BIOLOGICAL TECHNICAL REPORT

FOR

THE FIRST MARCH LOGISTICS PROJECT

LOCATED IN THE CITY OF PERRIS, RIVERSIDE COUNTY, CALIFORNIA

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January 13, 2022

INFORMATION SUMMARY

A. Report Date: January 13, 2022

B. Report Title: Biological Technical Report for the First March Logistics Project

C. Project Site Location: City of Perris, Riverside County, California. Latitude 33.869087°, longitude -117. 259435° [center reading].

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F. Report Summary: This report describes the current biological conditions for the First March Logistics Project and evaluates potential impacts to biological resources occurring as a result of the Project. The Project site occurs within the Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl Survey Area. The Project site does not occur within a Criteria Cell and/or Cell Group, Core and/or Linkage Area, Narrow Endemic Plant Species Survey Area (NEPSSA), Criteria Area Plant Species Survey Area (CAPSSA), Mammal Survey Area, and/or Amphibian Survey Area.

Glenn Lukos Associates, Inc. (GLA) conducted general biological and site-specific surveys. Fieldwork conducted for the Project site included a jurisdictional delineation, a general biological survey, habitat assessments, evaluation of MSHCP riparian/riverine areas and vernal pools, and focused burrowing owl surveys (pursuant to MSHCP policies and guidelines).

The proposed Project would result in impacts to State jurisdictional waters, MSHCP riparian/riverine habitat, and upland habitat for other special-status species, including MSHCP covered species. The proposed Project would be consistent with all applicable MSHCP policies, specifically pertaining to the Project's relationship to reserve assembly, Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools) and Section 6.3.2 (Additional Survey Needs and Procedures). Through compliance with the MSHCP, the Plan would fully mitigate for potentially significant

impacts under California Environmental Quality Act (CEQA)that would occur as a result of the Project, including potential cumulative impacts.

G. Individuals Conducting Fieldwork: Jeff Ahrens, Stephanie Cashin, Lesley Lokovic-Gamber, April Nakagawa, David Smith, Jillian Stephens, and Joseph Vu

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1.0 INTRODUCTION

1.1 Background and Scope of Work

This document provides the results of general and focused biological surveys for the approximately 27.50-acre First March Logistics Project (the Project) located in the City of Perris, Riverside County, California. This report identifies and evaluates impacts to biological resources associated with the proposed Project in the context of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the California Environmental Quality Act (CEQA), and State and federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), Clean Water Code (CWC), and the California Fish and Game Code.

The scope of this report includes a discussion of existing conditions for the approximately 27.50-acre Project site, all methods employed regarding the general 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 United States 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 studies focused on a number of primary objectives that would comply with CEQA and MSHCP requirements, including (1) general reconnaissance survey and vegetation mapping; (2) general biological surveys; (3) habitat assessments for special-status plant species (including species with applicable MSHCP survey requirements); (4) habitat assessments for special-status wildlife species (including species with applicable MSHCP survey requirements); (5) assessment for the presence of wildlife migration and colonial nursery sites; (6) assessments for MSHCP riparian/riverine areas and vernal pools; and (7) assessments for areas subject to the jurisdiction of the United States Army Corps of Engineers (Corps) pursuant to Section 404 of the CWA, Regional Water Quality Control Board (Regional Board) pursuant to Section 401 of the CWA and Section 13260 of the CWC [the Porter-Cologne Act], and CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600–1616 of the California Fish and Game Code. Observations of all plant and wildlife species were recorded during the biological studies and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium.

1.2 Project Location

The Project site comprises approximately 27.50 acres in the City of Perris, Riverside County, California [Exhibit 1 – Regional Map] and is located within Section 25 of Township 3 South, Range 4 West, of the Steele Peak, California United States Geological Survey (USGS) 7.5" topographic quadrangle map (dated 1967 and photorevised in 1978) [Exhibit 2 – Vicinity Map]. The Project site is bordered by undeveloped land to the north, commercial/industrial development and Natwar Lane to the east and south, and Interstate (I) 215 to the west.

1.3 Project Description

The Project consists of two industrial buildings, for a total of 559,005 square feet. Building 1 consists of 419,034 square foot industrial building with 411,034 square feet of warehouse and 8,000 square feet of office while Building 2 consists of 139,971 square foot industrial building with 131,971 square feet of warehouse and 8,000 square feet of office [Exhibit 3 – Proposed Site Plan].

Vehicular access to the Project would be provided from one driveway off of Western Way and three driveways off of Natwar Lane, which under existing conditions is shared by JR Pipeline Inc and Greenrock Materials Inc (south of the site). A future east-west roadway (Van Buren) connecting to MARB will be constructed adjacent to the northern boundary of the Project site; the roadway would not be developed as part of the Project.

The Project would include the installation of on-site storm drain, water quality, water, sewer, electric, natural gas, and telecommunications infrastructure systems to serve the proposed warehouse uses. The on-site utility infrastructure would connect to existing utilities in the vicinity of the Project site or new utility lines that would be installed in the roadways adjacent to the Project site.
For this report, the term Project site is defined as the entire subject property totaling 27.50 acres. The proposed Project will result in permanent impacts to approximately 26.37 acres; no temporary or offsite impacts are proposed [Exhibit 4 – Aerial Map].

1.4 Relationship of the Project Site to the MSHCP

1.4.1 MSHCP Background

The Western Riverside County MSHCP is a comprehensive habitat conservation/planning program for Western Riverside County. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to special-status species and associated native habitats.

Through agreements with the USFWS and CDFW, the MSHCP designates 146 special-status animal and plant species as Covered Species, of which the majority have no project-specific survey/conservation requirements. The MSHCP provides mitigation for project-specific impacts to these species for projects that are compliant/consistent with MSHCP requirements, such that the impacts are reduced to below a level of significance pursuant to CEQA.

The Covered Species that are not yet adequately conserved have additional requirements in order for these species to ultimately be considered "adequately conserved". A number of these species have survey requirements based on a project's occurrence within a designated MSHCP survey area and/or based on the presence of suitable habitat. These include Narrow Endemic Plant Species (MSHCP *Volume I, Section 6.1.3*), as identified by the Narrow Endemic Plant Species

Survey Areas (NEPSSA); Criteria Area Plant Species (MSHCP *Volume I, Section 6.3.2*) identified by the Criteria Area Plant Species Survey Areas (CAPSSA); animal species (burrowing owl, mammals, amphibians) identified by survey areas (MSHCP *Volume I, Section 6.3.2*); and species associated with riparian/riverine areas and vernal pool habitats, i.e., least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and three species of listed fairy shrimp (MSHCP *Volume I, Section 6.1.2*). An additional 28 species (MSHCP *Volume I*, *Table 9.3*) not yet adequately conserved have species-specific objectives in order for the species to become adequately conserved. However, these species do not have project-specific survey requirements.

The goal of the MSHCP is to have a total Conservation Area in excess of 500,000 acres, including approximately 347,000 acres on existing Public/Quasi-Public Lands, and approximately 153,000 acres of Additional Reserve Lands targeted within the MSHCP Criteria Area. The MSHCP is divided into 16 separate Area Plans, each with its own conservation goals and objectives. Within each Area Plan, the Criteria Area is divided into Subunits, and further divided into Criteria Cells and Cell Groups (a group of criteria cells). Each Cell Group and ungrouped, independent Cell has designated "criteria" for the purpose of targeting additional conservation lands for acquisition. Projects located within the Criteria Area are subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process to determine if lands are targeted for inclusion in the MSHCP Reserve. In addition, all Projects located within the Criteria Area are subject to the Joint Project Review (JPR) process, where the Project is reviewed by the Regional Conservation Authority (RCA) to determine overall compliance/consistency with the biological requirements of the MSHCP.

1.4.2 Relationship of the Project Site to the MSHCP

The Project site is located within the San Jacinto Habitat Management Unit of the MSHCP but is not located within the MSHCP Criteria Area. The Project site occurs within the MSHCP Burrowing Owl Survey Area, but does not occur within the NEPSSA, CAPSSA, Mammal Survey Area, and/or Amphibian Survey Area. The Project site also does not occur within an existing or proposed Core or Linkage.

Within the designated Survey Areas, the MSHCP requires habitat assessments and focused surveys within areas of suitable habitat. For locations with positive survey results, the MSHCP requires that 90 percent of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species have been met throughout the MSHCP. Findings of equivalency shall be made demonstrating that the 90-percent standard has been met, if applicable. If equivalency findings cannot be demonstrated, then "biologically equivalent or superior preservation" must be provided.

2.0 METHODOLOGY

In order to adequately identify biological resources in accordance with the requirements of CEQA, GLA assembled biological data consisting of the following main components:

- Delineation of aquatic resources (including wetlands and riparian habitat) subject to the jurisdiction of the Corps, Regional Board, and/or CDFW;
- Mapping of MSHCP Riparian/Riverine Areas;
- Performance of vegetation mapping for the Project site; 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 and the MSHCP.

The focus of the biological surveys was determined through initial site reconnaissance, a review of the California Natural Diversity Database (CNDDB) (CDFW 2021), CNPS 8th edition online inventory (CNPS 2021), Natural Resource Conservation Service soil data (NRCS 2020), MSHCP species and habitat maps and sensitive soil maps (Dudek 2003), other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project site were conducted on foot in the proposed development areas for each target plant or animal species identified below. Table 2-1 provides a summary list of survey dates, survey types, and personnel.

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

Survey Type	2019 Survey Dates	2021 Survey Dates*	Biologist(s)
Focused Burrowing Owl Surveys	08/16, 08/26, 08/28, 08/30	5/3, 5/17, 6/14, 6/29	DS, JS, JA, JV
Rare Plant Habitat Assessment	08/26	6/14	JS, JV
General Biological Survey	11/08	6/14	AN, SC, JV
Evaluation of Riparian/Riverine Areas	11/08	6/14	AN, LLG, SC
Evaluation of Vernal and/or Seasonal Pools	11/08	6/14	AN, LLG, SC
Delineation of Federal and State Jurisdictional Waters	11/08	6/14	AN, LLG, SC

AN = April Nakagawa, DS = David Smith, JA = Jeff Ahrens, JS = Jillian Stephens, LLG = Lesley Lokovic-Gamber, SC = Stephanie Cashin, JV = Joseph Vu
* = Includes additional lot located on the eastern boundary of the Project Site

Individual plant and wildlife species were evaluated in this report based on their "special-status." For this report, plants were considered "special-status" based on one or more of the following criteria:

- Listing through the federal and/or State ESA; and/or
- CNPS Rare Plant Inventory Rank 1A, 1B, 2A, 2B, 3, or 4).

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

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

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

- Riparian/riverine habitat; and/or
- Wetland/vernal pool habitat.

2.1 Botanical Resources

A site-specific survey program was designed to accurately document the botanical resources within the Project site, 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 site; (3) general field reconnaissance survey(s); (4) vegetation mapping according to Holland; and (5) habitat assessments for special-status plants (including those with MSHCP requirements).

2.1.1 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:

- CNPS, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39) (CNPS 2021); and

- CNDDB for the USGS 7.5' quadrangle(s): Steele Peak and surrounding quadrangles (CDFW 2021).

2.1.2 Vegetation Mapping

Vegetation communities within the Project site were mapped according to Holland (1986) when possible. The majority of the Project site does not meet the parameters of any natural vegetation classification system. Plant communities were mapped in the field directly onto a 175-scale (1"=175') aerial photograph.

2.1.3 Special-Status Plant Species and Habitats Evaluated for the Project Site

A literature search was conducted to obtain a list of special-status plants with the potential to occur within the Project site. 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 (2021) and the MSHCP (Dudek 2003).

The Project site is not located within the NEPSSA or the CAPSSA; therefore, focused plant surveys are not required pursuant to the MSHCP. However, a rare plant habitat assessment was performed to evaluate potential impacts under CEQA.

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur within the Project site 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 site; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Project site, if applicable.

2.1.4 Botanical Surveys

GLA biologist Jillian Stephens visited the site on August 26, 2019 to conduct a general plant survey and a habitat assessment for special-status plants. GLA biologist Joseph Vu visited the site on June 14, 2021 for the same purpose. Surveys were conducted in accordance with accepted botanical survey guidelines (CDFG 2009, CNPS 2001, USFWS 2000). 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 site. Survey(s) were conducted by following meandering transects within target areas of suitable habitat. All plant species encountered during the field survey(s) 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 Jepson Flora Project (2021) and Munz (1974) conventions.

2.2 Wildlife Resources

Wildlife species were evaluated and detected during the field survey(s) by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project site 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(s). A complete list of wildlife species observed within the Project site 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 (CDFW 2016), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians 8th Edition, and the American Ornithological Society's 7th Edition Check-list of North American Birds (2019) for birds. The methodology (including any applicable survey protocols) utilized to conduct general survey(s), habitat assessment(s), and/or focused surveys for special-status animals are included below.

2.2.1 General Surveys

Birds

During general biological and reconnaissance survey(s) within the Project site, birds were identified incidentally within each habitat type. Birds were detected by both direct observation and by vocalizations and were recorded in field notes.

Mammals

During general biological and reconnaissance survey(s) within the Project site, mammals were identified incidentally within each habitat type. Mammals were detected both by direct observations and by the presence of diagnostic sign (i.e. tracks, burrows, scat, etc.).

Reptiles and Amphibians

During general biological and reconnaissance survey(s) within the Project site, reptiles and amphibians were identified incidentally within each habitat type. Habitats were examined for diagnostic reptile sign which includes shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed or detected via diagnostic sign were recorded in field notes.

2.2.2 Special-Status Animal Species Evaluated for the Project Site

A literature search was conducted to obtain a list of special-status wildlife species with the potential to occur within the Project site. Species were evaluated based on three factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site, (2) species survey areas as identified by the MSHCP for the Project site; and 3) any other special-status animals that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs on the Project site.

2.2.3 Habitat Assessment for Special-Status Animal Species

GLA biologists Stephanie Cashin and April Nakagawa conducted a habitat assessment for special-status animal species on November 8, 2019. GLA biologist Joseph Vu visited the site on June 14, 2021 for the same purpose. An aerial photograph, soil map and/or topographic map were used to determine the community types and other physical features that may support special-status and uncommon taxa within the Project site.

2.2.4 Focused Surveys for Special-Status Animals Species

Burrowing Owl

The Project site is located within the MSHCP survey area for the burrowing owl (*Athene cunicularia*). GLA biologists Jeff Ahrens, David Smith, and Jillian Stephens conducted focused surveys for the burrowing owl in 2019 within all suitable habitat areas within the Project site. GLA biologist April Nakagawa and Joseph Vu repeated focused surveys for the burrowing owl in 2021 for the Project site plus an additional lot located on the eastern boundary of the Project Site. Surveys were conducted in accordance with survey guidelines described in the 2006 MSHCP Burrowing Owl Survey Instructions. The guidelines stipulate that four focused survey visits be conducted on separate dates between March 1 and August 31. Within areas of suitable habitat, the MSHCP first requires a focused burrow survey to map all potentially suitable burrows. The 2019 burrowing owl surveys included a focused burrow survey conducted on August 16, 2019 and focused burrowing owl surveys conducted on August 16, 26, 28, and 30,

2019. The 2021 burrowing owl surveys included a focused burrow survey conducted on May 3, 2021 and focused burrowing owl surveys conducted on May 3 and 17, 2021, and June 14 and 29, 2021. Pursuant to the survey protocol, the burrowing owl survey visits were conducted from one hour prior to sunrise to two hours after sunrise.

Both the burrow and owl surveys in 2019 and 2021 were conducted during weather that was conducive to observing owls outside their burrows and detecting burrowing owl sign, and not during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Additionally, all work was performed more than five days after a rain event.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Exhibit 5 – Burrowing Owl Survey Area Map identifies the burrowing owl survey area at the Project site and includes the locations of suitable burrows mapped during the transect surveys. Transects were spaced between 22 feet and 65 feet 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 320 feet 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. In addition, where feasible areas within a 500-foot buffer around the site were scanned with binoculars to evaluate for the burrowing owl in adjacent (offsite) areas. Refer to Table 2-2 below for survey condition details. 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(s)	Start/End Time	Start/End Temperature (°F)	Start/End Wind Speed (mph)	Cloud Cover (%)
08/16/19	DS	0630/0830	63/73	0/0	0
08/26/19	JS	0640/0835.	65/78	0/1	10
08/28/19	DS	0540/0835	64/74	1-2/1-2	0
08/30/19	JA	0630/0830	66/73	0/0	0
5/3/21*	AN	0615/0800	56/56	2/2	100/75
5/17/21*	AN	0615/0815	56/57	2-5	100/95
6/14/21*	JV	0545/730	60/68	0-1	0
6/29/21*	JV	0550/742	66/72	0-1	70/0

DS = David Smith, JA = Jeff Ahrens JS = Jillian Stephens, AN = April Nakagawa, JV = Joseph Vu
* = Includes additional lot located on the eastern boundary of the Project Site

2.3 Jurisdictional Waters

The Project site was delineated to identify the presence and limits of jurisdictional waters, including waters of the United States (including wetlands) subject to the jurisdiction of the Corps and Regional Board, waters of the State subject to the jurisdiction of the Regional Board only, and streams (including riparian vegetation) subject to the jurisdiction of CDFW. Prior to beginning the field delineation, a 175-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine the locations of potential areas of Corps, Regional Board, and 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 site were evaluated using the methodology set forth in the United States 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]. Reference was also made to the 2019 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Board Wetland Definition and Procedures) to identify suspected State wetland habitats.[3] 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[4] 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.[5] While in the field the limits of the OHWM, wetlands (if applicable), and CDFW jurisdiction were recorded using GPS technology and/or on copies of the aerial photography. Other data were recorded onto the appropriate datasheets.

2.4 MSHCP Riparian/Riverine Areas and Vernal Pools

Volume I, Section 6.1.2 of the MSHCP describes the process through which protection of riparian/riverine areas and vernal pools would occur within the MSHCP Plan Area. The purpose is to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained such that habitat values for species inside the MSHCP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall Plan Area, the effect of those projects on riparian/riverine areas and vernal pools must be addressed.

The MSHCP defines riparian/riverine areas as *lands which contain Habitat dominated by trees, shrubs, persistent emergent mosses and lichens, which occur close to or which depend upon soils moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.*

The MSHCP defines vernal pools as *seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indictors of hydrology and/or vegetation during the drier portion of the growing season.*

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[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] State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.
[4] 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).
[5] 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.

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

GLA surveyed the Project site on November 8, 2019 and June 14, 2021 for riparian/riverine areas and vernal pool/seasonal pool habitat, including features with the potential to support fairy shrimp. To assess for vernal/seasonal pools (including fairy shrimp habitat), GLA biologists evaluated the topography of the site including whether the site contained depressional features/topography with the potential to become inundated; whether the site contained soils associated with vernal/seasonal pools; and whether the site supported plants that suggested areas of localized ponding.

3.0 REGULATORY SETTING

The proposed Project is subject to State and federal laws and 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; special-status species which are not listed as threatened or endangered by the State or federal governments; and special-status vegetation communities.

3.1 Endangered Species Acts

3.1.1 California Endangered Species Act

California's ESA (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 ESA (FESA), the 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 as follows: "...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

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 a Habitat Conservation Plan (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 to 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.

3.1.4 Take Authorizations Pursuant to the MSHCP

The Western Riverside County MSHCP was adopted on June 17, 2003, and an Implementing Agreement was executed between the federal and State wildlife agencies and participating entities. The MSHCP is a comprehensive habitat conservation-planning program for western Riverside County. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. As such, the MSHCP is intended to streamline review of individual projects with respect to the species and habitats addressed in the MSHCP, and to provide for an overall Conservation Area that would be of greater benefit to biological resources than would result from a piecemeal regulatory approach. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to sensitive species pursuant to Section 10(a) of the FESA.

Through agreements with USFWS and CDFW, the MSHCP designates 146 special-status animal and plant species that receive some level of coverage under the plan. Of the 146 "Covered Species" designated under the MSHCP, the majority of these species have no additional survey/conservation requirements. In addition, through project participation with the MSHCP, the MSHCP provides mitigation for project-specific impacts to Covered Species such that impacts are considered reduced to below a level of significance pursuant to CEQA. As noted above, project-specific survey requirements exist for species designated as "Covered Species not yet adequately conserved". These include Narrow Endemic Plant Species, as identified by the NEPSSA; Criteria Area Plant Species identified by the CAPSSA; animals species as identified by survey area; and plant and animal species associated with riparian/riverine areas and vernal pool habitats (*Volume I, Section 6.1.2* of the MSHCP document).

For projects that have a federal nexus such as through federal CWA 404 permitting, take authorization for federally listed covered species would occur under Section 7 (not Section 10) of FESA; USFWS would provide an MSHCP consistency review of the proposed project, resulting in a Biological Opinion (BO). The BO would require no more compensation than what is required to be consistent with the MSHCP.

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 CNPS Ranked 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)

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**

CNPS Rank	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) as:

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(2) All interstate waters including interstate wetlands;
(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:
(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or
(iii) Which are used or could be used for industrial purpose by industries in interstate commerce...
(4) All impoundments of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;
(6) The territorial seas;
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.
(8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.

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

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.*

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

- More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List[6],[7]);
- 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 Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

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

[6] 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.

[7] 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.

(intrastate) waters. On September 12, 1985, the U.S. Environmental Protection Agency (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.

Rapanos v. United States and Carabell v. United States

On June 5, 2007, the 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 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 Corps and EPA 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 Corps and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- 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.

3.3.2 Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States[8] and waters of the State. Waters of the United States are defined above and waters of the state are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code 13050[e]).

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

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the United States (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. CWA Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

State Wetland Definition

The State Board Wetland Definition and Procedures define an area as wetland as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

The following wetlands are waters of the state:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;*[9] *and*
3. *Artificial wetlands*[10] *that meet any of the following criteria:*

    a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
    b. Specifically identified in a water quality control plan as a wetland or other water of the state;
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
    d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

        i. Industrial or municipal wastewater treatment or disposal,
        ii. Settling of sediment,

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

iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
iv. Treatment of surface waters,
v. Agricultural crop irrigation or stock watering,
vi. Fire suppression,
vii. Industrial processing or cooling,
viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
ix. Log storage,
x. Treatment, storage, or distribution of recycled water, or
xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
xii. Fields flooded for rice growing.[11]

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

3.3.3 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

[11] Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board's authority to issue or waive waste discharge requirements or take other actions as applicable.

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.

4.0 RESULTS

This section provides the results of general biological surveys, vegetation mapping, habitat assessments and/or focused surveys for special-status plants and animals, an assessment for MSHCP riparian/riverine areas and vernal pools, and a delineation of all jurisdictional waters and wetlands.

4.1 Existing Conditions

The Project site consists of regularly maintained undeveloped land, much of which is comprised of previously graded and highly compacted soils. The Project site is relatively flat and occurs at an elevation ranging from approximately 1,511 to 1,521 feet above mean sea level. A billboard is present near the northwestern Project boundary. A single blue-line drainage enters the Project site via a culvert under I-215, flows west to east for approximately 743 linear feet within the Project site, and exits the Project site via a pipe culvert underneath Natwar Lane.

The National Cooperative Soil Survey has mapped the following soil types as occurring in association with the Project site: Greenfield sandy loam, 0 to 2 percent slopes; Hanford fine sandy loam, 0 to 2 percent slopes; and Monserate sandy loam, 0 to 5 percent slopes.

4.2 Vegetation/Land Use Mapping

The Project site contains the following vegetation/land use types: disturbed/developed, disturbed/ruderal, and mulefat scrub. Table 4-1 provides a summary of the vegetation types and their corresponding acreages. A Vegetation/Land Use Map is attached as Exhibit 6. Photographs depicting the Project site are shown in Exhibit 7.

Table 4-1. Summary of Vegetation/Land Use Types for the Project Site

Vegetation/Land Use Type	Project Site (Acres)
Disturbed/Developed	0.39
Disturbed/Ruderal	26.96
Mulefat Scrub	0.15
Total	**27.50**

4.2.1 Disturbed/Developed

The Project site contains approximately 0.39 acre of disturbed/developed lands consisting of an unvegetated vehicular access area adjacent to Natwar Lane and the above-referenced billboard [Exhibit 7, Photograph 1].

4.2.2 Disturbed/Ruderal

The Project site contains approximately 26.96 acres of disturbed/ruderal lands, 0.03 acre of which occurs in association with Drainage A (described in Section 4.9, below). These areas consist of previously disked and graded sandy soils that are vegetated with mostly weedy disturbance-tolerant herbaceous species and which comprise the majority of the Project site. Dominant native species include doveweed (*Croton setiger*) and vinegarweed (*Trichostema lanceolatum*). Dominant non-native species include stinknet (*Oncosiphon piluliferum*), and several species of non-native grasses (*Bromus* spp., *Schismus barbatus*). Note that few California buckwheat (*Eriogonum fasciculatum*) individuals occur along the western boundary of the Project site adjacent to I-215, but not in an amount substantial enough to warrant its own vegetation category [Exhibit 7, Photographs 2 and 3].

4.2.3 Mulefat Scrub

The Project site contains approximately 0.15 acre of mulefat scrub which occurs in three distinct patches wholly in association with Drainage A. Mulefat scrub on the Project site is comprised mostly of mulefat (*Baccharis salicifolia*), as well as four black willow saplings (*Salix gooddingii*), and has an understory of doveweed (*Croton setiger*) and non-native upland grasses as described above [Exhibit 7, Photograph 4].

4.3 Special-Status Vegetation Communities

The CNDDB identifies the following seven special-status vegetation communities for the Steele Peak and surrounding quadrangle maps: canyon live oak ravine forest, southern California arroyo chub/Santa Ana sucker stream, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern riparian forest, southern sycamore alder riparian woodland, and southern willow scrub. The Project site does not contain any special-status habitats as identified in the CNDDB; however, the Project site contains riparian habitat (i.e. mulefat scrub), which is considered to be special-status because of its riparian association.

4.4 Special-Status Plants

The following special-status plant was detected at the Project site: paniculate tarplant (*Deinandra paniculata*). Table 4-2 provides a list of special-status plants evaluated for the Project site through general biological surveys and habitat assessments. 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 site, and 2) any other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs within the site.

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

Species Name	Status	Habitat Requirements	Occurrence
Brand's star phacelia *Phacelia stellaris*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(b)	Coastal dunes and coastal sage scrub.	Does not occur on the Project site due to a lack of suitable habitat.
Buxbaum's sedge *Carex buxbaumii*	Federal: None State: None CNPS: Rank 4.2	Bogs and fens, Meadows and seeps (mesic) and marshes and swamps.	Does not occur on the Project site due to a lack of suitable habitat.
California Orcutt grass *Orcuttia californica*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(b)	Vernal pools.	Does not occur on the Project site due to a lack of suitable habitat.
California screw moss *Tortula californica*	Federal: None State: None CNPS: Rank 1B.2	Sandy soil in chenopod scrub, and valley and foothill grassland.	Does not occur on the Project site due to a lack of suitable habitat.
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 on the Project site due to a lack of suitable habitat.
Chaparral sand-verbena *Abronia villosa* var. *aurita*	Federal: None State: None CNPS: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Does not occur on the Project site due to a lack of suitable habitat.
Cleveland's bush monkeyflower *Diplacus (Mimulus) clevelandii*	Federal: None State: None CNPS: Rank 4.2 MSHCP(f)	Gabbroic soils, often in disturbed areas, openings, rocky. Chaparral, cismontane woodland, lower montane coniferous forest.	Does not occur on the Project site due to a lack of suitable habitat.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur on the Project site due to a lack of suitable habitat.
Coulter's matilija poppy *Romneya coulteri*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Often in burns in chaparral and coastal scrub.	Does not occur on the Project site due to a lack of suitable habitat.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(d)	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Does not occur on the Project site due to a lack of suitable habitat.
Hall's monardella *Monardella macrantha* ssp. *hallii*	Federal: None State: None CNPS: Rank 1B.3 MSHCP	Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland.	Does not occur on the Project site due to a lack of suitable habitat.
Heart-leaved pitcher sage *Lepechinia cardiophylla*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(d)	Closed-cone coniferous forest, chaparral, and cismontane woodland.	Does not occur on the Project site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CNPS: Rank 1B.2 MSHCP	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur on the Project site due to a lack of suitable habitat.
Intermediate monardella *Monardella hypoleuca ssp.intermedia*	Federal: None State: None CNPS: Rank 1B.3	Usually in the understory of chaparral, cismontane woodland, and occasionally lower montane coniferous forest.	Does not occur on the Project site due to a lack of suitable habitat.
Little mousetail *Myosurus minimus* ssp. *apus*	Federal: None State: None CNPS: Rank 3.1 MSHCP(d)	Valley and foothill grassland, vernal pools (alkaline soils).	Does not occur on the Project site due to a lack of suitable habitat.
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	Federal: None State: None CNPS: Rank 1B.2 MSHCP	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands.	Does not occur on the Project site due to a lack of suitable habitat.
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 on the Project site due to a lack of suitable habitat.
Marsh sandwort *Arenaria paludicola*	Federal: FE State: SE CNPS: Rank 1B.1	Bogs and fens, freshwater marshes and swamps.	Does not occur on the Project site due to a lack of suitable habitat.
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 on the Project site due to a lack of suitable habitat.
Munz's onion *Allium munzii*	Federal: FE State: ST CNPS: Rank 1B.1 MSHCP(b)	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands.	Does not occur on the Project site due to a lack of suitable habitat.
Nevin's barberry *Berberis nevinii*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(d)	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	Does not occur on the Project site due to a lack of suitable habitat.
Ocellated humboldt lily *Lilium humboldtii* ssp. *ocellatum*	Federal: None State: None CNPS: Rank 4.2 MSHCP(f)	Chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, riparian woodland. Occurring in openings.	Does not occur on the Project site due to a lack of suitable habitat.
Palmer's grapplinghook *Harpagonella palmeri*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Does not occur on the Project site due to a lack of suitable habitat.
Paniculate tarplant *Deinandra paniculata*	Federal: None State: None CNPS: Rank 4.2	Usually in vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grassland, and vernal pools.	Confirmed present within the Project site. Refer below for additional information.
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Chenopod scrub, playas, vernal pools.	Does not occur on the Project site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Parry's spineflower *Chorizanthe parryi* var. *parryi*	Federal: None State: None CNPS: Rank 1B.1	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Does not occur on the Project site due to a lack of suitable habitat.
Payson's jewelflower *Caulanthus simulans*	Federal: None State: None CNPS: Rank 4.2	Sandy or granitic soils in chaparral and coastal scrub.	Does not occur on the Project site due to a lack of suitable habitat.
Peninsular spineflower *Chorizanthe leptotheca*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Alluvial fan, granitic. Chaparral, coastal scrub, lower montane coniferous forest.	Does not occur on the Project site due to a lack of suitable habitat.
Plummer's mariposa lily *Calochortus plummerae*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur on the Project site due to a lack of suitable habitat.
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CNPS: Rank 4.3	Dry openings in chaparral and coastal sage scrub.	Does not occur on the Project site due to a lack of suitable habitat.
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dunes, coastal salt marshes and swamps.	Does not occur on the Project site due to a lack of suitable habitat.
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 on the Project site due to a lack of suitable habitat.
San Diego ambrosia *Ambrosia pumila*	Federal: FE State: None CNPS: Rank 1B.1 MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.	Does not occur on the Project site due to a lack of suitable habitat.
San Diego sagewort *Artemisia palmeri*	Federal: None State: None CNPS: Rank 4.2	Sandy and mesic soils in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland.	Does not occur on the Project site due to a lack of suitable habitat.
San Jacinto Valley crownscale *Atriplex coronata* var. *notatior*	Federal: FE State: None CNPS: Rank 1B.1 MSHCP(d)	Alkaline soils in chenopod scrub, valley and foothill grassland, vernal pools.	Does not occur on the Project site due to a lack of suitable habitat.
San Miguel savory *Clinopodium chandleri*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(b)	Rocky, gabbroic, or metavolcanic soils in chaparral, cismontane woodland, coastal sage scrub, riparian woodland, valley and foothill grassland.	Does not occur on the Project site due to a lack of suitable habitat.
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 on the Project site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Santiago Peak phacelia *Phacelia keckii*	Federal: None State: None CNPS: Rank 1B.3 MSHCP	Closed-cone coniferous forest, chaparral.	Does not occur on the Project site due to a lack of suitable habitat.
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(b)	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Does not occur on the Project site due to a lack of suitable habitat.
Small-flowered microseris *Microseris douglasii* ssp. *platycarpha*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Cismontane woodland, coastal sage scrub, valley and foothill grassland, vernal pools. Occurring on clay soils.	Does not occur on the Project site due to a lack of suitable habitat.
Small-flowered morning-glory *Convolvulus simulans*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Chaparral (openings), coastal sage scrub, valley and foothill grassland. Occurring on clay soils and serpentinite seeps.	Does not occur on the Project site due to a lack of suitable habitat.
Smooth tarplant *Centromadia pungens* ssp. *laevis*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Not expected to occur on the Project site due to a lack of suitable habitat.
Southern California black walnut *Juglans californica*	Federal: None State: None CNPS: Rank 4.2 MSHCP	Chaparral, cismontane woodland, coastal sage scrub, alluvial surfaces.	Does not occur on the Project site due to a lack of suitable habitat.
Spreading navarretia *Navarretia fossalis*	Federal: FT State: None CNPS: Rank 1B.1 MSHCP(b)	Vernal pools, playas, chenopod scrub, marshes and swamps (assorted shallow freshwater).	Does not occur on the Project site due to a lack of suitable habitat.
Sticky dudleya *Dudleya viscida*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(f)	Coastal bluff scrub, chaparral, coastal sage scrub. Occurring on rocky soils.	Does not occur on the Project site due to a lack of suitable habitat.
Tecate cypress *Hesperocyparis forbesii*	Federal: None State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral.	Does not occur on the Project site due to a lack of suitable habitat.
Thread-leaved brodiaea *Brodiaea filifolia*	Federal: FT State: SE CNPS: Rank 1B.1	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Does not occur on the Project site due to a lack of suitable habitat.
Vernal barley *Hordeum intercedens*	Federal: None State: None CNPS: Rank 3.2 MSHCP	Coastal dunes, coastal sage scrub, valley and foothill grassland (saline flats and depressions), vernal pools.	Does not occur on the Project site due to a lack of suitable habitat.
Western spleenwort *Asplenium vespertinum*	Federal: None State: None CNPS: Rank 4.2	Rocky soils in chaparral, cismontane woodland, and coastal scrub.	Does not occur on the Project site due to a lack of suitable habitat.
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 on the Project site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
White-bracted spineflower *Chorizanthe xanti* var. *leucotheca*	Federal: None State: None CNPS: Rank 1B.2	Sandy or gravelly soils in Mojavean desert scrub and pinyon and juniper woodland.	Does not occur on the Project site due to a lack of suitable habitat.
Woven-spored lichen *Texosporium sancti-jacobi*	Federal: None State: None CNPS: Rank 3	On soil, small mammal pellets, dead twigs, and on *Selaginella* spp. Chaparral (openings).	Does not occur on the Project site due to a lack of suitable habitat.
Yucaipa onion *Allium marvinii*	Federal: None State: None CNPS: Rank 1B.2	Chaparral (clay, openings).	Does not occur on the Project site due to a lack of suitable habitat.
Wright's trichocoronis *Trichocoronis wrightii* var. *wrightii*	Federal: None State: None CNPS: Rank 2B.1 MSHCP(b)	Alkaline soils in meadows and seeps, marshes and swamps, riparian scrub, vernal pools.	Does not occur on the Project site due to a lack of suitable habitat.

STATUS

Federal
FE – Federally Endangered
FT – Federally Threatened

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).

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)

MSHCP
MSHCP = No additional action necessary
MSHCP(a) = Surveys may be required as part of wetlands mapping
MSHCP(b) = Surveys may be required within the Narrow Endemic Plant Species survey area
MSHCP(c) = Surveys may be required within locations shown on survey maps
MSHCP(d) = Surveys may be required within Criteria Area
MSHCP(e) = Conservation requirements identified in species-specific conservation objectives need to be met before classified as a Covered Species
MSHCP(f) = Covered species when a Memorandum of Understanding is executed with the Forest Service Land

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.
- Confirmed absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- 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 based on suitable habitat, however its presence/absence has not been confirmed.
- Confirmed present – The species was detected onsite incidentally or through focused surveys.

4.4.1 Special-Status Plants Detected at the Project Site

Paniculate Tarplant

GLA observed approximately 35 paniculate tarplant (CNPS 4.2) individuals, primarily within the southwestern portion of the Project site, in association with disturbed/ruderal areas. Refer to Section 5 below for a discussion of potential impacts to paniculate tarplant occurring as a result of the proposed Project.

4.5 Special-Status Animals

A single special-status animal, golden eagle (*Aquila chrysaetos*), was detected in association with the Project site. Several other special-status animals have potential to occur within the Project site but were not observed. Table 4-3 provides a list of special-status animals evaluated for the Project site 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 site, 2) applicable MSHCP survey areas, and 3) any other special-status animals that are known to occur within the vicinity of the Project site or for which potentially suitable habitat occurs on the site.

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

Species Name	Status	Habitat Requirements	Occurrence
Invertebrates			
Crotch bumble bee *Bombus crotchii*	Federal: None State: SCE	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert.	Does not occur on the Project site due to a lack of suitable habitat.
Quino checkerspot butterfly *Euphydryas editha quino*	Federal: FE State: None MSHCP	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include *Plantago erecta* and *Castilleja exserta*. Adults occur on sparsely vegetated rounded hilltops and ridgelines, and are known to disperse through disturbed habitats to reach suitable nectar plants.	Does not occur on the Project site due to a lack of suitable habitat.
Riverside fairy shrimp *Streptocephalus woottoni*	Federal: FE State: None MSHCP(a)	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Not expected to occur on the Project site due to a lack of suitable habitat.
Vernal pool fairy shrimp *Branchinecta lynchi*	Federal: FT State: None MSHCP(a)	Seasonal vernal pools.	Not expected to occur on the Project site due to a lack of suitable habitat.
Fish			

Species Name	Status	Habitat Requirements	Occurrence
Arroyo chub *Gila orcutti*	Federal: None State: SSC MSHCP	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	Does not occur on the Project site due to a lack of suitable habitat.
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 on the Project site due to a lack of suitable habitat.
Santa Ana sucker *Catostomus santaanae*	Federal: FT State: None MSHCP	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 on the Project site due to a lack of suitable habitat.
Southern steelhead - southern California DPS *Oncorhynchus mykiss irideus*	Federal: FE State: None	Clear, swift moving streams with gravel for spawning. Federal listing refers to populations from Santa Maria river south to southern extent of range (San Mateo Creek in San Diego county.)	Does not occur on the Project site due to a lack of suitable habitat.
Amphibians			
Western spadefoot *Spea hammondii*	Federal: None State: SSC MSHCP	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur on the Project site due to a lack of suitable habitat.
Reptiles			
California glossy snake *Arizona elegans occidentalis*	Federal: None State: SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Does not occur on the Project site due to a lack of suitable habitat.
Coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC MSHCP	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Does not occur on the Project site due to a lack of suitable habitat.
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 on the Project site due to a lack of suitable habitat.
Coastal whiptail *Aspidoscelis tigris stejnegeri (multiscutatus)*	Federal: None State: SSC MSHCP	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur on the Project site due to a lack of suitable habitat
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: SSC MSHCP	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Does not occur on the Project site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Southern California legless lizard *Anniella stebbinsi*	Federal: None State: SSC	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats that any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans	Does not occur on the Project site due to a lack of suitable habitat.
Western pond turtle *Emys marmorata*	Federal: None State: SSC MSHCP	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 on the Project site due to a lack of suitable habitat.
Birds			
Bald eagle (nesting & wintering) *Haliaeetus leucocephalus*	Federal: BGEPA State: SE, CFP MSHCP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	Does not occur on the Project site due to a lack of suitable habitat.
Burrowing owl (burrow sites & some wintering sites) *Athene cunicularia*	Federal: None State: SSC MSHCP(c)	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.	Confirmed absent from the Project site during focused surveys.
California black rail *Laterallus jamaicensis coturniculus*	Federal: None State: ST, CFP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	Does not occur on the Project site due to a lack of suitable habitat.
Coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: SSC MSHCP	Low elevation coastal sage scrub and coastal bluff scrub.	Does not occur on the Project site due to a lack of suitable habitat.
Golden eagle (nesting & wintering) *Aquila chrysaetos*	Federal: BGEPA State: CFP MSHCP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Confirmed present for foraging only within the Project site. Refer to discussion below for additional information.
Least Bell's vireo (nesting) *Vireo bellii pusillus*	Federal: FE State: SE MSHCP(a)	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Does not occur on the Project site due to a lack of suitable habitat.
Loggerhead shrike (nesting) *Lanius ludovicianus*	Federal: None State: SSC MSHCP	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses,	Low potential to occur on the Project site for foraging only. Does not

Species Name	Status	Habitat Requirements	Occurrence
		riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	occur on the Project site for nesting due to a lack of suitable habitat.
Long-eared owl (nesting) *Asio otus*	Federal: None State: SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Does not occur on the Project site due to a lack of suitable habitat.
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE MSHCP(a)	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur on the Project site due to a lack of suitable habitat.
Swainson's hawk (nesting) *Buteo swainsoni*	Federal: None State: ST MSHCP	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.	Low potential to occur on the Project site for foraging only. Does not occur on the Project site for nesting, as the Project site is located outside of the breeding range of this species.
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: None State: SCE, SSC MSHCP	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur on the Project site due to a lack of suitable habitat.
Western snowy plover (nesting) *Charadrius alexandrinus nivosus*	Federal: FT State: SSC	Sandy or gravelly beaches along the coast, estuarine salt ponds, alkali lakes, and at the Salton Sea.	Does not occur on the Project site due to a lack of suitable habitat.
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT State: SE MSHCP(a)	Dense, wide riparian woodlands with well-developed understories.	Does not occur on the Project site due to a lack of suitable habitat.
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: CFP MSHCP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Low potential to occur on the Project site for foraging only. Does not occur on the Project site for nesting due to a lack of suitable habitat.
Yellow rail *Coturnicops noveboracensis*	Federal: None State: SSC	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields.	Does not occur on the Project site due to a lack of suitable habitat.
Yellow-breasted chat (nesting) *Icteria virens*	Federal: None State: SSC MSHCP	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Does not occur on the Project site due to a lack of suitable habitat.
Yellow warbler (nesting) *Setophaga petechia*	Federal: BCC State: SSC	Breed in lowland and foothill riparian woodlands dominated by	Does not occur on the Project site due

Species Name	Status	Habitat Requirements	Occurrence
	MSHCP	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.	to a lack of suitable habitat.
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.	Confirmed absent during field efforts.
Dulzura pocket mouse *Chaetodipus califronicus femoralis*	Federal: None State: SSC	Coastal scrub, grassland, and chaparral, especially at grass-chaparral edges	Does not occur on the Project site due to a lack of suitable habitat.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	Federal: None State: SSC MSHCP(c)	Fine, sandy soils in coastal sage scrub and grasslands.	Does not occur on the Project site due to a lack of suitable habitat.
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	Federal: None State: SSC MSHCP	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Does not occur on the Project site due to a lack of suitable habitat.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: SSC	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Does not occur on the Project site due to a lack of suitable habitat.
San Bernardino kangaroo rat *Dipodomys merriami parvus*	Federal: FE State: SSC MSHCP(c)	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 on the Project site due to a lack of suitable habitat.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	Federal: None State: SSC MSHCP	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	Low potential to occur on the Project site for foraging only.
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: SSC MSHCP	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Does not occur on the Project site due to a lack of suitable habitat.
Southern grasshopper mouse *Onychomys torridus ramona*	Federal: None State: SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Does not occur on the Project site due to a lack of suitable habitat.
Stephens' kangaroo rat *Dipodomys stephensi*	Federal: FE State: ST MSHCP	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Does not occur on the Project site due to a lack of suitable habitat.
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.	Does not occur on the Project site due to a lack of suitable habitat.
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm	Does not occur on the Project site due

Species Name	Status	Habitat Requirements	Occurrence
		oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	to a lack of suitable habitat.

STATUS

Federal
FE – Federally Endangered
FT – Federally Threatened
BGEPA– Bald and Golden Eagle Protection Act

State
SE – State Endangered
ST – State Threatened
SCE – State Candidate Endangered
CFP – California Fully-Protected Species
SSC – Species of Special Concern

MSHCP
MSHCP = No additional action necessary
MSHCP(a) = Surveys may be required as part of wetlands mapping
MSHCP(b) = Surveys may be required within the Narrow Endemic Plant Species survey area
MSHCP(c) = Surveys may be required within locations shown on survey maps
MSHCP(d) = Surveys may be required within Criteria Area
MSHCP(e) = Conservation requirements identified in species-specific conservation objectives need to be met before classified as a Covered Species
MSHCP(f) = Covered species when a Memorandum of Understanding is executed with the Forest Service Land

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.
- Confirmed absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- 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 based on suitable habitat, however its presence/absence has not been confirmed.
- Confirmed present – The species was detected onsite incidentally or through focused surveys

4.5.1 Special-Status Animal Species Observed within the Project Site

Golden Eagle

A single golden eagle individual (BGEPA, CFP) was observed flying over the Project site. While the Project site may be part of a much broader foraging area for this species, the Project site itself contains only marginal foraging habitat and does not contain suitable nesting or wintering habitat. See Section 5 below for a discussion of potential impacts to the golden eagle occurring as a result of the proposed Project.

4.5.2 Special-Status Wildlife Species Not Observed but with a Potential to Occur at the Project Site

Loggerhead Shrike

The loggerhead shrike (SSC) is not expected to occur on the Project site for nesting due to a lack of suitable habitat. However, the Project site exhibits marginally suitable foraging habitat; therefore, there is low potential for loggerhead shrike to occur on the Project site for foraging only. Refer to Section 5 below for a discussion of potential impacts to loggerhead shrike occurring as a result of the proposed Project.

Swainson's Hawk

Swainson's hawk (ST) is not expected to occur on the Project site for nesting, as the Project site is located outside of the breeding range of the species. However, the Project site exhibits marginally suitable foraging habitat, particularly for wintering or migrating hawks; therefore, there is low potential for Swainson's hawk to occur on the Project site for foraging only. Refer to Section 5 below for a discussion of potential impacts to Swainson's hawk occurring as a result of the proposed Project.

White-tailed Kite

The white-tailed kite (CFP) is not expected to occur on the Project site for nesting due to a lack of suitable habitat. However, the Project site exhibits marginally suitable foraging habitat; therefore, there is low potential for white-tailed kite to occur on the Project site for foraging only. Refer to Section 5 below for a discussion of potential impacts to white-tailed kite occurring as a result of the proposed Project.

San Diego Black-tailed Jackrabbit

The San Diego black-tailed jackrabbit (SSC) has a low potential to occur on the Project site for foraging only. Refer to Section 5 below for a discussion of potential impacts to San Diego black-tailed jackrabbit occurring as a result of the proposed Project.

4.5.3 Special-Status Wildlife Species Confirmed Absent Through Focused Surveys at the Project Site

Burrowing Owl

The Project site occurs within the MSHCP Burrowing Owl Survey Area; however, burrowing owl was confirmed absent from the Project site during the 2019 and 2021 focused breeding season surveys. No burrowing owls were observed within the Project site, and no burrowing owl sign was detected in association with burrows.

4.6 Raptor Use

The Project site provides suitable foraging habitat for a number of raptor species, including special-status raptors as discussed above.

Southern California contains a diversity of birds of prey (raptors), many species of which 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 American kestrel (*Falco sparverius*) and red-tailed hawk (*Buteo jamaicensis*) 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.

Many of the raptors that would be expected to forage and nest within western Riverside are fully covered species under the MSHCP, with the MSHCP providing the necessary conservation of both foraging and nesting habitats. Some common raptor species (e.g., American kestrel and red-tailed hawk) are not covered by the MSHCP but are expected to be conserved with implementation of the Plan due to the parallel habitat needs with those raptors covered under the Plan. The MSHCP does not provide Fish and Game Code take coverage for raptors covered under the Plan.

Appendix B (faunal compendium) provides a list of the raptors detected over the course of the field studies. The Project site lacks potential nesting habitat (e.g., mature trees, shrubs) for raptor species but is expected to provide marginal foraging habitat in the form of insects, spiders, lizards, snakes, small mammals, and other birds as discussed above.

4.7 Nesting Birds

The Project site contains immature trees, shrubs, and ground cover that provide suitable habitat for nesting migratory birds. Mortality of migratory birds (including eggs) is prohibited under California Fish and Game Code.[12]

Birds anticipated to nest on the Project site would be those that are common to disturbed areas and include species such as killdeer (*Charadrius vociferus*) and mourning dove (*Zenaida macroura*).

4.8 Wildlife Linkages/ Corridors and Nursery Sites

Habitat linkages are areas which provide a communication between two or more other habitat areas which are often larger or superior in quality to the linkage. Such linkage sites can be quite small or constricted but can be vital to the long-term health of connected habitats. Linkage values are often addressed in terms of "gene flow" between populations, with movement potentially taking many generations.

[12] 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.

Corridors are similar to linkages but provide specific opportunities for individual animals to disperse or migrate between generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different from habitat(s) in the connected areas but if used by the wildlife species of interest, the corridor will still function as desired.

Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species.

While some very minor local wildlife movement may occur within the Project site, the relatively small size and highly disturbed nature of the Project site preclude it from providing migratory wildlife corridors and/or wildlife nursery sites, especially due to the site's close proximity to I-215 to the west and March Air Reserve Base to the north.

4.8 Critical Habitat

The Project site does not occur within any lands mapped as Critical Habitat by the USFWS.

4.9 Jurisdictional Waters

4.9.1 Corps Jurisdiction

No Corps jurisdiction is associated with the Project site. GLA regulatory specialists evaluated an unnamed blue-line drainage (herein referred to as "Drainage A") located within the southern portion of the Project site, as depicted on Exhibit 8A – Regional Board Jurisdictional Delineation Map. Drainage A is a man-made ephemeral feature excavated wholly in uplands and that flow only in direct response to precipitation (e.g., rain). Drainage A comprises approximately 0.03 acre (743 linear feet). The Corp generally will not assert jurisdiction over ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water. As a result, Drainage A is not subject to Corps jurisdiction pursuant to Section 404 of the CWA. In addition, Drainage A is not visibly connected to another feature such as TNW upstream or downstream based on aerial photography, does not have the capacity to carry pollutants or flood waters to TNWs, provide habitat and lifecycle support functions for fish and other species, or have other relationships to the physical, chemical, or biological integrity of the TNW.

4.9.2 Regional Water Quality Control Board Jurisdiction

Regional Board jurisdiction associated with the Project site consists of Drainage A and totals approximately 0.03 acre (743 linear feet), none of which consists of State wetlands. Regional Board jurisdiction was determined based on the presence of litter and debris, changes in the character of soil, natural lines impressed on the bank, and destruction of terrestrial vegetation. The feature generally ranges from approximately two to three feet in width. Drainage A is an ephemeral feature determined to be non-federal waters that would require separate analysis under Section 13260 of the CWC, the Porter-Cologne Act. 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)). 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). See Exhibit 8A for a depiction of Regional Board jurisdictional waters. See Appendix C for additional information.

4.9.3 CDFW Jurisdiction

CDFW jurisdiction associated with the Project site totals approximately 0.18 acre (743 linear feet), of which approximately 0.15 acre (505 linear feet) consists of riparian vegetation. CDFW jurisdiction onsite includes Drainage A, as depicted on Exhibit 8B – CDFW Jurisdictional Delineation Map. CDFW jurisdiction is extended to the top of the bank of the drainage and/or the dripline of riparian vegetation (where applicable), with widths ranging from approximately four to 41 feet. See Appendix C for additional information.

4.10 MSHCP Riparian/Riverine Areas and Vernal Pools

Vegetation communities associated with riparian systems and vernal pools are depleted natural vegetation communities because, similar to coastal sage scrub, they have declined throughout Southern California during past decades. In addition, they support a large variety of special-status wildlife species. Most species associated with riparian/riverine areas are covered species under the MSHCP (under Section 6.1.2 of the Plan). The MSHCP has specific policies and procedures regarding the evaluation and conservation of riparian/riverine resources (including riparian vegetation) and vernal pools because they support MSHCP covered species. Thus, the MSHCP classification of riparian/riverine includes both riparian (depleted natural vegetation communities) as well as ephemeral drainages that are natural in origin but may lack riparian vegetation.

MSHCP riparian/riverine areas within the Project site are comprised entirely of Drainage A and are identical to that of CDFW jurisdiction [Exhibit 9 – MSHCP Riparian/Riverine Areas Map]. Therefore, riparian areas onsite total 0.15 acre (505 linear feet) and riverine areas onsite total 0.03 acre (238 linear feet).

No vernal pools or other seasonal pools were observed in association with the Project site during the field studies. This includes road ruts, stock ponds, and other artificially-created depression features.

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 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 (or secondary) impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect 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 and can affect biological resources located downstream from projects and other offsite areas.

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, 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 2021 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 state or federally protected wetlands (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 Special-Status Species

Appendix G(a) of the CEQA guidelines asks if a project is likely to "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."

5.2.1 Special-Status Plants

Paniculate Tarplant

The proposed Project will result in impacts paniculate tarplant. However, impacts to paniculate tarplant occurring as a result of the proposed Project would be less than significant under CEQA. The Project site is heavily disturbed and the onsite population is relatively small, as only approximately 35 individuals were observed. Therefore, given the low sensitivity of this species (CNPS 4.2), the proposed Project will not have a substantial adverse effect on the survivorship of paniculate tarplant. Additionally, while paniculate tarplant is classified as a rare plant by CNPS, it is not a federally or state-listed species. Furthermore, there are no survey or preservation requirements for this species pursuant to any resource agency or HCP, including the MSHCP.

5.2.2 Special-Status Animals

The proposed Project will result in the loss of habitat with varying degrees of potential to support foraging by the following special-status species: golden eagle (BGEPA, CFP), loggerhead shrike (SSC), white-tailed kite (CFP), Swainson's hawk (ST), and San Diego black-tailed jackrabbit (SSC). Given the relatively small size and highly disturbed nature of the Project site, any potential impacts to the above-referenced species are unlikely to amount to the level of significant pursuant to CEQA. Furthermore, these species are all considered covered species pursuant to the MSHCP; therefore, the MSHCP addresses the loss of foraging habitat for these species.

5.3 Riparian Vegetation and Sensitive Vegetation Communities

Appendix G(b) of the CEQA guidelines asks if a project is likely to "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."

The proposed Project will permanently impact Drainage A and its associated 0.15 acre of mulefat scrub [Exhibit 10 –Vegetation/Land Use Impact Map]. However, impacts to mulefat scrub occurring as a result of the proposed Project would be less than significant with mitigation incorporated under CEQA. Regardless, mitigation for impacts to mulefat scrub will be provided for consistency with the MSHCP, and to support regulatory permitting (refer to Section 6 below for additional information). No other sensitive vegetation communities occur on the Project site;

therefore, no additional impacts to sensitive vegetation communities would occur (see Table 5-1, below).

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

Vegetation/Land Use Type	Total Acreage
Disturbed/Developed	0.36
Disturbed/Ruderal	25.86
Mulefat Scrub	0.15
Total	**26.37**

5.4 Wetlands

Appendix G(c) of the State CEQA guidelines asks if a project is likely to "have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means."

The Project site does not contain any state or federally protected wetlands; therefore no impacts to state or federally protected wetlands would occur as a result of construction of the proposed Project.

5.5 Wildlife Movement and Native Wildlife Nursery Sites

Appendix G (d) of the State CEQA guidelines asks if a project is likely to "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."

The Project site lacks migratory wildlife corridors and/or wildlife nursery sites and does not occur within any MSHCP Cores or Linkages. The proposed Project would not interfere with or impact (1) the movement of native resident or migratory fish or wildlife species, (2) established native resident or migratory wildlife corridors, or (3) the use of native wildlife nursery sites.

Any impacts to local wildlife movement occurring as a result of the proposed Project would be minor and would not rise to the level of significant pursuant to CEQA. 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 California Fish and Game Code.

Although impacts to migratory birds are prohibited by California Fish and Game Code, impacts to migratory birds by the proposed Project would not be a significant impact under CEQA. The migratory birds with potential to nest on the Project site would be those that are extremely common to the region and highly adapted to human landscapes (e.g., killdeer, mourning dove). The number of individuals potentially affected by the Project would not significantly affect regional, let alone local, populations of such species. A measure is identified in Section 6.0 of this report to avoid impacts to nesting birds.

5.6 Local Policies or Ordinances Plans

Appendix G(e) of the State CEQA guidelines asks if a project is likely to "conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance." There four black willow saplings and several mulefat shrubs within Drainage A. Pursuant to the provisions of the City's Urban Forestry Ordinance 1262 Section 19.71, the black willow saplings and mulefat shrubs on the Project site would not be afforded protection under the ordinance due to the truck sizes being smaller than two inches when measured 4.5 feet from the ground. As such, the proposed Project will not impact any trees protected under the City's ordinance and therefore will not conflict with any local policies or ordinances protecting biological resources.

5.7 Habitat Conservation Plans

Appendix G(f) of the State CEQA guidelines asks if a project is likely to "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan." As discussed throughout this report, the Project is within the Western Riverside County MSHCP. Section 7.0 of this report analyzes compliance of the Project with the Reserve Assembly and species/habitat requirements of the MSHCP. Impacts to species/habitats with MSHCP requirements are summarized here. Through compliance with the applicable requirements, the Project will not conflict with the provisions of the MSHCP.

5.7.1 MSHCP Riparian/Riverine Areas

MSHCP riparian/riverine areas within the Project site are comprised entirely of Drainage A and are identical to that of CDFW jurisdiction [Exhibit 9]. Therefore, riparian areas on-site total 0.15 acre (505 linear feet) and riverine areas onsite total 0.03 acre (238 linear feet). The entirety of MSHCP riparian/riverine areas within the Project site will be permanently impacted; no additional temporary or off-site impacts are currently proposed [Exhibit 11 - MSHCP Riparian/Riverine Areas Impact Map].

Pursuant to Volume I, Section 6.1.2 of the MSHCP, projects must consider alternatives providing for 100% percent avoidance of riparian/riverine areas. If avoidance is infeasible, then the unavoidable impacts must be mitigated and a Determination of Biologically Equivalent or Superior Preservation (DBESP) is required. Refer to Section 6.0 for a discussion regarding impacts to 0.18 acre of riparian/riverine resources.

5.8 Jurisdictional Waters

The proposed Project will permanently impact Drainage A and its associated 0.03 acre of Regional Board jurisdiction, none of which consists of State wetlands [Exhibit 12 – Regional Board Jurisdiction Impact Map] and 0.18 acre of CDFW jurisdiction, 0.15 acre of which consists riparian [Exhibit 13 – CDFW Jurisdiction Impact Map]. Therefore, the Project proponent will be pursuing regulatory permits from the Regional Board pursuant to Section 13260 of the CWC and CDFW pursuant to Division 2, Chapter 6, Section 1600–1616 of the California Fish and Game Code, respectively.

Impacts to Drainage A occurring as a result of the proposed Project would be less than significant under CEQA due to the heavily disturbed nature of the Project site, the low quality of the drainage to be impacted, and the lack of any state or federally protected wetlands. Regardless, mitigation for impacts to Drainage A will be provided pursuant to regulatory permitting. Refer to Section 6.0 below.

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. Note that the Project site does not occur in proximity to the MSHCP Conservation Area; therefore, the MSHCP Urban/Wildlands Interface Guidelines (*Volume I, Section 6.1.4* of the MSHCP) do not apply to the Project.

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 as the proposed project.

Given the small size and highly disturbed nature of the Project site, the Project is not expected to result in cumulative impacts that would rise to a level of significance under CEQA. Additionally, any potentially significant cumulative impacts occurring as a result of the proposed Project will be considered fully mitigated through participation in the MSHCP and therefore consistent with the MSHCP.

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

The Project site contains suitable habitat for burrowing owls; however, burrowing owls were not detected onsite during focused surveys. MSHCP Objective 6 for burrowing owls requires that pre-construction surveys occur prior to site grading. As such, the following measure is recommended to avoid direct impacts to burrowing owls and to ensure consistency with the MSHCP.

- **Pre-Construction Survey.** A 30-day pre-construction survey for burrowing owls is required prior to future ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, etc.) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing

activities, the project proponent will immediately inform the RCA and the Wildlife Agencies and will need to coordinate in the future with the RCA and the Wildlife Agencies, which may include preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure that burrowing owl have not colonized the site since it was last disturbed. If burrowing owls are found, the same coordination described above will be necessary.

6.2 Nesting Birds

The Project site contains vegetation with the potential to support native nesting birds. As discussed above, the California Fish and Game Code prohibits mortality of native birds, including eggs. The following measure is recommended to avoid take of nesting birds. Potential impacts to native birds was not considered a biologically significant impact under CEQA; however, to comply with state law, the following is recommended:

- As feasible, vegetation clearing should be conducted outside of the nesting season, which is generally identified as February 1 through August 31. 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 (typically 300 feet for passerine birds and 500 feet for raptors). A smaller buffer may be established if the project biologist deems it suitable. The buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests.

6.3 Jurisdictional Waters

As noted above, the Project will permanently impact 0.03 acre of non-wetland waters of the State and 0.18 acre of CDFW jurisdiction, of which 0.15 acre consists of riparian habitat. The following measure identifies mitigation proposed for impacts to jurisdictional waters.

- The Project Proponent shall compensate for permanent impacts to 0.03 acre of Regional Board jurisdiction and 0.18 acre of CDFW jurisdiction at a 2:1 mitigation-to-impact ratio through the purchase of 0.36 acre of rehabilitation (inclusive of the 0.03 acre of Regional Board jurisdiction collectively within the 0.18 acre of CDFW jurisdiction), re-establishment, and/or establishment mitigation credits at an approved Regional Board and/or CDFW mitigation bank or in-lieu fee program within the San Jacinto River and/or Santa Ana River Watershed, such as the Riverpark Mitigation Bank. If enhancement or preservation credits are pursued due to the lack of availability of rehabilitation, re-establishment, and/or establishment mitigation credits, the ratio may be higher as determined on a case by case basis by the Regional Board and/or CDFW. The mitigation receipt from this fee payment will be provided to the Lead Agency prior to initiation of jurisdictional impacts.

6.4 MSHCP Riparian/Riverine Areas

As noted above, the Project will impact approximately 0.15 acre of riparian area and 0.03 acre of riverine area. The following measures will address these impacts.

- A DBESP analysis will be submitted to the Wildlife Agencies to approve impacts to MSHCP riparian/riverine areas.

- The Project Proponent shall compensate for permanent impacts to 0.15 acre of riparian area and 0.03 acre of riverine area at a 2:1 mitigation-to-impact ratio through the purchase of 0.36 acre of rehabilitation, re-establishment, and/or establishment mitigation credits at an approved mitigation bank or in-lieu fee program within the San Jacinto River and/or Santa Ana River Watershed, such as the Riverpark Mitigation Bank. If enhancement or preservation credits are pursued due to the lack of availability of rehabilitation, re-establishment, and/or establishment mitigation credits, the ratio may be higher as determined on a case by case basis by the wildlife agencies.

7.0 MSHCP CONSISTENCY ANALYSIS

The purpose of this section is to provide an analysis of the proposed Project with respect to compliance with biological aspects of the Western Riverside County MSHCP. Specifically, this analysis evaluates the proposed Project with respect to the Project's consistency with MSHCP Reserve assembly requirements, *Section 6.1.2* (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), *Section 6.1.3* (Protection of Narrow Endemic Plant Species), *Section 6.1.4* (Guidelines Pertaining to the Urban/Wildlands Interface), and *Section 6.3.2* (Additional Survey Needs and Procedures).

7.1 Project Relationship to Reserve Assembly

The Project site does not occur within the MSHCP Criteria Area. Therefore, the proposed Project will not be subject to the HANS and/or JPR processes and would be consistent with MSHCP policies, specifically pertaining to the Project's relationship to the MSHCP reserve assembly.

7.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

Due to proposed impacts to approximately 0.18 acre of riparian/riverine areas on the Project site, a DBESP will be required. Given the low quality of riparian habitat as discussed above, the Project site does not provide suitable habitat for riparian species including least Bell's vireo, southwestern willow flycatcher, and/or western yellow-billed cuckoo.

No vernal pools occur on the Project site; therefore, no impact to vernal pools or vernal pool species including listed fairy shrimp will occur as a result of the proposed Project.

With the implementation of the mitigation measure as outlined in Section 6.3 and with the preparation of a DBESP, the proposed Project will be consistent with the biological requirements

of the MSHCP, specifically pertaining to Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools).

7.3 Protection of Narrow Endemic Plants

Volume I, Section 6.1.3 of the MSHCP requires that within identified NEPSSA, site-specific focused surveys for Narrow Endemic Plants Species will be required for all public and private projects where appropriate soils and habitat are present. However, the Project site does not occur within NEPSSA; therefore, the Project is not subject to any additional NEPSSA requirements pursuant to the MSHCP and would be consistent with the biological requirements of the MSHCP, specifically pertaining to Section 6.1.3 (Protection of Narrow Endemic Plant Species).

7.4 Guidelines Pertaining to the Urban/Wildland Interface

The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. As the MSHCP Conservation Area is assembled, development is expected to occur adjacent to the Conservation Area. Future development in proximity to the MSHCP Conservation Area may result in edge effects with the potential to adversely affect biological resources within the Conservation Area.

Indirect effects are those effects that give rise to delayed, secondary effects. Examples of indirect effects include fragmentation, increased levels of environmental toxins, plant and wildlife dispersal interruption, increased risk of fire, construction noise, and invasion of nonnative animals and plants, which stresses or alters competition among natives. Indirect effects are those that can be assumed to increase mortality, reduce productivity, and/or reduce the functions and values of natural open space for native species.

The Project site and its surrounding environs have been routinely disturbed and maintained for decades, and do not comprise a wildlife movement corridor; rather, the area is already fragmented by existing industrial development, the I-215 Freeway, and March Air Reserve Base. The development of an industrial building and its associated improvements will not result in further fragmentation than what already exists and will not result in lower functions and values of natural open space for native species or other effects associated with such natural open space.

The Project site does not occur in proximity to the MSHCP Conservation Area; therefore, the MSHCP Urban/Wildlands Interface Guidelines (*Volume I, Section 6.1.4* of the MSHCP) do not apply to the Project. As such, the proposed Project will be consistent with the biological requirements of the MSHCP, specifically pertaining to the MSHCP Urban/Wildlands Interface Guidelines.

7.5 Additional Survey Needs and Procedures

Focused burrowing owl surveys were conducted for the Project site and no burrowing owl was detected; refer to Section 6.1 regarding additional information pertaining to burrowing owl

procedures. As the Project site does not occur within amphibian and/or mammal survey areas, no Amphibian and/or Mammal surveys are required. As the Project site does not occur within the CAPSSA, no Criteria Area Plant Species surveys are required.

7.6 Conclusion of MSHCP Consistency

As outlined above, the proposed Project will be consistent with the biological requirements of the MSHCP; specifically pertaining to the Project's relationship to reserve assembly, *Section 6.1.2* (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), *Section 6.1.3* (Protection of Narrow Endemic Plant Species), *Section 6.1.4* (Guidelines Pertaining to the Urban/Wildlands Interface), and *Section 6.3.2* (Additional Survey Needs and Procedures).

8.0 REFERENCES

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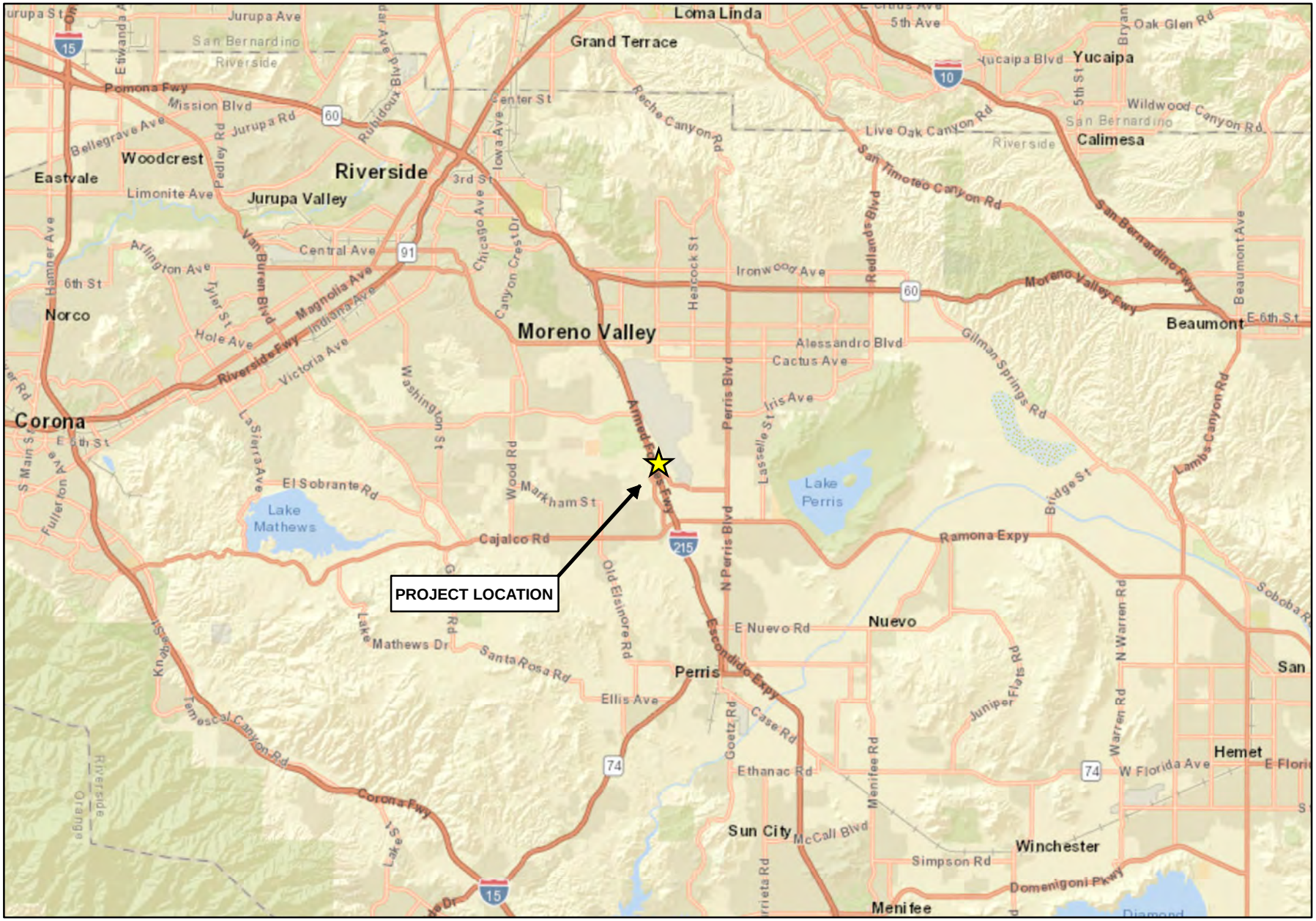
9.0 CERTIFICATION

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: January 13, 2022

p:0849-75a.bio.btr.docx

Source: ESRI World Street Map



N

0 2 4 8 Miles

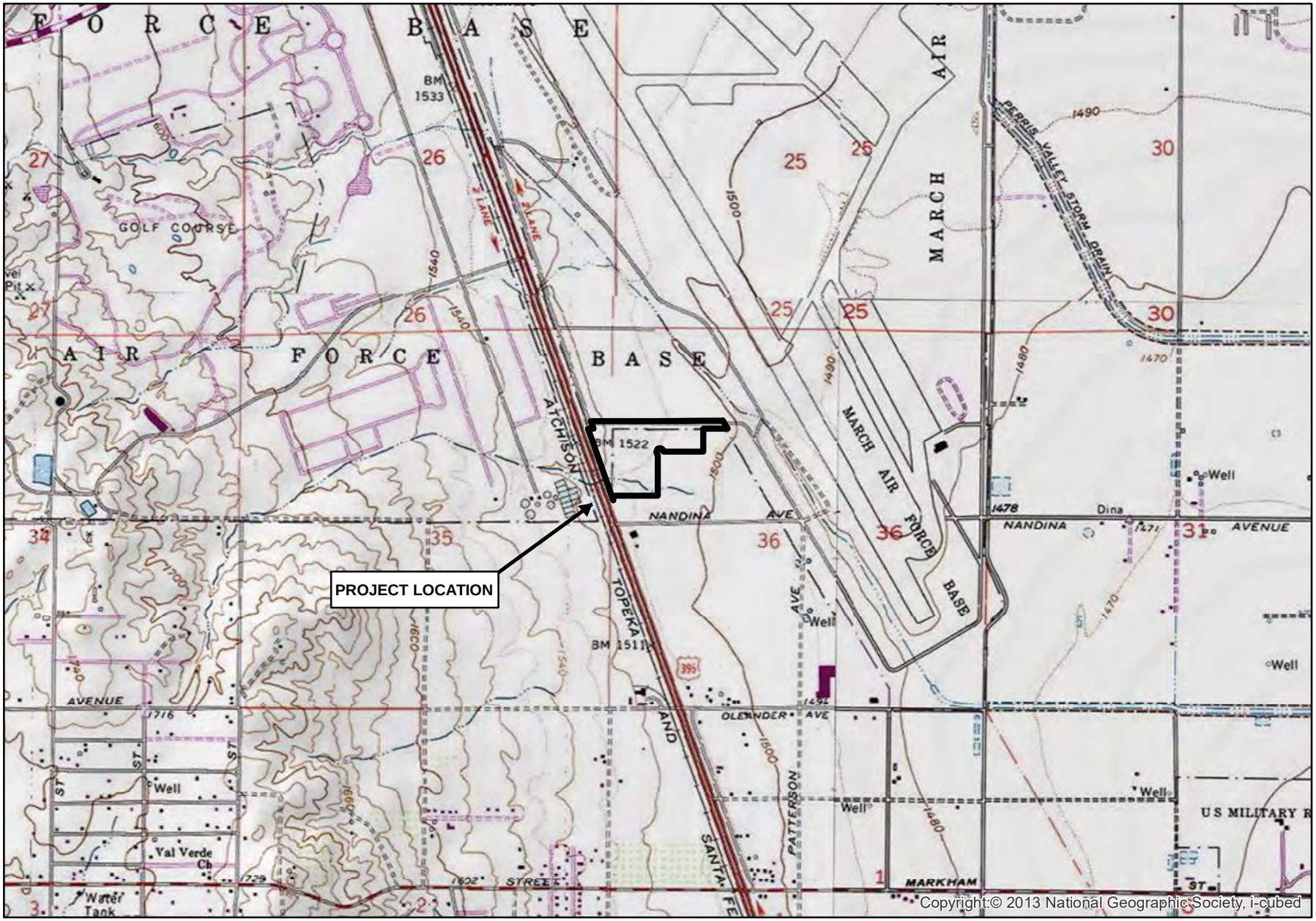
FIRST MARCH LOGISTICS

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1

Adapted from USGS Steele Peak, CA quadrangle



N

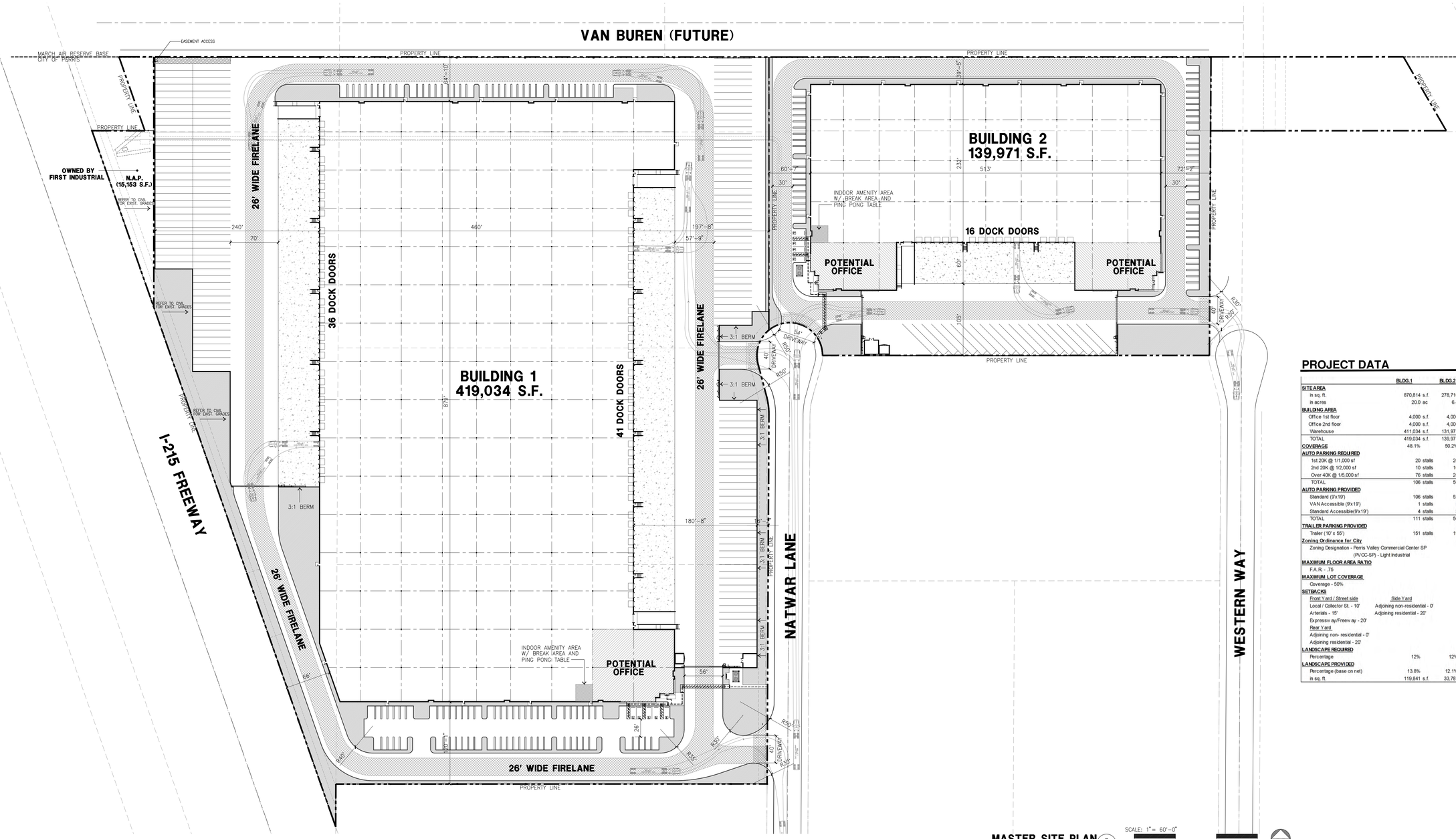
0 1,000 2,000 4,000 Feet

FIRST MARCH LOGISTICS

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2



MASTER SITE PLAN

scale: 1" = 60'-0"

SCALE: 1" = 60'-0"

0 60' 120' 180'

TRUE NORTH

PROJECT DATA

	BLDG.1	BLDG.2
SITE AREA		
in sq. ft.	870,814 s.f.	278,710 s.f.
in acres	20.0 ac	6.4 ac
BUILDING AREA		
Office 1st floor	4,000 s.f.	4,000 s.f.
Office 2nd floor	4,000 s.f.	4,000 s.f.
Warehouse	411,034 s.f.	131,971 s.f.
TOTAL	419,034 s.f.	139,971 s.f.
COVERAGE	48.1%	50.2%
AUTO PARKING REQUIRED		
1st 20K @ 1/1,000 sf	20 stalls	20 stalls
2nd 20K @ 1/2,000 sf	10 stalls	10 stalls
Over 40K @ 1/5,000 sf	76 stalls	20 stalls
TOTAL	106 stalls	50 stalls
AUTO PARKING PROVIDED		
Standard (9'x19')	106 stalls	52 stalls
VAN Accessible (9'x19')	1 stalls	1 stalls
Standard Accessible(9'x19')	4 stalls	3 stalls
TOTAL	111 stalls	56 stalls
TRAILER PARKING PROVIDED		
Trailer (10' x 55')	151 stalls	19 stalls

Zoning Ordinance for City
Zoning Designation - Perris Valley Commercial Center SP (PVCC-SP) - Light Industrial

MAXIMUM FLOOR AREA RATIO
F.A.R. - 75

MAXIMUM LOT COVERAGE
Coverage - 50%

SETBACKS

Front Yard / Street side	Side Yard
Local / Collector St. - 10'	Adjoining non-residential - 0'
Arterials - 15'	Adjoining residential - 20'
Expressway/Freeway - 20'	
Rear Yard	
Adjoining non- residential - 0'	
Adjoining residential - 20'	

LANDSCAPE REQUIRED		
Percentage	12%	12%
LANDSCAPE PROVIDED		
Percentage (base on net)	13.8%	12.1%
in sq. ft.	119,841 s.f.	33,787 s.f.

PROPERTY OWNER

FIRST INDUSTRIAL REALTY TRUST
898 N. SEPULVEDA BLVD. SUITE 750
EL SEGUNDO, CA 90245
TEL: (949) 226-4601
CONTACT: MIKE GOODWIN
MGOODWIN2@FIRSTINDUSTRIAL.COM

ADDRESS OF THE PROPERTY

TBD

ASSESSOR'S PARCEL NUMBER

294-180-013
294-180-028
294-180-029
294-180-030

ZONING

ZONING DESIGNATION – PERRIS VALLEY COMMERCIAL CENTER SP
(PVCC-SP) – LIGHT INDUSTRIAL

LEGAL DESCRIPTION

PARCELS 1, 2 AND 3 OF PARCEL MAP NO. 14264, IN THE CITY OF PERRIS, COUNTRY OF RIVERSIDE, STATE OF CALIFORNIA, ON FILE IN BOOK 82, PAGES 66 AND 67 OF PARCEL MAPS, RECORDS OF RIVERSIDE COUNTRY, CALIFORNIA. TOGETHER WITH A PORTION OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 36, TOWNSHIP 3 SOUTH, RANGE 4 WEST, SAN BERNARDO MERIDIAN, AND TOGETHER WITH PORTIONS OF LOTS 3 AND 4 IN BLOCK 113 OF THE ALESSANDRO TRACT, IN SAID CITY, COUNTRY AND STATE, AS PER MAP RECORDED IN BOOK 6, PAGE 13 OF MAPS, IN THE SAN BERNARDINO COUNTRY RECORDER'S OFFICE.

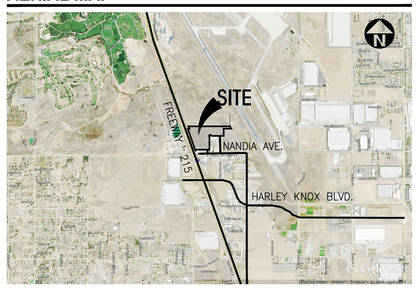
APPLICANT

FIRST INDUSTRIAL REALTY TRUST
898 N. SEPULVEDA BLVD. SUITE 750
EL SEGUNDO, CA 90245
TEL: (949) 226-4601
CONTACT: MIKE GOODWIN
MGOODWIN2@FIRSTINDUSTRIAL.COM

APPLICANT'S REPRESENTATIVE

HPA, INC.
18831 BARDEEN AVE SUITE 100
IRVINE CA 92612
TEL: 949-862-2132
ATTN: STEVE HONG
STEVE@HPARCHS.COM

AERIAL MAP



SITE LEGEND

- LANDSCAPED AREA
- SITE PAVING – SEE "C" DRWGS. FOR THICKNESS
- CONCRETE PAVING SEE "C" DRWGS. FOR THICKNESS
- STANDARD PARKING STALL (9' X 19')
- HANDICAP PARKING STALL (9' X 19')
- 26' FIRE LANE.
- LIGHT STANDARD
- EXISTING PUBLIC FIRE HYDRANT
- PRIVATE FIRE HYDRANT– APPROXIMATE LOCATION
- PROPERTY LINE
- PATH OF TRAVEL

OFFICIAL USE ONLY

HPA architecture

hpa, inc.
18831 bardeen avenue, - ste. #100
irvine, ca
92612
tel: 949•863•1770
fax: 949•863•0851
email: hpa@hparchs.com

LICENSED ARCHITECT
STEVEN HONG
C-29451
3-31-21
RENEWAL DATE
STATE OF CALIFORNIA

Owner:

FIRST INDUSTRIAL REALTY TRUST

989 N Sepulveda Blvd. Suite 750
El Segundo, CA 90245

tel: 310-414-5400

Project:

FIRST MARCH LOGISTICS

TDB
PERRIS, CA

Consultants:

CIVIL	THIENES
STRUCTURAL	-
MECHANICAL	-
PLUMBING	-
ELECTRICAL	-
LANDSCAPE	SPLA
FIRE PROTECTION	-
SOILS ENGINEER	-

Title: MASTER SITE PLAN

Project Number: 19100
Drawn by: CR
Date: 11/04/20
Revision:

Sheet:

DAB-A1.0

Project Site

Permanent Impact

N

0 87.5 175 350

Feet

1 inch = 171 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 11, 2021

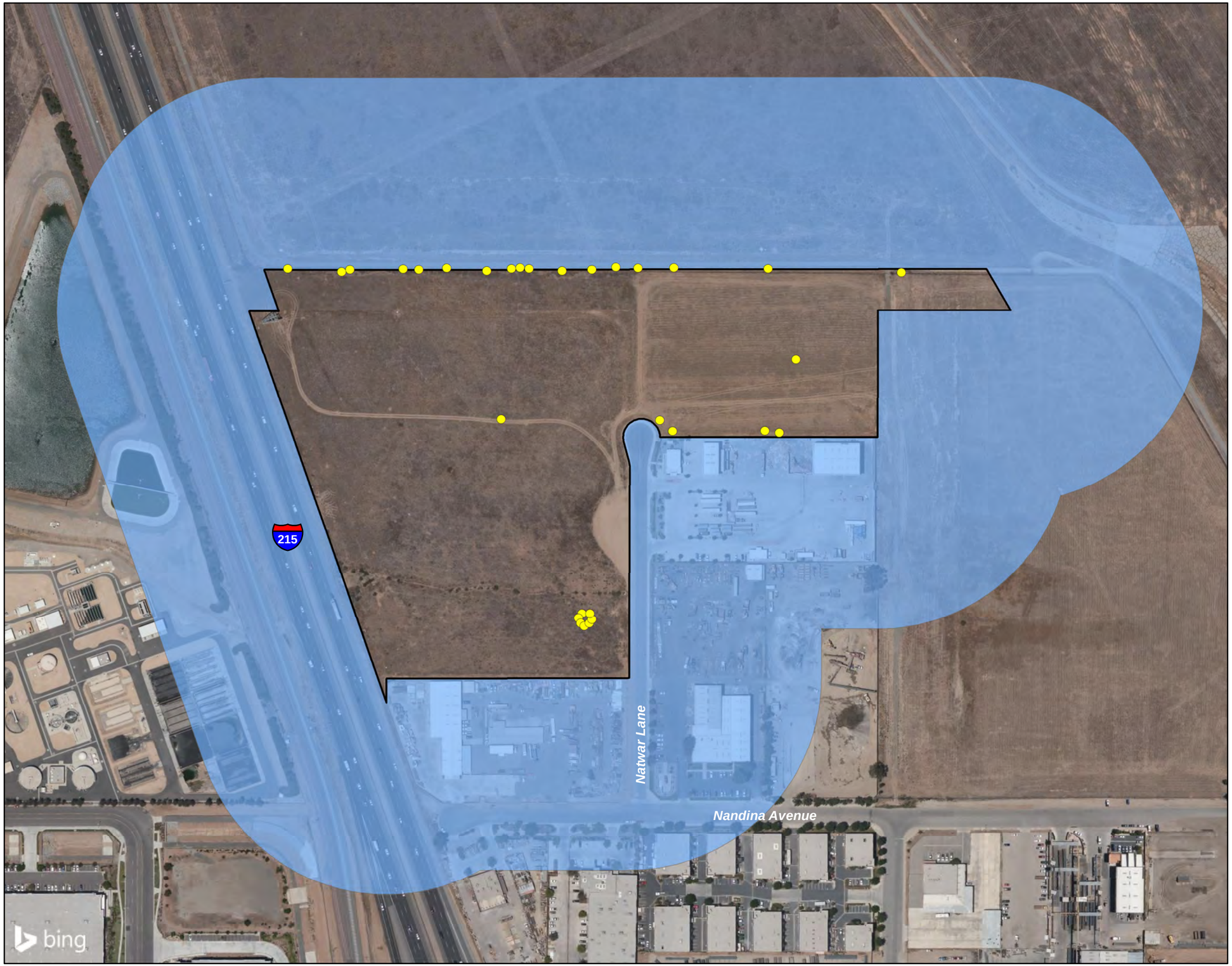
FIRST MARCH LOGISTICS

Aerial Map

GLENN LUKOS ASSOCIATES

Exhibit 4

X:\0363-THE REST\0849-75NATW\849-75_GIS\849-75_Aerial.mxd



Project Site

500-foot Visual Survey Buffer

Potentially Suitable Burrow

N

0 125 250 500

Feet

1 inch = 250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 6, 2021

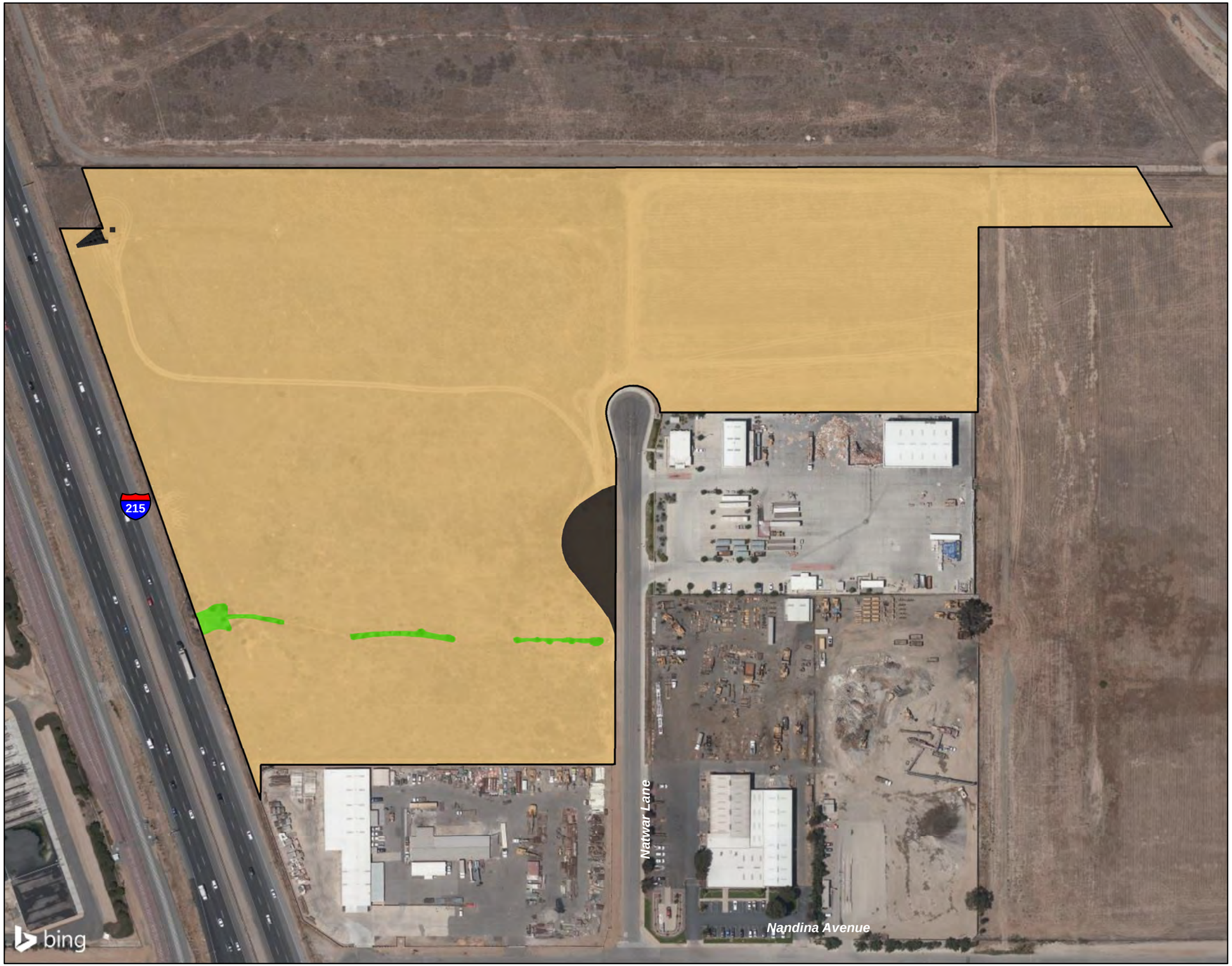
FIRST MARCH LOGISTICS

Burrowing Owl Survey Results Map

GLENN LUKOS ASSOCIATES

Exhibit 5

X:\0363-THE REST\0849-75NATW\849-75_GIS\BUOW_GIS\849-75_BUOW.mxd



Project Site

Disturbed/Developed

Disturbed/Ruderal

Mulefat Scrub

N

0 87.5 175 350

Feet

1 inch = 171 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 6, 2021

FIRST MARCH LOGISTICS

Vegetation Map

GLENN LUKOS ASSOCIATES

Exhibit 6

X:\0363-THE REST\0849-75NATW\849-75_GIS\VegetationGIS\849-75_Vegetation.mxd

Photograph 1: View of Project site facing approximately northwest depicting disturbed/developed conditions in the foreground. The onsite billboard is visible in the background (latitude 33.868308°, longitude -117.259290°).

Photograph 2: View of Project site facing approximately northeast depicting disturbed/ruderal conditions characteristic of the property (latitude 33.868162°, longitude -117.261215°).

Photograph 3: View of Project site facing approximately southeast depicting disturbed/ruderal conditions characteristic of the property. Drainage A and its associated mulefat scrub are visible in the background (latitude 33.868495°, longitude -117.261806°).

Photograph 4: View of Project site facing approximately southwest depicting Drainage A and its associated mulefat scrub with disturbed/ruderal conditions visible in the foreground (latitude 33.867893°, longitude -117.259318°).

Photograph 5: View of Project site facing approximately south depicting the disturbed/ruderal conditions characteristic of the property (latitude 33.867859°, longitude -117.261337°).

Photograph 6: View of Project site facing approximately west depicting the disturbed/ruderal conditions characteristic of the property. (latitude 33.870016°, longitude -117.257421°).

Project Site

RWQCB Waters of the State

2 Width of Drainage in Feet

N

0 87.5 175 350

Feet

1 inch = 175 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 6, 2021

FIRST MARCH LOGISTICS

Regional Board Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 8A

X:\0363-THE REST\0849-75NATW\849-75_GIS\DelineationGIS\849-75_JD_RWQCB.mxd

Project Site

CDFW Riparian

CDFW Non-Riparian Stream

2 Width of Drainage in Feet

N

0 87.5 175 350

Feet

1 inch = 175 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 6, 2021

FIRST MARCH LOGISTICS

CDFW Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 8B

X:\0363-THE REST\0849-75NATW\849-75_GIS\DelineationGIS\849-75_JD_CDFW.mxd

Project Site

MSHCP Riparian

MSHCP Riverine

2

N

0 87.5 175 350

Feet

1 inch = 175 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 6, 2021

FIRST MARCH LOGISTICS

MSHCP Riparian/Riverine Areas Map

GLENN LUKOS ASSOCIATES

Exhibit 9

X:\0363-THE REST\0849-75NATW\849-75_GIS\DelineationGIS\849-75_JD_MSHCPRipRiv.mxd

Project Site

Permanent Impact

Disturbed/Developed

Disturbed/Ruderal

Mulefat Scrub

N

0 87.5 175 350

Feet

1 inch = 171 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 11, 2021

FIRST MARCH LOGISTICS

Vegetation/Land Use Impact Map

GLENN LUKOS ASSOCIATES

Exhibit 10

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Project Site

Permanent Impact

MSHCP Riparian

MSHCP Riverine

2

N

0 87.5 175 350

Feet

1 inch = 175 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 11, 2021

FIRST MARCH LOGISTICS

MSHCP Riparian/Riverine Areas Impact Map

GLENN LUKOS ASSOCIATES

Exhibit 11

X:\0363-THE REST\0849-75NATW\849-75_GIS\ImpactsGIS\849-75_RipRiveImpacts.mxd

Project Site

RWQCB Waters of the State

2 Width of Drainage in Feet

N

0 87.5 175 350

Feet

1 inch = 175 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 11, 2021

FIRST MARCH LOGISTICS

Regional Board Jurisdiction Impact Map

GLENN LUKOS ASSOCIATES

Exhibit 12

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Project Site

Permanent Impact

CDFW Riparian

CDFW Non-Riparian Stream

2 Width of Drainage in Feet

N

0 87.5 175 350

Feet

1 inch = 175 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: August 11, 2021

FIRST MARCH LOGISTICS

CDFW Jurisdiction Impact Map

GLENN LUKOS ASSOCIATES

Exhibit 13

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APPENDIX A: FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows Jepson Flora Project (2019)[1]. An asterisk (*) denotes a non-native species.

EUDICOTS

Amaranthaceae – Amaranth Family

* *Amaranthus albus*, Tumbleweed Amaranth
Amaranthus palmeri, Palmer's Amaranth

Asteraceae – Sunflower Family

Ambrosia acanthicarpa, Annual Burr-sage
Baccharis salicifolia, Mule Fat
Baccharis sarothroides, Broom Baccharis
* *Centaurea melitensis*, Tocalote
Centromadia pungens ssp. *pungens*, Common Spikeweed
Corethrogyne filaginifolia, California Sand-aster
Deinandra paniculata, Paniculate Tarplant
Ericameria palmeri, Palmer Goldenbush
Ericameria pinifolia, Pine-bush
Erigeron canadensis, Horseweed
Heterotheca grandiflora, Telegraph Golden-aster
* *Lactuca serriola*, Prickly Lettuce
* *Oncosiphon piluliferum*, Stinknet

Brassicaceae – Mustard Family

* *Hirschfeldia incana*, Summer Mustard
* *Sisymbrium irio*, London Rocket

Chenopodiaceae – Goosefoot Family

* *Salsola tragus*, Russian Thistle

Euphorbiaceae – Spurge Family

Croton setiger, Doveweed

Fabaceae – Pea Family

Acmispon americanus var. *americanus*, Spanish Lotus

Lamiaceae – Mint Family

Trichostema lanceolatum, Vinegarweed

---

[1] Jepson Flora Project (B. D. Baldwin, D. J. Keil, S. Markos, B. D. Mishler, R. Patterson, T. J. Rosatti, and D. H. Wilken, eds.) [JFP]. 2019. *Jepson Flora Project*. http://ucjeps.berkeley.edu/eflora/.

Polygonaceae – Buckwheat Family

Eriogonum fasciculatum, California Buckwheat

Salicaceae – Willow Family

Salix gooddingii, Goodding's Black Willow

Solanaceae – Nightshade Family

Datura wrightii, Jimsonweed

* *Nicotiana glauca*, Tree Tobacco

Zygophyllaceae – Caltrop Family

* *Tribulus terrestris*, Puncture Vine

MONOCOTS

Poaceae – Grass Family

* *Bromus madritensis* ssp. *rubens*, Red Brome

* *Bromus diandrus*, Ripgut Brome

* *Cynodon dactylon*, Bermuda Grass

* *Hordeum murinum*, Mouse Barley

APPENDIX B: FAUNAL COMPENDIUM

The faunal compendium lists species that were either observed within or adjacent to the Project site. Taxonomy and common names are taken from Pelham (2012)[2] for butterflies, AOS (2019)[3] for birds, Crother (2017)[4] for amphibian, turtle, and reptile taxonomy, and CDFW (2016)[5] for mammals.

INSECTS

Formicidae – Ant Family
Pogonomyrmex rugosus, Rough Harvester Ant

Mutillidae – Velvet Ant Family
Dasymutilla aureola, Velvet Ant

Pieridae - Whites and Sulphurs
Pontia protodice, Checkered White Butterfly

REPTILES

Phrynosomatidae – Spiny Lizard Family
Sceloporus occidentalis, Western Fence Lizard
Uta stansburiana elegans, Western Side-blotched Lizard

BIRDS

Accipitridae – Hawk Family
Aquila chrysaetos, Golden Eagle
Buteo jamaicensis, Red-tailed Hawk

Alaudidae – Lark Family
Eremophila alpestris, Horned Lark

Charadriidae – Plover Family
Charadrius vociferus, Killdeer

Columbidae – Pigeon and Dove Family
* *Columba livia*, Rock Pigeon
Zenaida macroura, Mourning Dove

Corvidae – Jay and Crow Family
Corvus corax, Common Raven
Corvus brachyrhynchos, American Crow

---

[2] Warren, A.D., K.J. Davis, N.V. Grishin, J. P. Pelham, E.M. Strangeland. 2012. Catalogue of the Butterflies of the United States and Canada. Interactive Listing of American Butterflies. [30-XII-12]. Available online at http://www.butterfliesofamerica.com.

[3] Chesser, R. T., K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, P. C. Rasmussen, Jr., D. F. Stotz, and K. Winker. 2019. Check-list of North American Birds (online). American Ornithological Society. Available online at http://checklist.aou.org/taxa.

[4] Crother, B. I., ed. 2017. *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico*, *with Comments Regarding Confidence in Our Understanding, 8th Edition*. SSAR Herpetological Circular 43:1-102. Shoreview, MN: Society for the Study of Amphibians and Reptiles, Committee On Standard English And Scientific Names.

[5] California Department of Fish and Wildlife. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Dated May 2016.

Fringillidae – Finch Family

Haemorhous mexicanus, House Finch
Spinus psaltria, Lesser Goldfinch

Hirundinidae – Swallow Family

Hirundo rustica, Barn Swallow

Icteridae – Blackbird and Oriole Family

Euphagus cyanocephalus, Brewer's Blackbird
Sturnella neglecta, Western Meadowlark

Mimidae – Thrasher Family

Mimus polyglottos, Northern Mockingbird

Passeridae – Old World Sparrow Family

* *Passer domesticus*, House Sparrow

Sturnidae – Starling Family

* *Sturnus vulgaris*, European Starling

Trochilidae – Hummingbird Family

Calypte anna, Anna's Hummingbird

Tyrannidae – Tyrant Flycatcher Family

Sayornis nigricans, Black Phoebe
Sayornis saya, Say's Phoebe

MAMMALS

Sciuridae – Squirrel Family

Ostospermophilus beecheyi, California Ground Squirrel

Leporidae – Hare and Rabbit Family

Lepus californicus, Black-tailed Jackrabbit
Sylvilagus audubonii, Audubon's Cottontail