

BIOLOGICAL RESOURCES ASSESSMENT AND
WESTERN RIVERSIDE COUNTY MSHCP CONSISTENCY ANALYSIS

BAXTER VILLAGE
APNs 367-180-015 & 367-180-043

CITY OF WILDOMAR, RIVERSIDE COUNTY, CALIFORNIA



SEPTEMBER 2013

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CITY OF WILDOMAR, RIVERSIDE COUNTY, CALIFORNIA

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Biological Resources Assessment and Western Riverside County MSHCP Consistency Analysis

Baxter Village
APNs 367-180-015 & 367-180-043
City of Wildomar, Riverside County, California

Project Location:

U.S. Geological Survey (USGS) 7.5-minute
Wildomar topographic quadrangle map, Section 26, T. 6 S., R. 4 W.

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Report Date:

September 2013

Biological Resources Assessment and Western Riverside County MSHCP Consistency Analysis

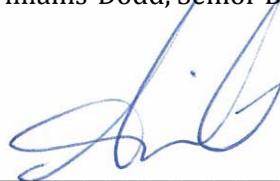
Baxter Village
APNs 367-180-015 & 367-180-043
City of Wildomar, Riverside County, California

The undersigned certify that this report is a complete and accurate account of the findings and conclusions of a biological resources assessment and Western Riverside County MSHCP consistency analysis for the above-referenced project.

PCR Services Corporation



Ceri Williams-Dodd, Senior Biologist II



Amir Morales, Principal Regulatory Scientist

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1.0 INTRODUCTION

1.1 BACKGROUND AND PURPOSE

This report presents the findings of a Biological Resources Assessment (BRA) and a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis conducted by **PCR Services Corporation (PCR)** for Assessor Parcel Numbers (APNs) 367-180-015 and 367-180-043, Baxter Village, in the City of Wildomar (City), Riverside County (County), California. APNs 367-180-015 and 367-180-043 are proposed for development as mixed-use residential and commercial facilities (Project). The Project comprises 35.96 acres on-site and 9.08 acres of off-site areas. The purpose of this report is to satisfy the requirements of the California Environmental Quality Act (CEQA) and to support approvals that Strata Equity Group, Inc. (Project Applicant) is requesting from the City and Responsible Agencies (Agencies).

1.2 SOURCES

This report is based on information compiled through field reconnaissance and appropriate reference materials, in addition to field surveys conducted by PCR. Field surveys included a general biological survey and vegetation mapping, a jurisdictional waters and wetland delineation, and focused surveys for special-status plants and burrowing owl (*Athene cunicularia*). The information sources used in preparation of this report are provided in section 9.0 *References*.

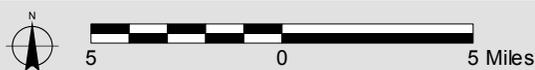
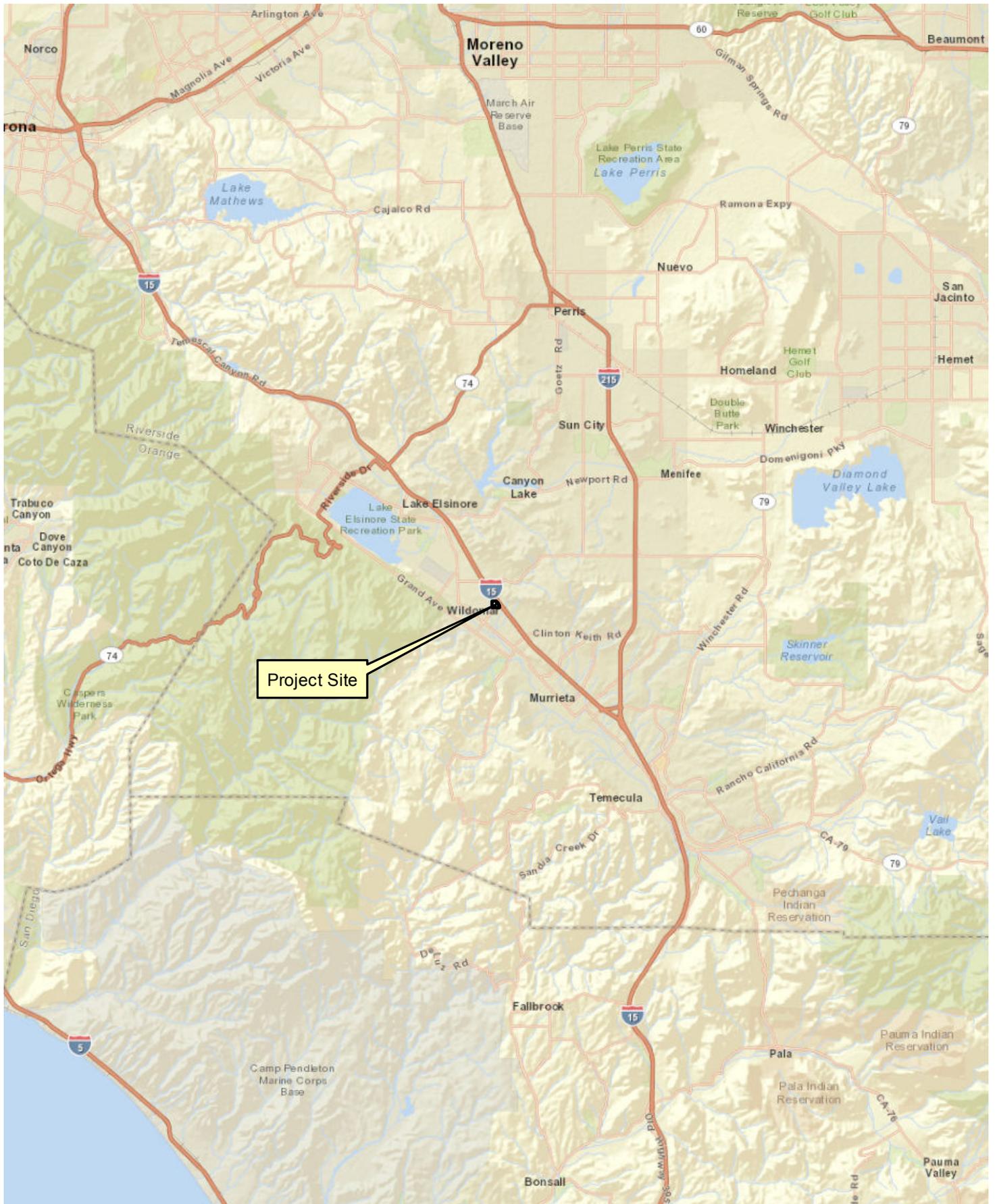
1.3 PROJECT SITE LOCATION

The Project site is generally situated just southwest of Interstate 15 (I-15), as shown in **Figure 1, Regional Map**. Specifically, the Project site is located northwest of the intersection of I-15 and Baxter Road. The Project site can be found on the U.S. Geological Survey (USGS) 7.5' Wildomar topographic quadrangle map, Section 26, T. 6 S., R. 4 W. (USGS 1953), as shown in **Figure 2, Vicinity Map**.

1.4 SCOPE OF STUDY

The scope of this report encompasses descriptions of the Project, methods of study, and existing site conditions, in addition to an evaluation of potential impacts to sensitive biological resources pursuant to CEQA thresholds and regulatory requirements including the Western Riverside County MSHCP. Avoidance, minimization, and/or mitigation measures are proposed to reduce any significant impacts.

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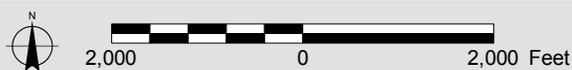
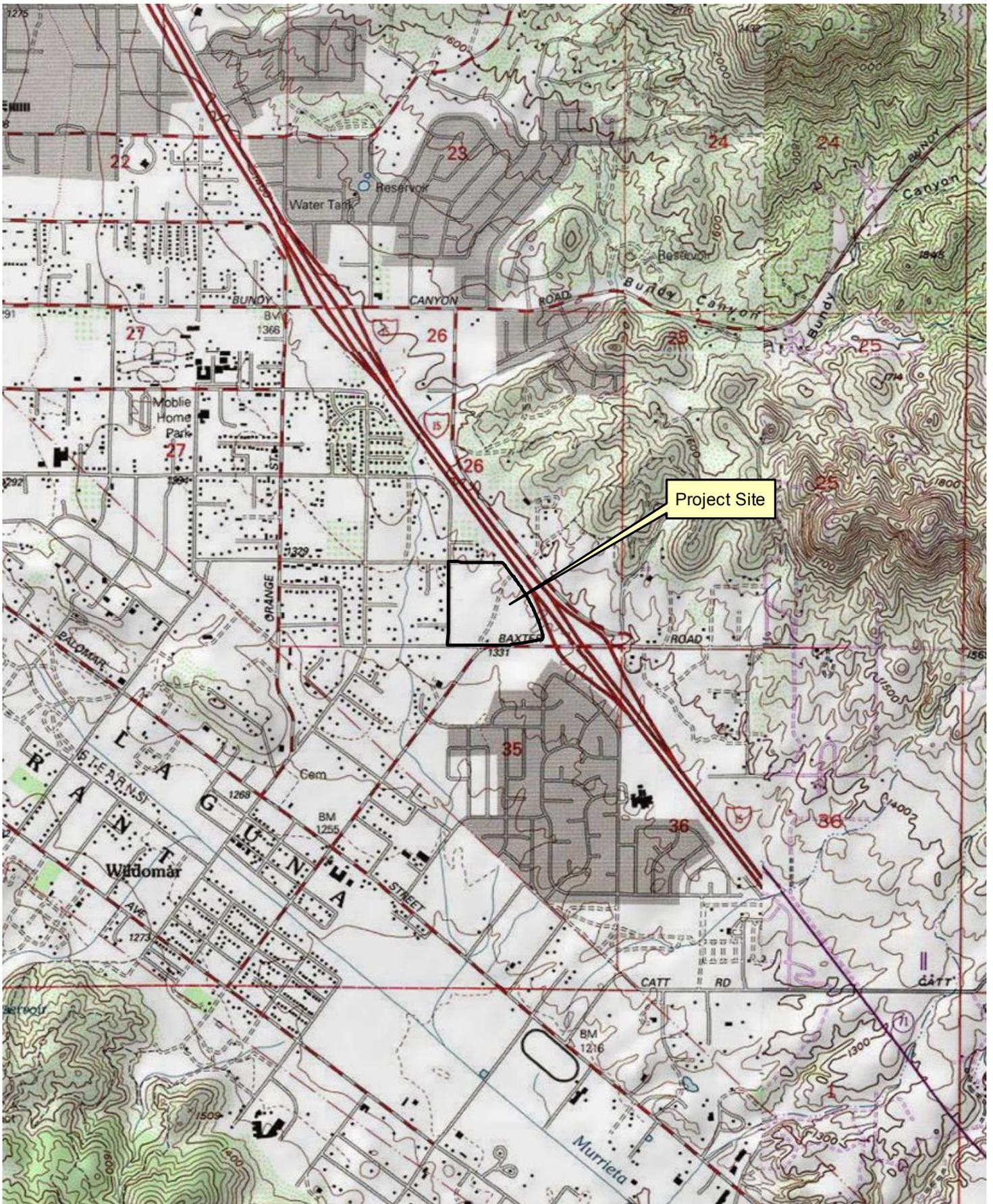


Regional Map

FIGURE

1

Baxter Village APNs 367180015 & 367180043
 Source: ESRI Street Map, 2009; PCR Services Corporation, 2013.



Vicinity Map

FIGURE

2

Baxter Village APNs 367180015 & 367180043

Source: USGS Topographic Series (Murrieta, Wildomar, CA); PCR Services Corporation, 2013.

2.0 PROJECT DESCRIPTION

2.1 PROJECT DESCRIPTION

The proposed Project is a mixed-use residential and commercial development. The residential portion includes single family homes and apartments on the majority of the site. Specifically, single family residential houses are proposed along the entire western portion of the site, including 67 two-story front loaded homes with approximately 4,200 square feet lots totaling 9.8 acres. Three story walk-up apartment buildings are proposed in the northeastern portion of the site totaling 204 units and 480 parking spaces on 10.8 acres. A recreation and leasing building is also proposed as part of the apartment complex. The proposed commercial portion of the Project is located in the southeastern portion of the site and comprises 75,000 square feet of buildings and 412 parking spaces on 11.4 acres. The proposed Project footprint is depicted on **Figure 3**, *Conceptual Site Plan*.

Additional features of the Project include a community multi-use trail, a recreation area/retention basin in the southwestern corner, a second retention basin in the southeastern corner, and a landscape buffer along the eastern boundary adjacent to the I-15. The main entry and secondary entry are both located off Central Avenue.

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Conceptual Site Plan

Baxter Village APNs 367-180-015 & 367-180-043

Source: KTG, 2013.

3.0 METHODS OF STUDY

3.1 APPROACH

This report is based on information compiled through a review of appropriate databases and reference materials, and field reconnaissance. A general biological survey and vegetation mapping was conducted, in addition to a jurisdictional waters and wetlands delineation and focused surveys for special-status plants and the burrowing owl.

3.2 LITERATURE REVIEW

The report began with a review of relevant literature on the biological resources of the Project site and surrounding vicinity. The California Natural Diversity Database (CNDDDB), a California Department of Fish and Wildlife (CDFW¹) species account database, was reviewed for all pertinent information regarding the localities of known observations of sensitive species and habitats in the vicinity of the Project site (CNDDDB 2013). The vicinity of the Project site included the following eight USGS topographic quadrangles: Lake Elsinore, Romoland, Murrieta, Temecula, Fallbrook, Margarita Peak, Sitton Peak and Alberhill. Federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) (USFWS 2013a), CDFW, and the California Native Plant Society (CNPS) (CNPS 2013) were reviewed in conjunction with anticipated federally and state listed species potentially occurring within the vicinity. Other data sources reviewed include USFWS critical habitat maps (USFWS 2013b) and United States Department of Agriculture Natural Resources Conservation Service (NRCS) soils mapping (NRCS 2012). In addition, numerous regional flora and fauna field guides were utilized to assist in the identification of species and suitable habitats, and relevant local policies were referenced such as the Western Riverside County MSHCP (Dudek and Associates 2003). A list of all relevant references reviewed is included in section 9.0 *References*.

3.3 FIELD INVESTIGATIONS

On November 27, 2012, a general biological survey and vegetation mapping was conducted by PCR Senior Biologist Ezekiel Cooley to document existing conditions relating to plant communities, and a delineation of jurisdictional waters and wetlands was conducted by PCR Principal Regulatory Scientist Amir Morales to identify the presence of drainages and/or wetland features. The observed vegetation communities and drainage features were mapped on aerial photographs. Survey coverage of the entire Project site, with special attention to sensitive habitats or those areas potentially supporting sensitive flora or fauna, was ensured using aerial photographs. Focused surveys were also conducted for special-status plants and burrowing owls in April, May, June and August 2013. During the course of all field visits, an inventory of plant and wildlife species observed was compiled. The methods for these field investigations are described in detail below.

¹ Previously known as the California Department of Fish and Game (CDFG). The name change was effective on January 1, 2013.

3.3.1 Natural Community Mapping

Natural vegetation communities were mapped directly in the field utilizing a 150-scale (1"=150') aerial photograph based on dominant species. Natural community names and descriptions follow Oberbauer (2008), which is based on Holland (1986). After completing the fieldwork, the natural community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages.

3.3.2 General Plant Inventory

All plant species observed during the field surveys were either identified in the field and recorded in field notes, or collected and later identified using taxonomic keys and added to the inventory. Regional field guides were utilized for the identification of plants, as necessary. Plant taxonomy follows Hickman (1993). Common plant names, when not available from Hickman, were taken from Munz (1974) and/or Clarke (2007). The NRCS PLANTS Database was also utilized (NRCS 2013). Scientific names are used during the first mention of a species; common names only are used in the remainder of the text. Since common names vary significantly between references, one common name per species is used consistently throughout the report. Special-status plant species are discussed below in section 3.3.4 *Special-Status Plant Species*.

3.3.3 General Wildlife Inventory

All wildlife species observed during the field surveys, as well as any diagnostic sign (call, tracks, nests, scat, remains, or other sign), were recorded in field notes. Binoculars and regional field guides were utilized for the identification of wildlife, as necessary. Wildlife taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists' Union (2012 and 1998) for birds, and Jameson and Peeters (1988) for mammals. Scientific names are used during the first mention of a species; common names only are used in the remainder of the text. Since common names vary significantly between references, one common name per species is used consistently throughout the report. Special-status wildlife species are discussed below in section 3.3.5 *Special-Status Wildlife Species*.

3.3.4 Sensitive Habitats

Sensitive habitats are listed by CDFW on their *List of California Terrestrial Natural Communities* (CDFW 2003).² Sensitive habitats for the Project site were identified based on the natural communities mapped for the Project site (see section 3.3.1 *Natural Community Mapping*).

3.3.5 Special-Status Plant Species

The potential for special-status plant species was assessed based upon the known occurrence of species in the area as identified from USFWS, CDFW, and CNPS databases (see section 3.2 *Literature Review*), and the presence or absence of suitable habitat within the Project site based on natural community vegetation mapping (see section 3.3.1 *Natural Community Mapping*). Suitable habitat was defined as areas with appropriate vegetation communities, soils and/or elevation at mean sea level (MSL) to support the species based on known occurrences in those habitats and/or CDFW and CNPS documented habitat descriptions for

² Available online at: http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp. Sensitive (also referred to by CDFW as 'rare' or 'special status') natural communities are asterisked on the list.

the species. The definitions of suitable habitat were then compared against the vegetation mapping conducted for the Project site and local knowledge. A table of special-status plant species was prepared for the Project site based on the databases, and the potential for each species to occur was determined following completion of the field surveys.

Based on the presence of suitable habitat for special-status species, focused plant surveys were conducted by PCR Senior Biologist Ezekiel Cooley, and PCR Biologists Bob Huttar, Florence Chan, and/or Amy Lee on April 11 and August 19, 2013. The focused surveys were conducted pursuant to published CDFW and USFWS protocols (CDFW 2009; CDFW 2000; USFWS 2000), including walking transects and making close observations at ground level during the blooming periods of the special-status plants with potential to occur on the Project site (both on- and off-site) to ensure detection.

All plant species observed during the field surveys were identified and recorded using scientific and common names, as described in section 3.3.2 *General Plant Inventory*

3.3.6 Special-Status Wildlife Species

The potential for special-status wildlife species was assessed based upon the known occurrence of species in the area as identified from USFWS and CDFW databases (see section 3.2 *Literature Review*), and the presence or absence of suitable habitat within the Project site based on natural community mapping (see section 3.3.1 *Natural Community Mapping*). Suitable habitat was defined as areas with appropriate vegetation communities and/or topography (elevation at MSL) to support the species based on known occurrences in those habitats and/or USFWS and CDFW documented habitat descriptions for the species. The definitions of suitable habitat were then compared against the vegetation mapping conducted for the Project site and local knowledge. A table of special-status wildlife species was prepared for the Project site based on the databases, and the potential for each species to occur was determined following completion of the field surveys.

Based on the presence of suitable habitat and regulatory requirements, including compliance with the MSHCP, focused surveys were conducted for burrowing owl by PCR Senior Biologist Ezekiel Cooley, and PCR Biologists Bob Huttar, Florence Chan, and/or Amy Lee. This methodology is described below in section 3.3.5.1 *Focused Burrowing Owl Surveys*. All wildlife species observed during the field surveys were identified and recorded using scientific and common names, as described in section 3.3.3 *General Wildlife Inventory*

3.3.6.1 Focused Burrowing Owl Surveys

Focused Step I and Step II burrowing owl surveys were conducted on April 11, 2013 (PCR Senior Biologist Ezekiel Cooley and PCR Biologist Bob Huttar), May 10, 2013 (PCR Senior Biologist Ezekiel Cooley and PCR Biologist Amy Lee), June 13, 2013 (PCR Biologists Florence Chan and Amy Lee), and August 19, 2013 (PCR Biologists Amy Lee, Florence Chan, and Bob Huttar). The surveys were conducted in accordance with the County of Riverside's *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside, 2006), including Step I, Habitat Assessment, and Step II, Locating Burrows and Burrowing Owls. Surveys were conducted within the Project site plus a 150-meter (approximately 500 feet) buffer zone around the Project site perimeter; binoculars were used to survey any inaccessible areas. The Step I survey was conducted to identify the presence or absence of suitable burrowing owl habitat (e.g., annual and perennial grasslands, deserts, and arid scrublands characterized by low-growing vegetation). The Step II surveys focused on the detection of small fossorial mammal burrows

potentially suitable for burrowing owl, burrowing owl burrows, individual burrowing owls, and any diagnostic sign of their occurrence (e.g., molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance). Transects were utilized, spaced no more than 100 feet apart, to allow 100 percent visual coverage of the ground surface. The four surveys were conducted during the burrowing owl breeding season (March 1 to August 31) on separate days between two hours before sunset to one hour after or one hour before sunrise to two hours after.³

3.3.7 Jurisdictional Delineation

A jurisdictional delineation of all existing drainage features within the Project site and off-site areas was conducted by PCR Principal Regulatory Scientist Amir Morales and Senior Biologist Ezekiel Cooley on November 27, 2012. The purpose of the delineation was to assess the extent of “waters of the U.S.” and/or wetlands under the jurisdiction of the U.S. Army Corps of Engineers (USACE)/Regional Water Quality Control Board (RWQCB), and/or streambed and associated riparian habitat under the jurisdiction of the CDFW. All areas were delineated using the protocol stipulated by the USACE under Section 404 of the Clean Water Act (CWA) and by the CDFW under Section 1600-1607 of the California Fish and Game Code. Any wetlands were delineated using the procedures stipulated in the USACE Wetland Delineation Manual (Environmental Laboratory 1987) and Arid West Supplement (USACE 2008a, USACE 2008b). Given the ephemeral nature of the drainages features associated with the Project site, the potential for USACE jurisdictional “waters of the U.S.” was based primarily on the presence or absence of jurisdictional field indicators consistent with the USACE guidelines pursuant to *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (ACOE 2008a) such as the presence of an OHWM and/or secondary indicators of hydrology, including evidence of the deposition of debris, scour, sediment sorting, and changes in vegetation. The extent of CDFW jurisdiction was assessed based on the limits of the defined bed and bank and includes riparian streambed associated vegetation, where applicable. If these criteria were met, data was collected to estimate the length and width of jurisdictional features potentially regulated by the resource agencies. Upon completion of the field work, documentation of all jurisdictional wetlands, “waters of the U.S.,” and CDFW jurisdictional areas were completed. The documentation included a map illustrating the location, extent and acreage of all jurisdictional features. Downstream surface connections to known USACE jurisdictional waters were also evaluated in the field and by using satellite imagery and mapping, for the purpose of establishing a connection to “waters of the U.S.,” where applicable.

3.4 REGIONAL CONNECTIVITY/WILDLIFE MOVEMENT CORRIDOR

An analysis of wildlife movement was conducted based on information compiled from the literature, analysis of aerial photographs and topographic maps, direct observations made in the field during survey work, and an analysis of existing wildlife movement functions. Relative to corridor issues, the focus of this assessment is to determine if the change of the existing land use within the Project site will have significant impacts on the regional wildlife movement associated with the Project site and the immediate vicinity.

The Western Riverside County MSHCP was reviewed to identify any Linkage or Core Areas proposed for preservation on the Project site (Dudek and Associates 2003). Additionally, the *South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion* document was reviewed (South Coast Wildlands 2008).

³ For projects within the Western Riverside County MSHCP plan area, it has been PCR's experience that the County of Riverside has recently preferred that Step II surveys be conducted approximately one week apart.

4.0 EXISTING CONDITIONS

4.1 CHARACTERISTICS OF THE PROJECT SITE AND SURROUNDING AREA

The approximately 35.95-acre Project site and 9.08-acres of off-site areas are located within the City of Wildomar in Riverside County. The Project site and off-site areas are not within any USFWS designated critical habitat, but are within the Elsinore Area Plan of the Western Riverside County MSHCP (**Figure 4**, *Locations within the Elsinore Area Plan of the MSHCP*).

The Project site and off-site areas consist primarily of disturbed fallow agricultural fields, with remnants of an olive orchard and a smaller component of native vegetation dominated by coast live oaks (*Quercus agrifolia*), California buckwheat (*Eriogonum fasciculatum*), and willows (*Salix* spp.). One on-site drainage feature, Drainage A, was observed in the western portion of the Project site, traversing the site in a northeast to southwest direction. Two additional jurisdictional drainage features were identified off-site, namely Drainages B and C. No USGS blue-line streams are mapped within the Project site or off-site areas.

The topography is relatively flat throughout the Project site and off-site areas. The site slopes gently in a northeast to southwest direction, with elevations ranging from approximately 1,330 feet above MSL along the southwestern boundary of the Project site to approximately 1,370 feet above MSL along the northeastern boundary of the Project site. Mapped soils in the Project site and off-site areas include seven soil types as follows (NRCS 2012):

- Greenfield sandy loam (GyC2), 2 to 8 percent slopes, eroded
- Greenfield sandy loam (GyD2), 8 to 15 percent slopes, eroded
- Hanford coarse sandy loam (HcC), 2 to 8 percent slopes
- Monserate sandy loam (MmD2), 8 to 15 percent slopes, eroded
- Monserate sandy loam (MmD2), shallow, 5 to 15 percent slopes, eroded
- Ramona sandy loam (RaB2), 2 to 5 percent slopes, eroded
- Ramona sandy loam (RaB2), 8 to 15 percent slopes, eroded

Surrounding land uses include a mix of rural and suburban residential development to the north, northwest, west, and south; and I-15, rural residential development, and open space to the northeast and east.

4.2 NATURAL COMMUNITIES

Descriptions of each of the natural communities found within the Project site and off-site areas are provided below, and the locations of each community are shown in **Figure 5**, *Natural Communities*. **Table 1**, *Natural Communities* lists each of the natural communities observed as well as the acreage both on- and off-site. Representative photographs of natural communities found are included in **Figure 6**, *Site Photographs*.

Table 1
Natural Communities

Natural Community	On-Site (acres)	Off-Site (acres)	Total (acres)
Buckwheat Scrub	-	0.77	0.77
Buckwheat Scrub/Ruderal	0.35	0.07	0.42
Coast Live Oak Woodland	0.55	-	0.55
Southern Riparian Scrub	-	0.10	0.10
Southern Willow Scrub/Eucalyptus Woodland	0.33	0.03	0.36
Eucalyptus Woodland	0.18	0.03	0.21
Olive Grove/Ruderal	3.30	-	3.30
Ruderal/Buckwheat Scrub	-	1.58	1.58
Disturbed	31.26	5.34	36.6
Developed	-	1.15	1.15
Total	35.97	9.07	45.04

Source: PCR Services Corporation, 2013.

4.2.1 Buckwheat Scrub (Holland Code: 32000)

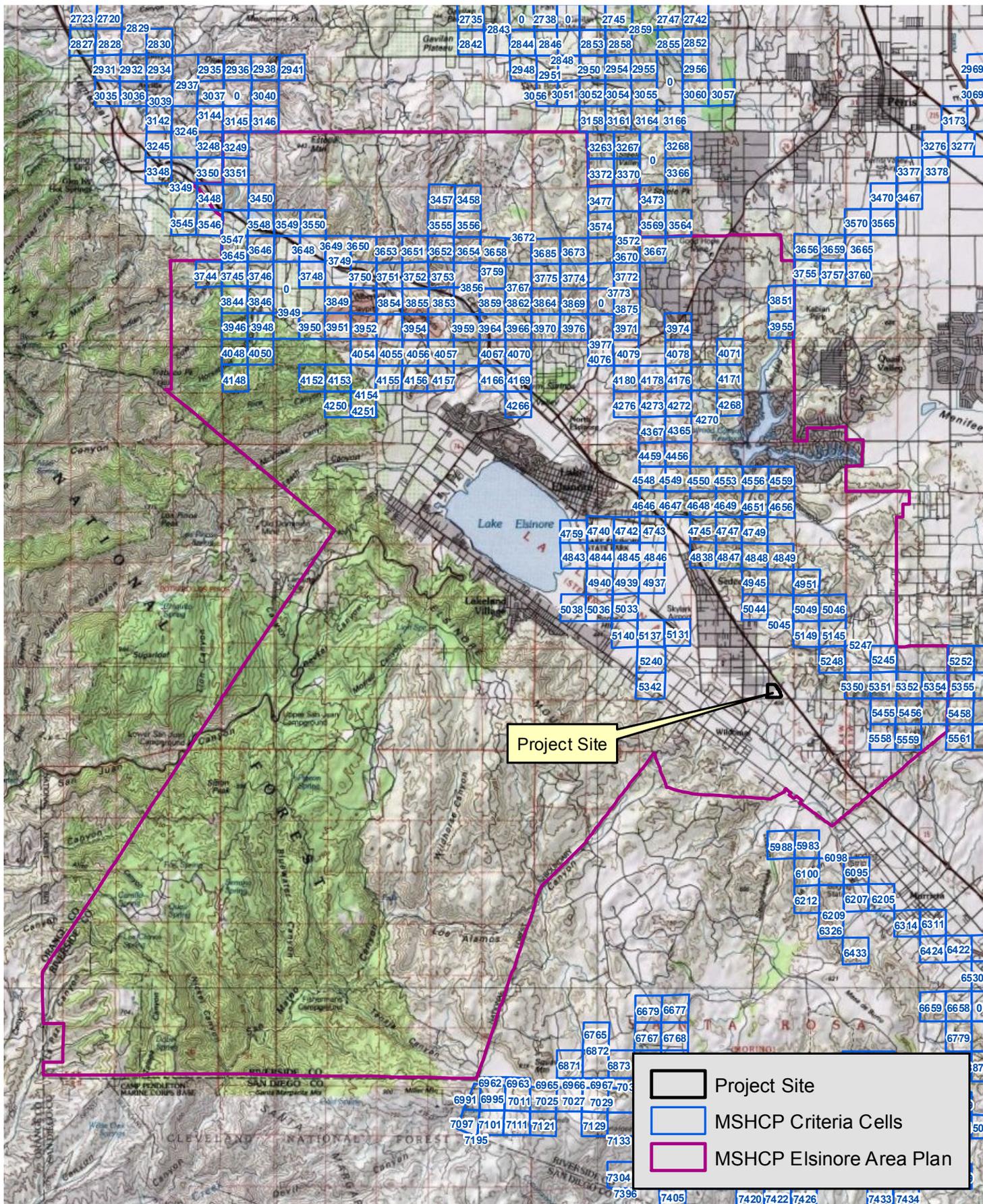
Buckwheat scrub is a shrubland with an alliance of plants dominated or co-dominated by California buckwheat (*Eriogonum fasciculatum*). In coastal California this community is usually one of the first to establish in mechanically disturbed areas.

Buckwheat scrub was found off-site only, just outside the southeast corner of the Project site boundary, totaling 0.77-acre. The community is well developed with dense mature individuals of California buckwheat.

4.2.2 Buckwheat Scrub/Ruderal (Holland Codes: 32000/11000)

Buckwheat scrub/ruderal is a shrubland with an alliance of plants dominated or co-dominated by California buckwheat, with associated ruderal vegetation. In coastal California, this community is usually one of the first to establish in mechanically disturbed areas.

The pioneering buckwheat/ruderal community was found in three areas on the Project site, including in the northeast corner of the site near I-15, in the northern portion of the Project site, and near the southeastern boundary. In these areas, the buckwheat scrub/ruderal community is well developed with mature individuals of California buckwheat that are closely spaced with non-native grasses and forbs filling those spaces. These apparently remnant patches do not appear to have been disced in recent years. Other associated ruderal species generally include those found in disturbed areas such as tocalote (*Centaurea melitensis*), short-podded mustard (*Hirschfeldia incana*), ripgut brome (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), and other brome grasses (*Bromus* spp.). This community occupies a small acreage, including 0.35 acre on the Project site and 0.07 acre off-site.



0 2.5 Miles

Location within the Elsinore Area Plan of the MSHCP

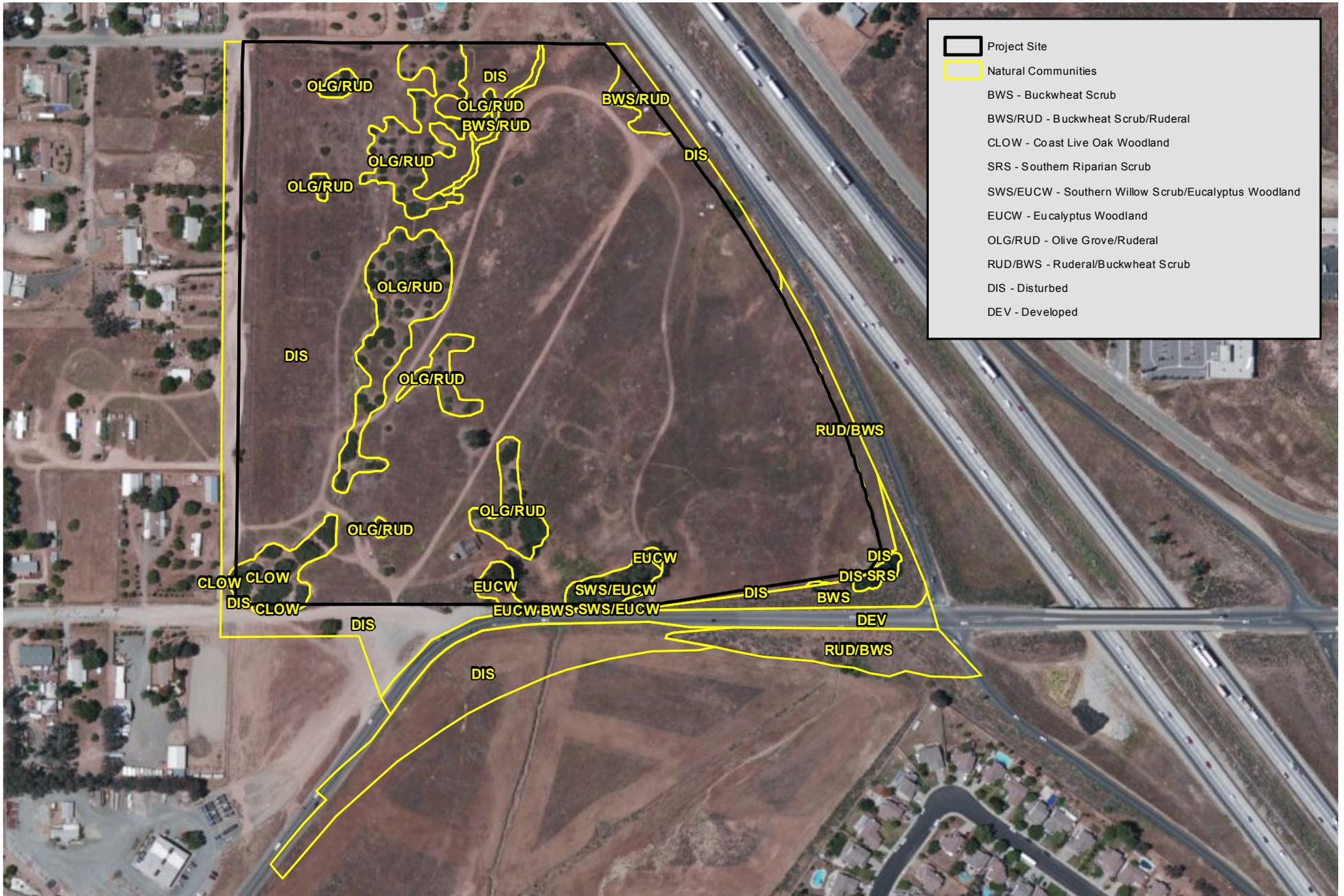
- Project Site
- MSHCP Criteria Cells
- MSHCP Elsinore Area Plan

Baxter Village APNs 367180015 & 367180043

Source: USGS Topographic Series; MSHCP; PCR Services Corporation, 2013.

FIGURE

4





Photograph 1: Photograph of Disturbed habitat located in the southeastern corner of the project site.



Photograph 2: Photograph of Buckwheat Scrub/Ruderal located within the southeastern portion of the project site.



Photograph 3: Photograph of Southern Willow Scrub/Eucalyptus Woodland located within the southern portion of the project site.



Photograph 4: Photograph of Southern Riparian Scrub located within the southeastern portion of the project site.

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4.2.3 Coast Live Oak Woodland (Holland Code: 71160)

Coast live oak woodlands are dominated by coast live oak trees with an understory of primarily non-native grasses such as brome grasses (*Bromus* spp.) and occasionally native and non-native herbaceous species. This community in southern California is often associated with drainage systems and south facing canyon slopes.

Within the Project site, coast live oak trees in this community grow close together with their canopies occasionally touching. The shrub layer underneath is poorly developed likely due to historic livestock grazing. Non-native species found in the understory included olive (*Olea* sp.), tocalote, short-podded mustard, riggut brome, and other brome grasses. Coast live oak woodland occupies 0.55 acre on the Project site only.

4.2.4 Southern Riparian Scrub (Holland Code: 63300)

The southern riparian scrub within the off-site area is dominated by Fremont cottonwood (*Populus fremontii* ssp. *fremontii*) trees with a sparse shrub layer comprised of primarily California buckwheat and mule fat (*Baccharis salicifolia*), with a few cottonwood saplings, and coast live oak trees occurring along the western perimeter. This community is often associated with drainage systems in southern California.

The Fremont cottonwood trees in this community include a stand of 4-5 established trees that grow close together with their canopies occasionally touching. The shrub layer underneath is poorly developed likely due to historic and on-going agricultural practices as well as weed abatement activities. Non-native species dominating the understory included tocalote, short-podded mustard, oat (*Avena* sp.), riggut brome, and other brome grasses. Southern riparian scrub occupies 0.10 acre within the off-site area only, located southeast of the Project site boundary.

4.2.5 Southern Willow Scrub/Eucalyptus Woodland (Holland Codes: 63320/11100)

Southern willow scrub/eucalyptus woodland communities consist of a dominance of red willow (*Salix laevigata*), black willow (*Salix gooddingii*) and gum tree (*Eucalyptus* sp.) trees. This community is generally associated with intermittent drainage systems throughout Southern California.

Within the Project site, red willow, black willow and gum trees in this community grow very close together with their canopies frequently touching. The quality of this habitat appears to have been reduced by the diversion of historic flows by the I-15, and as a result, appears remnant in nature as evidenced by the stressed condition of several willow trees, some of which have fallen and in some areas and have sprouted epicormic shoots.⁴ The shrub layer underneath is dominated by native plants such as mule fat, red willows, black willows and scattered coast live oak trees. Most of the understory is composed of leaf litter or bare ground, while canopy openings and ecotones are dominated by short-podded mustard, California sagebrush (*Artemisia californica*), and horehound (*Marrubium vulgare*). Southern willow scrub/eucalyptus woodland occurs in one small patch at the southern boundary of the Project site and occupies 0.33 acre on-site and 0.03 acre off-site.

⁴ An epicormic shoot is a shoot growing from an epicormic bud which is located underneath the bark of a trunk, stem, or branch of a plant. Epicormic buds are stimulated to grow and produce shoots as a result of stress.

4.2.6 Eucalyptus Woodland (Holland Code: 11100)

Eucalyptus woodland communities consist of a dominance of gum trees. Within the Project site, gum trees in this community grow very close together with their canopies frequently touching. Other species found in the understory included tocalote, short-podded mustard, ripgut brome, foxtail chess, and other brome grasses. Eucalyptus woodland occurs in one small patch at the southern boundary of the Project site and occupies 0.18 acre on-site and 0.03 acre off-site.

4.2.7 Olive Grove/Ruderal (Holland Codes: 18100/11000)

Olive grove/ruderal communities on the Project site are dominated by remnant olives groves and an underlying ruderal herbaceous layer, including species such as short-podded mustard and brome grasses. This community occurs throughout, but is densest in the central portion of the site. These areas occupy 3.30 acres on the Project site only.

4.2.8 Ruderal/Buckwheat Scrub (Holland Codes: 11000/32000)

Ruderal/buckwheat scrub is a shrubland with an alliance of plants dominated or co-dominated by ruderal vegetation such as brome grasses, tocalote and short-podded mustard, with buckwheat scrub comprising primarily of California buckwheat. This community was found off-site only totaling 1.58 acres located southeast of the Project boundary.

4.2.9 Disturbed (Holland Code: 11300)

Disturbed areas consist of regularly maintained areas that lack vegetation. Disturbed areas within the Project site primarily include regularly disced fallow agricultural fields, and dirt access roads. These areas occupy 31.26 acres within Project site and 5.34 acres off-site.

4.2.10 Developed (Holland Code: 12000)

Developed areas are paved or have structures on them. For the Project, developed areas are limited to Baxter Road located off-site only and totaling 1.15 acres.

4.3 GENERAL PLANT INVENTORY

The natural communities discussed above are composed of numerous plant species. Observations regarding the plant species present were made during each field visit, and a list of all plant species observed is provided in **Appendix A, *Floral and Faunal Compendium***. Special-status plant species occurring or potentially occurring are discussed below in section *4.7.3 Special-Status Plant Species*.

4.4 GENERAL WILDLIFE INVENTORY

The natural communities discussed above can provide habitat for common wildlife species. Observations regarding the wildlife species present were made during each field visit, and a list of all species observed is provided in **Appendix A**. Special-status wildlife species occurring or potentially occurring are discussed below in section *4.7.4 Special-Status Wildlife Species*.

4.5 WILDLIFE MOVEMENT

4.5.1 Overview

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic material (MacArthur and Wilson 1967, Soulé 1987, Harris and Gallagher 1989, Bennet 1990).

Corridors effectively act as links between different populations of a species. A group of smaller populations (termed “demes”) linked together via a system of corridors is termed a “metapopulation.” The long-term health of each deme within the metapopulation is dependent upon its size and the frequency of interchange of individuals (immigration vs. emigration). The smaller the deme, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increases overall genetic diversity. An increase in a population’s genetic variability is generally associated with an increase in a population’s health and long-term viability.

Corridors mitigate the effects of habitat fragmentation by: (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983, Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and, (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as “wildlife corridor,” “travel route,” and “wildlife crossing” to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this study, these terms are defined as follows:

Travel Route: A landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den areas). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover while moving between habitat areas; and provides a relatively direct link between target habitat areas.

Wildlife Corridor: A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food,

and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat or landscape linkages”) can provide both transitory and resident habitat for a variety of species.

Wildlife Crossing: A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These are often “choke points” along a movement corridor.

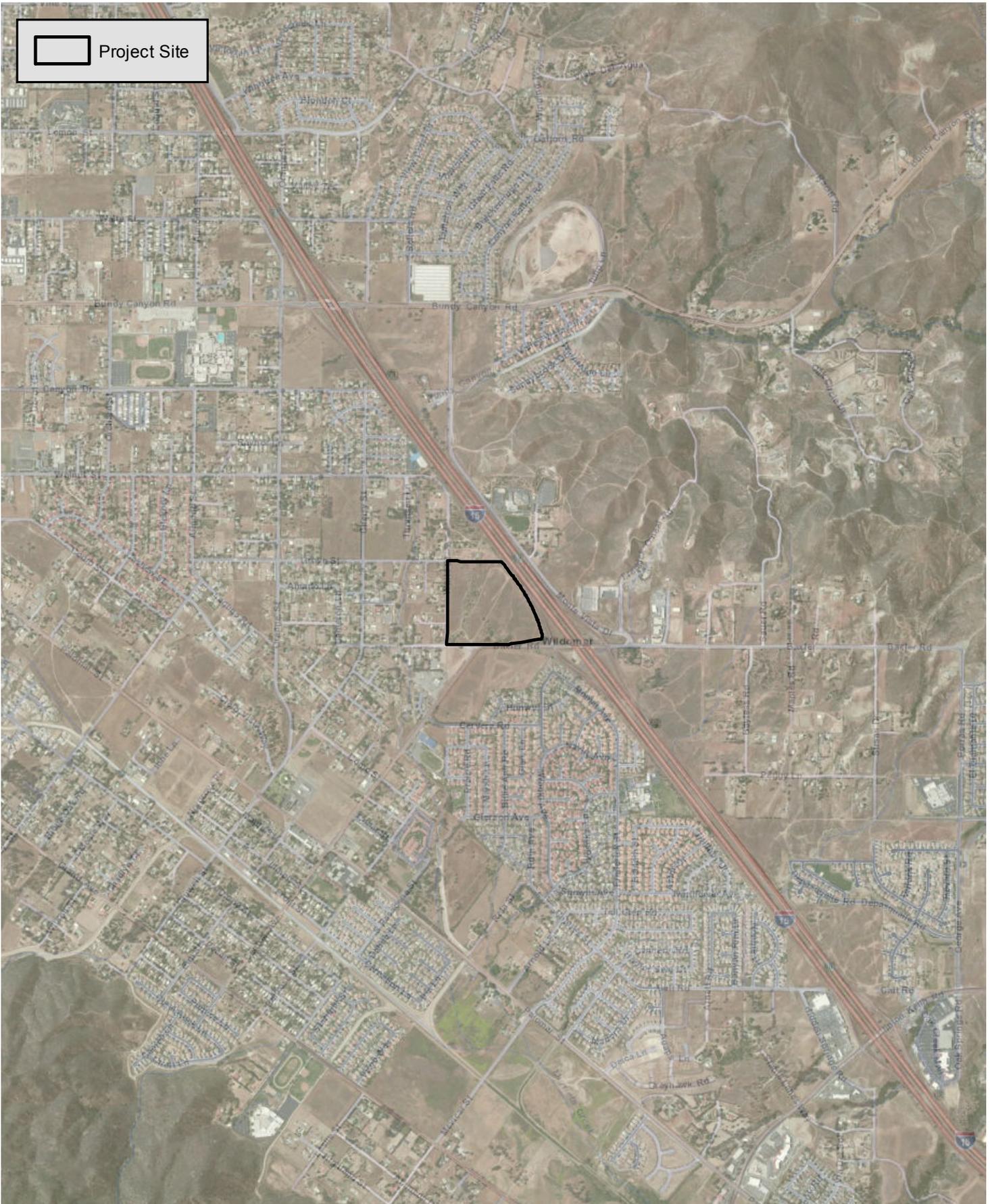
4.5.2 Wildlife Movement Within the Project Site

As previously described, wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). Although the nature of each of these types of movement is species specific, large open spaces will generally support a diverse wildlife community representing all types of movement. Each type of movement may also be represented at a variety of scales from non-migratory movement of amphibians, reptiles, and some birds on a “local” level to home ranges encompassing many square-miles for large mammals moving on a “regional” level.

Regional movement through the Project site to the surrounding vicinity immediately adjacent to the Project site is restricted in all directions due to the surrounding development and the I-15 freeway. The Project site is situated immediately adjacent to the I-15 freeway, with the Sedco Hills located on the other side of the freeway to the northeast (refer to **Figure 7, Aerial Photograph**). Due to the urbanization of the region, the Project site is immediately surrounded by rural and suburban residential development to the north and west, and by the I-15 freeway to the east. Vacant land occurs to the south, but suburban residential developed areas occur beyond this open area, restricting any potential wildlife movement.

The Project site is not within any core or linkage areas as identified by the MSHCP (Dudek and Associates 2003). The closest linkage to the Project site, Linkage 8, is slightly more than one mile to the east associated with Sedco Hills. The closest Core areas occur less than five miles to the west (Proposed Extension of Existing Core 3, Lake Elsinore Soils), southwest (Core B, Cleveland National Forest), and south (Core F, Santa Rosa Plateau). The Project site is also not within any linkages identified by the South Coast Missing Linkages document; the nearest linkage design identified is for the Palomar-San Jacinto-Santa Rosa Connection located approximately 18 miles to the east (South Coast Wildlands 2008). Since the Project site is not identified as a linkage by the MSHCP or South Coast Wildlands, and it does not support habitat that connects two or more habitat patches that would otherwise be fragmented or isolated from one another, the Project site is not considered a wildlife corridor. The Project site may provide limited opportunities for wildlife movement, more likely for local wildlife movement as described below.

Movement on a smaller or “local” scale could occur within the Project site for species that are less restricted in movement pathway requirements or are adapted to urban areas (e.g., raccoon/*Procyon lotor*, striped skunk/*Mephitis mephitis*, coyote/*Canis latrans*, and bird species in general). The Project site is routinely disced and was likely historically used for agriculture. Limited native habitat within the Project site therefore consists of primarily small patches of coast live oak woodland, buckwheat scrub/ruderal, southern willow scrub/eucalyptus woodland, and southern riparian scrub, in addition to non-native habitats such as



Aerial Photograph

Baxter Village APNs 367180015 & 367180043
Source: Aerial Express, 2010; PCR Services Corporation, 2013.

FIGURE

7

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eucalyptus woodland and remnants of an olive orchard. Although the habitat on-site is disturbed, it likely supports some wildlife movement within the Project site for foraging. Data gathered from the biological survey indicates that the Project site contains habitat that supports common species of invertebrates, reptiles, birds, and small mammals. The home range and average dispersal distance of many of these species may be entirely contained within the Project site and immediate vicinity. Populations of animals such as insects, reptiles, small mammals, and a few bird species may find all their resource requirements without moving far or outside of the Project site at all. Occasionally, individuals expanding their home range or dispersing from their parental range will attempt to move outside of the Project site, if feasible, based on the surrounding restrictions to movement from development (see above). Movement off-site would not occur via Drainage A due to a lack of upstream and downstream connection as a result of the I-15 and residential developments, respectively. Drainages B and C also lack an upstream connection, and a downstream connection is limited to the vacant land to the south after which the converged drainages appear to be piped underneath the residential development. Bird species may fly over the development in the area and the I-15 freeway to utilize the Project site for foraging, although this is expected to be limited due to the high level of human activity in the region and higher quality foraging habitats in nearby open areas such as Sedco Hills.

Although the Project site supports limited potential live-in and movement habitat for species on a local scale (i.e., reptile, bird, and small mammal species), it likely provides little to no function to facilitate wildlife movement for wildlife species on a regional scale, and is not identified as a regionally important dispersal or seasonal migration corridor.

4.6 Jurisdictional Waters and Wetlands

Based on the results of the delineation, there is one on-site erosional feature identified as Drainage A and two off-site drainage features identified as Drainages B and C, as shown on **Figure 8, Drainage Features**. The 35.96-acre Project site has a very limited watershed due to the construction of I-15 which diverts a significant portion of the historic watershed away from the site. The site drains toward the south/southeast and the off-site drainages are ultimately tributary to Murrieta Creek as part of the Santa Margarita Watershed. The on-site erosional feature (Drainage A) is not associated with any historic drainage features based on review of the USGS Wildomar Quadrangle and appears to have been formed by anthropogenically controlled discharge (e.g. pool drainage) from the rural land owner directly to the north based on review of historic aerial imagery. As a result, Drainage A is formed entirely in uplands, is otherwise isolated from downstream jurisdictional features, and is therefore presumed not to support USACE/RWQCB jurisdictional “waters of the U.S.” It should be noted that the USACE is currently evaluating the man-made isolated nature of the on-site erosional feature by way of a Jurisdictional Determination to determine if they concur with PCR’s assessment of Drainage A⁵. However, CDFW and the RWQCB reserve the right to regulate such man-made erosional features as isolated “waters of the State.” In addition, an approximately 0.33 acre on-site area and contiguous 0.03 acre off-site area determined to support disturbed southern willow scrub/eucalyptus woodland vegetation occurs adjacent to the central portion of the southern project boundary. This area appears to support remnant habitat that existed on the site prior to the historic diversion of much of the upstream watershed and was not observed to support jurisdictional field indicators associated with a streambed such as the presence of an OHWM or a defined bed and bank. As a result, the approximately 0.33 acre on-site and 0.03 acre off-site southern willow scrub/eucalyptus woodland area does

⁵ *If the USACE determines that Drainage A is subject to regulation under the Clean Water Act as “waters of the U.S.,” the total extent of USACE jurisdiction in Drainage A will be consistent with the acreage of RWQCB jurisdiction in Drainage A.*

not support jurisdictional waters regulated by the USACE, RWQCB, or CDFW. Therefore, drainages associated with the proposed Project total approximately 0.02 acre of unvegetated ephemeral⁶ USACE “waters of the U.S.,” 0.04 acre of RWQCB “waters of the U.S.”/“Waters of the State”, and 0.19 acre of CDFW jurisdictional streambed and riparian vegetation. No wetlands or other special aquatic sites occur within on- or off-site drainages associated with the proposed Project.

Table 2, *Drainage Features*, provides a summary of jurisdictional resources associated with the proposed Project, followed by descriptions of the on and off-site drainage features. Photographs of the drainage features are provided as **Figures 9a & 9b**, *Drainage Photographs*.

Table 2

Drainage Features

Feature	Length (ft)	Area (acres) ^a			Flow
		USACE	RWQCB	CDFG	
Drainage A (On-Site)	924	0.00 ^b	0.02	0.06	Anthropogenic
Drainage B (Off-Site)	109	0.01	0.01	0.02	Ephemeral
Drainage C (Off-Site)	149	0.01	0.01	0.11	Ephemeral
Total	1,182	0.02	0.04	0.19	

^a Jurisdictional acreages overlap and are not additive (e.g., USACE acreages are included in the total RWQCB and CDFG jurisdictional acreages).

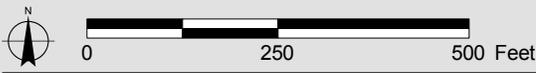
^b Drainage A is currently presumed to be an isolated drainage feature not regulated as “waters of the U.S.” pending the results of a Jurisdictional Determination currently under review by the USACE.

Source: PCR Services Corporation, 2013.

4.6.1 Drainage A (Man-Made Erosional Feature)

One isolated drainage feature identified as Drainage A abruptly begins near the center of the northern boundary of the site. Although there are culverts known to occur beneath the I-15, no evidence of surface flow exists between those culverts and the adjacent properties to the north as evidenced by the lack of any discernible streambed through those properties. As stated above, the entire watershed upstream of Drainage A appears to have been severed almost completely due to the historic construction of I-15 which is located less than 300 feet from the headwaters of the isolated drainage feature. Moreover, the location of the erosional feature identified as Drainage A is within an area that has not been historically associated with drainage features, and has therefore been associated with uplands based on review of the USGS Wildomar Quadrangle and historic aerial imagery. Drainage A extends toward the south for approximately 758 linear feet as a vertically incised drainage feature and then extends sporadically for a total of 165 linear feet where indicators of flow become very weak and sporadic ultimately becoming indiscernible as a drainage feature. The drainage feature is completely devoid of vegetation with the exception of some patches of upland

⁶ Ephemeral drainages are defined by the USACE as streambeds that exhibit flow only during, and immediately following a storm event.



Drainage Features Map

Baxter Village APNs 367180015 & 367180043
 Source: Aerial Express, 2010; PCR Services Corporation, 2013.



Photograph 1: Drainage A erosional feature looking upstream/north near northern project boundary.



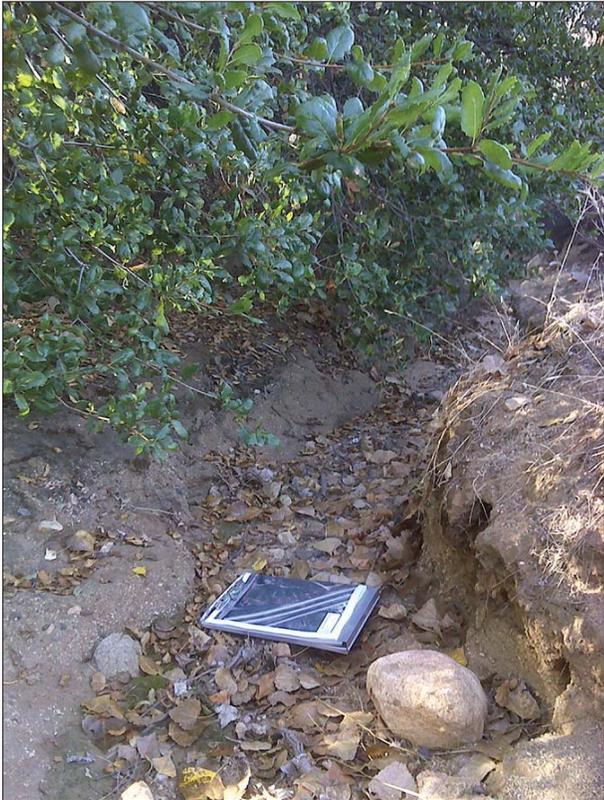
Photograph 2: View within incised portion of Drainage A erosional feature looking upstream/north. Note exposed roots along vertical banks suggesting recent high velocity flows consistent with anthropogenic discharge given lack of upstream watershed.



Photograph 3: Drainage A near central portion of site where streambed terminates and indicators of flow become indiscernible.



Photograph 4: Off-site Drainage B looking south/downstream from shoulder of Baxter Road.



Photograph 5: Off-site Drainage C looking southwest/downstream within streambed near culvert beneath Baxter Road.



Photograph 6: Upstream Drainage C (off-site) looking south at cottonwood trees located directly downstream of culvert beneath the I-15 Baxter Road (Southbound) off-ramp.

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vegetation such as buckwheat, tocalote, and ruderal grasses. Rows of olive trees comprise the majority of the western portion of the site which historically supported olive farming. The rural property located directly to the north of the site shows no evidence of a streambed and/or an OHWM capable of supporting the indicators of surface flow into Drainage A that would be expected, given the indicators of high velocity flow (e.g. incised streambed) exhibited within the upstream incised portion of the isolated drainage feature. Drainage B supports sandy loam soils. The RWQCB jurisdictional channel width in Drainage B averages one foot, while CDFW jurisdictional widths range from 1-5 feet based on the top-of-bank condition.

Drainage A totals approximately 0.02 acre of isolated man-made RWQCB “waters of the State” and 0.06 acre of unvegetated CDFW jurisdictional streambed.

4.6.2 Off-Site Drainage Features

Drainage B

Drainage B is an unvegetated ephemeral drainage feature that initiates off-site directly south of a culvert beneath the existing Baxter Road. The drainage accepts sheet flow from the eastern portion of the Project site and extends due south for approximately 109 linear feet within the limits of proposed improvements to Baxter Road. The drainage feature is incised vertically by several feet and appears to be somewhat remnant in nature possibly due to a significant reduction in flow following the construction of I-15 to the north/northeast several decades prior, which greatly reduced the upstream watershed area. Drainage B is unvegetated and supports sandy loam soils. The USACE/RWQCB jurisdictional channel width in Drainage B averages three feet, while CDFW jurisdictional widths average six feet based on the top-of-bank width.

Jurisdiction assessed within off-site Drainage B totals approximately 0.01 acre of ephemeral USACE/RWQCB “waters of the U.S.” and 0.02 acre of unvegetated CDFW jurisdictional streambed.

Drainage C

Drainage C is an off-site ephemeral drainage feature located directly northwest of the intersection formed by the southbound I-15 Baxter Road off-ramp and Baxter Road. The drainage feature initiates from a small pipe culvert located beneath the off-ramp structure and meanders off-site near the southeast corner of the Project site for approximately 149 linear feet prior to draining into a pipe culvert beneath Baxter Road. Drainage C supports mulefat, one coast live oak tree, and cottonwood trees within sandy loam soils.

Jurisdiction assessed within off-site Drainage C totals approximately 0.01 acre of ephemeral USACE/RWQCB “waters of the U.S.” and 0.11 acre of CDFW jurisdictional streambed and riparian vegetation.

4.7 SENSITIVE BIOLOGICAL RESOURCES

Protected sensitive species are classified by either federal or state resource management agencies, or both, as threatened or endangered, under provisions of the federal and state Endangered Species Acts (FESA and CESA, respectively). The following discussion describes the federal and state resource protection and classifications, followed by the plant and wildlife species present, or potentially present, within the study area that have been afforded special recognition by federal, state, or local resource conservation agencies

and organizations. These species have declining or limited population sizes, usually resulting from habitat loss. Also discussed are habitats that are unique, of relatively limited distribution, or of particular value to wildlife.

4.7.1 Federal Sensitive Resource Protection and Classifications

FESA

The Federal Endangered Species Act of 1973 (FESA) defines an “endangered” species as “any species which is in danger of extinction throughout all or a significant portion of its range”. A “threatened” species is defined as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range”. Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to “take” any listed species. “Take” is defined in Section 3(18) of FESA as to: “...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Further, the U.S. Fish and Wildlife Service (USFWS), through regulation, has interpreted the terms “harm” and “harass” to include certain types of habitat modification 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 which could affect a federally listed plant or animal species, the property owner and agency are required to consult with USFWS pursuant to Section 7 of the ESA if there is a federal nexus, or pursuant to Section 10 of the ESA. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

The status of federally listed species is assigned by USFWS as one of the following:

- Federally Endangered (FE)
- Federally Threatened (FT)
- Federally Proposed as Endangered (FPE)
- Federally Proposed as Threatened (FPT)
- Federally Proposed for Delisting (FPD)
- Federal Candidate for a Proposed Species (FC)

Some of the USFWS offices maintain a database of listed species within their jurisdiction, for example the Sacramento⁷ and Carlsbad⁸ offices. The Carlsbad USFWS Office jurisdiction encompasses the counties of Los Angeles, Orange, Riverside, San Bernardino, Imperial, and San Diego.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any part, nest, or eggs of any bird listed as migratory. In practice, federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If

⁷ http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists-overview.htm

⁸ http://www.fws.gov/carlsbad/SpeciesStatusList/CFWO_Species_Status_List.htm

not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS (USFWS, 2012c).

Federal Clean Water Act, Section 404

Section 404 of the Clean Water Act (CWA) regulates the discharge of dredged or fill material into waters of the U.S. and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. Implementing regulations for the CWA define waters of the U.S. as “rivers, creeks, streams, and lakes extending to their headwaters and any associated wetlands.” Wetlands are defined as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.” The permit review process entails an assessment of potentially adverse impacts to USACE jurisdictional waters of the U.S..

Over the years, the USACE has modified its regulations, typically due to evolving policy or judicial decisions, through the issuance of Regulatory Guidance Letters, memorandums, or more expansive instruction guidebooks. These guidance documents help to update and define how jurisdiction is claimed, and how these waters of the U.S. will be regulated. The most recent, significant modification occurred on June 5, 2007, subsequently updated in December 2008, when the USACE and the U.S. Environmental Protection Agency (USEPA) issued a series of guidance documents outlining the requirements and procedures, effective immediately, to establish jurisdiction under Section 404 of the CWA and the Section 10 of the Rivers and Harbors Act of 1899. These documents are intended to be used for all jurisdictional delineations and provide specific guidance for the jurisdictional determination of potentially jurisdictional features affected by the U.S. Supreme Court rulings in *Rapanos v. the United States* and *Carabell v. the United States* 547 U.S. 715 (2006) (jointly referred to as *Rapanos*).

The *Rapanos* case outlines the conditions and criteria used by the USACE to assess and claim jurisdiction over non-isolated, non-navigable, ephemeral tributaries. Under a plurality ruling, the Court noted that certain “not relatively permanent” (i.e., ephemeral), non-navigable tributaries must have a “significant nexus” to downstream traditional navigable waters to be jurisdictional. An ephemeral tributary has a significant nexus to downstream navigable “waters” when it has “more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a Traditional Navigable Water (TNW).” A significant nexus is established through the consideration of a variety of hydrologic, geologic and ecological factors specific to the particular drainage feature in question. For drainage features that do not meet the significant nexus criteria, a significant nexus determination is provided by the USACE to the USEPA for the final determination of federal jurisdiction. Drainage features that do not meet the significant nexus criteria based on completion of an AJD, and/or are determined to be isolated pursuant to the SWANCC ruling (see below), may still be regulated by California Department of Fish and Wildlife (CDFW) under Fish and Game Code Section 1600 or the Regional Water Quality Control Board (RWQCB) under the Porter-Cologne Water Quality Act.

On January 15, 2003, the USACE and USEPA issued a Joint Memorandum to provide clarifying guidance regarding the United States Supreme Court ruling in the *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*, No. 99-1178 (January 9, 2001) (“the SWANCC ruling”), (Federal Register: Vol. 68, No. 10.). This ruling held that the CWA does not give the federal government regulatory authority over non-navigable, isolated, intrastate waters. As a result of this decision, some previously regulated

depressional areas such as mudflats, sandflats, wetlands, prairie potholes, wet meadows, playa lakes, natural ponds, and vernal pools, which are not hydrologically connected to other intra- or inter-state “waters of the U.S.,” are no longer regulated by the USACE.

Federal Clean Water Act, Section 401

The mission of the RWQCB is to develop and enforce water quality objectives and implement plans that will best protect the beneficial uses of the state’s waters, recognizing local differences in climate, topography, geology, and hydrology. The California RWQCB is responsible for implementing compliance not only with state codes such as the California Water Code, but also some federal acts such as Section 401 of the CWA. Section 401 of the CWA requires that any applicant for a federal permit for activities that involve a discharge to waters of the state shall provide the federal permitting agency with a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal CWA.⁹ As such, before the USACE will issue a CWA Section 404 permit, applicants must apply for and receive a Section 401 water quality certification (WQC) from the RWQCB. The RWQCB regulates “discharging waste, or proposing to discharge waste, within any region that could affect “waters of the state” (Water Code § 13260 (a)), pursuant to provisions of the Porter-Cologne Water Quality Control Act which defines RWQCB jurisdictional “waters of the state” as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code § 13050 (e)).

With the exception of isolated waters and wetlands, most discharges of fill to waters of the state are also subject to a CWA Section 404 permit. If a CWA Section 404 permit is not required for the project, the RWQCB may still require issuance of Waste Discharge Requirements (WDR) under the Porter-Cologne Water Quality Control Act. The RWQCB may regulate isolated waters that are not under jurisdiction of the USACE through issuance of WDR’s. However, projects that obtain a Section 401 WQC are simultaneously enrolled in a statewide general WDR. Processing of Section 401 WQC’s generally requires submittal of 1) a construction storm water pollution prevention plan (SWPPP), 2) a final water quality technical report that demonstrates that post-construction storm water Best Management Practices (BMPs) comply with the local design standards for municipal storm drain permits (MS4 permits) implemented by the State Water Resources Control Board effective January 1, 2011, and 3) a conceptual Habitat Mitigation and Monitoring Plan (HMMP) to compensate for permanent impacts to RWQCB waters, if any. In addition to submittal of a draft CEQA document, a WQC application typically requires a discussion of avoidance and minimization of impacts to RWQCB jurisdictional resources, and efforts to protect beneficial uses as defined by the local RWQCB basin plan for the project. The RWQCB cannot issue a Section 401 WQC until the project CEQA document is certified by the lead agency.

4.7.2 State of California Sensitive Resource Protection and Classifications

CESA

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.

⁹ 33 USC 1341 (a) (1).

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 FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered 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.”

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively.

California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed species are not protected per se, but warrant consideration in the preparation of biological assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest areas.

For the purposes of this BRA, the following acronyms are used for State status species, as applicable:

- State Endangered (SE)
- State Threatened (ST)
- State Rare (SR)
- State Candidate for Endangered (SCE)
- State Candidate for Threatened (SCT)

- State Fully Protected (SFP)
 - California Species of Special Concern (SSC)

Protection of Birds

Section 3503.5 of the California Fish and Game Code states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3515 states that it is unlawful to take any non-game migratory bird protected under the MBTA.

State of California Fish and Game Code, Section 1602

Section 1602 of the California Fish and Game Code requires any entity (e.g., person, state or local government agency, or public utility) who proposes a project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake to notify the CDFW of the proposed project. In the course of this notification process, the CDFW will review the proposed project as it affects streambed habitats within the project area. The CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. 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 (CNPS, 2012). The list serves as the candidate list for listing as Threatened and Endangered by CDFW. CNPS has developed five categories of rarity, of which Lists 1A, 1B, and 2 are particularly considered sensitive:

- List 1A Presumed extinct in California.
- List 1B Plants Rare, Threatened, or Endangered in California and elsewhere.
- List 2 Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- List 3 Plants about which we need more information – a review list.
- List 4 Plants of limited distribution – a watch list.

The CNPS recently added “threat ranks” which parallel the ranks used by the CNDDDB, referred to as the California Rare Plant Rank (CRPR). The CRPRs are added as a decimal code after the CNPS List (e.g., List 1B.1). The threat codes are as follows:

- .1 – Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);

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

Sensitive species that occur or potentially could occur within the study area are based on one or more of the following: (1) the direct observation of the species within the study area during any field surveys; (2) a record reported in the CNDDDB; and (3) the study area is within known distribution of a species and contains appropriate habitat.

Sensitive Natural Communities

CDFW maintains a natural plant community list, the *List of California Terrestrial Natural Communities*.¹⁰ Sensitive natural communities (also referred to by CDFW as 'rare', 'special-status', or 'special concern') are identified on the list by an asterisk and are considered high priority vegetation types.

Western Riverside County MSHCP

The Project site is within the Western Riverside County MSHCP which was adopted by the Riverside County Board of Supervisors on June 17, 2003. The MSHCP functions as an Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the FESA and as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The USFWS and CDFW have authorized the take of a number of sensitive plant and wildlife species (Covered Species) within the MSHCP Plan Area in exchange for the assembly and management of a coordinated MSHCP Conservation Area.

4.7.3 Sensitive Natural Communities

Two CDFW sensitive natural communities were identified, namely southern willow scrub/eucalyptus woodland and southern riparian scrub, as shown on Figure 5. Southern willow scrub (CNDDDB Code CTT63320CA, 61.211.05) and southern riparian scrub (CTT63300CA, 61.130.00) are considered high priority, sensitive communities. Southern willow scrub/eucalyptus woodland occupies 0.33 acre on the Project site and 0.03 acre off-site; and southern riparian scrub occupies 0.1 acre off-site only. However, it should be noted that these habitats show signs of disturbance, as described in sections 4.2.4 *Southern Riparian Scrub (Holland Code: 63300)* and 4.2.5 *Southern Willow Scrub/Eucalyptus Woodland (Holland Codes 63320/11100)*. Specifically, the quality of the native component of the southern willow scrub/eucalyptus woodland community appears to have been reduced by diversion of historic flows and overshadowing resulting in a remnant community that is showing signs of stress. With regards to the southern riparian scrub, the understory has been disturbed through historic and on-going agricultural practices. Two additional native natural communities totaling 0.90 acre occur on the Project site, including coast live oak woodland (0.55 acre) and buckwheat scrub/ruderal (0.35 acre). A total 0.84 acre of native natural communities also occur off-site, including buckwheat scrub (0.77 acre) and buckwheat scrub/ruderal (0.07 acre). None of these communities are considered sensitive habitats by wildlife agencies such as CDFW and USFWS, or in the MSHCP, and no tree ordinance currently exists in the City of Wildomar. Furthermore, the native communities within the Project site and off-site areas are small, scattered, and are of low quality for sensitive

¹⁰ Available online at: http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp.

plant and wildlife species. The remaining non-native dominated habitats, including eucalyptus woodland, olive grove/ruderal, ruderal/buckwheat scrub, and disturbed, are also not considered sensitive habitats.

4.7.4 Special-Status Plant Species

Special-status plants include those listed, or candidates for listing, by the USFWS and CDFW, and species listed by the CNPS (particularly Lists 1A, 1B, and 2). Several special-status plant species were reported in the vicinity based on CNDDDB, totaling 73 species within the 9-quadrangle search. Of these, a total of 44 species were considered to have no potential to occur on-site due to the lack of suitable habitat or the site's location outside of the species' range. Based on the focused surveys, 28 of the species were determined absent from the Project site and off-site areas and 1 species was observed. A summary table of these species is provided in **Appendix B**, *Special-Status Plant Species*.

The one species observed on-site, paniculate tarplant (*Deinandra paniculata*), is a CNPS List 4, which is classified as 'Plants of limited distribution – a watch list'. This species was found in two locations on-site totaling 0.74 acre, including a moderate density area within a low lying location in the southeastern portion of the Project site (0.60 acre) and a low density area in the northeastern portion of the Project site (0.14 acre), as shown on **Figure 10**, *Paniculate Tarplant Locations*. The southeastern location consisted of several hundred individuals in a moderately dense cluster, and solitary individuals were scattered for a distance of approximately 50 yards. The species was flowering at the time of the survey. Based on CNDDDB records, this species is found throughout Riverside County. In addition, it is not a species covered by the MSHCP, nor was it considered for coverage under the MSHCP. Based on the wide distribution of this species within Riverside County, and the CNPS listing of 4, paniculate tarplant is not considered sensitive.

4.7.5 Special-Status Wildlife Species

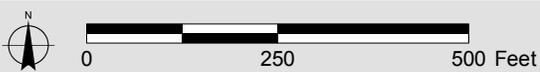
Special-status wildlife include those species listed as Endangered or Threatened under the FESA or CESA, candidates for listing by the USFWS or CDFW, and species of special concern to the CDFW. Several special-status wildlife species were reported in the vicinity based on CNDDDB, totaling 42 species within the 9-quadrangle search. Of these, a total of 25 species were considered to have no potential to occur due to the lack of suitable habitat or the Project site's location outside of the species' range, 1 species (burrowing owl) was determined absent based on focused surveys, and 16 species were determined to have a very low, low or moderate potential to inhabit or forage on-site. A summary table of these species is provided in **Appendix C**, *Special-Status Wildlife Species*. The results of the focused burrowing owl survey are provided below, in addition to a summary of the 16 species with potential to occur on-site; 4 of those species are migratory bird and raptor species and are described in a separate subsection below. Best Management Practices for wildlife species are recommended in section 7.3 *General Recommendations* of this BRA.

Burrowing Owl Focused Survey

Burrowing owl is a California Species of Special Concern that is known to occur in the Project vicinity based on CNDDDB and the MSHCP. The Project site is within an overlay in the MSHCP that requires additional surveys. Therefore, focused Step I and Step II surveys for burrowing owls were conducted on the Project site. Suitable habitat was identified on-site during the Step I survey, including disturbed, low-growing vegetation; bare ground; and small fossorial mammal burrows. Burrowing owls often use the burrows of California ground squirrels (*Spermophilus beecheyi*); ground squirrels were observed on-site, mostly in areas



Project Site
Distribution of Paniculate Tarplant
 Low Density
 Moderate Density



Paniculate Tarplant Locations

Baxter Village APNs 367180015 & 367180043
 Source: Aerial Express, 2010; PCR Services Corporation, 2013.

FIGURE

10

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where trees were present, particularly the eucalyptus trees located near the abandoned house/barn in the southwest portion of the Project site (a fair amount of garbage was also observed concentrated in this area). A few shallow old burrows were found in the open fields northeast of the house. Also, the site is fairly open, which burrowing owls prefer. Although the Project site supports some suitable habitat, no owls were observed on-site during the focused Step II surveys, or within approximately 500-feet of the Project site as required by the survey protocol. Therefore, the Project site and adjacent area does not currently support burrowing owls.

Species With Potential to Occur On-site

Coast horned lizard (*Phrynosoma blainvillii*): This reptile species is a state species of special concern and is a Covered Species pursuant to the MSHCP. It prefers sandy riparian and sage scrub habitats, but also occurs in valley-foothill, hardwood, conifer, pine-cypress, juniper and annual grassland habitats below 6,000 feet. Habitats include open country, especially sandy areas, washes, flood plains, and windblown deposits.

Coast horned lizard was determined to have a potential to occur on the Project site and off-site areas based on the presence of limited scrub and wash habitat. However, the potential to occur was considered low to moderate due to the limited habitat that is scattered and disturbed. No incidental sightings of this species were made during site surveys conducted in 2012 and 2013.

Orange-throated whiptail (*Aspidoscelis hyperythra*): This reptile species is a state species of special concern and a Covered Species pursuant to the MSHCP. It prefers chaparral, non-native grassland, Riversidean sage scrub, and juniper and oak woodlands. It is often associated with riparian areas and alluvial fan sage scrub habitats.

Orange-throated whiptail was determined to have a potential to occur within the Project site and off-site areas based on the presence of scrub, dry and disturbed habitats. However, the potential to occur was considered moderate due to the high level of disturbance. No incidental sightings of this species were made during site surveys conducted in 2012 and 2013.

Coastal California Gnatcatcher (*Polioptila californica californica*): This bird species is listed as federally Threatened, a state species of special concern, and a Covered Species pursuant to the MSHCP. It prefers coastal sage scrub vegetation below 2,500 feet elevation.

Coastal California gnatcatcher was determined to have a potential to occur within the Project site and off-site areas based on the presence of scrub vegetation and an occurrence of the species documented by CNDDDB within 1 mile of the site. However, the potential to occur was considered low due to the limited, scattered and highly disturbed nature of the site.

Least Bell's Vireo (*Vireo bellii pusillus*): This bird species is listed as federally Endangered, state Endangered, and a Covered Species pursuant to the MSHCP (with additional surveys required in proposed impact areas). It prefers perennial and intermittent streams with low, dense riparian habitat, particularly willows (*Salix* spp.), cottonwood (*Populus* spp.) and mule fat.

Least Bell's vireo was determined to have a potential to occur within the Project site within the southern willow scrub/eucalyptus woodland, as migratory stop-over habitat only. Although the community supports a willow scrub understory beneath the eucalyptus woodland canopy, the structure of the habitat was not considered optimal for nesting habitat for the species. Least Bell's vireo are known to require dense cover within 3 to 6 feet of the ground where nests are typically located, and a dense, stratified canopy for foraging (USFWS 1998). The structure of the willow scrub understory habitat on the Project site was observed in decline, consisting of many fallen willows and the lack of young saplings, likely a result of the effects of overshadowing by the eucalyptus canopy; the vegetation also displayed signs of stress. The habitat is also remnant and was likely associated with an historic drainage that has been cut off from the upstream watershed by the I-15 and agricultural dry-farming activities on the site, and from any downstream connection due to development. As such, no signs of a drainage feature were observed in association with this habitat. The habitat is isolated from nearby similar habitats; the nearest patch of riparian habitat from the Project site is approximately 2 miles south/downstream within Murrieta Creek and 1 mile northeast associated with an unnamed tributary within Bundy Canyon. Furthermore, the community is limited to a 0.36-acre patch (0.33 acre on-site and 0.03 acre off-site) that is generally too small for a breeding territory; territory sizes of the species range from 0.5 to 7.5 acres (USFWS 1998). In consideration of these factors, the potential for this species to occur was considered low and as a stop-over habitat only for birds migrating between suitable habitats in the region to the south and northeast. No potential for least Bell's vireo to nest on-site was considered, and the species is not expected to occur in the off-site southern riparian scrub habitat due to the lack of understory structure.

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*): This mammal species is listed as a state species of special concern and a Covered Species pursuant to the MSHCP. It prefers chaparral and coastal sage scrub habitats.

Northwestern San Diego pocket mouse was determined to have a potential to occur within the Project site and off-site areas based on the presence of scrub habitat. However, the potential to occur was considered very low; although small rodent burrows (unidentified species) were observed, the habitat is limited and highly disturbed.

Stephen's kangaroo rat (*Dipodomys stephensi*): This mammal species is listed as federally endangered, state threatened, and a Covered Species pursuant to the MSHCP. It prefers open coastal sage scrub and grassland habitats.

Stephen's kangaroo rat was determined to have a potential to occur within the Project site and off-site areas based on the presence of scrub habitat. However, the potential to occur was considered very low; although small rodent burrows (unidentified species) were observed, the habitat is limited and highly disturbed.

Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*): This mammal species is listed as federally endangered, state threatened, and a Covered Species pursuant to the MSHCP (with additional surveys required in survey overlay areas). It prefers coastal sage scrub and grassland habitats.

Los Angeles pocket mouse was determined to have a potential to occur within the Project site and off-site areas based on the presence of scrub habitat and potential burrows observed within 1 mile of the Project site. Small rodent burrows (unidentified species) were observed. Although potential burrows of this species

have been observed close to the Project site, the potential for this species to occur was considered low due to the limited habitat that is scattered and highly disturbed.

Jacumba Pocket Mouse (*Perognathus longimembris internationalis*): This mammal species is listed as a state species of special concern. It prefers arid coastal sage scrub and chaparral habitats.

Jacumba pocket mouse was determined to have a potential to occur within the Project site and off-site areas based on the presence of scrub habitat and potential burrows observed within 1 mile of the Project site. Small rodent burrows (unidentified species) were observed. Although potential burrows of this species have been observed close to the Project site, the potential for this species to occur was considered low due to the limited habitat that is scattered and highly disturbed.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*): This mammal species is a state species of special concern and a Covered Species pursuant to the MSHCP. It prefers open scrub habitats.

San Diego black-tailed jackrabbit was determined to have a potential to occur on the Project site and off-site areas based on the presence open scrub habitat and an occurrence in CNDDDB within 1-mile of the site. However, the potential to occur was considered low due to the limited habitat on-site that is scattered and highly disturbed. Furthermore this species is typically highly active and visible during the day, and none were observed during site surveys conducted in 2012 and 2013.

Western Mastiff Bat (*Eumops perotis californicus*): This mammal species is a state species of special concern. It prefers open scrub and grassland habitats.

Western mastiff bat was determined to have a potential to occur on the Project site and off-site areas for foraging only based on the presence of open habitat. However, the potential to occur was considered low due to the limited habitat. No suitable roosting habitat was determined present on- or off-site.

San Diego Desert Woodrat (*Neotoma lepida intermedia*): This mammal species is a state species of special concern. It prefers a variety of habitats with moderate to dense canopies.

San Diego desert woodrat was determined to have a potential to occur on the Project site and off-site areas based on the presence of open habitat. However, the potential to occur was considered very low based on the limited habitat and the absence of any recorded observations in CNDDDB within 10 miles of the site.

Pallid Bat (*Antrozous pallidus*): This mammal species is a state species of special concern. It prefers a variety of habitats, but mostly open, dry habitats.

Pallid bat was determined to have a potential to occur on the Project site and off-site areas for foraging only based on the presence of open habitat. However, the potential to occur was considered low based on the limited habitat.

Migratory Birds and Raptors

The Project site and off-site areas support potential nesting and foraging habitat for birds (limited to shrubs and trees for nesting), and also potential foraging habitat for birds including raptors (primarily in the disturbed areas and more open scrub habitat). Several species of non-listed birds were observed on-site (see Appendix A) and special-status birds were identified by CNDDDB as potentially occurring within the 9-quadrangle search area (see Appendix C). Only one of the special-status non-raptor species, loggerhead shrike (*Lanius ludovicianus*), was determined to have the potential to occur within the Project site and off-site areas (low potential for nesting, and moderate potential for foraging). In addition to the observed and special-status bird species, additional CDFW Watch List non-raptor species include California horned lark (*Eremophila aepstris actia*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and Bell's sage sparrow (*Amphispiza belli belli*).

According to CNDDDB, there is also a potential for special-status raptors such as northern harrier (*Circus cyaneus*/Species of Special Concern), bald eagle (*Haliaeetus leucocephalus*/Fully Protected), golden eagle (*Aquila chrysaetos*/Fully Protected), and white-tailed kite (*Elanus leucurus*/Fully Protected) within the 9-quadrangle search area, in addition to CDFW watch list species such as Cooper's hawk (*Accipiter cooperii*), and ferruginous hawk (*Buteo regalis*). Of the special-status raptors only bald eagle was determined to have no potential to occur due to the lack of aquatic habitats associated with the Project site; the remaining species were determined to have potential to occur for foraging only but were not incidentally observed by PCR during any surveys. Raptors observed on-site were limited to non-listed species including red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), and American kestrel (*Falco sparverius*).

4.7.6 WESTERN RIVERSIDE COUNTY MSHCP CONSISTENCY ANALYSIS

This section provides a discussion of the Project site's relationship to the MSHCP policies, including the location within the MSHCP Area Plan, Criteria Cells, and cores and linkages, and the presence of MSHCP protected biological resources.

4.7.6.1 Location of the Project Site within the MSHCP Area Plan and Criteria Cells

The entire Project site is within the Elsinore Area Plan (see Figure 4) but is not within or adjacent to a Criteria Cell, a designated Cell Group, or a subunit within the Elsinore Area Plan that requires conservation of land for inclusion in the MSHCP Conservation Area (Riverside County TLMA 2013a). The nearest Cell Group is approximately 0.6 mile northeast of the Project site (Cell Group J', specifically cells 5149 and 5248) (Riverside County TLMA 2013b). The Project site is separated from the nearest cell group by the I-15 freeway immediately adjacent to the site, with undeveloped land and scattered rural residential lots northeast of the freeway.

4.7.6.2 Location of the Study Area within MSHCP Cores and Linkages

As mentioned previously in section 3.5.2 *Wildlife Movement within the Project Site*, the Project site is not within any cores or linkages (i.e., Special Linkage Areas) as identified in the Elsinore Area Plan. The Elsinore Area Plan supports the following cores and linkages: all of Proposed Constrained Linkage 5, all of Proposed Constrained Linkage 6, most of Proposed Core 1, a portion of Proposed Extension of Existing Core 2, all of Proposed Extension of Existing Core 3, all of Proposed Linkage 1, all of Proposed Linkage 2, a portion of

Proposed Linkage 3, a portion of Proposed Linkage 7, and a large portion of Proposed Linkage 8. The closest linkage to the Project site is Proposed Linkage 8 just over one mile to the northeast associated with Sedco Hills. The closest Core areas occur less than five miles to the west (Proposed Extension of Existing Core 3, Lake Elsinore Soils), southwest (Core B, Cleveland National Forest), and south (Core F, Santa Rosa Plateau).

4.7.6.3 Riparian/Riverine Areas and Vernal Pools

Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, of the MSHCP provides for the protection of Riparian/Riverine Areas and Vernal Pools within the MSHCP Plan Area. Riparian/Riverine areas are defined in the MSHCP as “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.” Vernal pools are defined in the MSHCP 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 wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season.”

The on-site Drainage A was not considered to meet the definition of Riparian Areas due to the lack of riparian vegetation, or the definition of Riverine Areas (i.e., “*areas with fresh water flow during all or a portion of the year*”) based on a lack of OHWM within the downstream portion of the drainage and no downstream connection to other drainages. Drainage A is considered to be an erosional feature that was artificially created in uplands by anthropogenically controlled discharge (e.g. pool drainage) from the rural land owner directly to the north based on review of historic aerial imagery. This explains the weak indicators of flow observed in the upstream portion of the drainage. Drainage A is primarily unvegetated with some patches of upland native and non-native vegetation. Conversely, Drainages B and C are considered to meet the definition of a Riverine Area and Riparian Area, respectively, based on the vegetation and/or downstream connection. For the Riverine Area associated with Drainage B, the biological functions and values of Riparian/Riverine Areas do not exist due to the absence of riparian/riverine associated vegetation (the area is mapped as disturbed and the drainage itself is unvegetated). For the Riparian Area associated with Drainage C (specifically 0.1 acre of southern riparian scrub; the remainder of Drainage C is unvegetated), the habitat is not considered suitable for the amphibians, birds, fish, invertebrate-crustacean, and plant species afforded protection under the MSHCP, as discussed below, and as such no further surveys are required.

The 0.36 acre southern willow scrub/eucalyptus woodland (0.33 acre on-site and 0.03 acre off-site) was not considered to meet the MSHCP definition of a Riparian/Riverine Area due to the remnant, isolated, and declining condition of the vegetation community and absence of hydrology. The area was not considered CDFW, USACE or RWQCB jurisdictional due to the absence of any field indicators of hydrology including a bed and bank or OHWM. The hydrology to this area appears to have been diverted as a result of historic alterations to the watershed (i.e., the I-15 upstream and historic dry-farming activities on the site; there is also no downstream connection due to development). The southern willow scrub vegetation community is an understory component to the eucalyptus woodland and is showing signs of stress including fallen willow trees with epicormic shoots, likely a result of overshadowing by the eucalyptus canopy and lack of hydrology. The remnant community is isolated from any nearby similar habitats, and was not considered suitable breeding habitat for least Bell’s vireo or other riparian/riverine associated species (see below). As such, no focused surveys are warranted.

Other kinds of aquatic features that could provide suitable habitat for Riparian/Riverine species, such as fairy shrimp, are not present within the on- or off-site portions of the Project site (i.e. vernal pools, swales, vernal pool-like ephemeral ponds, seasonal ponds, stock ponds, or other human-modified depressions such as tire ruts, etc.).

Based on the above assessment, the Project supports Riparian and Riverine Areas associated with Drainages C and B, respectively, and preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis will be required providing details on any proposed impacts and compensatory mitigation in compliance with MSHCP requirements.

Riparian/Riverine Plant Species

A habitat assessment was conducted for species listed in Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, of the MSHCP. The results are presented in **Table 3, MSHCP Riparian/Riverine Plant Species**. No Riparian/Riverine plant species are expected to occur within the on- or off-site portions of the Project site due to the lack of suitable habitat, the location of the Project site outside of the species range, or based on the negative results of focused surveys.

Riparian/Riverine Wildlife Species

Habitat assessments were conducted for wildlife species listed in Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, of the MSHCP. Two species have the potential to occur on the Project site, including least Bell's vireo (on-site only, as a stop-over habitat for migrants) and the American peregrine falcon (on- and off-site, for foraging only), as indicated in **Table 4, MSHCP Riparian/Riverine Wildlife Species**. Least Bell's vireo has only a low potential to occur as suitable habitat is limited to the small patch (0.36-acre, including 0.33-acre on-site and 0.03 acre off-site) of remnant southern willow scrub/eucalyptus woodland habitat on-site that is not associated with a drainage feature, is not contiguous with any off-site habitat, and is isolated from other similar habitats in the area by approximately 1 to 2 miles. Although a willow understory occurs beneath the eucalyptus canopy, the habitat structure was in decline due the lack of young saplings and fallen stressed willows, and was therefore not considered suitable for nesting. Furthermore, the size of the habitat is generally too small for a breeding territory. As a result, the potential for least Bell's vireo to occur on the Project site is considered limited to use as a stop-over for birds during migration to suitable habitats in the region located to the south and northeast. No potential for least Bell's vireo was considered to occur in the off-site southern riparian scrub habitat due to the lack of an appropriate understory. Further detail is also provided in section 4.7.5 *Special-Status Wildlife Species* of this BRA. The American peregrine falcon has a very low potential to forage only within both the on- and off-site portions of the Project; no suitable breeding habitat (cliffs or tall buildings) occurs. This species can be found foraging in nearly any open habitat, but most likely near areas such as lake edges and mountain chains. The nearest of these areas is Lake Elsinore approximately 3.8 miles to the northwest, and Sedco Hills approximately 1 mile to the northeast. No other species are expected to occur due to the lack of suitable habitat.

4.7.6.4 Narrow Endemic Plant Species Survey Area

The Project site and off-site areas are not within the Narrow Endemic Plant Species Survey Area; therefore, no surveys were required for Narrow Endemic plant species.

Table 3

MSHCP Riparian/Riverine Plant Species

Species	Potential to Occur within the Study Area
Brand's phacelia <i>Phacelia stellaris</i>	Suitable habitat occurs; however, none were observed during the 2013 focused plant surveys.
California Orcutt grass <i>Orcuttia californica</i>	Not expected to occur due to the lack of vernal pools.
Coulter's matilija poppy <i>Romneya coulteri</i>	Suitable habitat occurs; however, none were observed during the 2013 focused plant surveys.
Engelmann oak <i>Quercus engelmannii</i>	Not observed and not expected to occur. This is a conspicuous tree species that would have been detected if present.
Fish's milkwort <i>Polygala cornuta</i> var. <i>fishiae</i>	Not expected to occur due to the lack of suitable habitat.
Graceful tarplant <i>Holocarpha virgata</i> ssp. <i>elongata</i>	Suitable habitat occurs; however, none were observed during the 2013 focused plant surveys.
Lemon lily <i>Lilium parryi</i>	Not expected to occur due to the lack of suitable habitat. Also, the Project site is outside the species range; this species is restricted to the San Jacinto Mountains.
Mojave tarplant <i>Deinandra mohavensis</i>	Not expected to occur due to the lack of suitable habitat. Also, the Project site is outside the species range; this species is restricted to the San Jacinto Mountains.
Mud nama <i>Nama stenocarpum</i>	Not expected to occur due to the lack of wetlands. Also, none were observed during the 2013 focused plant surveys (this species can occasionally occur in non-wetlands).
Ocellated Humboldt lily <i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	Not expected to occur due to the lack of suitable habitat.
Orcutt's brodiaea <i>Brodiaea orcuttii</i>	Not expected to occur due to the lack of suitable habitat. Also, the Project site is outside the species range; this species occurs in wetland areas at the Santa Rosa Plateau, Miller Mountain, and San Jacinto River.
Parish's meadowfoam <i>Limnanthes gracilis</i> ssp. <i>parishii</i>	Not expected to occur due to the lack of suitable habitat. Also, the Project site is outside the species range; this species is restricted to the Santa Rosa Plateau within the MSHCP Plan Area.
Prostrate navarretia <i>Navarretia prostrata</i>	Not expected to occur due to the lack of suitable habitat. Also, the Project site is outside the species range; this species is restricted to the Santa Rosa Plateau within the MSHCP Plan Area.
San Diego button-celery <i>Eryngium aristulatum</i> var. <i>parishii</i>	Not expected to occur due to the lack of suitable habitat. Also, the Project site is outside the species range; this species is restricted to the Santa Rosa Plateau within the MSHCP Plan Area.
San Jacinto Valley crownscale <i>Atriplex coronata</i> var. <i>notatior</i>	Not expected to occur due to the lack of suitable habitat.
San Miguel savory <i>Satureja chandleri</i>	Suitable habitat occurs; however, none were observed during the 2013 focused plant surveys.

Table 3 (Continued)

MSHCP Riparian/Riverine Plant Species

Species	Potential to Occur within the Study Area
Santa Ana River woollystar <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Not expected to occur. The Project site is outside the species range; this species is restricted to the Santa Ana River and alluvial fan sage scrub habitat which does not occur within the Project site.
Slender-horned spineflower <i>Dodecahema leptoceras</i>	Not expected to occur due to the lack of alluvial fan habitat. None were observed during the 2013 focused plant surveys.
Smooth tarplant <i>Centromadia pungens</i> ssp. <i>laevis</i>	Suitable habitat occurs; however, none were observed during the 2013 focused plant surveys.
Southern California black walnut <i>Juglans californica</i>	Not expected to occur. This is a conspicuous tree species that would have been detected if present.
Spreading navarretia <i>Navarretia fossalis</i>	Not expected to occur due to the lack of vernal pools.
Thread-leaved brodiaea <i>Brodiaea filifolia</i>	Not expected to occur due to the lack of clay soils.
Vernal barley <i>Hordeum intercedens</i>	Not expected to occur due to the lack of alkaline areas and vernal pools. Also, none were observed during the 2013 focused plant surveys (this species can also occasionally occur in coastal scrub).

Source: PCR Services Corporation 2013.

4.7.6.5 Additional Survey Needs and Procedures

Section 6.3.2, *Additional Survey Needs and Procedures*, of the MSHCP provides for additional survey needs for the burrowing owl, as well as a number of sensitive plant, amphibian, and mammal species.

Burrowing Owl Survey Area

The Project site and off-site areas are within the Burrowing Owl Survey Area; therefore, in compliance with the MSHCP, surveys are required for this species. As discussed above in section 4.7.5 *Special-Status Wildlife Species*, Step I and Step II surveys conducted for the Project following MSHCP protocol were negative. Although the site does not currently support burrowing owls, pre-construction surveys are required within 30 days of ground disturbance based on the presence of suitable habitat.

Criteria Area Species Survey Area

The Project site and off-site areas are not within the Criteria Area Species Survey Area; therefore, no surveys were required for Criteria Area plant species.

Table 4

MSHCP Riparian/Riverine Wildlife Species

Species	Potential to Occur within the Study Area
Arroyo toad <i>Anaxyrus californicus</i>	Not expected to occur due to the lack of suitable habitat.
Mountain yellow-legged frog <i>Rana muscosa</i>	Not expected to occur due to the lack of suitable habitat.
California red-legged frog <i>Rana aurora draytonii</i>	Not expected to occur due to the lack of suitable habitat.
Bald eagle <i>Haliaeetus leucocephalus</i>	Not expected to occur due to the lack of suitable habitat.
Least Bell's vireo <i>Vireo bellii pusillus</i>	Low potential as a migrating stop-over habitat. Habitat is limited to an isolated 0.36-acre patch of southern willow scrub/eucalyptus woodland that is not suitable for nesting (0.33 acre on-site and 0.03 acre off-site).
American peregrine falcon <i>Falco peregrinus anatum</i>	Very low potential for foraging (not observed). No suitable breeding habitat occurs within the Project site (on- or off-site).
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	Not expected to occur due to the lack of suitable habitat.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	Not expected to occur due to the lack of suitable habitat.
Santa Ana sucker <i>Catostomus santaanae</i>	Not expected to occur due to the lack of suitable habitat.
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	Not expected to occur due to the lack of suitable habitat.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Not expected to occur due to the lack of suitable habitat.

Source: PCR Services Corporation 2013.

Amphibian Species Survey Area

The Project site and off-site areas are not within the Amphibian Species Survey Area; therefore, no surveys are required.

Mammal Species Survey Area

The Project site and off-site areas are not within the Mammal Species Survey Area; therefore, no surveys are required.

4.7.6.6 Urban/Wildlands Interface

Section 6.1.4, *Guidelines Pertaining to the Urban/Wildlands Interface*, of the MSHCP presents a number of guidelines that are intended to address indirect effects associated with locating developments in proximity to a MSHCP Conservation Area. These guidelines address the quantity and quality of any runoff generated by the development, night lighting, noise, and domestic predators. The Project site is not within or adjacent to any Criteria Cells, and is separated from the nearest identified Conservation Areas by the I-15. Specifically, these areas are located northeast of the Project site and include Cell Group J' approximately 0.6 miles away and Proposed Linkage 8 associated with Sedco Hills just over one mile away. As such, no potential for indirect effects are anticipated.

5.0 THRESHOLDS OF SIGNIFICANCE

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

“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 State 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...”

Appendix G of the State CEQA Guidelines is more specific in addressing biological resources and encompasses a broader range of resources to be considered, including: candidate, sensitive, or special status species; riparian habitat or other sensitive natural communities; federally protected wetlands; fish and wildlife movement corridors; local policies or ordinances protecting biological resources; and, adopted HCPs. This is done in the form of a checklist of questions to be answered during the Initial Study leading to the preparation of the appropriate environmental documentation for a project [i.e., Negative Declaration, Mitigated Negative Declaration, or Environmental Impacts Report (EIR)]. Because these questions are derived from standards in other laws, regulations, and other commonly used thresholds, it is reasonable to use these standards as a basis for defining significance thresholds in an EIR. 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 conditions would result from implementation of the proposed project.

Threshold BIO-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 Wildlife or U.S. Wildlife Service.

Threshold BIO-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 Wildlife or U. S. Fish and Wildlife Service.
Threshold BIO-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.
Threshold BIO-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 areas.
Threshold BIO-E	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
Threshold BIO-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.

For the purposes of this impact analysis the following definitions apply, where applicable:

- “Significant Impact” means loss or harm of a magnitude which, based on current scientific data and knowledge would: (1) substantially reduce population numbers of a listed, candidate, sensitive, rare, or otherwise special status species; (2) substantially reduce the distribution of a sensitive natural community/habitat type; or (3) eliminate or substantially impair the functions and values of a biological resource (e.g., streams, wetlands, or woodlands) in a geographical area defined by interrelated biological components and systems. In the case of this analysis the prescribed geographical area is considered to be the region that includes the USGS topographic quadrangles for the Project, namely Wildomar. For some species, the geographic area may extend to the vicinity of the Project site based on known distributions of the species. The vicinity of the Project is considered to comprise the following USGS topographic quadrangles: Lake Elsinore, Romoland, Murrieta, Temecula, Fallbrook, Margarita Peak, Sitton Peak and Alberhill.
- “Conflict” means contradiction of a magnitude, which based on foreseeable circumstances, would preclude or prevent substantial compliance.
- “Rare” means: (1) that the species exists in such small numbers throughout all, or a significant portion of, its range that it may become endangered if its environment worsens; or (2) the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in the FESA.

6.0 PROJECT RELATED IMPACTS

6.1 REGULATORY SETTING

Sensitive species are provided protection by either federal or state resource management agencies, or both, under provisions of the FESA and CESA. There are a number of performance criteria and standard conditions that must be met as part of any review and approval of projects. These include compliance with all of the terms, provisions, and requirements with applicable laws that relate to federal, state, and local regulating agencies related to potential impacts to sensitive plant and wildlife species, wetlands, riparian habitats, and blue lined stream courses. The following summarizes federal and state regulations, and CNPS, as previously discussed in section 4.7 *Sensitive Biological Resources*.

6.1.1 Federal Regulations

As previously discussed in section 4.7.1 *Federal Sensitive Resource Protection and Classifications* of this BRA, under provisions of Section 9(a)(1)(B) of the FESA, unless properly permitted, it is unlawful to “take” any listed species. In a case where a property owner seeks permission from a federal agency for an action which could affect a federally-listed plant and animal species, the property owner and agency are required to consult with USFWS to obtain appropriate permits. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. In addition to FESA, take of migratory birds, or bald or golden eagles, require permits pursuant to the MBTA and the Bald and Golden Eagle Protection Act, respectively. Furthermore, any impacts to USACE and RWQCB jurisdictional waters may require permitting pursuant to Sections 404 and 401 of the CWA, respectively.

6.1.2 State of California Regulations

As previously discussed in section 4.7.2 *State of California Sensitive Resource Protection and Classifications* of this BRA, Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species. 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.” Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required by an initiator prior to disturbance. State regulations also exist for protection of birds pursuant to the MBTA, and for acquiring permits for impacts to CDFW jurisdictional streambeds pursuant to Section 1602 of the Fish and Game Code.

6.1.3 California Native Plant Society

As previously discussed in section 4.7.2 *State of California Sensitive Resource Protection and Classifications* of this BRA, the 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 which classifies plant species into categories of rarity. Informally listed species are not protected per se, but warrant consideration in the preparation of biological assessments.

6.2 PROJECT IMPACTS

The analysis in section 6.3 *Impact Analysis* of this BRA examines the potential impacts to plant and wildlife resources that may occur as a result of implementation of the Project. For the purpose of this BRA, project-related impacts take two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of natural habitats (i.e., vegetation or plant communities), which in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts also include the destruction of individual plants or wildlife, which is typically the case in species of low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals in these manners may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and, hence, population stability.

Indirect impacts are considered to be those that involve the effects of increases in ambient levels of sensory stimuli (e.g., noise, light), unnatural predators (e.g., domestic cats and other non-native animals), and competitors (e.g., exotic plants, non-native animals). Indirect impacts may be associated with the construction and/or eventual habitation/operation of a project; therefore, these impacts may be both short-term and long-term in their duration. These impacts are commonly referred to as “edge effects” and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to study areas.

The determination of impacts in this analysis is based on both the Project site’s existing uses and the biological values of the habitat and/or sensitivity of plant and wildlife species to be affected. Any required mitigation measures to address impacts are discussed in section 7.0 below; compliance with existing regulations are outlined in section 7.0 as Conditions of Approval, and recommendations for Best Management Practices are also provided.

The biological values of resources within, adjacent to, and outside the area to be affected by the Project were determined by consideration of several factors, as applicable. These included the overall size of habitats to be affected, the Project site’s previous land uses and disturbance history, the Project site’s surrounding environment and regional context, the on-site biological diversity and abundance, the presence of sensitive and special-status plant and wildlife species, the Project site’s importance to regional populations of these species, and the degree to which on-site habitats are limited or restricted in distribution on a regional basis and, therefore, are considered sensitive in themselves. Therefore, the focus of this impacts analysis is on sensitive plant communities/habitats, resources that play an important role in the regional biological system, and special-status species.

Impacts to biological resources as a result of Project development were analyzed in GIS using Computer-Aided Design (CAD) data of the Project footprint provided by the project architect, KTG Group, Inc., on September 10, 2013. Acreages of impacts were calculated by overlaying the CAD data over GPS data of biological resources collected by PCR during the surveys.

6.3 IMPACT ANALYSIS

6.3.1 Impacts to Sensitive Species

Threshold BIO-A: Would the project 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. Wildlife Service?

Less than Significant with Regulatory Compliance

6.3.1.1 Special-Status Plant Species

Development of the Project would result in the direct removal of numerous common plant species; a list of plant species observed within the Project site is included in Appendix A. Common plant species present within the Project site occur in large numbers throughout the region and their removal does not meet the significance thresholds defined in section 5.0 *Thresholds of Significance* above. Therefore, impacts to common plant species would be considered a less than significant impact and no mitigation measures would be required.

As discussed in section 4.7.4 *Special-Status Plant Species*, only one listed species was observed on the Project site, paniculate tarplant (CNPS List 4). The species was limited to two areas totaling 0.74 acre, including a moderate density area in the southeastern portion of the site (0.60 acre) and a low density area in the northeastern portion of the site (0.14 acre). Both areas are proposed for permanent impacts, as shown on **Figure 11, Impacts to Paniculate Tarplant**. This species is widely distributed in Riverside County, as documented on Calflora, including 31 CNPS and other records, in addition to georeferenced coordinates for several hundred observations (Calflora, 2012). Based on the distribution of this species within Riverside County, the lack of consideration of this species for coverage under the MSHCP, and the CNPS listing of 4, this species is not considered sensitive. Therefore, impacts to paniculate tarplant would be considered a less than significant impact and no mitigation measures would be required.

6.3.1.2 Special-Status Wildlife Species

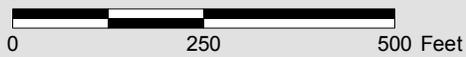
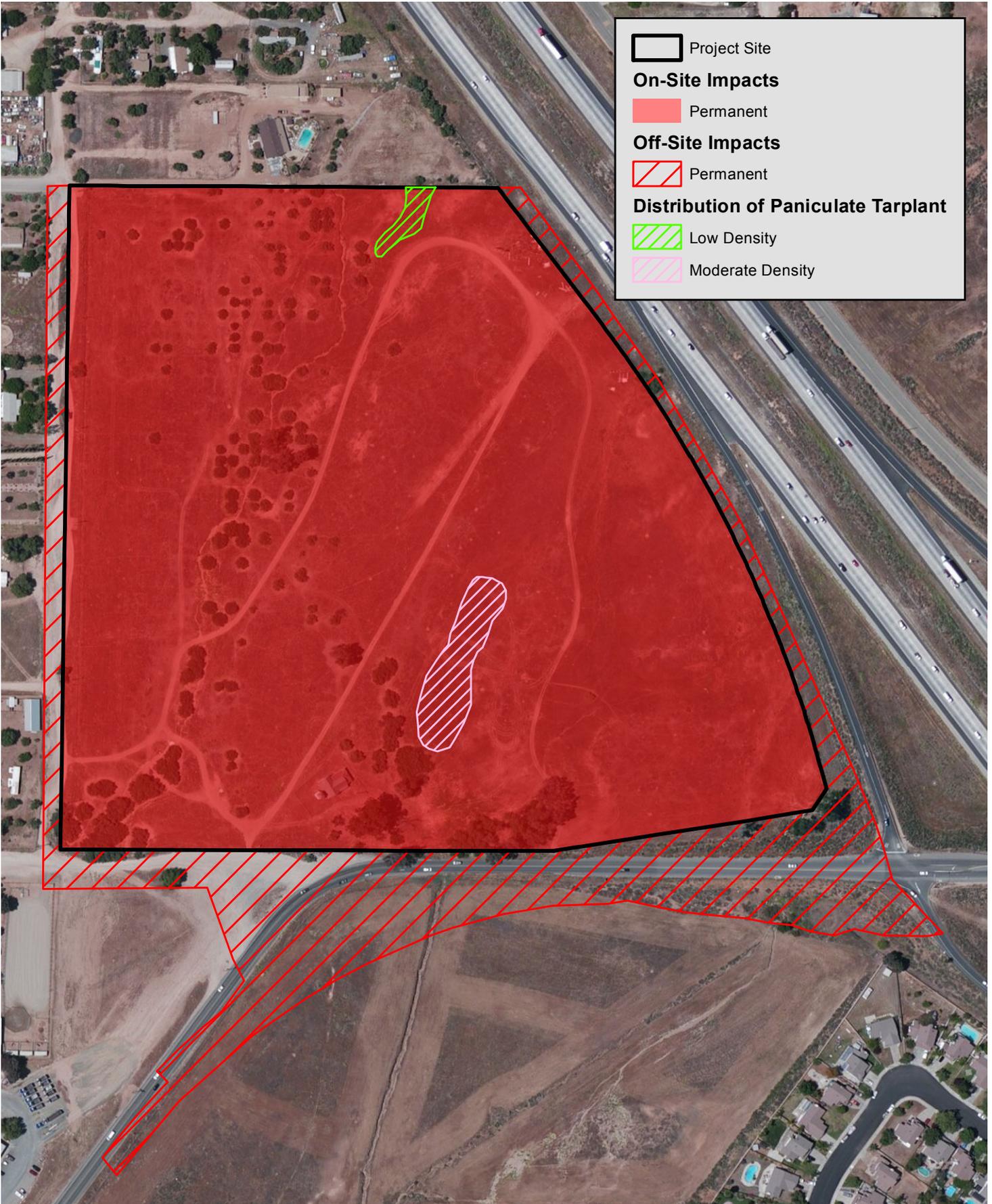
Development of the Project would result in the disruption and removal of habitat and the loss and displacement of non-sensitive common wildlife species. A list of wildlife species observed within the Project site is included in Appendix A. Due to the limited amount of native habitat to be removed and the high level of existing disturbance from human activity, these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds defined in section 5.0 *Thresholds of Significance* above. Therefore, impacts to common wildlife species would be considered less than significant impact and no mitigation measures would be required.

As outlined above in section 4.7.5 *Special-Status Wildlife Species* and Appendix C, 13 special-status species were determined to have a potential to occur on- and or off-site and 1 species (burrowing owl) was determined absent following focused surveys. Of the 12 species with potential to occur, 7 are Covered Species pursuant to the MSHCP (coast horned lizard, orange-throated whiptail, coastal California gnatcatcher, northwestern San Diego pocket mouse, Stephen's kangaroo rat, Los Angeles pocket mouse, and

San Diego black-tailed jackrabbit). No surveys or mitigation is required for these Covered Species assuming payment of the MSHCP development fee and implementation of MSHCP measures, including the Standard Best Management Practices provided in Appendix C of the MSHCP (see also section 6.3.6 *Consistency with Adopted Natural Community Conservation Plan* below). For the remaining 5 species, 1 is a Covered Species with additional surveys required in impact areas (least Bell's vireo), 2 species are state species of special concern with very low or low potential based on the limited, scattered and disturbed scrub habitat on- or off-site and occurrences in the region (Jacumba pocket mouse and San Diego desert woodrat), and two species are state species of special concern bats with potential for foraging only (western mastiff bat and pallid bat – foraging habitat is limited). No impacts to least Bell's vireo, and no significant impacts to the remaining species, are expected as summarized below:

- No indirect (habitat) or direct (loss of individuals) impacts are expected to least Bell's vireo. No impacts to potential least Bell's vireo habitat (southern willow scrub/eucalyptus woodland) will occur since it is not considered suitable for nesting based on the declining structure of the understory and the size of the habitat which is generally too small for a breeding territory. The habitat could be used as a stop-over rest area during migration of individuals to suitable breeding habitats in the region. However, no direct impacts are anticipated to least Bell's vireo as no nests are anticipated. If the species is present, only migrant birds would be expected on the Project site for a short duration just prior to the start of the breeding season when the birds have not yet established their breeding territories (breeding season starts around April 10, depending on their arrival from wintering areas). Pre-construction nesting bird surveys would be conducted prior to commencement of Project construction (see section 6.3.4 *Impacts to Wildlife Movement and Migratory Species* below).
- No significant impacts to western mastiff bat and pallid bat foraging habitat based on the limited and disturbed nature of the habitat within the Project's boundaries, and the availability of alternative, higher quality foraging habitat within the region. As such, any impacts to foraging habitat for these species would be less than significant and no mitigation measures would be required.
- No significant impacts to Jacumba pocket mouse or San Diego desert woodrat based on the low to very low potential for presence, respectively, and the limited, disturbed habitat that would not be expected to support large populations of these species, if present. Furthermore, these species were not considered for coverage under the MSHCP, indicating that regionally significant populations of these species do not exist within the MSHCP boundaries, and no CNDDDB records occur within 10 miles of the Project site. As such, any impacts to these species would be less than significant and no mitigation measures would be required.

Despite negative surveys for this species, a pre-construction survey for burrowing owl is required within 30 days prior to ground disturbance due to the presence of potentially suitable habitat, to avoid potential direct take of burrowing owls in the future. A Condition of Approval is provided for burrowing owl in section 7.2.4 *Measures to Mitigate Potentially Significant Impacts to the MSHCP* of this BRA in compliance with the MSHCP, in addition to a recommended mitigation measure should burrowing owls be present in the future (see section 6.3.6 *Consistency with Adopted Natural Community Conservation Plan* below)



Impacts to Paniculate Tarplant

Baxter Village APNs 367180015 & 367180043
 Source: Aerial Express, 2010; PCR Services Corporation, 2013.

FIGURE

11

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As previously discussed in section 4.7.5 *Special-Status Wildlife Species*, the site supports potential nesting and foraging habitat for migratory birds, in addition to potential foraging habitat for raptors. Based on the disturbed nature and the presence of development surrounding the Project site, the quality of foraging habitat is considered to be low. The loss of foraging habitat as a result of the Project would not expect to impact the foraging of these species. Therefore, impacts to foraging habitat would be considered less than significant and no mitigation measures would be required. Direct impacts to these species would be avoided through compliance with the Migratory Bird Treaty Act (MBTA), as discussed in section 6.3.4 *Impacts to Wildlife Movement and Migratory Species* below.

6.3.2 Impacts to Sensitive Plant Communities

Threshold BIO-B: Would the project 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?

Less than Significant with Regulatory Compliance

6.3.2.1 Sensitive Plant Communities

Two sensitive native habitats were identified totaling 0.46 acre, including southern willow scrub/eucalyptus woodland (0.33 acre on-site and 0.03 acre off-site) and southern riparian scrub (0.1 acre, off-site only) (see Table 1). Southern willow scrub (CNDDDB Code 61.211.05) and southern riparian scrub (CNDDDB Code 61.130.00) are both considered high priority for inventory in the CNDDDB. Therefore, impacts to these habitats are considered potentially significant; the entire 0.46-acre of southern willow scrub/eucalyptus woodland and southern riparian scrub is proposed for impacts by the Project, as summarized in **Table 5, Permanent Impacts to Natural Communities**. A mitigation measure is provided in section 7.2.1 *Measures to Mitigate Potentially Significant Impacts to Sensitive Natural Communities* of this BRA that would reduce this impact to a less than significant level. Based on the disturbed and remnant nature of these vegetation communities, mitigation is proposed at a 1:1 ratio.

The remainder of the Project site and off-site areas supports native (buckwheat scrub, buckwheat scrub/ruderal, and coast live oak woodland) and non-native dominated (eucalyptus woodland, olive grove/ruderal, ruderal/buckwheat scrub, and disturbed) communities which are not considered sensitive pursuant to CDFW, USFWS, or the MSHCP. Furthermore, the native communities within the Project site are small, scattered, and are of low quality for sensitive plant and wildlife species. Since these habitats are not sensitive, impacts would be less than significant and no mitigation measures would be required.

All of the natural communities on-site would be permanently impacted by the Project. A figure showing impacts to natural plant communities is provided as **Figure 12, Impacts to Natural Communities**, and acreages are summarized in Table 5.

6.3.2.2 CDFW Jurisdiction

The Project site and off-site areas support drainages that are considered jurisdictional streambed pursuant to Section 1602 of the California Fish and Game Code, as regulated by CDFW. This includes Drainage A on-site, and Drainages B and C off-site. Impacts are proposed to the entire portions of these jurisdictional

Table 5

Permanent Impacts to Natural Communities

Natural Community	On-Site (acres)	Off-Site (acres)	Total (acres)
Buckwheat Scrub	-	0.77	0.77
Buckwheat Scrub/Ruderal	0.35	0.07	0.42
Coast Live Oak Woodland	0.55	-	0.55
Southern Riparian Scrub	-	0.10	0.10
Southern Willow Scrub/Eucalyptus Woodland	0.33	0.03	0.36
Eucalyptus Woodland	0.18	0.03	0.21
Olive Grove/Ruderal	3.30	-	3.30
Ruderal/Buckwheat Scrub	-	1.58	1.58
Disturbed	31.26	5.34	36.6
Developed	-	1.15	1.15
Total	35.97	9.07	45.04

Source: PCR Services Corporation, 2013.

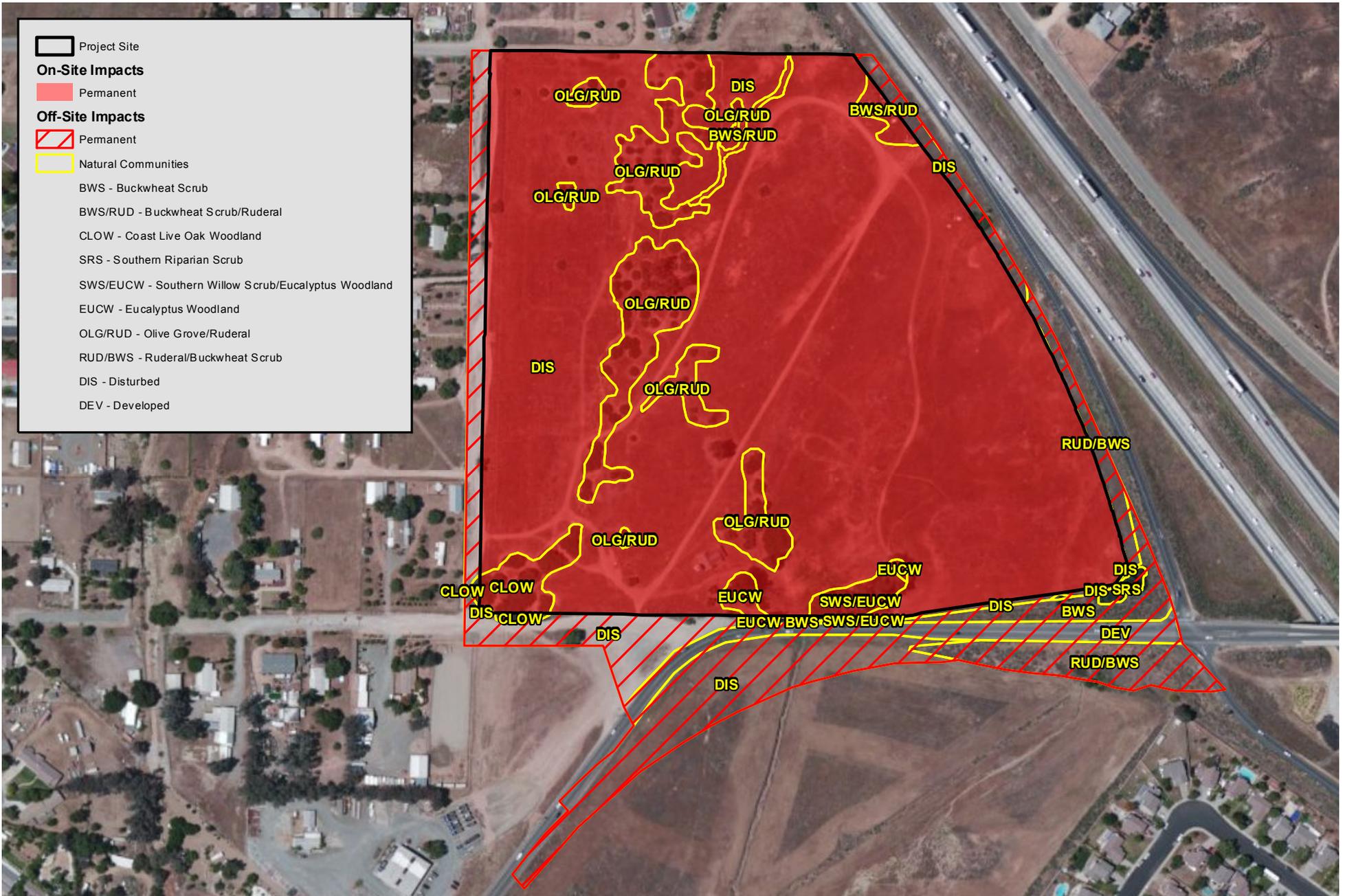
drainages on the Project site and off-site, as shown in **Figure 13, Impacts to Drainage Features**. Existing and impact acreages are summarized in **Table 6, Existing and Permanent Impacts to CDFW Jurisdictional Features**, totaling 0.06 acre of permanent on-site CDFW impacts in Drainage A, and 0.13 acre of permanent off-site impacts (0.02 acre in Drainage B and 0.11 acre in Drainage C). Impacts to these jurisdictional drainages would be required to comply with Section 1602 of the California Fish and Game Code, including applying for a permit and compensatory mitigation. A Condition of Approval is proposed in section 7.2.2 *Measures to Mitigate Potentially Significant Impacts to Jurisdictional Features* of this BRA to comply with the compensatory mitigation requirement of this regulation, subject to approval by CDFW. Compliance with Section 1602 of the California Fish and Game Code would reduce impacts to a less than significant level.

6.3.3 Impacts to Wetlands

Threshold BIO-C: Would the project 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?

Less than Significant with Regulatory Compliance

No federally protected wetlands occur within the on- or off-site portions of the Project. The Project site does, however, support non-wetland, ephemeral drainages that may be regulated by the Clean Water Act (CWA). Drainage A has been severed from its historic watershed and does not support indicators of a surface connection to downstream “waters of the U.S.” Therefore, Drainage A may be considered an isolated non-jurisdictional drainage feature by the USACE pending processing of Jurisdictional Determination, that would not be regulated under Section 404 of the CWA. Drainage A would be considered RWQCB “waters of the



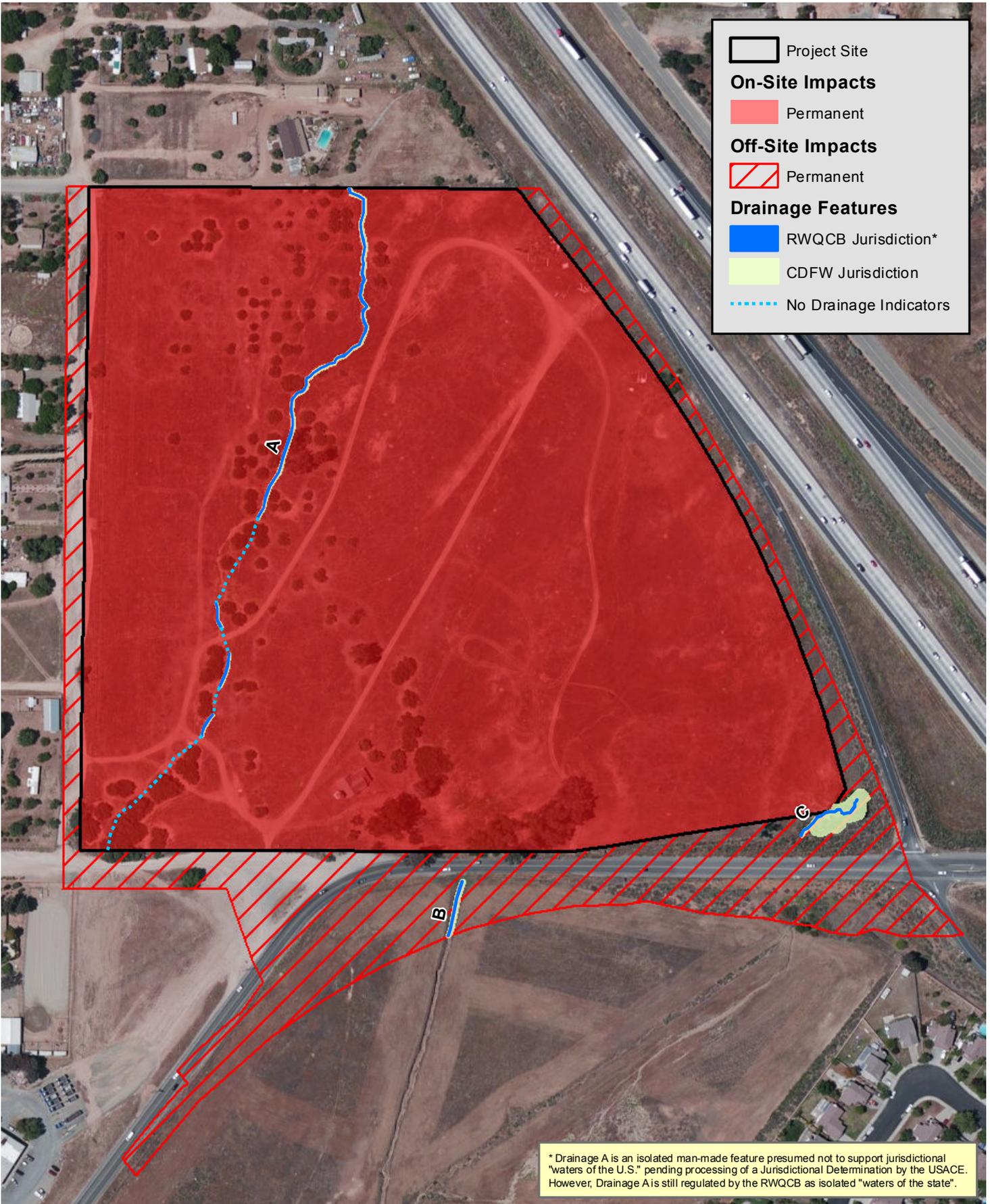


Table 6

Existing and Permanent Impacts to CDFW Jurisdictional Features

Feature	Area (acres)			
	On-Site		Off-Site	
	Existing	Impacts	Existing	Impacts
Drainage A (On-Site)	0.06	0.06	-	-
Drainage B (Off-Site)	-	-	0.02	0.02
Drainage C (Off-Site)	-	-	0.11	0.11
Total	0.06	0.06	0.13	0.13

Source: PCR Services Corporation, 2013.

State” regulated pursuant to Section 401 of the CWA, and Drainages B and C would both be considered USACE and RWQCB jurisdictional pursuant to the CWA. Impacts are proposed to the entire portion of these jurisdictional features on the Project site and off-site, as shown in Figure 13. Existing and impact acreages are summarized in **Table 7, Existing and Permanent Impacts to USACE/RWQCB Jurisdictional Features**, totaling 0.02 acre of permanent on-site RWQCB impacts in Drainage A and 0.02 acre of permanent USACE/RWQCB off-site impacts (0.01 acre in Drainage B and 0.01 acre in Drainage C). Impacts to these jurisdictional areas would be required to comply with Sections 404 and 401 of the CWA, including applying for a permit and mitigation subject to approval by USACE and RWQCB, respectively. A Condition of Approval is proposed in section 7.2.2 *Measures to Mitigate Potentially Significant Impacts to Jurisdictional Features* of this BRA to comply with the compensatory mitigation requirement of these regulations, subject to approval by USACE and RWQCB. Compliance with Sections 404 and 401 of the CWA would reduce impacts to a less than significant level.

Table 7

Existing and Permanent Impacts to USACE/RWQCB Jurisdictional Drainages

Feature	Length (ft)	Area (acres) ^a			Flow
		Existing	USACE Impacts	RWQCB Impacts	
Drainage A (On-Site)	924	0.02	0.00 ^b	0.02	Anthropogenic
Drainage B (Off-Site)	109	0.01	0.01	0.01	Ephemeral
Drainage C (Off-Site)	149	0.01	0.01	0.01	Ephemeral
Total	1,182	0.04	0.02	0.04	

^a Jurisdictional acreages overlap and are not additive (e.g., USACE acreages are included in the total RWQCB and CDFG jurisdictional acreages).

^b Drainage A is currently presumed to be an isolated drainage feature not regulated as “waters of the U.S.” pending the results of a Jurisdictional Determination currently under review by the USACE.

Source: PCR Services Corporation, 2013.

6.3.4 Impacts to Wildlife Movement and Migratory Species

Threshold BIO-D: Would the project 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 areas?

Less than Significant with MBTA Compliance

6.3.4.1 Wildlife Movement

As described in section 4.5.2 *Wildlife Movement Within the Project Site* above, the Project site supports potential live-in and movement habitat for species on a local scale (i.e., some limited live-in and at least marginal movement habitat for reptile, bird, and small mammal species), but it likely provides little to no function to facilitate wildlife movement for wildlife species on a regional scale, and is not identified as a regionally important dispersal or seasonal migration corridor. Movement on a local scale likely occurs with species adapted to urban environments due to the high level of development in the vicinity of the Project site. Although implementation of the Project would result in disturbances to local wildlife movement within the Project site, those species are considered to comprise primarily of those adapted to urban areas and would be expected to persist in the vicinity following construction of the Project. As such, impacts would be less than significant and no mitigation measures would be required. Since the Project site does not function as a regional wildlife corridor and is not known to support wildlife nursery area(s), no impacts would occur and no mitigation measures would be required.

6.3.4.2 Migratory Species

The Project site and off-site areas have the potential to support songbird nests due to the presence of limited trees, shrubs and ground cover. Nesting activity typically occurs from February 15 to August 31. Disturbing or destroying active nests is a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact as defined by the thresholds of significance (Threshold BIO-D) in section 5.0 *Thresholds of Significance* above. Any potential impacts to raptor and songbird nests would be considered potentially significant. A mitigation measure is proposed in section 7.2.3 *Measures to Mitigate Potentially Significant Impacts to Migratory or Nesting Birds* of this BRA to comply with the MBTA and reduce impacts to a less than significant level.

6.3.5 Consistency with Local Policies and Ordinances

Threshold BIO-E: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impacts

There is no local tree ordinance for the City of Wildomar, nor other local ordinances with which the proposed Project would conflict.

6.3.6 Consistency with Adopted Natural Community Conservation Plan

Threshold BIO-F: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than Significant with MSHCP Compliance

As discussed in section 4.7.6 *Western Riverside County MSHCP Consistency Analysis* of this BRA, the Project site is within the Elsinore Area Plan of the Western Riverside County MSHCP and requires compliance with the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP) and the Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP), as summarized below. The Project site is not within a cell, a designated cell group, a subunit, or any cores and linkages; therefore, conservation of land on the Project site is not required pursuant to the MSHCP. The Project site is also not within the survey overlays for Narrow Endemic Plant Species (Section 6.1.3 of the MSHCP), Criteria Area Species, Amphibian Species, or Mammal Species (Section 6.3.2 of the MSHCP). The Project site is not adjacent to any cell groups and will not result in edge effects that will adversely affect biological resources within the MSHCP Conservation Area; therefore, the Project will not be subject to the *Guidelines Pertaining to the Urban/Wildlands Interface* for the treatment and management of edge factors such as lighting, urban runoff, toxics, and domestic predators (Section 6.1.4 of the MSHCP). Compliance with the Riparian/Riverine and Burrowing Owl sections of the MSHCP, in addition to payment of the MSHCP development fee and implementation of required measures, including the Standard Best Management Practices provided in Appendix C of the MSHCP, will reduce impacts to a less than significant level. A Condition of Approval is proposed in section 7.2.4 *Measures to Mitigate Potentially Significant Impacts to the MSHCP* of this BRA to comply with the MSHCP.

Riparian/Riverine Areas and Vernal Pools

The on-site Drainage A was not considered to meet the definition of Riparian/Riverine Areas pursuant to the MSHCP based on the absence of riparian vegetation, in addition to a lack of an OHWM and the absence of a downstream connection to other drainages. Drainage A is considered to be an erosional feature that was artificially created in uplands by anthropogenically controlled discharge, and the drainage is primarily unvegetated with the exception of some patches of native and non-native upland vegetation. Conversely, Drainages B and C are considered to meet the definition of a Riverine Area and Riparian Area, respectively, based on the vegetation and/or downstream connection. For the Riverine Area associated with Drainage B, the biological functions and values of Riparian/Riverine Areas do not exist on-site due to the absence of riparian/riverine associated vegetation (the area is mapped as disturbed and the drainage itself is unvegetated). For the Riparian Area associated with Drainage C (specifically 0.1 acre of southern riparian scrub; the remainder of Drainage C is unvegetated), the habitat is not considered suitable for the amphibians, birds, fish, invertebrate-crustacean, and plant species afforded protection under the MSHCP based on the lack of suitable habitat or negative focused surveys, and as such no further surveys or mitigation is required for protected species. The 0.36-acre of southern willow scrub/eucalyptus woodland community was also not considered a Riparian/Riverine feature based on the lack of hydrology and no upstream or downstream connections. This has resulted in a remnant, isolated native component that is showing signs of stress and is not considered suitable for MSHCP Riparian/Riverine protected species. Based on the lack of suitable

habitat, no focused surveys or mitigation is required pursuant to the MSHCP.¹¹ No other aquatic features that could provide suitable habitat for Riparian/Riverine species occur within the on- or off-site portions of the Project site.

Based on the assessment of Riparian/Riverine resources, the Project will result in permanent impacts to Riparian/Riverine Areas located within the off-site areas, including 0.02 acre in Drainage B and 0.11 acre in Drainage C (including 0.1 acre of southern riparian scrub). As such, preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis will be required providing details on the impacts and compensatory mitigation in compliance with MSHCP requirements. A Condition of Approval is proposed in section 7.2.4 *Measures to Mitigate Potentially Significant Impacts to the MSHCP* of this BRA to comply with the Riparian/Riverine requirements of the MSHCP.

Burrowing Owl

As discussed above in section 6.3.1.2 *Special-Status Wildlife Species* of this BRA, the on- and off-site portions of the Project do not currently support burrowing owls. However, in compliance with the MSHCP, pre-construction surveys are required within 30 days of ground disturbance based on the presence of suitable habitat. These surveys should be conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside 2006). A Condition of Approval is proposed in section 7.2.4 *Measures to Mitigate Potentially Significant Impacts to the MSHCP* of this BRA to comply with the burrowing owl requirements of the MSHCP, in addition to a recommended mitigation measure pursuant to CDFW published guidelines (CDFW 2012) should burrowing owls be present on the Project site in the future.

¹¹ Although the southern willow scrub/eucalyptus woodland is not considered to meet the definition of a MSHCP Riparian/Riverine Area, the habitat is considered a sensitive community pursuant to CDFW and is being mitigated accordingly, as outlined in section 6.3.2.1 *Sensitive Plant Communities*, of this BRA. Mitigation is proposed as a 1:1 ratio based on the quality of the habitat.

7.0 MITIGATION MEASURES AND CONDITIONS OF APPROVAL

7.1 APPROACH

Mitigation measures are recommended for those impacts determined to be significant to sensitive biological resources. Mitigation measures for impacts considered to be “significant” were developed in an effort to reduce such impacts to a level of “insignificance,” while at the same time allowing an opportunity to realize development goals for the Project. As stated in CEQA Guidelines Section 15370 mitigation includes:

1. Avoiding the impact altogether by not taking a certain action or parts of an action.
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
3. Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
5. Compensating for the impact by replacing or providing substitute resources or environments.

Where compliance with existing regulations and the issuance of permits by regulatory agencies would reduce impacts to a less than significant level, those measures are proposed as Conditions of Approval.

7.2 MITIGATION MEASURES AND CONDITIONS OF APPROVAL FOR SIGNIFICANT IMPACTS

The following mitigation measures (MM) and conditions of approval (COA) address potentially significant impacts from the proposed Project.

7.2.1 Measures to Mitigate Potentially Significant Impacts to Sensitive Natural Communities

MM BIO-1 *Impacts to 0.36 acre of southern willow scrub/eucalyptus woodland (including 0.33 acre on-site and 0.03 acre off-site), and 0.10 acre of southern riparian scrub (off-site) shall occur at a no less than 1:1 ratio on off-site land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an established off-site mitigation bank. Purchase of any mitigation credits shall occur prior to any impacts to the southern willow scrub/eucalyptus woodland or southern riparian scrub habitats.*

Mitigation proposed on land acquired for the purpose of in-perpetuity mitigation shall include the preservation, creation, restoration, and/or enhancement of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to any impacts to the southern willow scrub/eucalyptus woodland and southern riparian scrub habitats, and shall provide details as to the implementation of the

mitigation, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the impacted habitat.

This mitigation may also satisfy the CDFW habitat compensation required in MM BIO-2, either in part or whole.

7.2.2 Measures to Mitigate Potentially Significant Impacts to Jurisdictional Features

COA BIO-1 Prior to the issuance of any grading permit for permanent impacts in jurisdictional features, the project applicant shall obtain a Clean Water Act Section 404 permit and/or an Approved Jurisdictional Determination from the USACE, a Clean Water Act Section 401 permit from the RWQCB, and a Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFW. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

1. Off-site replacement of USACE/RWQCB jurisdictional “waters of the U.S.”/“waters of the State” at a ratio no less than 1:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an agency-approved off-site mitigation bank.
2. Off-site replacement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an agency-approved off-site mitigation bank.

The CDFW mitigation may also satisfy the habitat compensation required in MM BIO-1, either in part or whole.

7.2.3 Measures to Mitigate Potentially Significant Impacts to Migratory or Nesting Birds

MM BIO-2 *Prior to the issuance of any grading permit that would result in removal of all suitable raptor and songbird nesting habitat, the Project applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following has been or will be accomplished.*

1. *Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.*
2. *Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all*

suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of approximately 300 feet (500 feet for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete, as determined by the biological monitor to minimize impacts. The biological monitor may determine alternative appropriate buffers and/or measures to protect the nesting birds.

7.2.4 Measures to Mitigate Potentially Significant Impacts to the MSHCP

COA BIO-2 Prior to the issuance of any grading permit, the Project applicant shall comply with all of the provisions of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), including payment of the MSHCP Local Development Mitigation Fee and Best Management Practices (specifically Appendix C, Standard Best Management Practices, of the MSHCP).

COA BIO-3 Due to the presence of suitable habitat and in compliance with the Western Riverside County MSHCP, a pre-construction survey for burrowing owl shall be conducted within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls that may occupy the site in the future.

MM BIO-3 *If burrowing owls are determined present following the pre-construction survey, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the "Staff Report on Burrowing Owl Mitigation" published by Department of Fish and Wildlife (March 7, 2012) including, but not limited to, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the Staff Report on Burrowing Owl Mitigation.*

COA BIO-4 Prior to the issuance of any grading permit, the Project applicant shall prepare a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis outlining the impacts and proposed compensatory mitigation for Riparian/Riverine Areas for submittal and approval by the Regional Conservation Authority and the wildlife agencies (CDFW and USFWS).

7.3 GENERAL RECOMMENDATIONS

7.3.1 Best Management Practices for Wildlife

- If any wildlife is encountered during construction activities, the wildlife should be allowed to leave the work area unharmed and shall be flushed or herded in a safe direction away from the work area(s).

- Any open trenches should be covered at the end of each work day in a manner to prevent the entrapment of wildlife, or adequately ramped to provide an animal escape.
- All vehicles and equipment should be maintained in proper working condition to minimize fugitive emissions and accidental spills from motor oil, hydraulic fluid, grease, or other fluids or hazardous materials entering downstream drainages. All fuel or hazardous waste leaks, spills, or releases shall be stopped or repaired immediately and cleaned up at the time of occurrence. All spill material removed should be disposed of at an appropriate offsite landfill. Maintenance vehicles should carry appropriate equipment and materials to isolate and remediate leaks or spills, such as a spill containment kit.
- All litter and pollutions laws should be followed. If trash receptacles are provided within or near the work areas they should be wildlife-proof.
- All exposed/disturbed areas should be stabilized to the greatest extent possible using appropriate, industry standard erosion control measures, to avoid soil run-off into downstream drainages.
- No construction activities should occur during active precipitation. If any precipitation is forecasted, the work area should be secured at least one day prior so no materials enter or wash into downstream drainages.

8.0 IMPACTS AFTER MITIGATION

8.1 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project, inclusive of mitigation measures and conditions of approval, would have less than significant impacts to sensitive wildlife species, sensitive natural communities, jurisdictional features, migratory and/or nesting birds, and the Western Riverside County MSHCP.

8.2 CUMULATIVE IMPACTS

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 significant. “Related projects” refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed Project. CEQA deems a cumulative impact analysis to be adequate if a list of “related projects” is included in the EIR or the proposed project is consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(b)(1)(B)]. CEQA also states that no further cumulative impact analysis is necessary for impacts of a proposed project consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(d)].

The MSHCP identifies areas for long-term conservation and management. As such, cumulative impacts of proposed projects within authorized take lands are minimized through the conservation of land. Cumulative impacts to the biological resources listed below for the Project site are considered to be less than significant based on compliance with the MSHCP and regulations for jurisdictional waters, in addition to mitigation for sensitive natural communities. This includes implementation of the mitigation measures and conditions of approval outlined above in section *6.0 Project Related Impacts* and *7.0 Mitigation Measures and Conditions of Approval*. Since the Project site was determined not to function as a regional wildlife movement corridor, this biological resource is not included below.

- Sensitive wildlife species (i.e., burrowing owl, if found, in addition to raptors and other migratory birds);
- Sensitive natural communities;
- Jurisdictional drainages;
- MSHCP Riparian/Riverine Areas;

The proposed mitigation would result in a no-net-loss of the biological function and value of these biological resources, and the conditions of approval would ensure compliance with existing regulations (such as the MSHCP and regulations for jurisdictional drainages). Therefore, with the proposed mitigation and conditions of approval, impacts would not be considered cumulatively significant. A summary is provided below.

Sensitive Wildlife Species: If any burrowing owls are observed on-site in the future, additional mitigation is proposed that would avoid direct impacts in compliance with the MSHCP. Mitigation is also proposed to

avoid direct impacts to raptors and migratory bird species through compliance with the MBTA. With these mitigation measures, any impacts would not be considered cumulatively significant.

Sensitive Natural Communities: Impacts to sensitive natural communities (i.e., southern willow scrub/eucalyptus woodland) would be mitigated off-site at no less than a 2:1 mitigation-to-impact ratio, either on land acquired for the purpose of in-perpetuity preservation, or at an established mitigation bank. With this mitigation measure, any impacts would not be considered cumulatively significant.

Jurisdictional Drainages: Impacts to jurisdictional features would be subject to permitting with the regulatory agencies, including USACE, RWQCB and/or CDFW, including compensatory mitigation. With the proposed mitigation and compliance with existing regulations through the permitting process, impacts would not be considered cumulatively significant.

Riparian/Riverine Areas: Impacts to Riparian/Riverine Areas would be subject to approval of a DBESP by the Regional Conservation Authority and wildlife agencies, as required in Section 6.1.2 of the MSHCP. With the approval and implementation of the DBESP, impacts would not be considered cumulatively significant.

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APPENDIX A

FLORAL AND FAUNAL COMPENDIUM

Appendix A: Floral and Faunal Compendium

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Adoxaceae	Elderberry Family
<i>Sambucus nigra</i>	blue elderberry
Anacardiaceae	Sumac Family
* <i>Schinus molle</i>	Peruvian peppertree
Asteraceae	Aster Family
<i>Ambrosia psilostachya</i>	western ragweed
<i>Artemisia californica</i>	coastal sagebrush
<i>Baccharis salicifolia</i>	mule fat
* <i>Carduus pycnocephalus</i>	Italian thistle
* <i>Centaurea melitensis</i>	totalote
<i>Corethrogyne filaginifolia</i>	common sandaster
<i>Deinandra paniculata</i>	paniculate tarweed
<i>Ericameria linearifolia</i>	narrowleaf goldenbush
<i>Ericameria palmeri</i>	Palmer's goldenbush
* <i>Filago gallica</i>	narrow-leaved filago
<i>Helianthus annuus</i>	common sunflower
* <i>Matricaria discoidea</i>	pineapple weed
Boraginaceae	Borage Family
<i>Amsinckia menziesii</i>	Menzies' fiddleneck
<i>Cryptantha intermedia</i>	common cryptantha
Brassicaceae	Mustard Family
* <i>Brassica tournefortii</i>	Sahara mustard
* <i>Hirschfeldia incana</i>	shortpod mustard
* <i>Sisymbrium irio</i>	London rocket
Chenopodiaceae	Goosefoot Family
<i>Chenopodium californicum</i>	California goosefoot
* <i>Chenopodium murale</i>	nettle-leaved goosefoot
* <i>Salsola tragus</i>	prickly Russian thistle
Cucurbitaceae	Gourd Family
<i>Marah macrocarpus</i>	Cucamonga manroot
Euphorbiaceae	Spurge Family
<i>Chamaesyce albomarginata</i>	rattlesnake weed
Fabaceae	Legume Family
<i>Acmispon americanus</i>	Spanish lotus
<i>Acmispon glaber</i> var. <i>glaber</i>	deerweed
<i>Lupinus microcarpus</i>	chick lupine
* <i>Melilotus indicus</i>	sourclover
* <i>Vicia villosa</i>	hairy vetch

*=Non-native Species

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Fagaceae <i>Quercus agrifolia</i>	Oak Family coast live oak
Geraniaceae * <i>Erodium cicutarium</i>	Geranium Family redstem stork's bill
Lamiaceae * <i>Marrubium vulgare</i> <i>Salvia apiana</i> <i>Salvia columbariae</i> <i>Salvia mellifera</i> <i>Trichostema lanceolatum</i>	Mint Family horehound white sage chia black sage vinegarweed
Myrtaceae <i>Eucalyptus globulus</i>	Myrtle Family blue gum
Olagraceae <i>Camissonia</i> sp.	Evening Primrose Family suncup
Oleaceae * <i>Olea europaea</i>	Olive Family olive
Polygonaceae <i>Eriogonum fasciculatum</i> <i>Rumex crispus</i> <i>Rumex salicifolius</i>	Buckwheat Family California buckwheat curly dock willow dock
Salicaceae <i>Populus fremontii</i> ssp. <i>fremontii</i> <i>Salix gooddingii</i> <i>Salix laevigata</i> <i>Salix lasiolepis</i>	Willow Family Fremont cottonwood black willow red willow arroyo willow
Simaroubaceae <i>Alianthus altissima</i>	Quassia Family tree of heaven
Solanaceae <i>Datura wrightii</i> * <i>Nicotiana glauca</i>	Nightshade Family jimson weed tree tobacco
Tamaricaceae * <i>Tamarix ramosissima</i>	Tamarisk Family tamarisk

*=Non-native Species

ANGIOSPERMS (MONOCOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Poaceae	Grass Family
<i>Avena sp.</i>	oat
* <i>Bromus diandrus</i>	ripgut grass
* <i>Bromus hordeaceus</i>	soft chess
* <i>Bromus madritensis ssp. rubens</i>	foxtail chess
* <i>Cynodon dactylon</i>	Bermuda grass
<i>Distichlis spicata</i>	saltgrass
* <i>Festuca myuros</i>	rattail fescue
* <i>Hordeum vulgare</i>	barley
Juncaceae	Rush Family
<i>Juncus arcticus</i>	wire rush

REPTILES

SCIENTIFIC NAME	COMMON NAME
Phrynosomatidae	Zebra-tailed Lizards and Relatives
<i>Sceloporus occidentalis</i>	western fence lizard

BIRDS

SCIENTIFIC NAME	COMMON NAME
Phalacrocoracidae	Cormorants
<i>Phalacrocorax aruitus</i>	double-crested cormorant
Ardeidae	Hérons
<i>Ardea alba</i>	great egret
Cathartidae	New World Vultures
<i>Cathartes aura</i>	turkey vulture
Accipitridae	Hawks, Kites, Harriers, and Eagles
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Buteo lineatus</i>	red-shouldered hawk
Falconidae	Falcons
<i>Falco sparverius</i>	American kestrel
Columbidae	Pigeons and Doves
<i>Columba livia</i>	rock dove
<i>Streptopelia decaocto</i>	Eurasian collared-dove
<i>Zenaida macroura</i>	mourning dove

*=Non-native Species

BIRDS

SCIENTIFIC NAME	COMMON NAME
Cuculidae	Cuckoos and Roadrunners
<i>Geococcyx californianus</i>	greater roadrunner
Trochilidae	Hummingbirds
<i>Calypte anna</i>	Anna's hummingbird
Picidae	Woodpeckers
<i>Picoides nuttalli</i>	Nuttall's woodpecker
Tyrannidae	Tyrant Flycatchers
<i>Sayornis nigricans</i>	black phoebe
<i>Sayornis saya</i>	Say's phoebe
<i>Tyrannus verticalis</i>	western kingbird
<i>Tyrannus vociferans</i>	Cassin's kingbird
Corvidae	Jays and Crows
<i>Aphelocoma californica</i>	western scrub-jay
<i>Corvus brachyrhynchos</i>	American crow
Hirundinidae	Swallows
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow
Aegithalidae	Bushtits
<i>Psaltriparus minimus</i>	bushtit
Mimidae	Thrashers
<i>Mimus polyglottos</i>	northern mockingbird
Sturnidae	Starlings
* <i>Sturnus vulgaris</i>	European starling
Ptilonotidae	Silky Flycatchers
<i>Phainopepla nitens</i>	phainopepla
Parulidae	Wood Warblers
<i>Geothlypis trichas</i>	common yellowthroat
<i>Setophaga coronata</i>	yellow-rumped warbler
Emberizidae	Emberizids
<i>Melospiza melodia</i>	song sparrow
<i>Melospiza crissalis</i>	California towhee
<i>Pipilo maculatus</i>	spotted towhee
Icteridae	Blackbirds
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Icterus cucullatus</i>	hooded oriole
Fringillidae	Finches
<i>Carpodacus mexicanus</i>	house finch
<i>Spinus psaltria</i>	lesser goldfinch

*=Non-native Species

MAMMALS

SCIENTIFIC NAME	COMMON NAME
Canidae <i>Canis latrans</i>	Foxes, Wolves, and Coyotes coyote
Leporidae <i>Sylvilagus audubonii</i>	Hares and Rabbits desert cottontail
Sciuridae <i>Spermophilus beecheyi</i>	Squirrels California ground squirrel

*=Non-native Species

APPENDIX B

SPECIAL-STATUS PLANT SPECIES

APPENDIX B: SPECIAL-STATUS PLANT SPECIES

Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
BRYOPHYTES								
Aspleniaceae	Spleenwort Family							
<i>Asplenium vespertinum</i>	western spleenwort	Feb.-Jun.	NONE	NONE	4.2	NONE	Chaparral, cismontane woodland, coastal scrub; rocky; between 590 to 3280 feet.	None
Bryaceae	Mosses Family							
<i>Schizymerium shevockii</i>	Shevock's copper moss	N/A	NONE	NONE	1B.2	NONE	Cismontane woodland (metamorphic, rock, mesic); between 2,461 and 4,593 feet.	None
<i>Tortula californica</i>	California screw moss	N/A	NONE	NONE	1B.2	NONE	Chenopod scrub, valley and foothill grassland; sandy, soil; between 33 and 328 feet.	None
Sphaerocarpaceae	Liverwort Family							
<i>Geothallus tuberosus</i>	Campbell's liverwort	N/A	NONE	NONE	1B.1	NONE	Coastal scrub (mesic), vernal pools; soil; between 33 and 1,969 feet.	None
<i>Sphaerocarpos drewei</i>	bottle liverwort	N/A	NONE	NONE	1B.1	NONE	Chaparral, coastal scrub; openings, soil; between 295 and 1,969 feet.	None
GYMNOSPERMS								
Cupressaceae	Cypress Family							
<i>Hesperocyparis forbesii</i>	Tecate cypress	N/A	NONE	NONE	1B.1	NONE	Closed-cone coniferous forest, chaparral; clay, gabbroic or metavolcanic; between 837 and 4,921 feet.	None

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
ANGIOSPERMS (DICOTYLEDONS)								
Apiaceae	Carrot Family							
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	Apr.-Jun.	FE	SE	1B.1	MSHCP	Valley grassland, coastal sage scrub, freshwater wetlands, wetland-riparian; vernal pools.	None
Asteraceae	Sunflower Family							
<i>Ambrosia pumila</i>	San Diego ambrosia	Apr.-Oct.	FE	NONE	1B.1	MSHCP	Chaparral, coastal scrub, desert dunes/sandy; Dry, sunny grasslands on disturbed sites.	Absent
<i>Baccharis vanessae</i>	Encinitas baccharis	Aug.-Nov.	FT	SE	1B.1	NONE	Chaparral (maritime), cismontane woodland; sandstone.	None
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	Apr.-Sep.	NONE	NONE	1B.1	MSHCP	Valley and foothill grasslands with poorly drained alkaline soil conditions at low elevations.	Absent
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	Jan.-Aug.	NONE	NONE	1B.1	NONE	Coastal bluff scrub, coastal dunes; between 0 and 328 feet.	None
<i>Deinandra paniculata</i>	paniculate tarplant	Apr.-Nov.	NONE	NONE	4.2	NONE	Coastal scrub, valley and foothill grassland, vernal pools; usually vernal mesic, sometimes sandy; between 80 to 3090 feet.	Observed
<i>Holocarpha virgata</i> ssp. <i>elongata</i>	graceful tarplant	May-Nov.	NONE	NONE	4.2	MSHCP	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; between 190 to 3610 feet.	Absent

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
<i>Lasthenia glabrata</i> <i>ssp. coulteri</i>	Coulter's goldfields	Feb.-Jun.	NONE	NONE	1B.1	MSHCP	Salt-marsh, playas, vernal-pools, coastal; usually occurs in wetlands but occasionally in non-wetlands.	None
<i>Packera gander</i>	Gander's ragwort	Apr.-Jun.	NONE	SR	1B.2		Chaparral.	None
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	Aug.-Nov.	NONE	NONE	2.2	NONE	Chaparral, cismontane woodland, coastal scrub, riparian woodland; sandy, gravelly.	Absent
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	Jul.-Nov.	NONE	NONE	1B.2	NONE	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic); near ditches, streams, springs; between 7 and 6,693 feet.	Absent
<i>Viguiera laciniata</i>	San Diego County viguiera	Feb.-Aug.	NONE	NONE	4.2	NONE	Chaparral, coastal scrub; between 190 to 2460 feet.	Absent
<i>Viguiera purisimae</i>	La Purisima viguiera	Apr.-Sep.	NONE	NONE	2.3	NONE	Coastal bluff scrub, chaparral; between 1190 to 1400 feet.	None
Berberidaceae	Barberry Family							
<i>Berberis nevinii</i>	Nevin's barberry	Mar.-Jun.	FE	SE	1B.1	MSHCP	Sandy soils in low-gradient washes, alluvial terraces, and canyon bottoms, along gravelly wash margins, or on coarse soils on steep, generally north-facing slopes in alluvial scrub, cismontane (e.g., chamise) chaparral, coastal sage	Absent

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
							scrub, oak woodland, and/or riparian scrub or woodland.	
Boraginaceae	Borage Family							
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	Mar.-Apr.	NONE	NONE	4.2	MSHCP	Variety of southern California plant communities including chaparral; sage scrub; clay soils; below 2,500 feet.	Absent
Brassicaceae	Cabbage Family							
<i>Caulanthus simulans</i>	Payton's jewel-flower	Mar.-Jun.	NONE	NONE	4.2	MSHCP	Burned areas, streambeds, rocky, steep slopes and other disturbed sites, below 6,500 feet.	Absent
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	Jan.-July	NONE	NONE	1B.2	NONE	Chaparral and coastal scrub.	Absent
<i>Sibaropsis hammittii</i>	Hammitt's clay-cress	Mar.-Apr.	NONE	NONE	1B.2	MSHCP	Chaparral (openings), valley and foothill grassland; between 2,395 and 3,494 feet.	None
Chenopodiaceae	Goosefoot Family							
<i>Atriplex coronata</i> var. <i>notatior</i>	San Jacinto Valley crownscale	Apr.-Aug.	FE	NONE	1B.1	MSHCP	Alkaline flats, playas, valley and foothill grassland, vernal pools; between 1216 to 1600 feet.	None
<i>Atriplex pacifica</i>	South Coast saltscale	Mar.-Oct.	NONE	NONE	1B.2	NONE	Alkali sink, coastal sage scrub, wetland-riparian; playas, coastal; equally as likely to be in wetland areas as non-wetland areas.	Absent

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
<i>Atriplex parishii</i>	Parish's brittle scale	Jun.-Oct.	NONE	NONE	1B.1	MSHCP	Shadscale scrub, alkali sinks, freshwater wetlands, wetland-riparian; playas, vernal pools; between 0 and 1,000 feet.	None
<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's salt scale	Apr.-Oct.	NONE	NONE	1B.2	MSHCP	Coastal sage scrub, wetland-riparian; coastal.	None
Convolvulaceae	Morning Glory Family							
<i>Convolvulus simulans</i>	small-flowered morning-glory	Mar.-Jul.	NONE	NONE	4.2	NONE	Chaparral (openings), coastal scrub, and valley and foothill grassland; clay or serpentinite seeps; between 90 to 2300 feet.	None
Crassulaceae	Stonecrop Family							
<i>Dudleya multicaulis</i>	many-stemmed dudleya	Apr.-Jul.	NONE	NONE	1B.2	MSHCP	Chaparral, coastal scrub, valley and foothill grassland often on clay soils.	Absent
<i>Dudleya viscida</i>	sticky dudleya	May-Jun.	NONE	NONE	1B.2	MSHCP	Chaparral, coastal sage scrub; coastal.	None
Ericaceae	Heather Family							
<i>Arctostaphylos rainbowensis</i>	Rainbow manzanita	Dec.-Mar.	NONE	NONE	1B.1	MSHCP	Chaparral.	None
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer holly	Apr.-Jun.	NONE	NONE	1B.2	NONE	Chaparral, cismontane woodland.	None
Fabaceae	Legume Family							
<i>Astragalus pachypus</i> var. <i>jaegeri</i>	Jaeger's milk-vetch	Dec.-Jun.	NONE	NONE	1B.1	MSHCP	Chaparral, valley grassland, foothill woodland.	Absent

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
<i>Pickeringia montana</i> <i>var. tomentosa</i>	woolly chaparral-pea	May-Aug.	NONE	NONE	4.3	NONE	Chaparral; gabbroic, granitic, clay; between 0 to 5580 feet.	None
Fagaceae	Beech Family							
<i>Quercus engelmannii</i>	Engelmann oak	Mar.-Jun.	NONE	NONE	4.2	MSHCP	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland; between 160 to 4270 feet.	Absent
Geraniaceae	Geranium Family							
<i>California macrophylla</i>	round-leaved filaree	Mar.-May	NINE	NONE	1B.1	MSHCP	Cismontane woodland, valley and foothill grassland, clay soils.	Absent
Juglandaceae	Walnut Family							
<i>Juglans californica</i>	Southern California black walnut	Mar.-Aug.	NONE	NONE	4.2	MSHCP	Chaparral, cismontane woodland, southern oak woodland, coastal scrub; alluvial; between 160 to 3000 feet.	Absent
Lamiaceae	Mint Family							
<i>Clinopodium chandleri</i>	San Miguel savory	Mar.-Jul.	NONE	NONE	1B.2	MSHCP	Chaparral, foothill woodland, coastal sage scrub, valley grassland; riparian.	Absent
<i>Lepechinia cardiophylla</i>	heart-leaved pitcher sage	Apr.-Jul.	NONE	NONE	1B.2	MSHCP	Closed-cone coniferous forest, chaparral, cismontane woodland.	None
<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	felt-leaved monardella	Jun.-Aug.	NONE	NONE	1B.2	NONE	Chaparral, foothill wetland.	None

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	Jun.-Oct.	NONE	NONE	1B.3	MSHCP	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland.	None
<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	southern mountains skullcap	Jun.-Aug.	NONE	NONE	1B.2	NONE	Typically grows on moist embankments of montane creeks.	None
Malvaceae	Mallow Family							
<i>Ayenia compacta</i>	California ayenia	Mar.-Apr.	NONE	NONE	2.3	NONE	Creosote bush scrub, washes.	None
Nyctaginaceae	Four O'clock Family							
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	Jan.-Sep.	NONE	NONE	1B.1	NONE	Chaparral, coastal scrub, and desert dunes/sandy areas.	Absent
Onagraceae	Evening Primrose Family							
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	Mar.-Jun.	NONE	NONE	3	NONE	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland; sandy or clay; between 0 to 990 feet.	None
Papaveraceae	Poppy Family							
<i>Romneya coulteri</i>	Coulter's matilija poppy	Mar.-Jul.	NONE	NONE	4.2	MSHCP	Chaparral, coastal scrub; often in burns; between 60 to 3940 feet.	Absent

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
Phrymaceae	Lopseed Family							
<i>Mimulus clevelandii</i>	Cleveland's bush monkeyflower	Apr.-Jul.	NONE	NONE	4.2	MSHCP	Chaparral, cismontane woodland, lower montane coniferous forest; gabbroic, often in disturbed areas, openings, rocky; between 1470 to 6600 feet.	None
<i>Mimulus diffuses</i>	Palomar monkeyflower	Apr.-Jun.	NONE	NONE	4.3	MSHCP	Chaparral, lower montane coniferous forest; sandy or gravelly; between 4000 to 6010 feet.	None
Picrodendraceae	Bitter Tree Family							
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	Apr.-May	NONE	NONE	1B.2	NONE	Low growing chamise chaparral, coastal sage scrub; prefers Las Posas soils.	Absent
Polemonaceae	Phlox Family							
<i>Navarretia fossalis</i>	spreading navarretia	Apr.-Jun.	FT	NONE	1B.1	MSHCP	Vernal pools.	None
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	Apr.-Jul.	NONE	NONE	1B.1	MSHCP	Coastal sage scrub, wetland-riparian; occurs almost always under natural conditions in wetlands.	None
Polygalaceae	Milkwort Family							
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish's milkwort	May-Aug.	NONE	NONE	4.3	MSHCP	Chaparral, cismontane woodland, riparian woodland; between 320 to 3280 feet.	None

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
Polygonaceae	Buckwheat Family							
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	Apr.-Jun.	NONE	NONE	1B.1	MSHCP	Openings/clearings in coastal or desert sage scrub, chaparral or interface; dry slopes or flat ground; sandy soils.	Absent
Comment: An occurrence of Parry's spineflower was reported in the CNDDDB on the Baxter Property in 2006.								
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	Apr.-Jun.	NONE	NONE	1B.2	MSHCP	Primarily associated with clay soils but also found on sandy or gravelly soils within open areas of chaparral, sage scrub, or needlegrass grassland.	Absent
<i>Dodecahema leptoceras</i>	slender-horned spineflower	Apr.-Jun.	FE	SE	1B.1	MSHCP	Scrub and chaparral in sandy soils and alluvial fans.	Absent
Ranunculales	Buttercup Family							
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	Mar.-Jun.	NONE	NONE	3.1	MSHCP	Associated with vernal pools and inundated grassland habitats.	None
Rosaceae	Rose Family							
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	Feb.-July (uncommonly Sept.)	NONE	NONE	1B.1	NONE	Chaparral, cismontane woodland, coastal scrub/sandy or gravelly.	Absent
<i>Horkelia truncata</i>	Ramona horkelia	May-Jun.	NONE	NONE	1B.3	NONE	Chaparral, cismontane woodland; clay and gabbroic; between 1310 and 4270 feet.	None
Rhamnaceae	Buckthorn Family							
<i>Ceanothus cyaneus</i>	Lakeside ceanothus	Apr.-Jun,	NONE	None	1B.2	NONE	Chaparral, closed-cone pine forest.	None

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
<i>Ceanothus ophiochilus</i>	Vail Lake ceanothus	Feb.-Mar.	FT	SE	1B.1	MSHCP	Chaparral.	None
ANGIOSPERMS (MONOCOTYLEDONS)								
Alliaceae	Onion Family							
<i>Allium munzii</i>	Munz's onion	Mar.-May	FE	ST	1B.1	MSHCP	Bare or grassy clearings in a variety of southern California plant communities; clay soils; between 1,000-3,000 feet	Absent
Juncaceae	Juncus							
<i>Juncus luciensis</i>	Santa Lucia dwarf rush	Apr.-Jul.	NONE	NONE	1B.2	NONE	Wetland-riparian.	None
Liliaceae	Lily Family							
<i>Calochortus plummerae</i>	Plummer's mariposa lily	May-Jul.	NONE	NONE	1B.2	MSHCP	Chaparral (openings), cismontane woodland, coastal scrub, valley and foothill grassland, granitic/rocky.	Absent
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa lily	May-Jul.	NONE	NONE	1B.2	MSHCP	Coastal scrub, chaparral, valley and foothill grassland on rocky soil.	Absent
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	ocellated Humboldt lily	Mar.-Aug.	NONE	NONE	4.2	MSHCP	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland; openings; between 90 to 5910 feet.	None

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Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
<i>Lilium parryi</i>	lemon lily	Jul.-Aug.	NONE	NONE	1B.2	MSHCP	Red fir forest, yellow pine forest, wetland-riparian; riparian meadows; usually occurs in wetlands, but occasionally found in non-wetlands; between 4000 to 9010 feet.	None
Limnanthaceae (Liliaceae)	Meadowfoam Family							
<i>Limnanthes alba</i> ssp. <i>parishii</i>	Parish's meadowfoam	Apr.-Jun.	NONE	SE	1B.2	MSHCP	Yellow pine forests, freshwater wetlands, wetland-riparian; meadows, vernal pools.	None
Poaceae	True Grass Family							
<i>Hordeum intercedens</i>	vernal barley	Mar.-Jun.	NONE	NONE	3.2	MSHCP	Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), vernal pools; between 10 to 3280 feet.	Absent
<i>Orcuttia californica</i>	California Orcutt grass	Apr.-Aug.	FE	SE	1B.1	MSHCP	Vernal pools.	None
Ruscaceae	Ruscus Family							
<i>Nolina cismontana</i>	chaparral nolina	Mar.-Jul.	NONE	NONE	1B.2	NONE	Xeric Diegan sage scrub, open chaparral; sandstone or gabbro; between 450 to 4190 feet.	None
Themidaceae	Brodiaea Family							
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	Mar.-Jun.	FT	SE	1B.1	MSHCP	Sage scrub, valley and foothill grassland, cismontane woodland, vernal pools (clay soils).	None

None = Species not expected to occur on-site due to the lack of suitable habitat or the site's location outside of the species' range; Observed = the species was observed on-site; Absent = potential habitat exists on site but the species was not observed during focused surveys.

Scientific Name	Common Name	Flowering Period	FEDERAL	STATE	CNPS	OTHER (MSHCP)	Preferred Habitat	Potential for Occurrence
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	May-Jul.	NONE	NONE	1B.1	MSHCP	Chaparral, valley and foothill grassland, cismontane woodland; wet meadows/seeps, vernal pools (clay soils); sometimes associated with serpentine substrate.	None
<i>Brodiaea santarosae</i>	Santa Rosa Basalt brodiaea	May-Jun.	NONE	NONE	3	NONE	Valley and foothill grassland; basaltic; between 1900 to 3430 feet.	None

Key to Species Listing Status Codes

FE	Federally Endangered	SE	State Listed as Endangered
FT	Federally Threatened	ST	State Listed as Threatened
FPE	Federally Endangered	SCE	State Candidate for Endangered
FPT	Federally Proposed as Threatened	SCT	State Candidate for Threatened
FPD	Federally Proposed for Delisting	SFP	State Fully Protected
		SR	State Rare
		SSC	California Species of Special Concern

California Native Plant Society (CNPS)

List 1A: Presumed extinct in California.

List 1B: Rare, threatened, or endangered throughout their range.

List 2: Rare, threatened, or endangered in California, but more common in other states.

List 3: Plant species for which additional information is needed before rarity can be determined.

List 4: Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat.

New Threat Code extensions and their meanings:

- 1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 2 Fairly endangered in California (20-80% occurrences threatened)
- 3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

Source: PCR Services Corporation 2013.

None = Species not expected to occur on-site due to the lack of suitable habitat or the site's location outside of the species' range; Observed = the species was observed on-site; Absent = potential habitat exists on site but the species was not observed during focused surveys.

APPENDIX C

SPECIAL-STATUS WILDLIFE SPECIES

APPENDIX C: SPECIAL-STATUS WILDLIFE SPECIES

INVERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
ARTHROPODS						
Branchinectidae	Fairy Shrimp Family					
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT	None	MSHCP	Vernal pools in areas of shallow depressions that have a clay hardpan soil layer that inhibits percolation.	None
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	None		Small shallow vernal pools ranging in depth from 2-12 inches and 50-68 degrees F.	None
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	None	MSHCP	Vernal pools/swales; apparently prefers deeper pools through the warm weather of late Apr. and May.	None
INSECTA						
Nymphalidae	Brush-foot Butterfly Family					
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE	NONE	MSHCP	Grassland and open areas in sage scrub, chaparral, sparse native woodlands. Low levels of invasive, nonnative vegetation and soil with a cryptogamic crust. Associated with host plant species dwarf plantain (<i>Plantago erecta</i>) and purple owl's clover (<i>Castilleja exserta</i>).	None

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VERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
FISHES						
Cyprinidae	Cyprinids					
<i>Gila orcuttii</i>	arroyo chub	NONE	SSC	MSHCP	Warm, coastal southern California streams.	None
Salmonidae	Salmons					
<i>Oncorhynchus mykiss irideus</i>	southern steelhead – southern California DPS	FE	SSC		Coastal river basins.	None
AMPHIBIANS						
Ambystomatidae	Mole Salamanders					
<i>Ambystoma californiense</i>	California tiger salamander	FT	ST/SSC		Frequents grassland, oak savanna, and edges of mixed woodland and lower elevation coniferous forest.	None
Bufo	True Toads					
<i>Anaxyrus californicus</i>	arroyo toad	FE	SSC	MSHCP	Shallow, exposed streambanks, quiet water stretches, or overflow pools with silt-free sandy or gravelly bottoms. Nearby sandy terraces, dampened in places by capillary action, with some scattered vegetation.	None
Pelobatidae	Spadefoot Toads					
<i>Spea hammondi</i>	western spadefoot	NONE	SSC	MSHCP	Prefers burrow sites within relatively open areas in lowland grasslands, chaparral, and pine-oak woodlands, areas of sandy or gravelly soil in alluvial fans, washes, and floodplains. Requires temporary pools for reproduction.	None

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VERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
Ranidae	True Frogs					
<i>Rana draytonii</i>	California red-legged frog	FT	SSC	MSHCP	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams.	None
Salimandridae	Newts					
<i>Taricha torosa</i>	Coast Range newt	NONE	SSC	MSHCP	Terrestrial habitats and will migrate over 1 kilometer to breed in ponds, reservoirs and slow-moving streams.	None
REPTILES						
Colubridae	Colubrid Snakes					
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	NONE	SSC		Desert and rocky areas in chaparral covered hillsides and canyons.	None
<i>Thamnophis hammondi</i>	two-striped garter snake	NONE	SSC		Coastal California along watercourses with permanent fresh water, and near streams with rocky beds and riparian growth.	None
Emydidae	Pond Turtles					
<i>Emys marmorata</i>	western pond turtle	NONE	SSC	MSHCP	Ponds, marshes, rivers, streams, irrigation ditches.	None
Phrynosomatidae	Iguanid Lizard Family					
<i>Phrynosoma blainvillii</i>	coast horned lizard	NONE	SSC	MSHCP	Prefers sandy riparian and sage scrub habitats but also occurs in valley-foothill hardwood, conifer, pine-cypress, juniper and annual grassland habitats below 6,000 feet, open country, especially sandy areas, washes, flood plains, and windblown deposits.	Low-Moderate Not observed during site surveys conducted in 2012 and 2013.

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VERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
Scincidae	Skinks					
<i>Plestiodon skiltonianus Interparietalis</i>	Coronado Island skink	NONE	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.	None
Teiidae	Whiptail Lizards					
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	NONE	SSC	MSHCP (ssp. <i>beldingi</i>)	Coarse soils in open coastal sage scrub vegetation; it also inhabits many other vegetation types and disturbed areas: open chaparral, along edges of open, dry, riparian areas, along trails, along dirt roads, and in areas of light off-road vehicle use; often in areas with 50% cover and 50% bare soil, and flat to sloping topography; it seldom uses rodent burrows. Washes and other sandy areas where there are rocks and patches of brush and rocky hillsides: coastal chaparral, thornscrub, and streamside growth. Prefers loose, fine-grained soils, such as rocky hillsides bordering arroyos or the lower slopes of foothills. Eggs are laid probably in a nest dug in soil/underground.	Moderate Not observed during site surveys conducted in 2012 and 2013.
Viperidae	Vipers					
<i>Crotalus ruber</i>	red-diamond rattlesnake	NONE	SSC	MSHCP	Chaparral, woodland, grassland, and desert. In rocky areas and dense vegetation.	None

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VERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
BIRDS						
Accipitridae	Hawks, Kites, Harriers and Eagle Family					
<i>Aquila chrysaetos</i>	golden eagle	NONE	SFP	MSHCP	A variety of plant communities including grasslands, shrublands with tree saplings, and open-canopy blue oak (<i>Quercus douglasii</i>) woodlands. In late summer the golden eagle is often seen above timberline in California.	Low (F) Not observed during site surveys conducted in 2012 and 2013.
<i>Circus cyaneus</i>	northern harrier	NONE	SSC	MSHCP	Coastal salt marshes, freshwater marshes, grasslands, and agricultural fields; occasionally forages over open desert and brushlands.	Moderate (F) Not observed during site surveys conducted in 2012 and 2013.
<i>Elanus leucurus</i>	white-tailed kite	NONE	SFP	MSHCP	Agricultural areas, grasslands, marshes, savannas, and other open land or sparsely wooded areas.	Moderate (F) Not observed during site surveys conducted in 2012 and 2013.
<i>Haliaeetus leucocephalus</i>	bald eagle	FD	SE/SFP	MSHCP	Seacoasts, rivers, lakes and other aquatic habitats; needs perching and nesting sites with adequate prey base.	None
Charadriidae	Plovers					
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT	SSC		Coastal sandy, gravelly beaches, estuarine salt ponds, alkali lakes, dry salt flats in lagoons, deposited dredge spoils, levees and flats at salt-evaporation ponds, river bars, dunes.	None

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VERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
Cuculidae	Cuckoos					
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FC	SE	MSHCP	Southwestern cottonwood-willow riparian, mixed broadleaf riparian forest.	None
Icteridae	Blackbirds					
<i>Agelaius tricolor</i>	tricolored blackbird	NONE	SSC	MSHCP	Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, or thickets of willows; feeds in grassland and cropland habitats.	None
Laniidae	Shrike Family					
<i>Lanius ludovicianus</i>	loggerhead shrike	NONE	SSC	MSHCP	Open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches.	Low (N); Moderate (F) Not observed during site surveys conducted in 2012 and 2013.
Strigidae	Owls					
<i>Athene cunicularia</i>	burrowing owl	NONE	SSC	MSHCP	Dry grasslands, desert habitats, open-pinyon-juniper and ponderosa pine woodlands below 5,300 feet elevation. Prefers berms, ditches, and grasslands adjacent to rivers, agricultural, and scrub areas.	Absent None observed during the focused survey conducted in 2013.
Sylviidae	Old World Warblers, Gnatcatchers					
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT	SSC	MSHCP	Coastal sage scrub vegetation below 2,500 feet elevation in Riverside County and generally below 1,000 feet elevation along the coastal slope; generally avoids steep slopes and dense vegetation for nesting.	Low Potential habitat on- and off-site is highly disturbed and scattered.
Comment: An occurrence of coastal California gnatcatcher was reported in the CNDDDB within 1 mile of the Project site in 2001.						

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VERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
Troglodytidae	Wren Family					
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	NONE	SSC	MSHCP	Coastal sage scrub, vegetation with thickets of prickly pear or cholla cactus.	None
Vireonidae	Vireo Family					
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE	SE	MSHCP	Perennial and intermittent streams with low, dense riparian scrub and riparian woodland habitats below 2,000 feet elevation; nests primarily in willows and forages in the riparian and occasionally in adjoining upland habitats. Associated with willow, cottonwood, and mule fat. Found especially in willow and mesquite thickets near water.	Low (non-nesting) Potential habitat on-site is limited to one small, isolated area (southern willow scrub/eucalyptus woodland) that is not suitable for nesting, but could be used as stop-over during migration.
MAMMALS						
Heteromyidae	Pocket Mice and Kangaroo Rat Family					
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	NONE	SSC		Chaparral, occasionally desert grasslands; between 0 and 4633 feet.	None
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	NONE	SSC	MSHCP	Chaparral, coastal sage scrub (Riversidean and Diegan), desert scrub, grassland, juniper woodland and scrub, and Riversidean alluvial fan sage scrub.	Very Low Potential habitat on- and off-site is highly disturbed and scattered.

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VERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
<i>Dipodomys stephensi</i>	Stephen's kangaroo rat	FE	ST	MSHCP	Coastal scrub, valley and foothill grassland; annual and perennial grasslands and coastal sage scrub with sparse canopy cover.	Very Low Potential habitat on-site is highly disturbed and scattered.
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	NONE	SSC	MSHCP	Coastal sage scrub, and grasslands, desert cactus, creosote bush and sagebrush habitats.	Low Potential habitat on-site is highly disturbed and scattered and there are no recorded occurrences of the species within 10 miles. However, unidentified burrows of either <i>Perognathus</i> sp. or <i>Peromyscus</i> sp. were observed within 1 mile by Principe and Associates in 2012.
<i>Perognathus longimembris internationalis</i>	Jacumba pocket mouse	NONE	SSC		Arid coastal sage brush and chaparral; nocturnal, burrows during the day.	Low Potential habitat on-site is highly disturbed and scattered and there are no recorded occurrences of the species within 10 miles. However, unidentified burrows of either <i>Perognathus</i> sp. or <i>Peromyscus</i> sp. were observed within 1 mile by Principe and Associates in 2012.

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VERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
Leporidae	Hares and Rabbit Family					
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	NONE	SSC	MSHCP	Open brushlands and scrub habitats between sea level and 4,000 feet elevation.	Low Not observed during site surveys conducted in 2012 and 2013. This species is highly visible.
Comment: An occurrence of San Diego black-tailed jackrabbit was reported in the CNDDDB in 1998 within 1-mile of the Project site.						
Molossidae	Free-tailed Bats					
<i>Eumops perotis californicus</i>	western mastiff bat	NONE	SSC		Many open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Low (F)
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	NONE	SSC		More arid habitat such as pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Roosts in rock crevices, caverns, or buildings.	None
Muridae	Mice, Rats, and Vole Family					
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	NONE	SSC		Variety of habitats, often in the vicinity of rocky outcrops; prefer moderate to dense canopies.	Very Low No recorded occurrences within 10 miles

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VERTEBRATES						
Scientific Name	Common Name	Federal	State	Other (MSHCP)	Preferred Habitat	Potential for Occurrence On the Project Site
<i>Onychomys torridus ramona</i>	southern grasshopper mouse	NONE	SSC		Grasslands, desert areas, especially scrub with friable soils.	None Not recorded within 8 miles of the Project site since 1932
Vespertilionidae	Evening Bats					
<i>Antrozous pallidus</i>	pallid bat	NONE	SSC		Wide variety of habitats but most common in open, dry habitats with rocky areas for roosting.	Low (F)
<i>Lasiurus xanthinus</i>	western yellow bat	NONE	SSC		Desert wash	None
<p>Key to Federal and State Listings</p> <p> <i>FE</i> Federally Listed as Endangered <i>FT</i> Federally Listed as Threatened <i>FPE</i> Federally Proposed as Endangered <i>FPT</i> Federally Proposed as Threatened <i>FPD</i> Federally Proposed for Delisting <i>SE</i> State Listed as Endangered <i>ST</i> State Listed as Threatened <i>SCE</i> State Candidate for Endangered <i>SCT</i> State Candidate for Threatened <i>SFP</i> State Fully Protected <i>SSC</i> California Species of Special Concern </p> <p>Source: PCR Services Corporation 2013.</p>						

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