution or range 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 California	Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.
.2 – Fairly endangered in California	Species with 20-80% of occurrences threatened.
.3 – Not very endangered in California	Species with <20% of occurrences threatened or with no current 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 abutted 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.

[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 Vegetation

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
FE – Federally Endangered
FT – Federally Threatened
FC – Federal Candidate

State
SE – State Endangered
ST – State Threatened

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	SE – State Endangered
FT – Federally Threatened	ST – State 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 (*Heterotheca grandiflora*) and California croton (*Croton californicus*).	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 year-long 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 *Eumops perotis californicus*	Federal: None State: SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Foraging only.
Western red bat *Lasiurus blossevillii*	Federal: None State: SSC	Prefers riparian areas dominated by walnuts, oaks, willows, cottonwoods, and sycamores where they roost in broad-leafed trees.	Potential to occur.
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC	Desert washes and fan palm oases.	Potential to occur.

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 red-tailed 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 Jurisdictional Delineation

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. CDFW Jurisdiction

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.

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

Drainage Feature	Resource Type	Corps/Regional Board			CDFW			Length (linear feet)
		Wetland (acres)	Non-wetland Waters (acres)	Total (acres)	Riparian (acres)	Non-riparian Streambed (acres)	Total (acres)	
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 California Environmental Quality Act (CEQA)

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 CEQA.

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 Impacts to Critical Habitat

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 Impacts to Jurisdictional Waters

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 Nesting Birds

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).

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8.0 CERTIFICATION

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

Signed:_____ Date: September 19, 2019_____

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