BIOLOGICAL TECHNICAL REPORT

FOR

SPENCER'S CROSSING
[FRENCH VALLEY SP 312 A-2]

LOCATED IN UNINCORPORATED, RIVERSIDE COUNTY, CALIFORNIA

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October 17, 2016 [revised December 7, 2016]

INFORMATION SUMMARY

A. Report Date: October 17, 2016 [revised December 7, 2016]

B. Report Title: Biological Technical Report for Spencer's Crossing [French Valley SP 312 A-2]

C. Project Site Location: Unincorporated Riverside County, California

D. Owner/Applicant: Riverside Mitland 03 LLC
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F. Report Summary: A biological study was performed for the proposed Spencer's Crossing Project. The Project would construct a residential development with parks and developed open space on approximately 222 acres of land. This document provides the results of field studies performed to evaluate the potential occurrence of biological resources and the requirements triggered by environmental laws and regulations. The site occurs within the Southwest Area Plan of the MSHCP, but outside of Criteria Cells and survey areas for Criteria Area plants, mammals, and amphibians, as well as outside of Core and Linkage areas. The Project site occurs in the survey area for Narrow Endemic Plants and Burrowing Owl. Habitat assessments were performed for special-status plants and animals and a jurisdictional waters and wetlands delineation was conducted. The Project site does not support potential habitat for narrow endemic plants, riparian birds, and fairy shrimp and lacks vernal pools. The Project site supports 0.34 acre of potential federal, state, and MSHCP riverine jurisdictional ephemeral waters (no wetlands or riparian vegetation) that would be permanently removed by the proposed Project. A burrowing owl occupied the Project site prior to the focused survey and was then found absent from the Study area. Potentially significant impacts under CEQA would occur to burrowing owl, loggerhead shrike, and raptor use and potentially less than significant impacts under CEQA to white-tailed kite, northern harrier, northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, foraging raptors, and native nesting birds. There is no federal Critical Habitat present.

G. Individuals Conducting Fieldwork: Jeff Ahrens, Dave Moskovitz, Martin Rasnick, Amy Walters, and Tricia Campbell.

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1.0 INTRODUCTION

1.1 Background and Scope of Work

This document provides the results of general biological surveys and a focused biological survey for the Spencer's Crossing (the Project) located in unincorporated 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), and the California Fish and Game Code.

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

The field study focused on a number of primary objectives that would comply with CEQA requirements, including (1) general reconnaissance survey and vegetation mapping; (2) general biological surveys; (3) habitat assessments for special-status plant species (including species with applicable MSHCP survey requirements); (4) habitat assessments for special-status wildlife species (including species with applicable MSHCP survey requirements); (5) assessments for MSHCP riparian/riverine areas and vernal pools; and (6) assessments for areas subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) jurisdiction pursuant to Section 404 of the Clean Water 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 surveys and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium.

1.2 Project Location

The Project occurs in unincorporated Riverside County, California [Exhibit 1 – Regional Map]. Although the Project occurs outside of the limits of a city, it is within the sphere of Murrieta and is located in undeveloped lands south of Scott Road, west of State Route 79, north of Clinton Keith Road, and east of Interstate 215 [Exhibit 2]. The project is within Section 30 of Township 6 south, Range 2 west, of the U.S. Geological Survey (USGS) 7.5" quadrangle maps of Romoland (dated 1953 and photorevised in 1979), Winchester (dated 1953 and photorevised in 1979), Murrieta (dated 1953 and photorevised in 1979), and Bachelor Mountain (dated 1953 and photorevised in 1973)[Exhibit 2 – Vicinity Map]. The Project is bordered by Keller Road to the north, Leon Road to the east, Baxter Road to the south, and Lasker Lane to the west.

1.3 Project Description

Amendment No. 2 to the French Valley Specific Plan (Specific Plan No. 312) modifies the Specific Plan though reconfiguring the boundaries in the northeast corner of the Specific Plan Area (resulting in an increase of acreage from 605.7 acres to 628.5 acres), and increases the target residential unit count by 149 units, from 1,671 to 1,820. This increase in unit count recaptures the units that had been originally approved within the French Valley Specific Plan (SP) and were subsequently removed as part of SP Amendment (A) No. 1, in addition to additional units made possible by the increase in acreage within the Specific Plan. SPA No.2 also relocates and expands the school site, and increases the total parkland acreage north of Baxter Road by providing a 5.6-acre multi-use park, a 3.4-acre private recreation facility, and 1.9 acres reserved for a linear park.

A summary of the land uses implemented by SPA No. 2 is provided in Table 1-1 – Summary Change of Land Use. Refer to Exhibit 3 for the Project detail map.

Specifically, French Valley SPA No. 2 provides the following substantive modifications to the approved Land Use Plan:

- The Planning Areas (PAs) north of Baxter Road have been reconfigured and renumbered, and eight new Planning Areas have been added north of Baxter Road. These revisions have resulted in an addition of 22.8 acres to the Specific Plan Area, from a total of 605.7 acres to 628.5 acres.
- The total number of residential units within the Specific Plan Area has increased by 149 units, from 1,671 to 1,820 total units. This is due to the increase in acreage of the Specific Plan Area and changes to the land use designation of PAs.
- Three PAs (PA 24, PA 26, and PA 33) with the Medium High Density residential (MHDR) land use designation were added to the northeast portion of the Specific Plan Area. PA 24 consists of 15.3 acres and includes a total of 82 residential units, PA 26 consists of 11.8 acres with a total of 60 residential units, while PA 33 consists of 18.2 acres and includes a total of 95 residential units.
- The school site (formerly PA 24) has been relocated to the northeast corner of the Specific Plan Area, and is now shown as PA 42. The acreage of the school site has increased by 1.1 acres, from 10.4 acres to 11.5 acres.
- PA 2E (formerly designated as "Open Space – Water (Drainage)" [OS-W]) has been removed from the Specific Plan Area.
- Although Planning Area 3C is considered part of the "Project site" for purposes of CEQA, there are no components of the proposed Project that would authorize new physical disturbances in this area. The Project merely proposes to re-designate this area from 6.4 acres of "Open Space – Recreation (OS-R)" and 3.5 acres of "Open Space – Water (OS-W)" to instead provide for 7.1 acres of OS-W land uses in order to reflect a previously-approved detention basin associated with an off-site and adjacent tract. The remaining approximately 2.8 acres are now included as part of Planning Area 22, which are included in the Project's physical limits of impact because disturbance of this area would be authorized by Tract Map No. 37053.

- PA 40 has been added to the northwest portion of the Specific Plan Area, and has a land use designation of "Open Space – Conservation" (OS-C). The acreage of PA 40 is 4.4 acres.

Table 1-1. Summary Change of Land Use

Land Use	Approved SP			Proposed Amendment			Change in Use		
	DU	AC	Density	DU	AC	Density	DU	AC	Density
Residential									
MDR[1]	1,621	438.4	3.7	1,533	399.8	3.8	-88	-38.6	0.1
MHDR[2]	50	10.0	5.0	287	55.3	5.2	237	45.3	0.2
Residential Subtotals	**1,671**	**448.4**	**3.7**	**1,820**	**455.1**	**4.0**	**149**	**6.7**	**0.3**
Non-Residential									
PF[3]	--	10.4	--	--	11.5	--	--	1.1	--
OS-R[4]	--	37.0	--	--	40.1	--	--	3.1	--
OS-W[5] (Water Quality)	--	17.5	--	--	17.9	--	--	0.4	--
OS-W[6] (Drainage)	--	31.3	--	--	25.5	--	--	-5.8	--
OS-C[7]	--	19.8	--	--	24.2	--	--	4.4	--
Circulation	--	41.3	--	--	54.2	--	--	12.9	--
Non-Residential Subtotal	**--**	**157.3**	**--**	**--**	**173.4**	**--**	**--**	**16.1**	**--**
Project Totals	**1,671**	**605.7**	**2.8**	**1,820**	**628.5**	**2.9**	**149**	**22.8**	**0.1**

[1] – Medium Density Residential [2] – Medium High Density Residential [3] – Public Facility (School)
[4] – Open Space Recreation (Parks) [5] – Open Space Water (Drainage) [6] – Open Space Water (Detention Basin)
[7] - Open Space Conservation

For this report, the term *Project boundary* encompasses areas that would be affected by the proposed revisions to Specific Plan No. 312, including 198.7 acres within the existing boundaries of Specific Plan No. 312 (SP 312) and 22.8 acres planned to be added to the boundaries of SP 312 [refer to Exhibit 3 – Project Detail Map]. It should be noted that although PA 3C occurs within the *Project boundary* limits as defined herein, PA 3C would not be physically impacted by the proposed Project, as Project-related changes are limited to a land use designation change to reflect previous discretionary approvals that are unrelated to the proposed Project (see above). Based on the limits of disturbance identified by the Project's Tentative Map (TR 37053), the Project would result in physical impacts to 210.9 acres within the Project boundary and approximately 8.3 acres of impacts off site, for a total impact area of 219.2 acres (*Impact Boundary*). The term *Project study area* refers to the 222.1 acres of land (excluding PA 3C) that was studied in support of the proposed Project. Refer to Exhibit 6. The term *Project site* encompasses the Project study area and the Project boundary.

1.4 Western Riverside County Multiple Species Habitat Conservation Plan (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 U.S. Fish and Wildlife Service (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); animals 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 (PQP) 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 Southwest Area Plan of the MSHCP, but is not located within the MSHCP Criteria Area [Exhibit 4A – MSHCP Map] or the MSHCP Criteria Area Plant Species Survey Area (CAPSSA). The Project site is also not located within the MSHCP Mammal or Amphibian Survey Areas, or Core and Linkage areas. However, the Project site is located within the MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) and the MSHCP Burrowing Owl Survey Area [Exhibit 4B – MSHCP Burrowing Owl and Narrow Endemic Plant Species Survey Areas].

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

To adequately identify biological resources in accordance with the requirements of CEQA, Glenn Lukos Associates (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 U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and CDFW;
- Performance of vegetation mapping for the Project site;
- 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;
- Performance of a focused survey for rare plants; and
- Performance of a focused survey for burrowing owl.

The focus of the biological surveys was determined through initial site reconnaissance, a review of the CNDDB [CDFW 2016], CNPS 8th edition online inventory (CNPS 2016), Natural Resource Conservation Service (NRCS) soil data [Exhibit 5 – Soils Map], other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project study area were conducted on foot in the proposed development areas for each target plant or animal species identified below.

Vegetation was mapped directly onto a 200-scale (1"=200') aerial photograph most closely following or Holland (1986). Observations of all plant and wildlife species were recorded during

each of the above mentioned survey efforts [Appendix A: Floral Compendium and Appendix B: Faunal Compendium].

GLA conducted biological studies in order to identify and analyze actual or potential impacts to biological resources associated with development of the Project study area. Table 2-1 provides a summary list of survey dates, survey types, and personnel.

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

Survey Type	2016 Survey Dates	Biologists
General Site Reconnaissance/ Habitat Assessments	January 14, March 4	JA
Focused Burrowing Owl Surveys Survey Area 1 Survey Area 2	 March 4, 15, 25, and April 18 March 8, 17, April 8 and 18	 JA JA
Focused Rare Plant Studies	April 11 March 15, 17, 25, April 8 and 18	DM JA
Jurisdictional Delineation/ Riparian/Riverine and Vernal Pools	January 14, March 4 March 25	JA MR, JA, AW
Vegetation Mapping	March 4, 8, and 25 May 20	JA TC

JA = Jeff Ahrens, DM = David Moskovitz, MR = Martin Rasnick, AW = Amy Walters, TC = Tricia Campbell

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

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

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

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

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

- Occurrence in the CNDDB inventory; and
- Riparian vegetation.

2.1 Botanical Resources

A site-specific survey program was designed to accurately document the botanical resources within the Project study area, and consisted of five components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project study area; (3) general field reconnaissance surveys; (4) vegetation mapping; and (5) habitat assessments and focused surveys for special-status plants (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 *Inventory of Rare and Endangered Plants* (online edition, v8-02) (CNPS 2016); and

- CNDDB for the four USGS 7.5' quadrangles that the Project site occurs within including: Bachelor Mountain, Murrieta, Romoland, Winchester and the 12 surrounding quadrangles including Fallbrook, Hemet, Lake Elsinore, Lakeview, Pechanga, Perris, Sage, San Jacinto, Steele Peak, Temecula, Vail Lake, and Wildomar (CNDDB 2016).

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 and was instead mapped as disturbed ruderal. Plant communities were mapped in the field directly onto a 200-scale (1"=200') aerial photograph. A vegetation map is included as [Exhibit 6 – Vegetation Map]. Representative site photographs are included as [Exhibit 10 – Site Photographs].

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 (2016).

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.

The entire Project site is located within the MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) [Exhibit 4B – MSHCP Burrowing Owl and Narrow Endemic Plant Species Survey Areas]. Pursuant to the MSHCP, the following target species must be evaluated through habitat assessments and focused surveys (if suitable habitat is present): Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*).

2.1.4 Botanical Surveys

GLA biologists David Moskovitz and Jeff Ahrens visited the Project study area on March 15, 17, 25 and April 8, 11, 18, 2016 to conduct general and focused plant surveys. Surveys were conducted in accordance with accepted botanical survey guidelines (CDFG 2009, CNPS 2001, USFWS 2000). As applicable, surveys were conducted at appropriate times based on precipitation and flowering periods. An aerial photograph, and a soil map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Project study area. Surveys were conducted by following meandering transects. All plant species encountered during the field surveys were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984). A complete list of the plant species observed is provided in Appendix A. Scientific nomenclature and common names used in this report follow Baldwin et al (2012), and Munz (1974).

2.2 Wildlife Resources

Wildlife species were evaluated and detected during field surveys by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project study area by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit. A complete list of wildlife species observed within the Project study area is provided in Appendix B. The methodology (including any applicable survey protocols) utilized to conduct general surveys, habitat assessments, and/or focused surveys for special-status animals are included below.

2.2.1 General Surveys

Birds

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

2.2.2 Special-Status Animal Species Evaluated for the Project

A literature search was conducted in order to obtain a list of special-status wildlife species with the potential to occur within the Project site. Species were evaluated based on two factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) 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 biologist Jeff Ahrens conducted habitat assessments for special-status animal species on January 14, 2016. 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

Focused surveys were conducted for only burrowing owl.

Burrowing Owl

The Project site is located within the MSHCP survey area for the burrowing owl (*Athene cunicularia*) [Exhibit 4B – MSHCP Burrowing Owl and Narrow Endemic Plant Species Survey Areas. GLA biologist (Jeff Ahrens) conducted focused surveys for the burrowing owl for all suitable habitat areas within the Project study area. 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 should be conducted between March 1 and August 31. Within areas of suitable habitat, the MSHCP first requires a focused burrow survey to map all suitable burrows. The focused burrow survey was conducted on March 4 and 8, 2016. Focused burrowing owl surveys were conducted on March 4, 15, 25 and April 18 in Survey Area 1 and March 8, 17 and April 8 and 18, 2016 in Survey Area 2 [Exhibit 7 – Burrowing Owl

Survey Results Map]. As recommended by the survey guidelines, the survey visits were conducted from one hour prior to sunrise to two hours after sunrise. Weather conditions during the surveys were conducive to a high level of bird activity.

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

Table 2-2. Summary of Burrowing Owl Survey Conditions

Survey Date	Biologist		Start/End Time	Start/End Temperature	Start/End Wind Speed (mph)	Cloud Cover (%)
	Survey Area 1					
March 4, 2016	JA		0615/1045	43/61	3/2	0/25
March 15, 2016	JA		0630/0900	49/58	3/2	100/0
March 25, 2016	JA		0625/1025	49/66	1/2	0/0
April 18, 2016	JA		0610/1015	50/76	1/2	0/0
	Survey Area 2					
March 8, 2016	JA		0600/0955	41/52	2/4	0/0
March 17, 2016	JA		0630/1005	46/66	2/2	0/0
April 8, 2016	JA		0620/0955	55/56	2/3	100/100
April 18, 2016	JA		0610/1015	50/76	1/2	0/0

JA = Jeff Ahrens

2.3 Jurisdictional Delineation

Prior to beginning the field delineation a 200-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine the locations of potential areas of Corps/CDFW jurisdiction. Since the Project study area has been disked and/or disturbed as part of ongoing dry farming operations and grading by the adjacent landowner, GLA conducted a review of historic aerial photography to discern what streambeds, if any, were identifiable. These areas were also field reviewed to determine if sign of an ordinary high water mark (OHWM), streambed, or drainage pattern was visible within these features.

On March 25, 2016 and May 13, 2016, regulatory specialists from GLA examined the Project study area to determine the limits of Corps jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), Regional Board jurisdiction pursuant to Section 401 of the CWA and Section 13260 of the California Water Code (CWC) [the Porter-Cologne Act], and CDFW jurisdiction pursuant to Division 2, Chapter 6, Sections 1600-1616 of the Fish and Game Code.

Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Potential wetland habitats at the Project study area were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual[1] (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement)[2]. The presence of an Ordinary High Water Mark (OHWM) was determined using the 2008 Field Guide to Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States[3] in conjunction with the Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.[4] While in the field the limits of the OHWM, wetlands, and CDFW jurisdiction were recorded using GPS technology and/or on copies of the aerial photography. Other data were recorded onto the appropriate datasheets. The results of the Jurisdictional Delineation are depicted on [Exhibit 8 – Jurisdictional Delineation Map].

2.4 MSHCP Riparian/Riverine Areas and Vernal Pools

GLA surveyed the Project study area for riparian/riverine areas and vernal pool/seasonal pool habitat on January 14, March 4, and March 25, 2016 (refer to Table 2-1 in Section 2.0). *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*

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

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

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

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

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.*

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.

3.0 REGULATORY SETTING

The proposed Project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state- and federally listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

3.1 State and/or Federally Listed Plants and Animals

3.1.1 State of California Endangered Species Act

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating "No person shall import into this state, export out of

this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

3.1.2 Federal Endangered Species Act

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

3.1.3 State and Federal Take Authorizations for Listed Species

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

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

well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

3.1.4 Take Authorizations Pursuant to the MSHCP

The Western Riverside County MSHCP was adopted on June 17, 2003, and an Implementing Agreement (IA) was executed between the Federal and State Wildlife Agencies (USFWS and CDFW) 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.

Through agreements with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (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 so that the impacts would be 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 Narrow Endemic Plant Species Survey Areas (NEPSSA); Criteria Area Plant Species identified by the Criteria Area Species Survey Areas (CASSA); 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).

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 Non-Listed 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

State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC are designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDB project. Informally listed taxa are not protected, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For this report the following acronyms are used for State special-status species:

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

California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS's Eighth Edition of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* separates plants of interest into five ranks. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California. The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS has developed five categories of rarity that are summarized in Table 3-1.

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

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

3.3 Jurisdictional Waters

3.3.1 Army Corps of Engineers

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

> *(1) All waters which are currently used, 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) The territorial seas;*
> *(4) All impoundments of waters otherwise identified as waters of the United States under this section;*
> *(5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section;*
> *(6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;*
> *(7) All waters in paragraphs (a)(7)(i) through (v) of this section where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. The waters identified in each of paragraphs (a)(7)(i) through (v) of this section are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.*
>
> > *(i) Prairie potholes. Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest.*
> > *(ii) Carolina bays and Delmarva bays. Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.*
> > *(iii) Pocosins. Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.*
> > *(iv) Western vernal pools. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic*

[5] As revised by the Corps and EPA, "Clean Water Rule: Definition of 'Waters of the United States"; Final Rule," 80 Federal Register 124 (29 June, 2015), pp. 37054-37127.

depression, soils with poor drainage, mild, wet winters and hot, dry summers.

(v) Texas coastal prairie wetlands. Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.

(8) All waters located within the 100- year floodplain of a water identified in paragraphs (a)(1) through (3) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (3) of this section or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.

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.*

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands[6]);

[6] Lichvar, R. W. 2013. *The National Wetland Plant List:* 2013 wetland ratings. Phytoneuron 2013-49: 1-241.

- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

B. Corps Jurisdiction Pursuant to the Regulations Existing Prior to August 28, 2015

On October 9, 2015, the U.S. 6th District Circuit Court of Appeals ordered a nationwide stay on the Corps and EPA's definition of waters of the United States under the Clean Water Rule. As a result, the Corps' regulations that was in effect prior to the August 28, 2015 Clean Water Rule is again in effect until such a time as the Court order is satisfied, if this occurs.

Pursuant to Section 404 of the CWA, 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[7]:

(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.

[7] On October 9, 2015, the U.S. Court of Appeals for the 6th Circuit ordered a nationwide stay on the Agency's new definition.

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.

> *(8) Waters of the United States do not include prior converted cropland.*[8] *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 CWA jurisdiction remains with the U.S. Environmental Protection Agency (EPA).*

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark (OHWM) which is defined at 33 CFR 328.3(e) as:

> *...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

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

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

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

The written opinion notes that the court's previous support of the Corps' expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc*.) was for a wetland that <u>abutted</u> a navigable water and that the court did not express any opinion on the

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

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 CWA (regardless of any interstate commerce connection). However, the Corps and U.S. Environmental Protection Agency (EPA) have issued a joint memorandum, which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

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

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

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

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 information pertaining to isolated waters is also included on the *Approved Jurisdictional Determination Form*.

The agencies will assert jurisdiction over the following waters:

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

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

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent

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

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

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

The agencies will apply the significant nexus standard as follows:

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

3. Corps Preliminary Jurisdictional Determination

A *Corps Preliminary Jurisdictional Determination Form* may be used to concede Corps jurisdiction where all streambeds within the project area are considered Corps jurisdictional waters. The project would be able to move forward pursuant to Corps Regulatory Guidance Letter (RGL) 08-02, issued on June 26, 2008, which allows the Corps to issue preliminary jurisdictional determinations (Preliminary JD) for a project. A Preliminary JD allows a project to move forward by setting aside/voluntarily waiving questions regarding CWA jurisdiction over drainages onsite in the interest of allowing expeditiously obtaining a Section 404 Permit.

As stated in RGL 08-02:

While a landowner, permit applicant, or other affected party can elect to request and obtain an approved JD, he or she can also decline to request an approved JD, and instead obtain a Corps individual or general permit authorization based on either a preliminary JD, or, in appropriate circumstances (such as authorizations by non-reporting nationwide general permits), no JD whatsoever. The Corps will determine what form of JD is appropriate for any particular circumstance based on all the relevant factors, to include, but not limited to, the applicant's preference, what kind of permit authorization is being used (individual permit versus general permit), and the nature of the proposed activity needing authorization.

The Corps typically completes Preliminary JDs within 60 days of receipt of the request for such a determination. If the Corps project manager cannot complete the Preliminary JD within the 60-day timeframe, they must provide their supervisor, who would also provide the applicant, with a schedule to complete the determination (i.e., unlike the Rapanos significant nexus guidelines, there is a specific timeframe to complete the Preliminary JD and move forward with the jurisdictional determination, without uncertainty, and the EPA will not be involved with the

Preliminary JD process as the Corps is not required to coordinate with the EPA to review Preliminary JDs).

4. Wetland Definition Pursuant to Section 404 of the Clean Water Act

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Corps 2013 National Wetland Plant List[9]);

- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

3.3.2 Regional Water Quality Control Board

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

Subsequent to the U.S. Supreme Court Case titled Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, et. al (SWANCC) decision, the Chief Counsel for the State Water Resources Control Board issued a memorandum that addressed the effects of the SWANCC decision on the Section 401 Water Quality Certification Program.[10] The

[9] Lichvar, R.W. 2013. National Wetland Plant List: 2013 Wetland Ratings. Phytoneuron 2013-49: 1-241. U.S. Army Corps of Engineers.

[10] Wilson, Craig M. January 25, 2001. Memorandum addressed to State Board Members and Regional Board Executive Officers.

memorandum stating that for waters that are no longer considered subject to federal jurisdiction pursuant to Section 404 of the CWA, but which remain “waters of the state”, the State will continue to regulate discharges under the Porter-Cologne Act. In such cases the applicant must apply for and obtain a Waste Discharge Requirement from the Regional Board.

3.3.3 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1616 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 jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. The CDFW Legal Advisor has prepared the following opinion:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...
- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFW] as natural waterways...
- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

Thus, CDFW jurisdictional limits closely mirror those of the Corps. Exceptions are CDFW's exclusion of isolated wetlands (those not associated with a river, stream, or lake), the addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

4.0 RESULTS

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

4.1 Existing Conditions

The Project site is comprised of approximately 229.20 acres of former agricultural land that is significantly disturbed from long establish agricultural practices including dry farming and disking [Exhibit 6 – Vegetation Map]. The Project site occurs within unincorporated Riverside County and is located south of Keller Road, east of the terminus of Pat Road, north of Baxter Road, and west of Leon Road. Refer to [Exhibit 3 - Vicinity].

Lands directly adjacent to the northwest corner of the Project site are designated as conserved lands under the Western Riverside County Regional Conservation Authority (RCA) [Exhibit 4A]. All other lands adjacent to or in vicinity of the Project site include a mixture of rural and recently constructed high density residential development.

Elevation in the Project site ranges from approximately 1,378 to 1,440 feet above mean sea level (AMSL). The topography consists of gently sloping terrain that supports a predominance of baregound/ruderal vegetation with sporadic rock outcrops concentrated in the north and west portions of the Project site. Areas of disturbed/developed land include an onsite rural residence, recently created stockpile area in the center of the Project site, vehicular access roads, and an existing building in the eastern portion of the Project site.

Three ephemeral drainages (Drainage Complex 1, Drainage 2, and Drainage Complex 3) occur in the northern half of the Project site with all of them eventually draining to Warm Springs Creek [Exhibit 8].

4.2 Vegetation Mapping

The Project site supports the following vegetation types: Disturbed/Developed, Disturbed/Ruderal, and California Buckwheat Scrub. Table 4-1 provides a summary of the vegetation types and their corresponding acreage. Descriptions of each vegetation type follow the table. A Vegetation Map is attached as Exhibit 6. Photographs depicting the Project site are shown in Exhibit 10.

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

VEGETATION Type	Project Site (acres)
California Buckwheat Scrub	0.35
Disturbed/Developed	10.79
Disturbed/Ruderal	218.06
Total	**229.20**

California buckwheat scrub
The Project site supports 0.35 acre of California buckwheat (*Eriogonum fasciculatum*) scrub in the form of three patches. California buckwheat scrub is located in the northeastern corner of the Project site [Exhibit 6].

Disturbed/Developed
The Project site supports 10.79 acres of disturbed/developed lands [Exhibit 6]. These areas consist of vehicular access roads, a rural residential area located in the northern portion of the Project site, and an existing utility structure located immediately west of Leon Road.

Disturbed/Ruderal
The Project site supports 229.20 acres of disturbed/ruderal lands. These lands cover the majority of the Project site and were used for dry farming. These areas are routinely disked for weed abatement, as was the case during the biological study. Dominant plant species observed included London rocket (*Sisymbrium irio*), red-stemmed filaree (*Erodium cicutarium*), cheeseweed (*Malva parviflora*), common fiddleneck (*Amsinckia intermedia*), ripgut grass (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), tocalote (*Centaurea melitensis*), and Russian thistle (*Salsola australis*). Other species detected included doveweed (*Croton setiger*), wild radish (*Raphanus sativus*), and California poppy (*Eschscholzia californica*),

Within some areas of the disturbed/ruderal lands there occur sporadic rock outcroppings. Within the rock outcrops, many of the same ruderal species were found, but other species including California figwort (*Scrophularia californica*), branching phacelia (*Phacelia ramosissima*), and jimsonweed (*Datura wrightii*) were present.

The southern portion of the Project site was being graded as part of ongoing development by the adjacent landowner.

4.3 Special-Status Habitats

The CNDDB identifies the following 10 special-status vegetation communities for the Bachelor Mountain, Murrieta, Romoland, Winchester and surrounding quadrangle maps: Desert Fan Palm Oasis Woodland, Riversidian Alluvial Fan Sage Scrub, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Interior Basalt Flow Vernal Pool, Southern Mixed Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Valley Needlegrass Grassland. The Project site does not contain any special-status vegetation communities, including those identified by the CNDDB.

The three small patches of California buckwheat scrub (totally 0.35 acre) present in the northeastern portion of the Project site are too small to provide habitat for animal species characteristic of sage scrub or to represent a natural vegetation community.

Vernal Pools. The Study area was evaluated for the potential presence of vernal pools in January and March 2016. The lands were checked carefully for ponding and low-lying areas that may have been dry at the time of the site visits, but showed indirect signs of ponding, such as silt deposits, water deposits, and species of plants that need ponding for some portion of their growing period. Vernal pools were determined to be absent from the Study area.

4.4 Special-Status Plants

One special-status plant species, graceful tarplant (*Holocarpha virgata* ssp. *elongata*) was detected at the Project site. Table 4-2 provides a list of special-status plants evaluated for potential occurrence on the Project site through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors: 1) species identified by the CNDDB and CNPS as occurring (either currently or historically) on or in 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

Status

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

State
SE – State Endangered
ST – State Threatened

CNPS
Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.
Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.
Rank 2A – Plants presumed extirpated in California, but common elsewhere.
Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.
Rank 3 – Plants about which more information is needed (a review list).
Rank 4 – Plants of limited distribution (a watch list).

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

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

Occurrence

- Absent – The species is absent from the site, either because the site lacks suitable habitat for the species, the site is located outside of the known range of the species, or focused surveys has confirmed the absence of the species.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

Species Name	Status	Habitat Requirements	Occurrence
Bottle liverwort *Sphaerocarpos drewei*	Federal: None State: None CNPS: Rank 1B.1 MSHCP None	Openings in chaparral and coastal scrub.	Absent
California ayenia *Ayenia compacta*	Federal: None State: None CNPS: Rank 2B.3 MSHCP None	Rocky soils in Mojavean desert scrub and Sonoran desert scrub.	Absent
California beardtongue *Penstemon californicus*	Federal: None State: None CNPS: Rank 1B.2 MSHCP Covered	Sandy soils in chaparral, lower montane coniferous forest, and pinyon and juniper woodland.	Absent
California Orcutt grass *Orcuttia californica*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(b)	Vernal pools	Absent
California satintail *Imperata brevifolia*	Federal: None State: None CNPS: Rank 2B.1 MSHCP None	Mesic soils in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub.	Absent
California screw moss *Tortula californica*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Sandy soil in chenopod scrub, and valley and foothill grassland.	Absent
Campbell's liverwort *Geothallus tuberosus*	Federal: None State: None CNPS: Rank 1B.1 MSHCP None	Occurs on soil in coastal scrub (mesic) and vernal pools.	Absent
Chaparral nolina *Nolina cismontana*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Chaparral, coastal sage scrub. Occurring on sandstone or gabbro substrates.	Absent
Chaparral sand-verbena *Abronia villosa* var. *aurita*	Federal: None State: None CNPS: Rank 1B.1 MSHCP None	Sandy soils in chaparral, coastal sage scrub.	Absent
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).	Absent
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.	Absent
Delicate clarkia *Clarkia delicata*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Often in gabbroic soils in chaparral and cismontane woodland.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Gander's ragwort *Packera ganderi*	Federal: None State: Rare CNPS: Rank 1B.2 MSHCP None	Chaparral (burns, gabbroic outcrops)	Absent
Graceful tarplant *Holocarpha virgata* ssp. *elongata*	Federal: None State: None CNPS: Rank 4.2 MSHCP(e)	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.	Detected an estimated 200 individuals in the northeastern portion of the Project site.
Hall's monardella *Monardella macrantha* ssp. *hallii*	Federal: None State: None CNPS: Rank 1B.3 MSHCP Covered	Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland.	Absent
Hammitt's clay-cress *Sibaropsis hammittii*	Federal: None State: None CNPS: Rank 1B.2	Clay soils in openings of chaparral, and in valley and foothill grasslands.	Absent
Intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CNPS: Rank 1B.2 MSHCP Covered	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Absent
Intermediate monardella *Monardella hypoleuca ssp.intermedia*	Federal: None State: None CNPS: Rank 1B.3 MSHCP None	Usually in the understory of chaparral, cismontane woodland, and lower montane coniferous forest (sometimes)	Absent
Jaeger's (bush) milk-vetch *Astragalus pachypus* var. *jaegeri*	Federal: None State: None CNPS: Rank 1B.1 MSHCP Covered	Sandy or rocky soils in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland.	Absent
Lemon lily *Lilium parryi*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(f)	Mesic soils in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest.	Absent
Little mousetail *Myosurus minimus* ssp. *apus*	Federal: None State: None CNPS: Rank 3.1 MSHCP(d)	Valley and foothill grassland, vernal pools (alkaline soils).	Absent
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	Federal: None State: None CNPS: Rank 1B.2 MSHCP Covered	Clay soils in chaparral, coastal sage scrub, meadows and seeps,and valley and foothill grasslands	Absent
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(b)	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Absent
Mesa horkelia *Horkelia cuneata* var. *puberula*	Federal: None State: None CNPS: Rank 1B.1 MSHCP None	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Mission Canyon bluecup *Githopsis diffusa* ssp. *filicaulis*	Federal: None State: None CNPS: Rank 3.1 MSHCP None	Chaparral (mesic, disturbed areas)	Absent
Mojave tarplant *Deinandra mohavensis*	Federal: None State: SE CNPS: Rank 1B.3 MSHCP(e)	Chaparral (mesic soils) and riparian scrub.	Absent
Mud nama *Nama stenocarpum*	Federal: None State: None CNPS: Rank 2B.2 MSHCP(d)	Marshes and swamps	Absent
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	Absent
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.	Absent
Orcutt's brodiaea *Brodiaea orcuttii*	Federal: None State: None CNPS: Rank 1B.1 MSHCP Covered	Mesic, clay soils (sometimes serpentinite) in chaparral, meadows and seeps, valley and foothill grassland, vernal pools, closed-cone coniferous forest, cismontane woodland.	Absent
Orcutt's linanthus *Linanthus orcuttii*	Federal: None State: None CNPS: Rank 1B.3 MSHCP None	Openings in chaparral, lower montane coniferous forest, and pinyon and juniper woodland.	Absent
Orcutt's pincushion *Chaenactis glabriuscula* var. *orcuttiana*	Federal: None State: None CNPS: Rank 1B.1 MSHCP None	Coastal bluff scrub (sandy soils) and coastal dunes.	Absent
Palmer's grapplinghook *Harpagonella palmeri*	Federal: None State: None CNPS: Rank 4.2 MSHCP Covered	Chaparral, coastal sage scrub, valley and foothill grassland. Occurs in clay soils.	Absent
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Chenopod scrub, playas, vernal pools.	Absent
Parish's chaenactis *Chaenactis parishii*	Federal: None State: None CNPS: Rank 1B.3 MSHCP None	Rocky soils in chaparral.	Absent
Parish's meadowfoam *Limnanthes alba* ssp. *parishii*	Federal: None State: SE CNPS: Rank 1B.2 MSHCP Covered	Vernally mesic soils in lower montane coniferous forests, meadows and seeps, and vernal pools.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Parry's spineflower *Chorizanthe parryi* var. *parryi*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(e)	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Absent
Parry's tetracoccus *Tetracoccus dioicus*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Chaparral and coastal sage scrub.	Absent
Payson's jewelflower *Caulanthus simulans*	Federal: None State: None CNPS: Rank 4.2 MSHCP Covered	Sandy or granitic soils in chaparral and coastal scrub.	Absent
Plummer's mariposa lily *Calochortus plummerae*	Federal: None State: None CNPS: Rank 4.2 MSHCP(e)	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Absent
Prostrate vernal pool navarretia *Navarretia prostrata*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Absent
Rainbow manzanita *Arctostaphylos rainbowensis*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(e)	Chaparral	Absent
Ramona horkelia *Horkelia truncata*	Federal: None State: None CNPS: Rank 1B.3 MSHCP None	Clay, gabbroic soils in chaparral and cismontane woodland.	Absent
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CNPS: Rank 4.3 MSHCP None	Chaparral, coastal sage scrub	Absent
Round-leaved filaree *California macrophylla*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(d)	Clay soils in cismontane woodland, valley and foothill grassland	Absent
Salt Spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CNPS: Rank 2B.2 MSHCP None	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Absent
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Absent

Species Name	Status	Habitat Requirements	Occurrence
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.	Absent
San Diego button-celery *Eryngium aristulatum* var. *parishii*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP Covered	Mesic soils in vernal pools, valley and foothill grasslands, coastal sage scrub.	Absent
San Diego hulsea (sunflower) *Hulsea californica*	Federal: None State: None CNPS: Rank 1B.3 MSHCP None	Openings and burned areas in chaparral, lower and upper montane coniferous forest.	Absent
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.	Absent
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.	Absent
Santa Lucia dwarf rush *Juncus luciensis*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, and vernal pools.	Absent
Santa Rosa Basalt brodiaea *Brodiaea santarosae*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Basaltic soils in valley and foothill grassland.	Absent
Santiago Peak phacelia *Phacelia keckii*	Federal: None State: None CNPS: Rank 1B.3 MSHCP None	Closed-cone coniferous forest, chaparral	Absent
Shevock's copper moss *Mielichhoferia shevockii*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Cismontane woodland (metamorphic, rock, mesic)	Absent
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP(b)	Sandy soils in alluvial scrub, chaparral, and cismontane woodland.	Absent
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.	Absent
Southern mountains skullcap *Scutellaria bolanderi* ssp. *austromontana*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Mesic soils in chaparral, cismontane woodland, lower montane coniferous forest.	Absent

Species Name	Status	Habitat Requirements	Occurrence
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).	Absent
Sticky dudleya *Dudleya viscida*	Federal: None State: None CNPS: Rank 1B.2 MSHCP(f)	Coastal bluff scrub, chaparral, coastal sage scrub; rocky soils.	Absent
Tecate cypress *Hesperocyparis forbesii*	Federal: None State: None CNPS: Rank 1B.1 MSHCP None	Closed-cone coniferous forest and chaparral.	Absent
Thread-leaved brodiaea *Brodiaea filifolia*	Federal: FT State: SE CNPS: Rank 1B.1 MSHCP(d)	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Absent
Vail Lake ceanothus *Ceanothus ophiochilus*	Federal: FT State: SE CNPS: Rank 1B.1 MSHCP(d)	Chaparral (gabbroic or pyroxenite-rich outcrops)	Absent
White rabbit-tobacco *Pseudognaphalium leucocephalum*	Federal: None State: None CNPS: Rank 2B.2 MSHCP None	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Absent
Wiggins' cryptantha *Cryptantha wigginsii*	Federal: None State: None CNPS: Rank 1B.2 MSHCP None	Often on clay soils in coastal scrub.	Absent
Woven-spored lichen *Texosporium sancti-jacobi*	Federal: None State: None CNPS: Rank 3 MSHCP None	On soil, small mammal pellets, dead twigs, and on *Selaginella* spp; chaparral (openings).	Absent
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.	Absent
Yucaipa onion *Allium marvinii*	Federal: None State: None CNPS: Rank 1B.1 MSHCP(b)	Chaparral (clay, openings).	Absent

4.4.1 Special-Status Plants Detected at the Project Site

The rare plant focused surveys detected one special status plant species, graceful tarplant. This species has a CNPS Rank of 4.2 (defined as uncommon in California but can be fairly endangered depending on the location). Under the MSHCP, graceful tarplant is not yet a covered species until species-specific conservation objectives are met. As indicated in Table 4-2 above, approximately 200 dried individuals at one location in the northeastern portion of the Project site were documented.

4.5 Special-Status Animals

The following special-status animals were detected at the Project site: burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). Table 4-3 provides a list of special-status animals evaluated for potential occurrence on 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 vicinity of the Project site, and 2) any other special-status animals known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site.

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

Status

Federal	**State**
FE – Federally Endangered	SE – State Endangered
FT – Federally Threatened	ST – State Threatened
FPT – Federally Proposed Threatened	SC– State Candidate
FC – Federal Candidate	CFP – California Fully-Protected Species
BGEPA– Bald and Golden Eagle Protection Act	SSC – Species of Special Concern

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

Western Bat Working Group (WBWG)
H – High Priority
LM – Low-Medium Priority
M – Medium Priority
MH – Medium-High Priority

Occurrence

- Absent – The species is absent from the site, either because the site lacks suitable habitat for the species, the site is located outside of the known range of the species, or focused surveys has confirmed the absence of the species.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

Species Name	**Status**	**Habitat Requirements**	**Occurrence**
Invertebrates			
Quino checkerspot butterfly	Federal: FE State: None	Larval and adult phases each have distinct habitat	Absent

Species Name	Status	Habitat Requirements	Occurrence
Euphydryas editha quino	MSHCP Covered	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.	
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.	Absent
San Diego fairy shrimp *Branchinecta sandiegonensis*	Federal: FE State: None MSHCP None	Seasonal vernal pools	Absent
Santa Rosa Plateau fairy shrimp *Linderiella santarosae*	Federal: None State: None MSHCP(a)	Resides in Southern Basalt Flow vernal pools ranging from 25 to over 100,000 square meters in area.	Absent
Vernal pool fairy shrimp *Branchinecta lynchi*	Federal: FT State: None MSHCP(a)	Seasonal vernal pools	Absent
Fish			
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.	Absent
Amphibians			
Arroyo toad *Anaxyrus californicus*	Federal: FE State: SSC MSHCP(c)	Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats. Breeding pools must be open and shallow with minimal current, and with a sand or pea gravel substrate overlain with sand or flocculent silt. Adjacent banks with sandy or gravely terraces and very little herbaceous cover for adult and juvenile foraging areas, within a moderate riparian canopy of cottonwood, willow, or oak.	Absent
California red-legged frog	Federal: FT State: SSC	Lowlands and foothills in or near permanent sources	Absent

Species Name	Status	Habitat Requirements	Occurrence
Rana draytonii	MSHCP(c)	of deep water with dense, shrubby, or emergent riparian vegetation.	
Coast Range newt *Taricha torosa*	Federal: None State: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	Absent
Western spadefoot *Spea hammondii*	Federal: None State: SSC MSHCP	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Absent
Reptiles			
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.	Absent
Coast patch-nosed snake *Salvadora hexalepis virgultea*	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Absent
Coronado Island skink *Plestiodon skiltonianus interparietalis*	Federal: None State: SSC	Grassland, woodlands, pine forests, chaparral, especially in open sunny areas such as clearings and the edges of creeks and rivers. Prefers rocky areas near streams with lots of vegetation. Also found in areas away from water.	Absent
Orangethroat whiptail *Aspidoscelis hyperythra*	Federal: None State: SSC	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	Absent
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: SSC MSHCP	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Absent
Two-striped garter snake *Thamnophis hammondii*	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	Absent
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,	Absent

Species Name	Status	Habitat Requirements	Occurrence
		including logs, rocks, submerged vegetation, and undercut banks.	
Coastal whiptail *Aspidoscelis tigris stejnegeri*	Federal: None State: None MSHCP	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Absent
Birds			
Bald eagle (nesting & wintering) *Haliaeetus leucocephalus*	Federal: Delisted State: SE, FP 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.	Absent
Burrowing owl (burrow sites & some wintering sites) *Athene cunicularia*	Federal: BCC 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 present. Individual observed and detected during initial site reconnaissance, prior to the burrowing owl focused survey window. Not detected during focused surveys.
Coastal cactus wren (San Diego & Orange County only) *Campylorhynchus brunneicapillus sandiegensis*	Federal: None State: SSC MSHCP	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Absent
Coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: SSC MSHCP	Low elevation coastal sage scrub and coastal bluff scrub.	Absent
Golden eagle (nesting & wintering) *Aquila chrysaetos*	Federal: None State: FP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Absent
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.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Loggerhead shrike (nesting) *Lanius ludovicianus*	Federal: BCC State: SSC MSHCP(a)	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	Confirmed present. Project site lacks potential nesting habitat (shrubs, trees) but provides suitable foraging 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.	Absent
Northern harrier (nesting) *Circus cyaneus*	Federal: None State: SSC MSHCP	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Potential to occur. The Project site is far too disturbed for the species to potentially nest, but may occur in a foraging role during spring/fall migration or over winter.
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.	Absent.
Summer tanager (nesting) *Piranga rubra*	Federal: None State: SSC	Low-elevation willow and cottonwood woodlands, and in higher-elevation mesquite and saltcedar stands.	Absent
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.	Absent
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: None State: SCT MSHCP	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Absent
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.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT State: SE MSHCP(a)	Dense, wide riparian woodlands with well-developed understories.	Absent
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: FP MSHCP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Confirmed present. Project site lacks potential nesting habitat (shrubs, trees) but provides foraging habitat.
Yellow warbler (nesting) *Setophaga petechia*	Federal: BCC State: SSC MSHCP	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Absent
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.	Absent
Dulzura pocket mouse *Chaetodipus californicus femoralis* *Chaetodipus fallax fallax*	Federal: None State: SSC	Coastal scrub, grassland, and chaparral, especially at grass-chaparral edges	Absent
Jacumba pocket mouse *Perognathus longimembris internationalis*	Federal: None State: SSC	Arid plains and desert-like country. Grassland, alluvial sage scrub, and coastal sage scrub.	Absent
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	Federal: None State: SSC MSHCP(c)	Fine, sandy soils in coastal sage scrub and grasslands.	Absent
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	Federal: None State: SSC MSHCP	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Confirmed Present
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.	Absent

Species Name	Status	Habitat Requirements	Occurrence
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.	Confirmed Present
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: MSHCP	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Absent
Stephens' kangaroo rat *Dipodomys stephensi*	Federal: FE State: ST MSHCP	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Absent
Pallid bat *Antrozous pallidus*	Federal: None State: SSC WBWG_H-High Priority	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Absent
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: SSC WBWG_M-Medium Priority	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Absent
Townsend's big-eared bat *Corynorhinus townsendii*	Federal: None State: SCT WBWG_H-High Priority	Coniferous forests and woodlands, deciduous riparian woodland, semi-desert and montane shrublands.	Absent
Western Mastiff bat *Eumops perotis californicus*	Federal: None State: SSC WBWG_H-High Priority	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.	Absent
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC WBWG_H-High Priority	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Absent
Yuma myotis *Myotis yumanensis*	Federal: None State: None WBWG_LM-Low-Medium Priority	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies	Absent

Species Name	Status	Habitat Requirements	Occurrence
		in caves, mines, buildings or crevices.	

4.5.1 Special-Status Wildlife Species Observed within the Project Site

Burrowing Owl. As summarized in Section 2.2.4, focused breeding surveys were conducted to determine presence/absence for burrowing owl. The burrowing owl is a state SSC and is a covered but not yet adequately conserved species under the MSHCP. During the initial site reconnaissance visit conducted on January 20, 2016, one burrowing owl was detected on site within a small rock outcrop area located in the northeastern portion of the Project site [refer to Exhibit 7]. The burrowing owl was not detected again during the focused breeding surveys. Due to the lack of detection, it is presumed that this owl was wintering on site, which can extend into mid-March. In addition, a burrow with whitewash and remnants of a cast pellet was detected within a very small rock outcrop area located immediately south of Hilton Road and west of the onsite rural residence [refer to Exhibit 7]. A tenant who at the time of the survey resided within the onsite rural residence confirmed that at least one burrowing owl had occupied the area, the previous year. Exhibit 7 depicts the location of the burrowing owl and burrow with sign.

White-tailed Kite. This species is state FP (Fully Protected) species and is a fully covered species under the MSHCP. White-tailed kite is not expected to nest on the Project site due to lack of potential nesting habitat, but may forage on the site. This species was detected on the Project site during one or more field visits.

Loggerhead Shrike. As summarized in Table 4-3, this species was detected on the Study area and suitable foraging habitat is present. There is no potential nesting habitat present on the Project site. This species is a state SSC and is a fully covered species under the MSHCP.

Northwestern San Diego Pocket Mouse. This species of pocket mouse was detected on the Study area during the field visits. Northwestern San Diego pocket mouse is a state SSC and is a fully covered species under the MSHCP.

San Diego Black-tailed Jackrabbit. Several San Diego black-tailed jackrabbits were observed within the northern portion of the Project site adjacent to the RCA conserved lands. The San Diego black-tailed jackrabbit is a SSC and is a species fully covered under the MSHCP.

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

Northern Harrier (*Circus cyaneus*). This species may forage on the Project site during migration and/or over winter in the general area. There is no nesting habitat present. Northern harrier is a fully covered species under the MSHCP and is a state SSC. This species was not detected during any of the field studies.

4.5.3 Critical Habitat

The Project site does not occur in any federal designated or proposed Critical Habitat.

4.6 Raptor Use

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

It is important to understand that the MSHCP does not provide MBTA and Fish and Game Code take for raptors covered under the Plan.

Appendix B (faunal compendium) provides a list of the hawks and falcons detected over the course of the field studies. These species were Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), ferruginous hawk (*B. regalis*), American kestrel (*Falco sparverius*), and burrowing owl (refer to Section 4.5.1). Great horned owl (*Bubo virginianus*) and barn owl (*Tyto alba*) may also be present. The ferruginous hawk migrates through the region in spring/fall and may over winter in the area. The Project site lacks potential nesting habitat (e.g., mature trees, shrubs) for the other species but is expected to provide foraging habitat for all of these species in the form of insects, spiders, lizards, snakes, small mammals, and other birds.

4.7 Nesting Birds

The disturbed/ruderal and California buckwheat scrub present on the Project site can provide suitable habitat for nesting native birds. Direct impacts to native nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.[11]

4.8 Soil Mapping

The Natural Resource Conservation Service (NRCS) identifies the following soil types (series) as occurring (currently or historically) within the Project site [Exhibit 5]:

[11] The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

Auld Clay, 2 to 8 Percent Slopes (AuC)
The Auld series consists of well-drained soils that developed on decomposing gabbro. This gently sloping soil (2 to 8 percent slopes) occurs on the uplands. Elevations range from 1,400 to 2,700 feet. In a typical profile, the surface layer is reddish-brown and dark reddish-brown clay about 28 inches thick. Beneath this layer is reddish-brown and light reddish-brown loam. At a depth of about 44 inches is weathered basic igneous rock. Vegetation primarily consists of annual grasses, forbs, and black sage. The permeability of the soil is moderately slow, and the available water holding capacity is 5.0 to 8.0 inches. Runoff is slow to medium and the hazard of erosion is slight to moderate. This soil is used for dryland grain, pasture, and range.

Buchenau Silt Loam, 2 to 8 Percent Slopes, Eroded (BkC2)
The Buchenau series consists of moderately well-drained soils on alluvial fans. These soils developed in mixed alluvium and are underlain by a platy, calcareous hardpan. Elevations range from 700 to 1,500 feet. In a typical profile, the surface layer is brown silt loam about 10 inches thick. The subsoil is yellowish-brown and pale brown clay loam averaging 29 inches thick. The substratum is light brownish-gray loam, which overlies a cemented, platy hardpan at a depth of about 24 to 36 inches. Vegetation largely consists of annual grasses, saltgrass, and forbs. Runoff is medium and the hazard of erosion is moderate. This soil is used for dryland grain and pasture, range, and for nonfarm purposes.

Buren Loam, Deep, 2 to 8 Percent Slopes, Eroded (BxC2)
The Buren series consists of moderately well-drained soils on terraces and alluvial fans. These soils developed in alluvium from mixed sources and are underlain by a weakly cemented pan. Elevations range from 700 to 3,000 feet. In a typical profile, the surface layer is yellowish-brown and brown loam about 12 inches thick. The subsoil is brown and pale brown clay in the upper portion. It becomes light olive-brown loam at a depth of 28 inches. The substratum is yellowish-brown, weakly cemented loam at a depth of about 37 inches. This soil can be up to 50 inches deep to the pan. Vegetation primarily consists of annual grasses, forbs, and chamise. Runoff is slow to medium and the hazard of erosion is slight to moderate. This soil is used for dryland grain and pasture, range, for irrigated citrus, alfalfa, and truck crops, and for non-farm purposes.

Cajalco Fine Sandy Loam, 2 to 8 Percent Slopes, Eroded (CaC2)
The Cajalco series consists of well-drained soils developed in decomposing gabbro and other basic igneous rocks. These soils occur on uplands and elevations range from 900 to 2,700 feet. In a typical profile, the surface layer is yellowish-brown fine sandy loam about 10 inches thick. The subsoil is brown fine sandy loam and loam. The depth of this soil to partly weathered rock is 30 to 36 inches. Included in mapping are some small areas that are 36 to 46 inches deep to weathered rock. Runoff is slow to medium and the hazard of erosion is slight to moderate. Vegetation primarily consists of annual grasses, forbs, and chamise. This soil is used for dryland grain, pasture, range, irrigated citrus, and non-farming purposes.

Cajalco Fine Sandy Loam, 8 to 15 Percent Slopes, Eroded (CaF2)
The Cajalco series consists of well-drained soils developed in decomposing gabbro and other basic igneous rocks. These soils occur on uplands and elevations range from 900 to 2,700 feet. In a typical profile, the surface layer is yellowish-brown fine sandy loam about 10 inches thick.

The subsoil is brown fine sandy loam and loam, which grades to light yellowish-brown loam at a depth of about 18 inches. At a depth ranging from 18 to 46 inches is weathered gabbro. Runoff is medium on this soil, and the hazard of erosion is moderate. Vegetation consists mainly of annual grasses, forbs, and chamise. This soil is used for dryland pasture, range, grain, for irrigated citrus, and for nonfarm purposes.

Fallbrook Sandy Loam, 8 to 15 Percent Slopes, Eroded (FaD2)
The Fallbrook series consists of well-drained soil occurring on uplands. These soils developed on granodiorite and tonalite. Elevations range from 700 to 3,500 feet. The A horizon is slightly acid to neutral in reaction and dark brown, brown, or yellowish brown in color. The Bt horizon is reddish brown to dark brown or yellowish red in color and loam to clay loam or sandy clay loam in texture. The C horizon is slightly acid to neutral, light brownish-yellow to dark-gray, weathered granodiorite or tonalite. Depth to the weathered rock commonly ranges from 20 to 36 inches but may be as shallow as 10 inches in some Fallbrook soils. Included with this soil in mapping are small areas of Cieneba sandy loam, Vista coarse sandy loam, Bonsall fine sandy loam, Monserate sandy loam, and Buren fine sandy loam. Runoff is medium, and the hazard of erosion is moderate. Vegetation associated with the Fallbrook soils series consists mainly of annual grasses, oaks, flat-top buckwheat, and chaparral. This Fallbrook soil is used for dry land grain and pasture, for irrigated citrus, and for home sites.

Fallbrook Rocky Sandy Loam, Shallow, 8 to 15 Percent Slopes, Eroded (FcD2)
The Fallbrook series consists of well-drained soil occurring on uplands. These soils developed on granodiorite and tonalite. Elevations range from 700 to 3,500 feet. In a typical profile, the surface layer is brown sandy loam about 14 inches thick. The subsoil is reddish-brown sandy clay loam. At a depth of about 10 to 20 inches is weathered rock. Rock outcrops occupy 2 to 10 percent of the surface. Included with this soil in mapping are a few small areas that are 20 to 36 inches deep to weathered rock. Also included are some areas where slopes are 2 to 8 percent. Runoff is medium, and the hazard of erosion is moderate. This soil is used for dry land pasture and range, and as a source of water.

Fallbrook Fine Sandy Loam, 2 to 8 Percent Slopes, Eroded (FfC2)
The Fallbrook series consists of well-drained soil occurring on uplands. These soils developed on granodiorite and tonalite. Elevations range from 700 to 3,500 feet. In a typical profile, the surface layer is brown fine sandy loam about 14 inches thick. The subsoil is reddish-brown sandy clay loam. At a depth of about 24 inches is weathered tonalite. Included with this soil in mapping are a few small areas that are more than 36 inches deep to weathered rock. Runoff on this soil is slow, and the hazard of erosion is slight. This soil is used for dry land pasture, for irrigated citrus and alfalfa, and for home sites.

Fallbrook Fine Sandy Loam, Shallow, 8 to 15 Percent Slopes, Eroded (FkD2)
The Fallbrook series consists of well-drained soil occurring on uplands. These soils developed on granodiorite and tonalite. Elevations range from 700 to 3,500 feet. In a typical profile, the surface layer is brown fine sandy loam about 14 inches thick. The subsoil is reddish-brown sandy clay loam. At a depth of about 10 to 20 inches is weathered rock. Included with this soil in mapping are a few small areas having a gravelly fine sandy loam or a very fine sandy loam

surface layer. Runoff is medium, and the hazard of erosion is moderate. This soil is used for dry land pasture, for irrigated citrus, and for home sites.

Las Posas Loam, 2 to 8 Percent Slopes (LaC)
The Las Posas series consists of well-drained soils which occur on uplands, and developed on gabbro and other intrusive basic igneous rocks. Typically, the surface layer is reddish-brown loam and clay loam about 12 inches thick. The subsoil is dark-red clay and red heavy clay loam. At a depth of about 32 inches is yellowish-red weathered gabbro. A few small areas include weathered gabbro at a depth ranging from 45 to 60 inches. Runoff is slow to medium on this soil, and the hazard of erosion is slight to moderate. Vegetation consists primarily of annual grasses, forbs, chamise, flat-top buckwheat, and black sage. This soil is used for irrigated citrus and truck crops, and for dryland grain and pasture.

Porterville Clay, 0 to 8 Percent Slopes (PoC)
The Porterville series consists of well-drained soils on alluvial fans. These soils developed in alluvium consisting mainly of very fine basic igneous materials. Elevations range from 1,000 to 2,700 feet and the average rainfall ranges from 10 to 14 inches. In a typical profile, the surface layer is dark reddish-brown clay about 15 inches thick. The underlying layer is typically brown and yellowish-red clay. Included with this soil in mapping are small areas on slopes of 8 to 15 percent. A small portion of this soil consists of moderately saline-alkali soil with gravelly or cobbly surface layers. Runoff is slow and the hazard of erosion is slight. Vegetation primarily consists of annual grasses, forbs, salvia, and buckwheat. This soil is used for dryland grain and pasture, irrigated citrus, and for nonfarm purposes.

Porterville Clay, Moderately Deep, Slightly Saline-Alkali, 0 to 5 Percent Slopes (PtB)
The Porterville series consists of well-drained soils on alluvial fans. These soils developed in alluvium consisting mainly of very fine basic igneous materials. Elevations range from 1,000 to 2,700 feet and the average rainfall ranges from 10 to 14 inches. In a typical profile, the surface layer is dark grayish-brown to brown clay surface layer about 24 to 42 inches deep over calcareous marl and is saline-alkali. The underlying layer is typically brown and yellowish-red clay. Included with this soil in mapping are some small areas that are not saline-alkali. The available water holding capacity of this soil is 4.5 to 7.5 inches. Runoff is slow and the hazard of erosion is slight. Vegetation primarily consists of annual grasses, forbs, salvia, and buckwheat. This soil is used for irrigated alfalfa, permanent pasture, truck crops, dryland grain and pasture, and for nonfarm purposes.

Ramona Very Fine Sandy Loam, 0 to 8 Percent Slopes, Eroded (ReC2)
The Ramona series consists of well drained soils on alluvial fans and terraces. These soils developed in alluvium consisting mainly of granitic materials. Elevations range from 500 to 3,500 feet. In a typical profile, the surface layer is dark-brown very fine sandy loam about 23 inches thick. The subsoil extends to a depth of about 68 inches, and consists of brown loam and reddish-brown and yellowish-red sandy clay loam. The substratum is strong-brown fine sandy loam. Included in this soil in mapping are a few small severely eroded areas. Vegetation primarily consists of annual grasses, forbs, chamise, salvia, and flat-top buckwheat. This soil is used for irrigated citrus, peaches, truck crops, alfalfa, and grain, for dry land grain and pasture, and for home sites.

None of the soils within the Study Area are identified as hydric in the SCS's publication, Hydric Soils of the United States[12]; nor are any of these soils listed as hydric in the Soil Survey for Western Riverside County, California.

4.9 Jurisdictional Delineation

The Study area has been significantly disturbed and disked as part of ongoing dry farming operations. Additionally, the southern third of the Study Area has been graded as part of ongoing development by the adjacent landowner.

Since the Study area has been disked and/or disturbed as part of ongoing dry farming operations and grading by the adjacent landowner, GLA conducted a review of historic aerial photography to discern what streambeds, if any, were identifiable. Based on GLA's review of historic aerial photography, the site has been consistently disked and/or disturbed for several years, but a few drainage features are discernable that may potentially be subject to Corps jurisdiction pursuant to Section 404 of the CWA, Regional Board jurisdiction pursuant to Section 401 of the CWA and/or Section 13260 of the CWC, and CDFW jurisdiction pursuant to Section 1602 of the Fish and Game Code. These areas were also field reviewed to determine if sign of an Ordinary High Water Mark (OHWM), streambed, or drainage pattern was visible within these features.

Based on GLA's review of historic aerial photography, and our field review, Corps, Regional Board, and CDFW jurisdiction is present on the Study area and totals 0.34 acre, none of which consists of jurisdictional wetlands, and includes 6,459 linear feet of ephemeral streambed. All Corps, Regional Board, and CDFW jurisdiction within the Study area is limited to Drainage Complex 1, Drainage 2, and Drainage Complex 3, all of which ultimately drain into Warm Springs Creek, which is tributary to Murrieta Creek, which is tributary to the Santa Margarita River, which is tributary to De Luz Creek, which is tributary to the downstream portion of the Santa Margarita River, which is tributary to the Pacific Ocean, a Traditional Navigable Water (TNW). The amount of potential jurisdiction present in the Study area is the same for Corps, Regional Board, and CDFW jurisdiction. Table 4-4 below provides a summary of jurisdiction by drainage feature.

Table 4-4: Potential Corps, Regional Board, and CDFW Jurisdiction

Drainage Features	Potential Jurisdiction (Acres)	Linear Feet of Streambed
Drainage Complex 1	0.12	1,958
Drainage 2	0.04	1,035
Drainage Complex 3	0.18	3,466
Total	**0.34**	**6,459**

[12] United States Department of Agriculture, Soil Conservation Service. 1991. Hydric Soils of the United States, 3rd Edition, Miscellaneous Publication Number 1491. (In cooperation with the National Technical Committee for Hydric Soils.)

Drainage Complex 1, Drainage 2, and Drainage Complex 3 each drain in a general east/southeast to west/northwest direction and have been disturbed through ongoing dry farming operations. The minimal vegetation associated with the drainage features include London rocket (*Sisymbrium irio,* UPL*),* cheeseweed (*Malva parviflora,* UPL), red-stemmed filaree (*Erodium cicutarium,* UPL), and red brome (*Bromus madritensis* subsp. *rubens,* UPL*).*

A graphic depicting the limits of Corps jurisdiction is attached as Exhibit 8.

4.10 MSHCP Riparian/Riverine Areas and Vernal Pools

Vegetation communities associated with riparian systems 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 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) because it supports MSHCP covered species. Specifically, the MSHCP states that "riparian/riverine areas are natural lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." 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. For this analysis, all non-man-made features that qualify as state streambeds are considered MSHCP riparian/riverine resources.

The riparian/riverine jurisdiction in the Study area is identical to that of CDFW jurisdiction. It totals 0.34 acre, none of which consists of wetlands, and includes 6,459 linear feet of ephemeral streambed. Refer to Section 4.9 for a full summary.

5.0 IMPACT ANALYSIS

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

Indirect impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project, but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other off site areas where the effects of the project may be

experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasives, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. A cumulative impact can occur from multiple individual effects from the same project, or from several projects. The cumulative impact from several projects is the change in the environment resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

5.1 California Environmental Quality Act (CEQA)

5.1.1 Thresholds of Significance

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

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

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

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

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

5.1.2 Criteria for Determining Significance Pursuant to CEQA

Appendix G of the 1998 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2 Impacts to Native Vegetation Communities

Table 5-1 provides a summary of proposed impacts to vegetation on the Project site. The proposed Project would permanently impact approximately 0.35 acre of native California buckwheat scrub vegetation. This vegetation occurs as several small patches and is not expected to provide habitat for species that rely on sage scrub vegetation communities given the very

limited amount of it present [Exhibit 6]. The Project would also permanently remove 210.09 acres of nonnative disturbed/ruderal vegetation. The proposed permanent removal of 0.35 acre of California buckwheat scrub vegetation would not be a significant impact under CEQA, neither would the removal of 210.09 acres of disturbed/ruderal vegetation. However, the removal of sage scrub by the proposed project would be fully mitigated through compliance with the biological requirements of the MSHCP.

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

VEGETATION Type	**Project Site (acres) 100% Removal**
California Buckwheat Scrub	0.35
Disturbed/Developed	8.76
Disturbed/Ruderal	210.09
Total	**219.20**

5.3 Impacts to Special-Status Plants

The proposed Project would impact a small population of graceful tarplant, roughly 200 individuals in the northeastern portion of the Project site. The Project site does not provide potential habitat for any other special status plants. The CNPS classifies graceful tarplant as "as uncommon in California but can be fairly endangered depending on the location" and under the MSHCP will not become a covered species until conservation of the species in the Plan Area has been demonstrated by reaching Objective 3. Objective 3 states "[w]ithin the MSHCP Conservation Area, confirm 10 localities (locality in this sense is not smaller than one quarter section) with 1,000 individuals each (unless a smaller population has been demonstrated to be self-sustaining)." To date, no studies have been prepared to demonstrate whether fewer than 1,000 individuals would comprise a self-sustaining population.

Its classification by CNPS is likely driven by its distribution in California being limited to portions of counties with characteristically high levels of development. It occurs on lands with mild topography (e.g., valley floor) and hence characteristically prone to development.

This species is an annual that is still common to western Riverside County and also occurs in San Diego and Orange counties. It is also very tolerant to routine ground disturbances such as disking and mowing. This species was not found to occur anywhere else on the Project site.

For some CNPS Rank 4 species, impacts would be judged potentially significant under CEQA. However, graceful tarplant is a species that is extremely tolerant of disking and other forms of weed abatement, and in some circumstances will "disappear" when such routine disturbances are halted. Because of this species' commonness to western Riverside County and the size of the population impacted by the Project, impacts under CEQA would be less than significant.

5.4 Impacts to Special-Status Animals

The proposed Project would result in the loss of habitat that supports the following special status species: burrowing owl, white-tailed kite, loggerhead shrike, northwestern San Diego pocket

mouse, and San Diego black-tailed jackrabbit. Another species, northern harrier, was not detected but may potentially forage on the Project site. A discussion of each species is provided below.

Burrowing Owl. This species was not present in the spring (2016), when the focused survey was performed, but was observed prior in January (2016) during reconnaissance work. Implementation of the proposed project would remove 210.44 acres of potential burrowing owl habitat. The burrowing owl observed in January and then not detected during the survey may have been an overwintering individual that migrated out of the area for breeding and may return in the fall and winter, may have left the area permanently, or may have died. The removal of occupied burrowing owl habitat under CEQA would be a potentially significant impact. Through consistency with the MSHCP, potential impacts to burrowing owl by the proposed Project would be fully mitigated under CEQA. Under the MSHCP, if a site has burrowing owl(s) but is outside of the MSHCP Criteria Area (which the Project is outside), the following action(s) will be taken:

1. If the site contains, or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than 3 pairs of burrowing owls, then the on-site burrowing owls will be passively or actively relocated following accepted protocols.
2. If the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.

None of the criteria above apply to the proposed Project. As such, the on-site burrowing owls will be passively or actively relocated following accepted protocol. This would be consistent with the MSHCP. Refer to Section 6.0 for further details.

White-tailed Kite. This is species is a state FP (Fully Protected) species and is a fully covered species under the MSHCP. Implementation of the proposed Project would permanently remove 210.44 acres of potential foraging habitat for white-tailed kite. There is no potential nesting habitat on the Project site. The removal of 210.44 acres of potential foraging habitat is not expected to be a significant impact under CEQA. Regardless, consistency with the MSHCP would provide full mitigation under CEQA for the loss of foraging habitat.

Loggerhead Shrike. Implementation of the proposed Project would remove an estimated 210.44 acres of potential foraging habitat for loggerhead shrike. This species is a state SSC and is a fully covered species under the MSHCP. As such, there are no survey requirements. Due to the decline of this species in western Riverside County, the removal of 210.44 acres of shrike foraging habitat may be a potentially significant impact under CEQA. However, because it is a fully covered species, consistency with the MSHCP provides the necessary mitigation under CEQA.

Northern Harrier. This species was not detected during any of the field studies but may forage on the Project site during migration or winter. There is no potential for this species to breed in the area. Northern harrier is a fully covered species under the MSHCP and is a state SSC.

Development of the Project site would remove 210.44 acres of potential foraging habitat. This habitat loss is not judged a significant impact given the degraded condition of the site.

Raptor Use. Raptors (Birds of Prey) include owls, hawks, eagles, and falcons. Common species of raptors (e.g. red-tailed hawk, American kestrel, great horned owl) as well as less common special-status species (i.e. northern harrier, white-tailed kite,) have potential to forage on the Project site. The proposed Project would remove an estimated 210.44 acres of potential foraging habitat (disturbed/ruderal, small patches of California buckwheat scrub vegetation). The Project site does not support potential nesting habitat for raptors. The loss of 210.44 acres of potential foraging habitat would be a significant impact under CEQA given the amount of potential habitat proposed for removal and the special-status raptors detected over the course of the field studies. However, the special-status raptors present are also covered species under the MSHCP and thus potential impacts would be fully mitigated by the MSHCP.

Northwestern San Diego Pocket Mouse. This species is a state SSC and is a fully covered species under the MSHCP. The Project is proposing to permanently remove an estimated 210.44 acres of potential habitat for this species. The Project site is expected to support only a modest population given the routine disking and lack of natural vegetation communities. As such the removal of 210.44 acres of potential habitat for this species is not judged to be a significant impact under CEQA.

San Diego Black-tailed Jackrabbit. Several San Diego black-tailed jackrabbits were observed on the Project site adjacent to the RCA conserved lands. The San Diego black-tailed jackrabbit is a SSC and is a species fully covered under the MSHCP. Although this species was more common to western Riverside County in past decades, black-tailed jackrabbit is still common to existing natural open lands and even those with high degrees of disturbance. The proposed removal of 210.44 acres of routinely disked lands would be less than significant under CEQA.

5.5 Impacts to Critical Habitat

The proposed Project would not impact lands designated as critical habitat by the USFWS, as none are present in the Project site.

5.6 Impacts to Nesting Birds

The Project has the potential to impact active native bird nests if vegetation is removed during the nesting season (January 15 to September 15). Impacts to nesting native birds are prohibited by the MBTA and California Fish and Game Code. Although impacts to native birds are prohibited by MBTA and similar provisions of California Fish and Game Code, impacts to native birds by the proposed Project would not be a significant impact under CEQA. The native 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., house finch, killdeer). 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.

5.7 Impacts to Wildlife Migration/Nurseries

The Project site lacks migratory wildlife corridors and wildlife nursery sites. The Project site does not occur within MSHCP Cores or Linkages. The proposed Project would not interfere or impact (1) the movement of native resident or migratory fish or wildlife species or (2) established native resident or migratory wildlife corridors, or (3) impede the use of native wildlife nursery sites. No impact would occur.

5.8 Impacts to Jurisdictional Waters

Implementation of the proposed Project would permanently impact 0.34 acre (6,459 linear feet of ephemeral streambed) of potential federal and state jurisdiction, none of which consists of jurisdictional wetlands. All of Drainage Complex 1, Drainage 2, and Drainage Complex 3 would be permanently removed by the Project [Exhibit 8]. These features do not support riparian vegetation (herbaceous or woody) and would support water flow only during and shortly after rainfall. These features do not provide habitat to plant or wildlife species beyond what the adjacent uplands provide. Although removal of these features trigger CWA Sections 401 and 404 and Fish and Game Code 1602 permitting/authorizations, the removal of 0.34 acre of these shallow, ephemeral drainages would not significantly impact water resources or associated biological resources in the vicinity or at a regional level. The proposed impact would be less than significant under CEQA.

5.9 Impacts to MSHCP Riparian/Riverine Areas

The Project would permanently remove 0.34 acre of riparian/riverine resources that are shallow ephemeral features that do not provide habitat for plants and animals beyond that of the adjacent uplands. No riparian vegetation is present (herbaceous or woody). As discussed in Section 5.8 above, the removal of these drainages poses a less than significant impact to water and biological resources. However, because the Project is receiving coverage under the MSHCP for impacts to other biological resources, it must be consistent with the Plan requirements. 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 addressing the removal of 0.34 acre of riparian/riverine resources.

5.10 Indirect Impacts to Biological Resources

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

The Project is not expected to result in significant indirect impacts to special-status biological resources, with the implementation of measures pursuant to the MSHCP Urban/Wildlands Interface Guidelines (*Volume I, Section 6.1.4* of the MSHCP). These guidelines are intended to address indirect effects associated with locating projects (particularly development) in proximity to the MSHCP Conservation Area. Existing MSHCP Conservation Area is directly adjacent to the northwest corner of the Project site [refer to Exhibit 4A]. To minimize potential edge effects, the guidelines are to be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area. The Project will implement measures consistent with the MSHCP guidelines to address the following:

- Drainage;
- Toxics;
- Lighting;
- Noise;
- Invasives;
- Barriers; and
- Grading/Land Development.

5.10.1 Drainage

Proposed Projects in proximity to the MSHCP Conservation Area shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.

The Project's contractor will develop a Stormwater Pollution Prevention Plan (SWPPP) to address runoff and potential water quality degradation during construction. Exhibit 4A illustrates the location of the existing MSHCP conserved lands adjacent and in vicinity of the Project site. A detention basin is proposed in the developed open space at the northwest corner of the Project site to capture and treat water surface runoff from the development.

5.10.2 Toxics

Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, habitat or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. Measures such as those employed to address drainage issues shall be implemented. The proposed Project will implement a SWPPP that will address runoff during construction (refer to Section 6.0).

5.10.3 Lighting

Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. If night lighting is required during construction, shielding shall be incorporated to ensure ambient lighting in the MSHCP Conservation Area is not increased. Exhibit 4A illustrates the location of the existing MSHCP conserved lands adjacent to the northwest corner of the Project site. As shown on Exhibit 9 [Conceptual Wall and Fence Plan], open space and a wall (block wall) is proposed along the northwest corner of the Project site. This would buffer the existing MSHCP conserved lands from potential night lighting effects. Refer to Section 6.0 for measures.

5.10.4 Noise

Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards. Exhibit 4A illustrates the location of the existing MSHCP conserved lands adjacent to the northwest corner of the Project site. Exhibit 9 (PA3E, PA41) also shows the proposed open space elements that will occur in the northwest corner of the proposed development (including block wall), thus providing the necessary buffer between the development and the existing conserved lands.

5.10.5 Invasives

Projects adjacent to the MSHCP Conservation Area shall avoid the use of invasive plant species in landscaping, including invasive, non-native plant species listed in *Volume I*, Table 6-2 of the MSHCP.

5.10.6 Barriers

Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms. The proposed Project will have a wall between the development and the existing MSHCP Conserved lands in the northwest corner of the Project site. Exhibit 4A shows the location of existing MSHCP Conserved lands in relationship with the proposed Project and Exhibit 9 illustrates the proposed locations of open space (PA3E, PA41) and walls/fencing.

5.10.7 Grading/Land Development

The MSHCP states that manufactured slopes associated with development shall not extend into the MSHCP Conservation Area. No manufactured slopes are proposed adjacent to the MSHCP conserved lands.

5.11 Cumulative Impacts to Biological Resources

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

Anticipated cumulative impacts are addressed by the MSHCP, which, as currently adopted, addresses 146 "Covered Species" that represent a broad range of habitats and geographical areas within western Riverside County, including threatened and endangered species and regionally- or locally-sensitive species that have specific habitat requirements and conservation and management needs. The MSHCP addresses biological impacts for take of Covered Species within the MSHCP area. Impacts to Covered Species and establishment and implementation of a regional conservation strategy and other measures included in the MSHCP are intended to address the federal, state, and local mitigation requirements for these species and their habitats. Specifically, Section 4.4 of the MSHCP states that:

> *The MSHCP was specifically designed to cover a large geographical area so that it would protect numerous endangered species and habitats throughout the region. It is the projected cumulative effect of future development that has required the preparation and implementation of the MSHCP to protect multiple habitats and multiple endangered species.*

Of the biological resources present, implementation of the proposed Project was judged to cause potentially significant impacts to burrowing owl, loggerhead shrike, and raptor foraging habitat. Given the population declines of both species as breeders and the decline of raptor foraging habitat in western Riverside County, it is feasible the proposed Project could make a cumulatively considerable contribution to the regional decline of these two species and raptor foraging habitat. These species are covered species under the MSHCP and the special-status raptors associated with the potential cumulative impact to foraging habitat are also covered species. Consistency with the Plan would fully mitigate for these potential cumulative impacts under CEQA.

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 and an individual was detected in January 2016, prior to the breeding focused survey. The species was not present by March 2016, when the focused survey was performed. MSHCP Objective 6 for burrowing owls requires that a

pre-construction survey be performed within 30 days prior to Project ground disturbance. However, given the mercurial nature of the burrowing owl on the site, it is prudent to assume the Project site may be occupied by the species in the future. The following measure will be implemented to avoid direct impacts to burrowing owls and to ensure consistency with the MSHCP:

- A qualified biologist will perform a burrowing owl site visit between 6 am and 12 pm to all potentially suitable habitat within the Project site between two and four months prior to Project ground disturbance. Given the amount of potential habitat, no less than 5 hours will be spent on the site looking for direct and/or indirect burrowing owl sign. A survey this far in advance to Project ground disturbance allows lead-time should the species be found. If no owls and/or sign are detected, then a pre-construction survey as detailed below will be implemented. If only burrowing owl sign is detected, and it cannot be discerned whether the species is still occupying the site, either (a) additional visit(s) will be performed until it can be determined whether burrowing owl occupies the site or not or (b) assume occupation and implement a Burrowing Owl Management Plan (see below). If additional site visits determine the species is absent, then the pre-construction survey provided below will be implemented.

    - **Pre-Construction Survey** - A qualified biologist will conduct a pre-construction presence/absence survey for burrowing owls within 14 days prior to site disturbance. If burrowing owls are detected onsite, the owls will be relocated/excluded from the site outside of the breeding season following accepted protocols, and subject to the approval of the RCA and wildlife agencies.
    - **Burrowing Owl Management Plan** – A management plan will be drafted in coordination with the Regional Conservation Authority (RCA) and CDFW that will detail the relocation of owls from the Project site, passively and/or actively. It is important to have early coordination with the RCA and CDFW to ensure the project schedule is maintained.

6.2 Nesting Birds

Development of the Project site does not pose a biologically significant impact to native nesting birds under CEQA. This is because the species of native birds with potential to nest on the Project site are very common to abundant to the region (e.g. house finch) and the number of individuals possibly impacted would not substantially reduce existing populations. The MBTA and the Fish and Game Code do not make a distinction based upon the stability and/or abundance of populations, but instead prohibit the "take" of any native bird. As such, the following is a recommendation for complying with the MBTA and the Fish and Game Code. Vegetation clearing of each phase will be conducted outside of the nesting season (January 15 through September 15). 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 Project site, including disking, demolition activities, and grading. If active nests of native species are identified, the biologist shall establish suitable buffers around the nests, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Typically established buffers are greater for raptors than songbirds

and depend upon the species, the nesting stage, and type of construction activity proposed. The buffer should be 300 feet for raptors and 150 feet for songbirds; unless specifically determined by a qualified biologist familiar with the nesting phenology of the nesting species.

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

6.3 Riparian/Riverine Resources

The removal of 0.34 acre of riverine resources triggers the requirement under the MSHCP that a DBESP be drafted and approved by the Wildlife Agencies. The DBESP details the type of resource proposed for impact, why avoidance was not feasible, and the compensation provided to ensure biologically equivalent or superior preservation. The features proposed for impact will be compensated at a 2:1 ratio. The Wildlife Agencies are provided the DBESP for review by the Permittee and they have 60 days to review the DBESP and provide comments. If no comments are provided by the Wildlife Agencies within 60 days, the DBESP is considered approved. If comments are received, the comments need to be addressed until the Permittee and the Wildlife Agencies are in agreement.

6.4 Invasive Species

The Project shall avoid the use of invasive plant species in landscaping, including invasive, non-native plant species listed in Volume I, *Table 6-2* of the MSHCP.

6.5 Drainage

The Project's contractor shall develop and implement a SWPPP to address runoff and potential water quality degradation during construction.

6.6 Lighting

Any construction activities occurring during nighttime shall direct lighting away from the existing MSHCP conserved lands adjacent to the northwest corner of the Project site. Post construction, all lighting along the perimeter of the west boundary of the Project site, particularly street lamps, shall be downcast luminaries and shall be shielded and oriented in a manner that will prevent spillage or glare into the MSHCP conserved lands.

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 is located within the Southwest Area Plan of the MSHCP, but is not located within the MSHCP Criteria Area [Exhibit 4A – MSHCP Map]. The Project site is also not located within the MSHCP Core and Linkage areas. As such, the proposed Project has not been identified by the MSHCP for reserve assembly and is not subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process.

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

The Study area was reviewed for the potential presence of vernal pools on January 14, March 4, and March 25, 2016 (refer to Table 2-1 in Section 2.0). The lands were checked carefully for ponding and low-lying areas that may have been dry at the time of the site visits, but showed indirect signs of ponding, such as silt deposits, water deposits, and species of plants that need ponding for some portion of their growing period. Vernal pools and potential habitat for fairy shrimp were determined to be absent from the Study area.

The riparian/riverine jurisdiction in the Study area is identical to that of CDFW jurisdiction. It totals 0.34 acre of ephemeral streambed, none of which consists of wetlands. Refer to Section 4.9 for a full summary. The removal of this resource triggers a DBESP. Refer to Section 6.3 above for additional information on the DBESP.

The Project site lacks riparian vegetation and thus, does not provide potential habitat for least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*).

7.3 Protection of Narrow Endemic Plants

Volume I, Section 6.1.3 of the MSHCP requires that within identified Narrow Endemic Plant Species Survey Areas (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.

The Project site is located within the MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) for the following target species: Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, and Wright's trichocoronis [Exhibit 4B].The Study area lacked potential habitat for these species and although a focused survey was performed for non-MSHCP special status plants, no NEPSSA plants were found.

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. To minimize such edge effects, the guidelines shall be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area and address the following:

- Drainage;
- Toxics;
- Lighting;
- Noise;
- Invasive species;
- Barriers;
- Grading/Land Development.

As discussed in Section 5.0 of this report, the Project will implement applicable measures as it relates to temporary construction impacts to minimize adverse indirect impacts on special-status resources within adjacent MSHCP Conserved Lands. The proposed Project will be consistent with *Section 6.1.4* of the MSHCP. Refer to Section 6.0 for measures.

7.5 Additional Survey Needs and Procedures

The Project site is not located within the MSHCP survey areas for Criteria Area Plant species (CAPSSA), mammals, or amphibians, and does not occur in existing or proposed Core and Linkage areas. However, the Project site is located within the Burrowing Owl Survey Area [Exhibit 4B]. A focused survey for burrowing owl was performed and the species was not found. However, during field work prior to the focused survey, an individual burrowing owl was observed and detected (by sign) in the northern portion of the Study area. Refer to Exhibit 7 for the results of the focused survey. The entire Project site would be developed. Using guidance provided by the MSHCP, conservation of the Project site or a portion thereof is not required. However, the MSHCP requires that if burrowing owl is found occupying the Project site in the future, either passive or active relocation is necessary. Refer to the burrowing owl measure in Section 6.0 above.

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).

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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: _December 7, 2016_____

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