Biological Resources Assessment

Roquet Ranch Specific Plan
City of Colton, San Bernardino County, California

Project Location:
APNs 116-701-101, 116-702-101, 116-701-102, 116-702-105,
116-702-121, 116-703-118, 116-702-123, and 116-702-122
U.S. Geological Survey (USGS) 7.5-minute San Bernardino South topographic quadrangle map,
Township 2 South, Range 4 West, Section 6 and unsectioned

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Report Date:
December 2016

Biological Resources Assessment

Roquet Ranch Specific Plan
City of Colton, San Bernardino County, California

The undersigned certify that this report is a complete and accurate account of the findings and conclusions of a supplemental biological resources assessment for the above-referenced project.

ESA PCR

Maile Tanaka, Senior Biologist

Amir Morales, Principal Regulatory Scientist

December 2016

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1.0 INTRODUCTION

1.1 BACKGROUND AND PURPOSE

This report presents the findings of a Biological Resources Assessment (BRA) conducted by **ESA PCR** for the approximately 335.97-acre project site (project site) and 43.90-acre off-site study areas (off-site study areas) comprising the Roquet Ranch Specific Plan in the City of Colton (City), San Bernardino County, California. The purpose of this study is to satisfy the requirements of the California Environmental Quality Act (CEQA) and in support of approvals that the Project Applicant (Sunmeadows, LLC) is requesting from the City and Responsible Agencies (Agencies).

1.2 SOURCES

This BRA is based on information compiled through field reconnaissance and appropriate reference materials. A general biological survey, vegetation mapping, jurisdictional waters and wetlands delineation, and focused surveys for special-status plant species and burrowing owl (*Athene cunicularia*) was conducted by ESA PCR. In addition, focused surveys for coastal California gnatcatcher (*Polioptila californica californica*) were conducted by Leatherman Bioconsulting Inc. The information sources used in preparation of this BRA are provided in Section 9.0, *References*.

1.3 PROJECT SITE LOCATION

The approximately 335.97-acre project site and 43.90-acre off-site study areas are generally situated north of California State Route 60 (SR-60) and west of Interstate 215 (I-215), as shown in **Figure 1**, *Regional Map*. The Santa Ana River borders the project site to the west. Specifically, the project site and off-site areas are located west of the intersection of La Cadena Drive and Maryknoll Drive. The project site and off-site study areas can be found on the U.S. Geological Survey (USGS) 7.5' San Bernardino South topographic quadrangle map, Township 2 South, Range 4 West (Section 6 and unsectioned) (USGS 1967, Earth Survey 2015), as shown in **Figure 2**, *Vicinity Map.* Elevations range from approximately 850 feet above mean sea level (MSL) on the southwestern section of the project site to approximately 1,470 feet above MSL along the peak of the La Loma Hills on the eastern side of the project site.

1.4 SCOPE OF STUDY

The scope of this BRA encompasses descriptions of the project, methods of study, and existing site conditions including vegetation communities and the potential for sensitive biological resources, followed by an evaluation of impacts to sensitive biological resources pursuant to CEQA thresholds and regulatory requirements. Avoidance, minimization, and/or mitigation measures are proposed to reduce any significant impacts.

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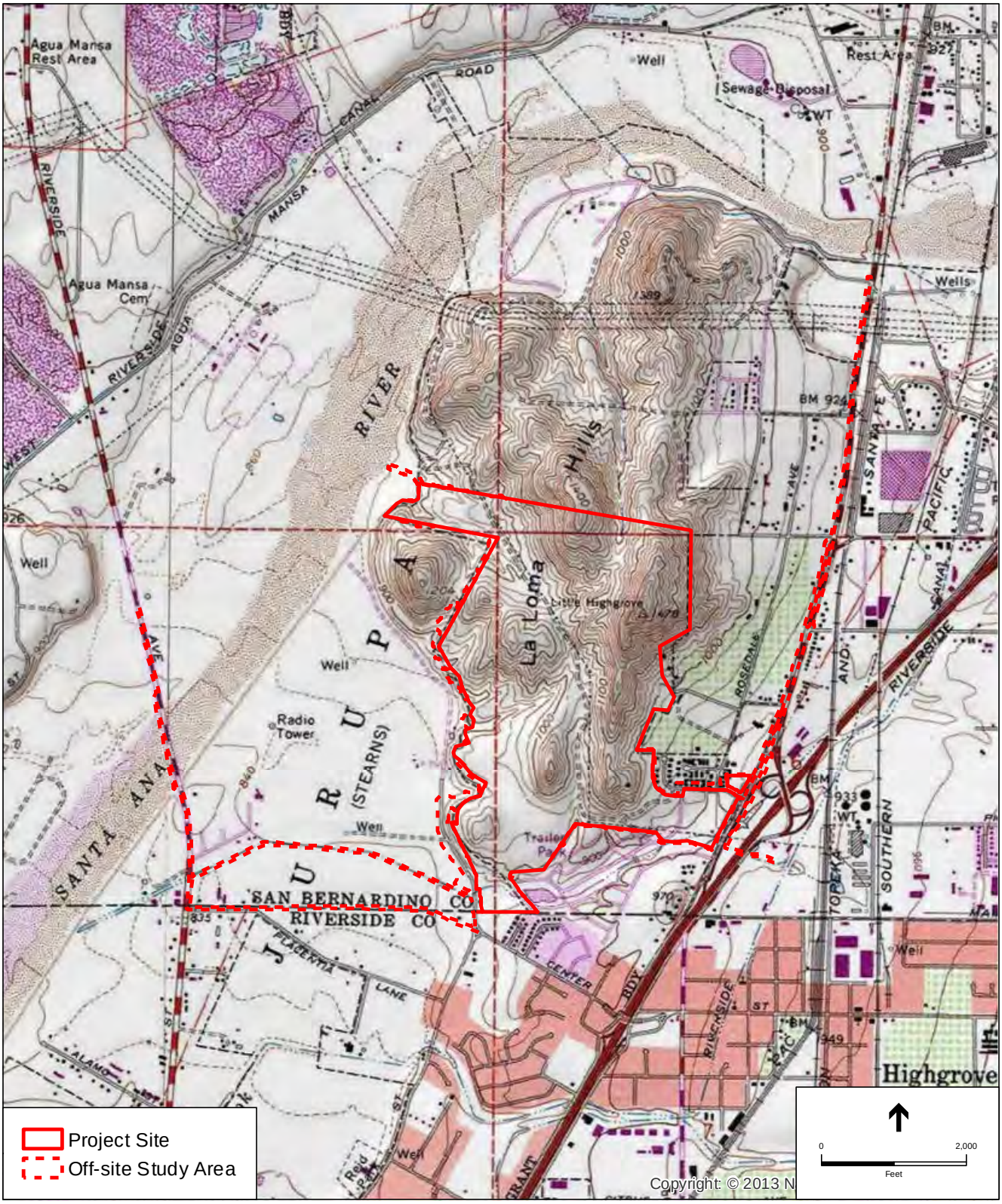
SOURCE: ESRI StreetMap, 2009.

Roquet Ranch
Figure 1
Regional Map

ESA PCR



SOURCE: USGS Topographic Series (San Bernardino South, CA).

Roquet Ranch
Figure 2
Vicinity Map

ESA PCR

2.0 PROJECT DESCRIPTION

2.1 PROJECT DESCRIPTION

The Roquet Ranch Specific Plan proposes to develop a community of residential villages accompanied by recreational areas, open spaces, and commercial areas, as shown in **Figure 3**, *Site Plan*. The project proposes to develop the project site with up to 874 residential dwelling units, including a maximum of 450 Low Density single-family detached residential units on 60.2 acres; 293 Medium Density residential units on 19.2 acres; and 131 High Density residential townhome units on 6.0 acres. The project also proposes the development of 1.2 acres of commercial retail land uses on the southeastern portion of the project site; 22.3 acres of recreational open space located primarily on the northwest portion of the project site; 199.7 acres of preserved natural habitat as open space; a 0.8-acre fire station; and a 10.3-acre school site. In the case that the Colton Joint Unified School District selects not to develop a school facility, up to 165 Medium Density residential dwelling units will be developed instead. Additionally, in the case that the City of Colton Fire Department selects not to develop a fire station, 11 Medium Density residential units will be developed instead. The Specific Plan proposes to preserve the existing SCE utility easement that transects the site. A total of six (6) water quality basins are proposed throughout the project site, one of which would be located in the northwest portion of the project site, and the other five (5) located in the southern portion of the project site. Additionally, the project proposes the construction of 16.5 acres of roadways to serve the Roquet Ranch community. Primary access would be provided from the southeast from La Cadena Drive via Pellissier Road. In addition, primary access to the community from the southwest from Center Street would be provided via Orange Street.

Off-site improvements proposed by the project include the following:

- Construction of a 12-inch underground force sewer main in La Cadena Drive between the eastern Project boundary (intersection of La Cadena Drive and Pellissier Drive) and Deberry Street;

- Construction of underground electric utilities in La Cadena Drive between the eastern Project boundary (intersection of La Cadena Drive and Maryknoll Drive) and (approximately) Barton Road;

- Construction of an 18-inch underground water line in La Cadena Drive between the eastern Project boundary (intersection of La Cadena Drive and Pellissier Drive) and Tropicana Ranch Road;

- Construction of a 15-inch underground sewer main in unnamed roads to the south of the Project boundary, and between the southwest Project boundary and Center Street;

- Abandonment of an existing sewer lift station in the residential neighborhood that buts the Project site to the south;

- Construction of underground electric utilities in Pellissier Road from western Project boundary to intersection of Orange Street and Pellissier Road;

- Construction of underground force main and water main utilities in Orange Street south to the intersection of Orange Street and Center Street;

- Construction of underground electric utility in Orange Street south to intersection of Orange Street and the existing Riverside County Flood Control District (RCFCD) right-of-way;

- Construction of overhead electric utilities within RCFCD right-of-way from Orange Street to Riverside Avenue that would connect with proposed segment of underground utilities in Riverside Avenue from the RCFCD right-of-way across the Santa Ana River Trail to existing underground utilities within Riverside Avenue;

- As an alternative to connecting to and construction the overhead electric utilities in the RCFCD right-of-way (west of Project site), the Project proposes extending electric utilities in Orange Street to the intersection of Center Street and Orange Street, extending the utilities westward in Center Street, northward in Riverside Avenue to the point of connection in Riverside Avenue on the north side of the Santa Ana River Trail;

- Undergrounding of existing off-site overhead electric utilities in La Cadena Drive (to the southeast of the Project boundary);

- Construction of sewer lift station at the northern intersection of Placentia Lane and Center Street; and

- Full width improvements in Maryknoll Drive and Rosedale Avenue.

It should be noted that a small portion of the off-site improvements will occur within Orange Street and Center Street within the existing paved roadways only, and extends just beyond the San Bernardino County border into Riverside County by approximately 300 feet to the south (along Orange Street to the intersection of Orange Street and Center Street) and by approximately 750 feet to the northwest (from the intersection of Orange Street and Center Street, along Center Street until the point where Center Street runs along the border of both counties). The proposed project does not include any other components within Riverside County, and no work will occur outside of already-developed, existing paved roadways. Thus, this BRA does not analyze the project against Riverside County requirements (i.e., the Western Riverside County Multiple Species Habtiat Conservation Plan [MSHCP]).

2.2 PROJECT AVOIDANCE

The project proposes to cluster development within the most disturbed areas of the project site and avoid a large portion of the native habitat within the La Loma Hills in order to preserve natural hillsides, natural habitats, and natural drainage courses within open space. The majority of the La Loma Hills in the eastern portion of the project site will be avoided, and two existing on-site drainages (Drainage E and Tributary E1 within the northwestern portion of the project site) will only be temporarily impacted for restoration purposes to improve the functions and values of these drainage features.

SOURCE: K&A Engineering, Inc., 2016

Roquet Ranch

Figure 3

Site Plan

ESA PCR

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3.0 METHODS OF STUDY

3.1 APPROACH

This BRA is based on information compiled through field reconnaissance and appropriate reference materials. Surveys included a general biological survey and vegetation mapping; a jurisdictional waters and wetlands delineation; and focused surveys for special-status plant species, burrowing owl, and coastal California gnatcatcher.

3.2 LITERATURE REVIEW

An assessment of the project began with a review of relevant literature on the biological resources of the project site and surrounding vicinity. The California Natural Diversity Database (CNDDB), a California Department of Fish and Wildlife[1] (CDFW) species account database, was reviewed for all pertinent information regarding the localities of known observations of special-status species and habitats in the vicinity of the project site (CDFW 2016). The vicinity of the project site included the following USGS topographic quadrangles: Devore, Fontana, Harrison Mountain, Redlands, Riverside East, Riverside West, San Bernardino North, and Sunnymead. Federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) (USFWS 2016a), CDFW and the California Native Plant Society (CNPS 2016) 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 2016b) and United States Department of Agriculture Natural Resources Conservation Service (NRCS) soils mapping (NRCS 2015). In addition, numerous regional flora and fauna field guides were utilized to assist in the identification of species and suitable habitats. A list of all relevant references reviewed is included in Section 9.0, *References*.

3.3 FIELD INVESTIGATIONS

On November 26, 2013, a general biological survey and vegetation mapping was conducted by ESA PCR biologists Zeke Cooley and Maile Tanaka and a delineation of jurisdictional waters and wetlands was conducted by regulatory scientist Amir Morales to identify the presence of drainages and/or wetland features on the project site. The observed vegetation communities, jurisdictional features, and other biological features or species observations of interest were mapped on aerial photographs. Survey coverage of the project site was ensured using the aerial photographs, with special attention to sensitive habitats or those areas potentially supporting special-status flora or fauna, or jurisdictional features. Focused surveys for special-status plant species were conducted on the project site on April 16, 29, and August 10, 2015 by ESA PCR biologists Zeke Cooley, Amy Lee, and Lauren Singleton. Focused surveys were conducted on the project site for burrowing owls from March to June 2014 by ESA PCR biologists Florence Chan, Zeke Cooley, Bob Huttar, Amy Lee, and Maile Tanaka. Focused surveys were conducted on the project site for coastal California gnatcatcher from April to June 2014 and from May to June 2015 by Leatherman Bioconsulting Inc.

[1] *As of January 1, 2013, the former California Department of Fish and Game name has been changed to the California Department of Fish and Wildlife.*

biologists Brian Leatherman, Adam DeLuna, and James Huelsman. 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.

In 2015, a 9-acre area within the southern portion of the project site (east of Orange Street) was purchased and added to the project site. Within this 9-acre area of the project site, a general biological survey and vegetation mapping was conducted by ESA PCR biologist Zeke Cooley on April 29, 2015; a delineation of jurisdictional waters and wetlands was conducted by ESA PCR regulatory scientist Amir Morales on April 29, 2015; focused surveys for special-status plant species were conducted by ESA PCR biologists Zeke Cooley and Amy Lee on April 29 and August 10, 2015; and focused surveys for burrowing owls were conducted by ESA PCR biologist Zeke Cooley on May 7, June 2, June 23, and July 13, 2015.

Subsequent to the addition of the 9-acre area within the project site, in 2016, the additional off-site study areas were added (refer to Figure 3). A general biological survey and vegetation mapping was conducted by ESA PCR biologist Zeke Cooley on July 12, 2016. No focused surveys were conducted for the off-site study areas.

3.3.1 Plant Community Mapping

Plant communities were mapped directly in the field utilizing a 125-scale (1"=125') aerial photograph focusing on dominant plant species. Plant community names, codes, and descriptions follow *A Manual of California Vegetation, Second Edition* (Sawyer, Keeler-Wolf, and Evens 2009) and the California Natural Community Codes (CaCodes) are in parentheses next to each community name. After completing the fieldwork, the plant community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages.

3.3.2 Sensitive Habitats

Sensitive habitats are listed by CDFW on their *Natural Communities List* (CDFW, 2010).[2] Communities on this list are given a global (G) and state (S) rarity ranking on a scale of 1 to 5, where communities with a ranking of 5 are the most common and communities with a ranking of 1 are the rarest and of the highest priority to preserve. These high priority communities are denoted on the CDFW list with asterisks. For the purpose of this report, special-status habitats are those communities that have a state ranking of S3 or rarer. Sensitive habitats for the project site were identified based on the natural communities mapped for the project site (see Section *3.3.1 Plant Community Mapping*).

3.3.3 General Plant Inventory

All plant species observed during the general and focused surveys were either identified in the field or collected and later identified using taxonomic keys. Plant taxonomy follows Baldwin (2012). Common plant names, when not available from Baldwin, were taken from Munz (1974) and/or Clarke (2007). Since common names vary significantly between references, scientific names are included upon initial mention of each species; common names consistent throughout the report are employed thereafter. All plant species

[2] *Available online at: http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp*

observed were recorded in field notes. Special-status plant species are discussed below in Section 3.3.4, *Special-Status Plant Species*.

3.3.4 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 CDFW, USFWS and CNPS databases (see Section 3.2, *Literature Review*), and the presence or absence of suitable habitat within the project site based on plant community mapping (see Section 3.3.1, *Plant Community Mapping*). Suitable habitat was defined as areas with appropriate vegetation communities, soils and/or topography (elevation at MSL) to support the species based on known occurrences in those habitats and/or CDFW and CNPS 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 plant species for which potentially suitable habitat occurs within the project site was prepared, and the potential for occurrence for each species was determined following completion of the vegetation mapping conducted during the field survey.

Due to the presence of potentially suitable habitat, focused surveys were conducted on the project site for special-status plant species on April 16 and 29, 2015 by ESA PCR biologists Zeke Cooley, Amy Lee, and Lauren Singleton, and for the 9-acre portion of the project site (which was added in 2015) on August 10, 2015 by ESA PCR biologists Zeke Cooley and Amy Lee. No focused surveys were conducted for the off-site study areas.

3.3.5 General Wildlife Inventory

All wildlife species observed within the project site, 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) and California Herps (2015) for amphibians and reptiles, the American Ornithologists' Union (1998) for birds, and Jameson and Peeters (1988) for mammals. Since common names vary significantly between references, scientific names are included upon initial mention of each species; common names consistent throughout the report are employed thereafter. All wildlife species detected were recorded in field notes. Special-status wildlife species are discussed below in Section 3.3.6, *Special-Status Wildlife Species*.

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 CDFW and USFWS databases (see Section 3.2, *Literature Review*), and the presence or absence of suitable habitat within the project site based on plant community mapping (see Section 3.3.1, *Plant 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 CDFW and USFWS 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 for which potentially suitable habitat occurs within the project site was prepared, and the potential for occurrence for each species was determined following completion of the vegetation mapping conducted during the field survey.

Due to the presence of potentially suitable habitat, focused surveys were conducted within the project site for burrowing owl and coastal California gnatcatcher. No focused surveys were conducted for the off-site study areas. A summary of the survey methods is provided below; separate survey reports were also prepared following completion of the focused surveys. No other focused surveys were conducted for special-status wildlife species.

Burrowing Owl

The project site supports potentially suitable habitat for burrowing owl, and as such, focused surveys were conducted on the project site by ESA PCR biologists Florence Chan, Zeke Cooley, Bob Huttar, Amy Lee, and Maile Tanaka on March 20; April 16; May 9; and June 18, 2014. For the 9-acre portion of the project site (which was added in 2015), focused surveys for burrowing owls were conducted by ESA PCR biologist Zeke Cooley on May 7, June 2, June 23, and July 13, 2015. Focused surveys for burrowing owls were conducted in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (2012). No focused surveys were conducted for the off-site study areas.

Suitable habitat was identified on-site during the habitat assessment, including disturbed, low-growing vegetation; bare ground; and a few small fossorial mammal burrows. Therefore, focused surveys were conducted within the project site plus a 150-meter (approximately 500 feet) buffer zone around the project site perimeter focusing 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 morning civil twilight and 10:00 AM during suitable weather conditions.

Coastal California Gnatcatcher

The project site supports potentially suitable habitat for coastal California gnatcatcher and the project site is within critical habitat mapped by USFWS (USFWS 2015b). As such, focused surveys were conducted by Leatherman Bioconsulting Inc. biologists Brian Leatherman, Adam DeLuna, and James Huelsman, authorized under permit number TE-827493-7 to determine the presence and location or absence of coastal California gnatcatchers within the survey area. Surveys were conducted on the project site in accordance with the USFWS *Coastal California Gnatcatcher Presence/Absence Survey Protocols* (1997). No focused surveys were conducted for the off-site study areas.

Suitable habitat was identified on-site during the field survey, including brittle bush scrub, brittle bush scrub/rock outcrop, brittle bush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, disturbed/brittle bush scrub, disturbed/California sagebrush scrub, rock outcrop/brittle bush scrub, ruderal/brittle bush scrub, and ruderal/California sagebrush scrub (see Section 4.2 below for plant community descriptions). Suitable habitat within the project site was divided into three survey areas and six surveys were conducted in each of the three areas on April 7, 14, 22, 28, and 29; May 6, 7, 13, 14, 20, 21, 28, and 30; and June 4, 2014 and repeated on May 7, 8, 14, 15, 21, 22, 28, and 29; June 4, 5, 11, 12, 19, 24, 2015. Surveys were conducted no less than one week apart, between 6:00 AM and 12:00 PM during suitable weather conditions. Permitted biologists slowly walked along or within the potentially suitable habitat, stopping intermittently to look and listen for coastal California gnatcatcher,

uttering pishing sounds, and playing a digital copy of recorded coastal California gnatcatcher vocalizations. The recording was played for several seconds at each interval, followed by a brief pause to listen for a response.

3.3.7 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 *South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion* document was reviewed to identify any linkage networks on or in the vicinity of the project site.

3.3.8 Jurisdictional Delineation

A jurisdictional delineation of existing on-site drainage and wetland features was conducted by ESA PCR regulatory scientist Amir Morales on November 26, 2013. For the 9-acre portion of the project site added in 2015, a delineation of jurisdictional waters and wetlands was conducted by ESA PCR regulatory scientist Amir Morales on April 29, 2015. The purpose of the delineation was to assess the location, extent and acreage of "waters of the U.S." and/or wetlands under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and the 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) for "waters of the U.S" and by the CDFW under the California Fish & Game Code. No indication of wetland or other special aquatic sites were observed on the site, therefore, the delineation of wetlands using the procedures stipulated in the USACE Wetland Delineation Manual (Environmental Laboratory 1987) was not warranted (USACE 2008a). However, jurisdictional "waters of the U.S." were delineated in compliance with the USACE's Arid West Supplement (USACE 2008b).

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 (USACE 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, and streambed 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. The results of the ESA PCR jurisdictional assessment are subject to review and approval by the resource agencies as part of future regulatory permits for the project, if required.

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4.0 EXISTING CONDITIONS

4.1 CHARACTERISTICS OF THE PROJECT SITE AND SURROUNDING AREA

The approximately 335.97-acre project site and the 43.90-acre off-site study areas are located in the City of Colton in San Bernardino County. The project site and off-site areas consists primarily of native brittle bush scrub, which is dominated by brittle bush (*Encelia farinosa*), as well as smaller scattered patches of other native plant communities, such as California buckwheat scrub, California sagebrush scrub, and black willow thicket (intermixed with some ornamental vegetation). A large portion of the site is composed of disturbed areas, consisting of dirt roads, disced fields comprised of non-native species, and areas with little to no vegetation that exhibited signs of previous human disturbance. Other non-native plant communities present include non-native grassland, ruderal vegetation, and ornamental species. There are also scattered areas of rock outcrops along the steep hillsides, wash areas, and unvegetated developed areas on the project site. The project site and off-site areas support nine drainages observed to support field indicators associated with USACE, RWQCB and CDFW (collectively "the resource agencies") jurisdictional waters, referred to in this report as Drainages A, A1, B, C, D, D1, E, E1, and E2. Drainages A and A1 are located in southeastern corner of the project site, Drainage B is in the southwestern portion, Drainages C and D occur near the western boundary, and Drainages E, E1, and E2 are in the northwestern corner.

The topography on-site is generally flat in the southeastern portion of the project site with a slight northeast to southwest slope in the southwestern portion of the project site. In the northern portion of the project site, there is a valley that runs northwest to southeast and with steep hills that border the valley on the southwest. A low mountain range (La Loma Hills) occurs along the limits of the project site. Elevations range from approximately 850 feet above mean sea level (MSL) in the southern portion to approximately 1,470 feet above MSL along the peak of the La Loma Hills on the eastern side of the project site. Soils mapped in the project site and off-site areas include four soil types as follows (NRCS 2016), as shown in **Figure 4**, *Soils Map*:

- Hanford coarse sandy loam, 2 to 9 percent slopes
- Monserate sandy loam, 2 to 9 percent slopes
- Ramona sandy loam, 2 to 9 percent slopes
- Saugus sandy loam, 30 to 50 percent slopes
- Vista-Rock outcrop complex

Immediate surrounding land uses include industrial areas to the west, residential areas to the east and south, and open space to the north. The Santa Ana River runs in a northeast to southwest direction to the north and west of the project site and off-site study areas. A San Bernardino County Flood Control levee has been constructed along the entire length of the river adjacent from the project site, thus removing the project site from the 100-year floodplain (SWCA Environmental Consultants 2009).

4.2 PLANT COMMUNITIES

Descriptions of plant communities found within the project site and off-site areas are provided below and their corresponding California Natural Community Codes (CaCodes) assigned by CDFW are in parentheses next to each community name (CDFW 2010). The location of each plant community is shown in **Figure 5**, *Plant Communities* and **Table 1**, *Plant Communities*, lists each of the plant communities observed, as well as the acreage within the project site and off-site study areas. Representative photographs of plant communities found within the project site are included in **Figure 6**, *Site Photographs*.

4.2.1 Brittle Bush Scrub (33.030.00)

Brittle bush scrub is dominated by an almost monotypic community of brittle bush. Associated species observed within this community include sparse amounts of California buckwheat (*Eriogonum fasciculatum*), California sagebrush, common sandaster (*Corethrogyne filaginifolia*), pinebush (*Ericameria pinifolia*), desert brickellbush (*Brickellia desertorum*), wishbone bush (*Mirabilis laevis*), bush monkeyflower (*Diplacus longiflorus*), wild cucumber (*Marah macrocarpus*), wild canterbury-bells (*Phacelia minor*), valley cholla (*Cylindropuntia parryi*), linear-leaved stillingia (*Stillingia linearifolia*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), and Sahara mustard (*Brassica tournefortii*). Brittle bush scrub encompasses the majority of the project site with approximately 149.20 acres within the project site, and 2.49 acres within the off-site study areas (primarily adjacent to the central portion of the project site), for a total of 151.69 acres.

4.2.2 Brittle Bush Scrub/Rock Outcrop (33.030.00/Not Applicable)

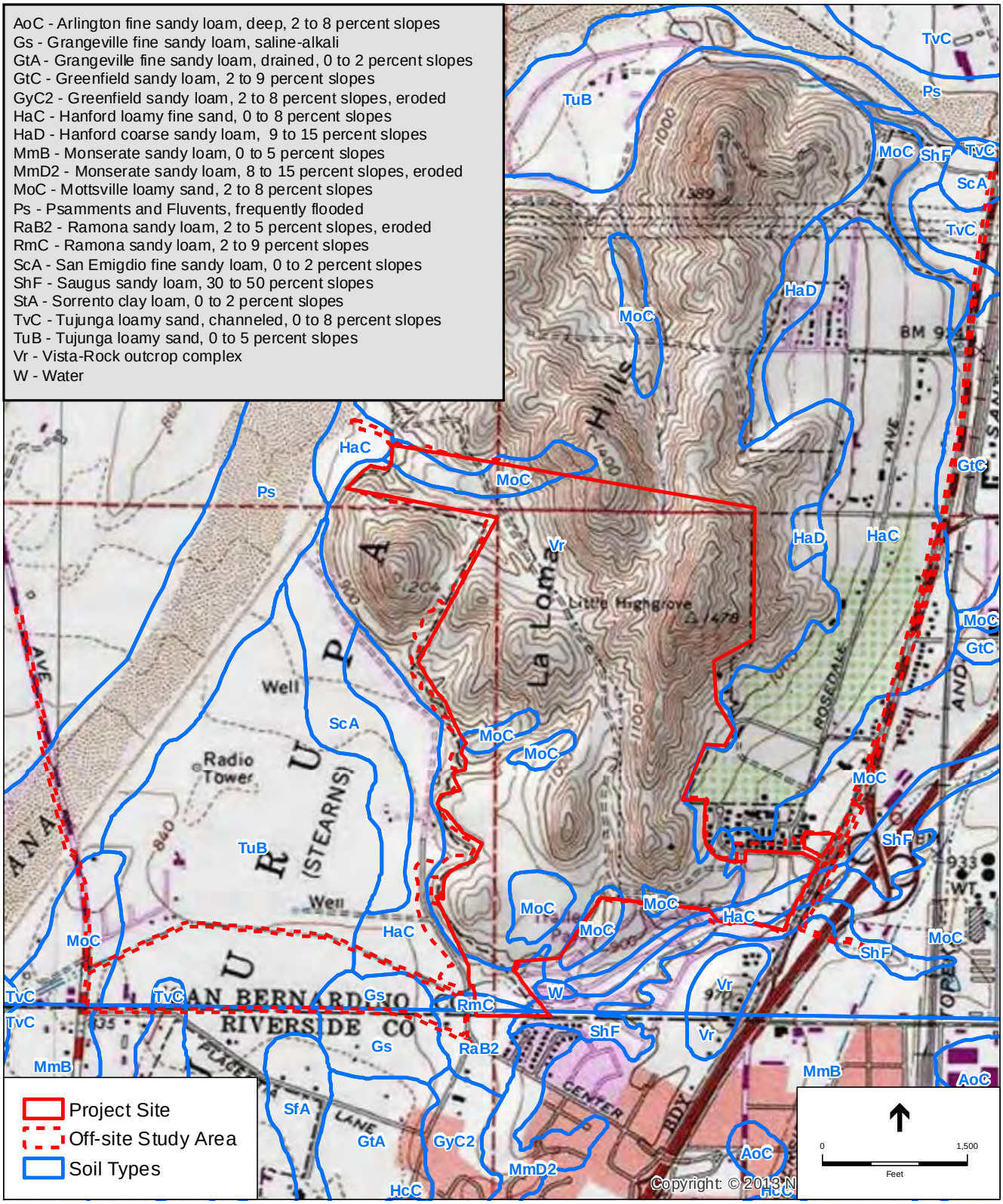
Brittle bush scrub/rock outcrop is dominated by the species within the brittle bush scrub community with rock outcroppings interspersed within the brittle bush scrub vegetation. Brittle bush scrub/rock outcrop comprises approximately 0.02 acre in the western portion of the project site.

4.2.3 Brittle Bush Scrub/Ruderal (33.030.00/Not Applicable)

Brittle bush scrub/ruderal is dominated by the species within the brittle bush scrub community (primarily brittle bush) with ruderal species interspersed throughout the brittle bush scrub community. Species observed within the ruderal community include shortpod mustard (*Hirschfeldia incana*), common fiddleneck (*Amsinckia intermedia*), London rocket (*Sisymbrium irio*), tocalote (*Centaurea melitensis*), ripgut grass (*Bromus diandrus*), western ragweed (*Ambrosia psilostachya*), cheeseweed (*Malva parviflora*), wild radish (*Raphanus raphanistrum*), foxtail chess (*Bromus madritensis* ssp. *rubens*), wild oat (*Avena* sp.), gum tree (*Eucalyptus* sp.), mule fat (*Baccharis salicifolia*), blue elderberry, pinebush, Mexican palo verde (*Parkinsonia aculeata*), tree tobacco (*Nicotiana glauca*), vetch (*Astragalus* sp.), and dove weed (*Croton setigerus*). Brittle bush scrub/ruderal comprises approximately 1.18 acres in the northeastern portion of the project site.

4.2.4 California Buckwheat Scrub (32.040.02)

California buckwheat scrub is dominated by California buckwheat with a subdominance of brittle bush. Other associated species observed within this community include California sagebrush, redstem stork's bill (*Erodium cicutarium*), tocalote, and shortpod mustard. California buckwheat scrub comprises approximately 1.03 acres in the northwestern portion of the project site.



SOURCE: USGS Topographic Series (San Bernardino South, CA).

Roquet Ranch
Figure 4
Soils Map

FSA PCR

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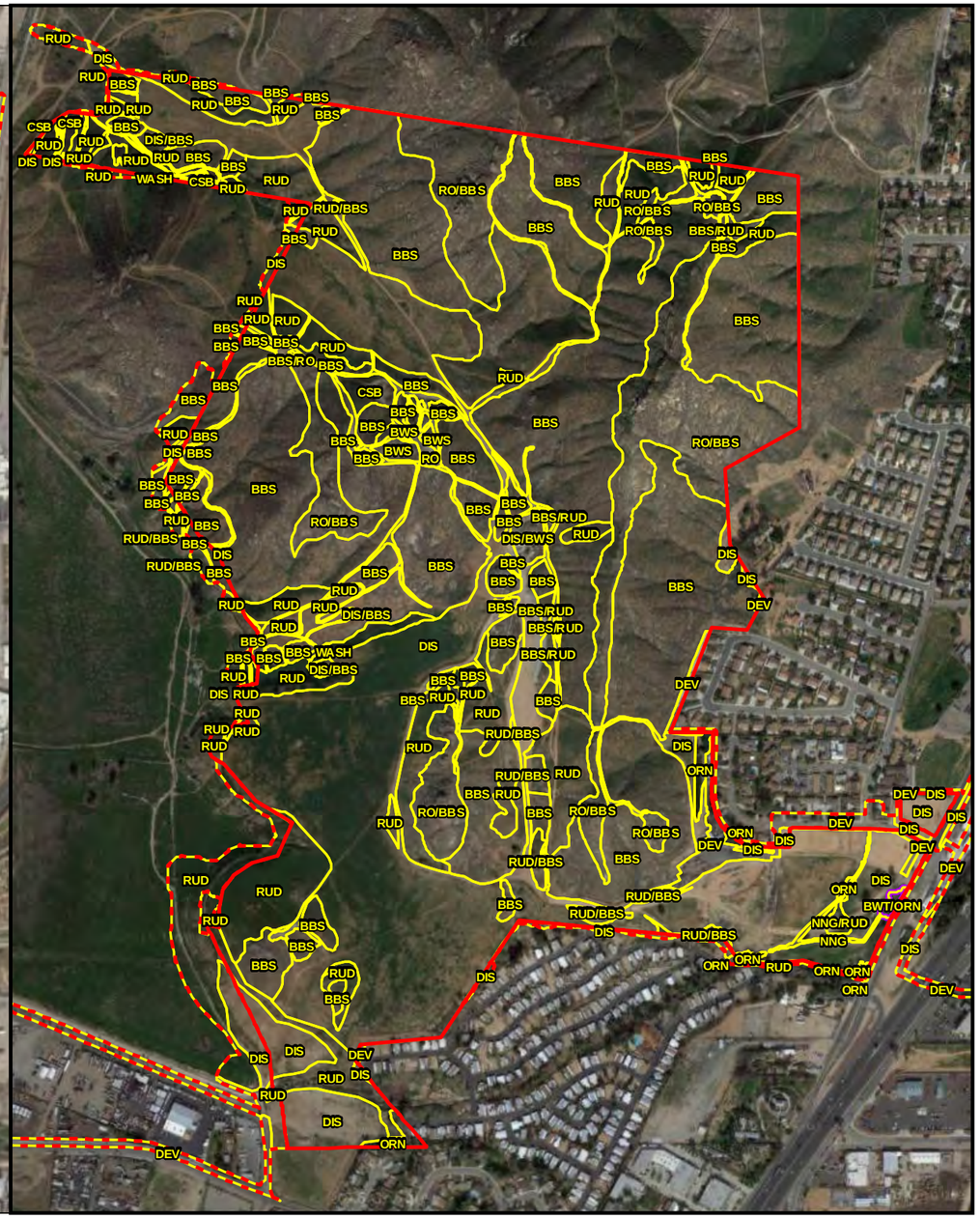
Project Site
Off-site Study Area
Plant Communities
Sensitive Plant Communities **

BBS - Brittle Bush Scrub
BBS/RO - Brittle Bush Scrub/Rock Outcrop
BBS/RUD - Brittle Bush Scrub/Ruderal
BWS - California Buckwheat Scrub
BWT - Black Willow Thicket **
BWT/ORN - Black Willow Thicket/Ornamental **
CSB - California Sagebrush Scrub
CSB/RUD - California Sagebrush Scrub/Ruderal
DEV - Developed
DIS - Disturbed
DIS/BBS - Disturbed/Brittle Bush Scrub
DIS/BWS - Disturbed/California Buckwheat Scrub
DIS/CSB - Disturbed/California Sagebrush Scrub
NNG - Non-Native Grassland
NNG/RUD - Non-Native Grassland/Ruderal
ORN - Ornamental
RO - Rock Outcrop
RO/BBS - Rock Outcrop/Brittle Bush Scrub
RUD - Ruderal
RUD/BBS - Ruderal/Brittle Bush Scrub
RUD/CSB - Ruderal/California Sagebrush Scrub
WASH - Wash



SOURCE: Google Maps, 2015.

Roquet Ranch
Figure 5
Plant Communities

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PHOTOGRAPH 1. View of brittle bush scrub with rock outcrop/ brittle bush scrub in the background within the northern central portion of the project site (facing north).

PHOTOGRAPH 2. View of brittle bush scrub in central portion of the project site looking south across disced disturbed habitat towards a knoll with rock outcrop/brittle bush scrub in the background.

PHOTOGRAPH 3. View of disturbed/brittle bush scrub in the foreground looking southwest towards patches of California sagebrush scrub and ruderal communities in the background within the northwest portion of the project site.

PHOTOGRAPH 4. View of ornamental vegetation surrounded by a ruderal community within the southeastern corner of the project site (facing north-northeast).

SOURCE: ESA PCR, 2016

Roquet Ranch

Figure 6

Site Photographs

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Table 1

Plant Communities

Plant Communities	Project Site (Acres)	Off-Site Study Areas (acres)	Total (acres)
Brittle Bush Scrub	149.20	2.49	151.69
Brittle Bush Scrub/Rock Outcrop	0.02	-	0.02
Brittle Bush Scrub/Ruderal	1.18	-	1.18
California Buckwheat Scrub	1.03	-	1.03
California Sagebrush Scrub	1.93	0.07	2.00
California Sagebrush Scrub/Ruderal	0.13	-	0.13
Black Willow Thicket*	-	0.46	0.46
Black Willow Thicket*/Ornamental	0.26	-	0.26
Non-Native Grassland	0.45	-	0.45
Non-Native Grassland/Ruderal	0.33	-	0.33
Ornamental	1.68	0.66	2.34
Disturbed	97.64	9.69	107.33
Disturbed/ Brittle Bush Scrub	1.09	0.10	1.19
Disturbed/California Buckwheat Scrub	0.99	-	0.99
Disturbed/California Sagebrush Scrub	0.04	-	0.04
Rock Outcrop	0.53	-	0.53
Rock Outcrop/ Brittle Bush Scrub	34.97	-	34.97
Ruderal	39.52	9.95	49.47
Ruderal/ Brittle Bush Scrub	2.00	0.53	2.53
Ruderal/California Sagebrush Scrub	0.09	-	0.09
Wash	0.21	-	0.21
Developed	2.68	19.95	22.63
Total	**335.97**	**43.90**	**379.87**

* *Indicates a sensitive plant community.*

Source: ESA PCR, 2013, 2014, & 2016.

4.2.5 California Sagebrush Scrub (32.010.01)

California sagebrush scrub is dominated by almost monotypic stands of California sagebrush. Other native species observed within this community include brittle bush, California buckwheat, and non-native species including shortpod mustard. California sagebrush scrub comprises approximately 1.93 acres in the northern portion of the project site, and 0.07 acre within the northwestern portion of the off-site study areas, for a total of 2.00 acres.

4.2.6 California Sagebrush Scrub/Ruderal (32.010.01/Not Applicable)

California sagebrush scrub/ruderal is dominated by the species within the California sagebrush community with ruderal, weedy vegetation interspersed throughout. California sagebrush scrub/ruderal comprises approximately 0.13 acre in the northwestern portion of the project site.

4.2.7 Black Willow Thicket (*61.211.01)

A portion of the off-site study area crosses the Santa Ana River via the Riverside Avenue bridge. Although the project will be confined to the bridge, a 40-foot buffer surrounding the bridge was added to define this portion of the off-site study area and the vegetation community underneath the bridge within the Santa Ana River was mapped as black willow thicket. This black willow thicket community is dominated by black willow (*Salix gooddingii*). Other associated species observed within this community include native Fremont's cottonwood (*Populus fremontii*), red willow (*Salix laevigata*), mule fat, brittle bush, horseweed (*Conyza canadensis*), and non-native Mexican palo verde, shortpod mustard, castor bean (*Ricinus communis*), and London rocket. Black willow thicket comprises approximately 0.46 acre in the western portion of the off-site study areas where Riverside Avenue crosses the Santa Ana River.

4.2.8 Black Willow Thicket/Ornamental (*61.211.01/Not Applicable)

Black willow thicket/ornamental community is dominated by black willow (*Salix gooddingii*). Other associated species observed within this community include ornamental vegetation such as shamel ash (*Fraxinus uhdei*) and castor bean. Black willow thicket/ornamental comprises approximately 0.26 acre in the southeastern corner of the project site, adjacent to South La Cadena Drive.

4.2.9 Non-Native Grassland (Not Applicable)

The non-native grassland community is dominated by jungle rice grass (*Echinochloa colona*). Associated species found within this community include umbrella sedge (*Cyperus eragrostis*), smilo grass (*Piptatherum miliaceum*), tree tobacco, western ragweed, jimson weed (*Datura wrightii*), watercress (*Nasturtium officinale*), and common plantain (*Plantago major*). Non-native grassland comprises approximately 0.45 acre in the southeastern portion of the project site.

4.2.10 Non-Native Grassland/Ruderal (Not Applicable)

This community is dominated by Mexican sprangletop (*Leptochloa uninervia*) and wild radish, with a subdominance of jimson weed and native umbrella sedge. Associated species found within this community include black willow, western ragweed, jungle rice grass, Fremont's cottonwood, horseweed, Peruvian peppertree (*Schinus molle*), cheeseweed, curly dock (*Rumex crispus),* castor bean, nettle-leaved goosefoot (*Chenopodium murale*), fragrant everlasting (*Pseudognaphalium beneolens*), cocklebur (*Xanthium strumarium*), watercress, Douglas' nightshade (*Solanum douglasii*), fountain grass (*Pennisetum setaceum*), tree tobacco, rice flat sedge (*Cyperus difformis*), common plantain, Mexican palo verde, common sunflower (*Helianthus annuus*), willow-weed (*Polygonum lapathifolium*), Mediterranean tamarisk (*Tamarix ramosissima*), water speedwell (*Veronica anagallis- aquatica*), and Johnson grass (*Sorghum halepense*). Non-native grassland/ruderal comprises approximately 0.33 acre in the southeastern portion of the project site.

4.2.11 Ornamental (Not Applicable)

The ornamental area within the project site is comprised of a community dominated by a few large ornamental ash trees (*Fraxinus* sp.). Other associated species found in this community include umbrella sedge, rice flat sedge, Mexican palo verde, watercress, horseweed, and fireweed (*Epilobium angustifolium*). Ornamental vegetation comprises approximately 1.68 acres in the southeastern portion of the project site, and 0.66 acre within the western portion of the off-site study areas, for a total of 2.34 acres.

4.2.12 Disturbed (Not Applicable)

Disturbed areas consist of dirt road, maintained right-of-ways, disced fields, and areas with little to no vegetation that exhibited signs of previous human disturbance (e.g., associated with previous agricultural practices). Sparse densities of species that were observed within this community include shortpod mustard, fiddleneck, London rocket, prickly pear (*Opuntia littoralis*), dove weed, Mexican palo verde, redstem stork's bill, brittle bush, Peruvian peppertree, horehound (*Marrubium vulgare*), and purple nightshade (*Solanum xanti*). Disturbed areas comprise approximately 97.64 acres of the project site, and 9.69 acres within the southern and southeastern portions of the off-site study areas, for a total of 107.33 acres.

4.2.13 Disturbed/Brittle Bush Scrub (Not Applicable/33.030.00)

Disturbed/brittle bush scrub is dominated by primarily bare ground with species associated with the brittle bush scrub interspersed throughout the disturbed areas. Disturbed/brittle bush scrub comprises approximately 1.09 acres mainly in the central portion and a small patch in the northwestern portion of the project site, and 0.10 acre within the western portion of the off-site study areas, for a total of 1.19 acres.

4.2.14 Disturbed/California Buckwheat Scrub (Not Applicable/32.040.02)

Disturbed/California buckwheat scrub is dominated by primarily bare ground and interspersed with California buckwheat scrub species. Disturbed/California buckwheat scrub comprises approximately 0.99 acre in the central portion of the project site.

4.2.15 Disturbed/California Sagebrush Scrub (Not Applicable/32.010.01)

Disturbed/California sagebrush scrub is dominated by primarily bare ground with California sagebrush scrub species interspersed throughout. Disturbed/California sagebrush scrub comprises less than approximately 0.04 acre of the project site.

4.2.16 Rock Outcrop (Not Applicable)

Rock outcrop areas are primarily rocky, sparsely vegetated areas typically found along the steep hillsides throughout the project site. Rock outcrop areas comprise approximately 0.53 acres of the project site.

4.2.17 Rock Outcrop/Brittle Bush Scrub (Not Applicable/33.030.00)

Rock outcrop/brittle bush scrub consists of rock outcrop areas that are interspersed with vegetation that is characteristic of the brittle bush scrub community within the project site. Rock outcrop/brittle bush scrub comprises approximately 34.97 acres primarily along the ridgelines within the project site.

4.2.18 Ruderal (Not Applicable)

Ruderal areas are dominated by Ta. Species observed within this community include shortpod mustard, fiddleneck, London rocket, tocalote, ripgut grass, western ragweed, cheeseweed, wild radish, foxtail chess, wild oat, gum tree, mule fat, blue elderberry, pinebush, Mexican palo verde, tree tobacco, vetch, and dove weed. Ruderal areas comprise approximately 39.52 acres throughout the project site, and 9.95 acres adjacent to the project site and within the southwestern portion of the off-site study areas, for a total of 49.47 acres.

4.2.19 Ruderal/Brittle Bush Scrub (Not Applicable/33.030.00)

Ruderal/brittle bush scrub is dominated by ruderal, weedy species but exhibit sparse, remnant species associated with the brittle bush scrub community, mainly consisting of brittle bush. Ruderal/brittle bush scrub comprises approximately 2.00 acres, the largest area being in the southern portion of the project site, and 0.53 acres within the off-site study areas adjacent to the project site, for a total of 2.53 acres.

4.2.20 Ruderal/California Sagebrush Scrub (Not Applicable/32.010.01)

Ruderal/California sagebrush scrub is dominated by ruderal, weedy species but exhibit sparse, remnant species associated with the California sagebrush community, including California sagebrush, California buckwheat, and brittle bush, interspersed throughout the community. Ruderal/California sagebrush scrub comprises approximately 0.09 acre in the northwestern portion of the project site.

4.2.21 Wash (Not Applicable)

Wash areas consist of prevailingly coarse-textured but variable material, ranging from sand to gravel. Wash areas range from unvegetated within portions of the drainage to dominated by ruderal vegetation. Wash areas comprise approximately 0.21 acre in the northwestern portion of the project site.

4.2.22 Developed (Not Applicable)

Developed areas consist of man-made structures such as paved roadways and buildings, and these areas comprise approximately 2.68 acres in the southeastern portion of the project site, and 19.95 acres within the off-site study areas (primarily within the eastern portion), for a total of 22.63 acres.

4.3 GENERAL PLANT INVENTORY

The plant communities discussed above are comprised of numerous plant species. Observations regarding the plant species present were made during the field visits to the project site and off-site study areas, 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 within the project site and off-site study areas are discussed below in Section 4.8.5, *Special-Status Plant Species*.

4.4 GENERAL WILDLIFE INVENTORY

The plant communities discussed above provide habitat for common wildlife species, including numerous reptile, bird, and mammal species observed during field visits. Observations regarding the wildlife species present were made during the field visits to the project site and off-site study areas, and a list of all species

observed is provided in Appendix A. Special-status wildlife species occurring or potentially occurring within the project site and off-site study areas are discussed below in Section 4.8.6, *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, Bennett 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). 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. 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 occur at a variety of scales from a "local" level to a "regional" level. The project site and off-site study areas are adjacent to the Santa Ana River, which is a regional wildlife corridor. However, beyond the Santa Ana River, regional movement through the project site and off-site study areas to the surrounding vicinity is restricted due to the urbanization of the region and the proximity to major freeways (refer to **Figure 7**, *Regional Aerial Photograph*). The eastern portion of the project site is adjacent to the I-215 freeway and is approximately 1.75 miles northeast of CA-60. The project site is surrounded by industrial areas (west), residential areas (east and south), and a mix of industrial and residential uses to the north. There are limited undeveloped areas immediately surrounding the project site to the west (including the Santa Ana River), north, and south. Although there are patches of vacant land within the developed industrial and residential areas in this region, these patches are dominated by open fields, some of which show evidence of previous disturbance (from review of historic aerial photographs), and do not support large areas of natural communities that would provide habitat, resources, and cover for wildlife. Additionally these patches of undeveloped land are isolated and surrounded by development; they are not connected to other undeveloped areas that could allow for wildlife movement apart from within the Santa Ana River, which these areas are adjacent to. Although regional movement through this area is restricted due to surrounding development, there is a potential for movement via the Santa Ana River which connects to the San Bernardino Mountains upstream and to the Prado Basin downstream.

The project site and off-site study areas are generally east of the Santa Ana River and surrounded by developed areas, with only a few undeveloped areas in the immediately vicinity. As such the project site and off-site study areas are restricted to providing potential local wildlife movement within the project site and, to a limited extent, to undeveloped areas primarily located directly north and west of the project site. This local wildlife movement likely occurs via La Loma Hills as well as some limited movement via Drainage Complexes A and E, though these drainages are rather disturbed and sparsely vegetated or dominated by ruderal vegetation, and therefore, provide little cover, habitat, and resources for wildlife. Drainages B, C, D, and D1 are primarily unvegetated, ephemeral systems that originate on-site; as such, these drainages are not

considered to function as wildlife movement corridors but do allow for some opportunities for local wildlife movement on and off the site.

Along the eastern side of the project site, there is a low mountain range, namely La Loma Hills, which runs in a north to south direction. La Loma Hills originates in the southern portion of the project site and extends north along the eastern boundary for approximately 0.75 miles. Outside of the project boundary, the mountain range continues for roughly another one mile north, where it terminates at the Santa Ana River. Although local wildlife movement (e.g., travel routes) could occur within the project site via the Santa Ana River and La Loma Hills, regional movement is restricted due to residential development along the eastern

SOURCE: Google Maps, 2015.

Roquet Ranch
Figure 7
Regional Aerial Photograph

ESA PCR

side of the La Loma Hills. Additionally, this particular section of the Santa Ana River is primarily surrounded by industrial and residential development. Thus, this area is not considered to function as a wildlife movement corridor.

Drainage Complex A, which includes Drainages A and A1, occurs on the southeastern corner of the project site. Drainage A enters the project site from underground South La Cadena Drive and continues to flow on-site in a southwest direction for approximately 0.10 mile. Drainage A1 also occurs in the southeastern corner of the project site as a tributary to Drainage A. Drainage A exits the site and flows through a residential neighborhood parallel to Graymoor Avenue for roughly 0.45 mile, and re-enters the project site on the southwestern corner. Drainage A continues to flow west for approximately 0.15 mile and exits the site after it flows under Orange St, at which point the drainage is confined within the concrete lined Highgrove Channel. Drainage A continues to flow within the concrete lined channel in a general west direction for roughly 1.10 miles, where it ultimately connects to the Santa Ana River. Although some vegetation exists along the off-site portions of Drainage A with more natural flows, the drainage is extremely constrained by development within this area on either side as it flows through the residential neighborhood. For the portions of Drainage A that occur within the project site or off-site study areas, some sparse vegetation exists along the portions of Drainage A that flow on-site, but are adjacent to open areas that appear to be associated with disturbed areas that lack vegetation required by wildlife for habitat and foraging. Another limiting factor is I-215, which creates a barrier to local wildlife movement to the east of Drainage A. As such, Drainage Complex A is not considered to function as a wildlife movement corridor.

Drainage Complex E includes Drainage E and two tributaries, namely E1 and E2, which originate on-site on the northwestern corner. Drainages E1 and E2 are sparsely vegetated, ephemeral systems that flow a short distance on-site (175 and 41 linear feet, respectively) before their confluence with Drainage E; as such, these tributaries are not considered wildlife movement corridors. Drainage E flows downstream in a northwest direction for approximately 0.25 miles on-site, after which it exits the project site and continues to flow for roughly 0.10 miles, passing under the Santa Ana River Trail (a paved multi-use trail) and ultimately connecting to the Santa Ana River. The connection of Drainage E to the Santa Ana River may provide some opportunities for wildlife movement onto the project site; however, Drainage E is sparsely vegetated and surrounded by primarily disturbed and ruderal areas that lack vegetation required by wildlife for habitat and foraging, thus limiting its function for wildlife movement. As such, Drainage Complex E is not considered to function as a wildlife movement corridor.

The project site and off-site study areas are not within any linkages identified by the South Coast Missing Linkages report; the nearest linkage design identified is for the San Gabriel-San Bernardino Connection located approximately 8 miles north (South Coast Wildlands 2008). Since the project site and off-site study areas are not identified as a linkage by South Coast Wildlands, and do not support habitat that connects two or more habitat patches that would otherwise be fragmented or isolated from one another, the project site and off-site study areas are not considered a wildlife corridor.

The project site and off-site study areas may provide limited opportunities for local wildlife movement. 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*], stripped skunk [*Mephitis mephitis*], coyote [*Canis latrans*], and bird species in general). Habitat within the project site are dominated by brittle bush scrub and disturbed areas, with smaller patches of native vegetation, including California buckwheat scrub, California sagebrush scrub, and black willow thicket (intermixed with some

ornamental vegetation). As such, it likely supports some wildlife movement within the project site and/or nearby areas for foraging and shelter. 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 could attempt to move outside of the project site, if feasible, based on the surrounding restrictions to movement from development (see above). Bird species may fly over the development and freeways 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 with less human disturbance, particularly Box Springs Mountain Park to the southeast.

In summary, the project site and off-site study areas may support live-in and movement habitat for species on a local scale (i.e., some live-in and at least marginal movement habitat for invertebrates, reptiles, birds, and small mammal species). Drainage E and the La Loma Hills may allow some small-scale local movement of wildlife between the project site and the Santa Ana River, which is a regional wildlife corridor. However, due to development surrounding the majority of Drainage Complex A, the lack of vegetation along Drainage Complex E, and the presence of interrupted disturbances, including underground flows, channelized portions of drainages, paved bike paths, roads, and freeways, the project site and off-site study areas likely provide little to no function to facilitate movement for wildlife species on a regional scale and are not identified as a regionally important dispersal or seasonal migration corridor by South Coast Wildlands.

4.6 JURISDICTIONAL WATERS AND WETLANDS

Based on the jurisdictional delineation conducted by ESA PCR on November 26, 2013, and April 29, 2015, the approximately 335.97-acre project site and 43.90-acre off-site study areas support nine natural drainage features identified as Drainages A, A1, B, C, D, D1, E, E1, and E2. In total, the project site supports approximately 0.67 acre of USACE/RWQCB "waters of the U.S." and 1.91 acres of CDFW jurisdictional streambed and riparian vegetation. The off-site study area contains approximately 0.04 acre of USACE/RWQCB waters and 0.60 acre of CDFW jurisdictional streambed which includes approximately 0.47 acre of CDFW jurisdictional tree canopy estimated due to the proposed trimming of streambed associated vegetation within the river for hanging of a proposed power line on the downstream side of a bridge that spans the river (**Figure 8**, *Jurisdictional Features*). No impacts to USACE/RWQCB jurisdiction within the Santa Ana River and/or the physical streambed of the river will occur as part of the proposed project. No wetlands or other special aquatic sites where observed on the project site or off-site study areas.

Drainage A enters the site in the east and runs southwest through the eastern corner of the site before exiting the site. Drainage A continues off-site for approximately 2,000 feet, flowing through the Cadena Creek mobilehome community before it returns, bisecting the southern portion of the site. After passing through the southern portion of the site Drainage A then exits the site via a box culvert, once off-site Drainage A transitions to a concrete trapezoidal channel that is known as Highgrove channel. Draianage A1 is a less prominent drainage feature that predominately conveys urban runoff from a storm drain along Maryknoll Drive near the easternmost corner of the site. Drainages B, C, D, D1, E, E1 and E2 all originate on-site at topographic low points where flows coalesce and form jurisdictional indicators such as ordinary high water mark (OHWM) including 1) impressions on the bank, 2) sediment deposits/sorting, and 3) the presence of wracking, a defined bank and associated riparian vegetation. Areas that had weak or

indiscernible jurisdictional indicators were presumed to connect to downstream waters off-site for the purpose of this assessment.

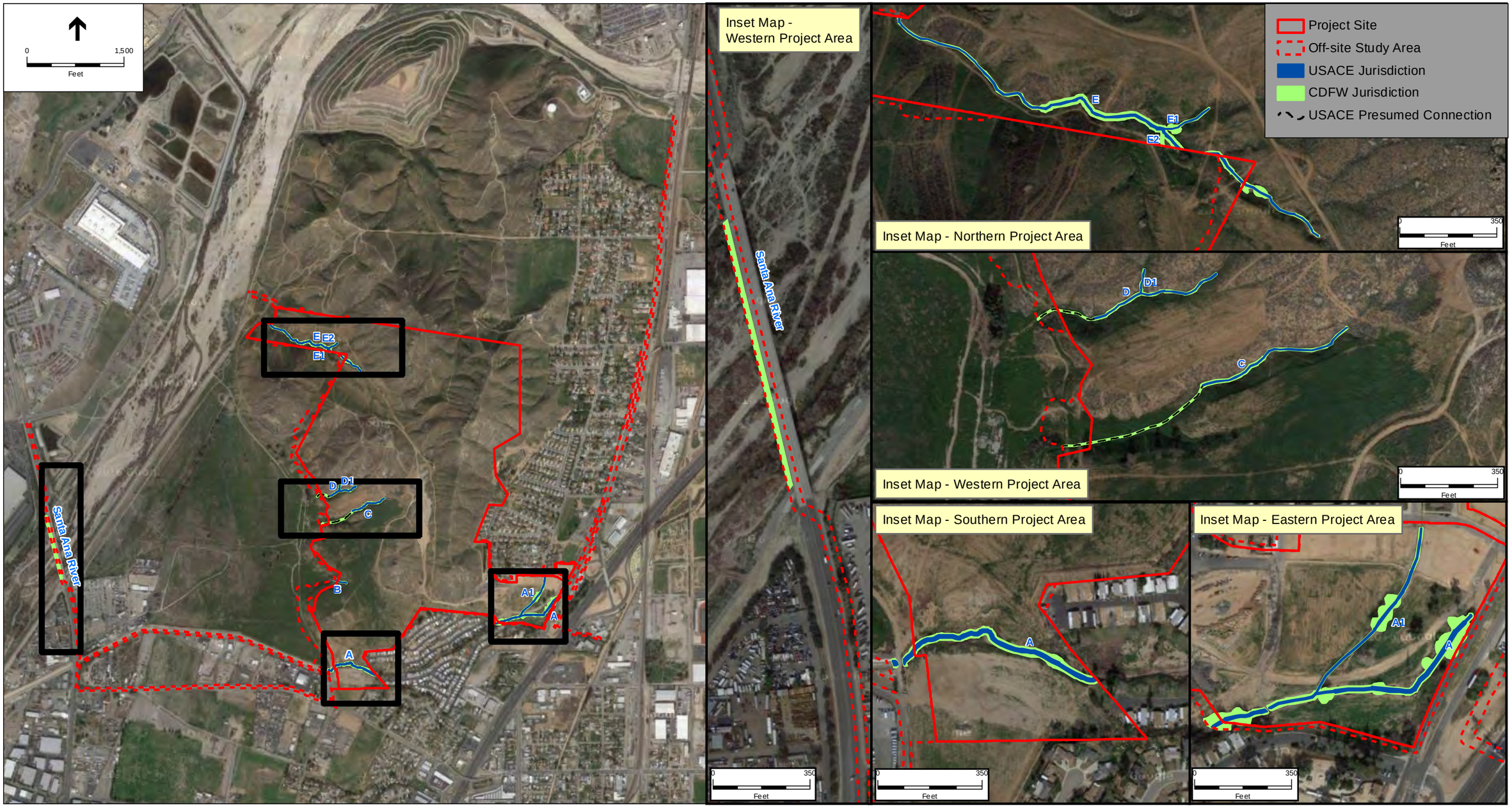
Representative photographs of the drainage features are provided in **Figures 9a, 9b** and **9c**, *Jurisdictional Features Photographs*. **Table 2**, *Jurisdictional Features*, provides a summary of all the jurisdictional features assessed, and a description of each feature is provided below.

Table 2

Jurisdictional Features

	Area (acres)						
	USACE/RWQCB			CDFW			
Drainage	Project Site	Off-Site Study Area	Total	Project Site	Off-Site Study Area	Total	Flow
A	0.44	0.03	0.47	1.15	0.11	1.26	Ephemeral
A1	0.08	-	0.08	0.21	-	0.21	Ephemeral
B	<0.01	<0.01	<0.01	0.01	<0.01	0.01	Ephemeral
C	0.02	-	0.02	0.08	<0.01	0.08	Ephemeral
D	0.02	-	0.02	0.05	<0.01	0.05	Ephemeral
D1	<0.01	-	<0.01	0.01	-	0.01	Ephemeral
E	0.11	0.01	0.12	0.37	0.03	0.40	Ephemeral
E1	<0.01	-	<0.01	0.02	-	0.02	Ephemeral
E2	-	-	-	0.01	-	0.01	Ephemeral
Santa Ana River	-	-	-	-	0.46	0.46	Perennial
Total	**0.67**	**0.04**	**0.71**	**1.91**	**0.60**	**2.51**	

Source: ESA PCR, 2013, 2014 & 2016.



SOURCE: Google Maps, 2015.

Roquet Ranch

Figure 8

Jurisdictional Features

ESA PCR

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Drainage A

Drainage A is an unnamed USGS blueline tributary with headwaters that initiate off-site approximately 1/2-mile to the east. Based on field examination and review of historic aerial imagery[3], Drainage A appears to be a remnant streambed that has had much of its upstream watershed developed resulting in the diversion of surface runoff to localized storm drains.

Drainage A enters the southeast corner of the site and extends for approximately 1,000 LF of streambed toward the southwest prior to exiting along the southern site boundary. Drainage A becomes severely incised immediately after storm drain outlet. The upstream portion of Drainage A supports mostly black willow and ornamental tree species above the grade-break. The streambed remains vertically incised and then extends for approximately 200 LF of unvegetated channel where topographic relief is reduced resulting in the significant deposition of sand. The drainage then extends for approximately 700 LF as an unvegetated sandy channel with banks reduced to only a few feet prior to leaving the site along the southern boundary.

Drainage A continues off-site through the Cadena Creek mobilehome community before returning to the site as a mostly unvegetated wash. Drainage A then exits the site via a box culvert under Old Pelisier Road, once off-site Drainage A transitions to a concrete trapezoidal channel that is known as Highgrove channel. Soils within Drainage A are comprised of sandy loam soils and generally appeared to be consistent with the soil series mapped by the Natural Resources Conservation Service (NRCS) as Hanford course sandy loam (see Figure 4).[4] No indication of wetlands or other special aquatic sites were observed in Drainage A.

Drainage A supports a total of approximately 0.47 acre (0.44 acre on-site, 0.03 acre off-site) of non-wetland ephemeral USACE/RWQCB "waters of the U.S." and 1.26 acre (1.15 acre on-site, 0.11 acre off-site) of CDFW jurisdictional streambed and associated riparian vegetation.

Drainage A1

Drainage A1 is an ephemeral drainage feature with a small watershed that is bounded by La Cadena Road and the eastern slope of the La Loma Hills. Most of the watershed is developed and the flows to Drainage A1 are all a result of urban runoff and immediate storm flows. Drainage A1 enters the site through a storm drain along Maryknoll Drive. The drainage then extends due south for approximately 700 LF, before joining Drainage A. Soils within Drainage A1 are consistent with the Monserate sandy loam series mapping by NRCS in the area (see Figure 4). Vegetation is characterized by a non-native grasses and forbs. No indication of wetlands or other special aquatic sites were observed in Drainage A1.

Drainage A1 supports a total of approximately 0.08 acre of on-site ephemeral non-wetland USACE/RWQCB "waters of the U.S." and 0.21 acre of on-site CDFW jurisdictional streambed and associated riparian vegetation.

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[3] *Accessed by internet via Google Maps and historicaerials.com on J, 2014.*

[4] *NRCS-SSURGO soils mapping generally focuses on mapping of surface soils over large upland-dominated areas and does not map at the scale required to determine specific soil types within drainage features of this size. However, understanding soil classifications of uplands, and/or the presence of buried inclusions at depth within a soil profile, can often help substantiate the composition and type of soils observed within smaller adjacent streambeds such as those on the project site.*

Drainage B

Drainage B initiates in the southwestern portion of the site and extends toward the west for approximately 200 linear feet before exiting the site. The drainage supports ephemeral flow and contains sandy loam soils within an area dominated by non-native forbs. No indication of wetlands or other special aquatic sites were observed in Drainage B.

Drainage B supports a total of less than 0.01 acre (<0.01 acre on-site, <0.01 acre off-site) of non-wetland ephemeral USACE/RWQCB "waters of the U.S." and 0.01 acre (0.01 acre on-site, <0.01 acre off-site) of CDFW jurisdictional streambed and associated riparian vegetation.

PHOTOGRAPH 1. Photograph of Drainage A facing northeast, upstream.

PHOTOGRAPH 2. Photograph of Drainage A facing west, downstream.

PHOTOGRAPH 3. Photograph of Drainage A1 facing northeast, upstream.

PHOTOGRAPH 4. Photograph of Drainage A1 facing southwest, downstream.

SOURCE: ESA PCR, 2016

Roquet Ranch

Figure 9A

Jurisdictional Features Photographs

ESA PCR

PHOTOGRAPH 5. Photograph of Drainage C facing northeast, upstream.

PHOTOGRAPH 6. Photograph of Drainage D facing northeast, upstream.

PHOTOGRAPH 7. Photograph of Drainage D facing southwest, downstream.

PHOTOGRAPH 8. Photograph of Drainage D1 facing south, downstream.

SOURCE: ESA PCR, 2016

Roquet Ranch

Figure 9B

Jurisdictional Features Photographs

ESA PCR

PHOTOGRAPH 9. Photograph of Drainage E facing east, upstream.

PHOTOGRAPH 10. Photograph of Drainage E facing northwest, downstream.

PHOTOGRAPH 11. Photograph of Drainage E1 facing southwest, downstream.

PHOTOGRAPH 12. Photograph of Drainage E2 facing northwest, downstream.

SOURCE: ESA PCR, 2016

Roquet Ranch

Figure 9C

Jurisdictional Features Photographs

ESA PCR

PHOTOGRAPH 13. Photograph of Bridge Crossing Santa Ana River facing north.

PHOTOGRAPH 14. Photograph of Underside of Bridge Crossing Santa Ana River facing north.

PHOTOGRAPH 15. Photograph of Bridge Crossing Santa Ana River facing northwest.

PHOTOGRAPH 16. Photograph of Bridge Crossing Santa Ana River facing west.

SOURCE: Google, 2016; ESA PCR, 2016

Roquet Ranch

Figure 9D

Jurisdictional Features Photographs

ESA PCR

Drainages C, D and D1

Drainages C, D and D1 all initiate in the central portion of the site and extend toward the southwest before exiting the site. The drainages all support ephemeral flow and contain sandy loam soils within areas dominated by non-native forbs. No wetlands or other special aquatic sites were observed in these Drainages.

Drainage supports a total of approximately 0.02 acre (0.02 acre on-site) of ephemeral non-wetland USACE/RWQCB "waters of the U.S." and 0.08 acre (0.08 acre on-site, <0.01 acre off-site) of CDFW jurisdictional streambed.

Drainage D supports a total of approximately 0.02 acre (0.02 acre on-site) of ephemeral non-wetland USACE/RWQCB "waters of the U.S." and 0.05 acre (0.05 acre on-site, <0.01 acre off-site) of CDFW jurisdictional streambed.

Drainage D1 supports less than 0.01 acre (<0.01 acre on-site) of ephemeral non-wetland USACE/RWQCB "waters of the U.S." and and 0.01 acre (0.01 acre on-site) of CDFW jurisdictional streambed.

Drainage E

Drainage E is an ephemeral drainage feature with an approximately 128 acre watershed that is occurs within the northwestern portion of the La Loma Hills. Drainage E initiates in the northwestern portion of the site and extends toward the northwest for approximately 1,700 linear feet before exiting the site at its most northwestern point. The drainage supports ephemeral flow and contains sandy loam soils within an area dominated by non-native forbs and a few riparian shrubs. No indication of wetlands or other special aquatic sites were observed in Drainage E.

Drainage E supports a total of approximately 0.12 acre (0.11 acre on-site, 0.01 acre off-site) of non-wetland ephemeral USACE/RWQCB "waters of the U.S." and 0.40 acre (0.37 acre on-site, 0.03 acre off-site) of CDFW jurisdictional streambed and associated riparian vegetation.

Drainage E1

Drainage E1 initiates in the northwestern portion of the site and extends toward the southwest for approximately 150 linear feet, before joining Drainage E. The drainage supports ephemeral flow and contains sandy loam soils within areas dominated by non-native forbs. No indication of wetlands or other special aquatic sites were observed in this drainage feature.

Drainage E1 supports less than 0.01 acre (<0.01 acre on-site) of non-wetland ephemeral USACE/RWQCB "waters of the U.S." and 0.02 acre (0.02 acre on-site) of CDFW jurisdictional streambed and associated riparian vegetation.

Drainage E2

Drainage E2 initiates in the northwestern portion of the site and extends toward the north for approximately 150 linear feet, before joining Drainage E. The drainage supports ephemeral flow and contains sandy loam soils within areas dominated by non-native forbs. Drainage E2 primarily exhibits swale-like conditions with

weak bed and bank indicators associated with CDFW jurisdiction ranging from 6-8 feet in total channel width. No indications of an OHWM within the swale-like feature were observed. Therefore, no USACE/RWQCB jurisdiction was presumed to be associated with this drainage feature. No indication of wetlands or other special aquatic sites were observed in Drainage E2.

Drainage E2 supports a total of approximately 0.01 acre (0.01 acre on-site) of CDFW jurisdictional streambed.

Santa Ana River

The Santa Ana River traverses the off-site project area where a proposed power line will be hung along the downstream end of the South Riverside Avenue bridge. Although all work will be performed from the bridge and no impacts to the streambed are proposed, some minor trimming of CDFW jurisdictional vegetation within an existing overhead power line easement may occur. As such, this BRA solely evaluates the potential for CDFW jurisdiction associated with the black willow thicket dominated vegetation community within proximity to the bridge based on recent aerial imagery and available photographs.

The limits of CDFW jurisdiction associated with the off-site Santa Ana River tree canopy are estimated to support approximately 0.46 acre of CDFW streambed associated vegetation.

4.7 REGULATED TREES

Per the Street Tree Ordinance of the City of Colton (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs), no tree, shrub or plant upon any public street, planting strip, parkway or alley in the City can be trimmed or removed without permission from the Recreation and Parks Director. This ordinance also includes trimming or removal for purposes of maintaining any overhead wires or any pipes or underground conduits along or across any public street, parkway or alley in the City.

The project site does not support any street trees regulated under the City's ordinance. However, the off-site study areas support trees along City streets that may be subject to the Street Tree Ordinance of the City of Colton. No focused surveys were conducted for the off-site study areas. A tree inventory is recommended for any street trees which may potentially be trimmed or removed by the proposed project.

4.8 SENSITIVE BIOLOGICAL RESOURCES

The following discussion describes the plant and wildlife species present, or potentially present, within the project site 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. Protected special-status 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).

4.8.1 Federal Sensitive Resource Protection and Classifications

FESA

The FESA of 1973 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, unless properly permitted, it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification 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.

All references to Federally-protected species in this BRA include the most current published status or candidate category to which each species has been assigned by USFWS. For purposes of this assessment the following acronyms are used for Federal status species, as applicable:

- FE Federally-listed as Endangered
- FT Federally-listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FPD Federally proposed for delisting
- FC Federal candidate species (former C1 species)

Some of the USFWS offices maintain a database of listed species within their jurisdiction, for example the Sacramento[5] and Carlsbad[6] 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 not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances

[5] *http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists-overview.htm*

[6] *https://www.fws.gov/carlsbad/SpeciesStatusList/CFWO_Species_Status_List%20.htm*

(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.

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.[7] 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.

4.8.2 State of California Sensitive Resource Protection and Classifications

CESA

California's Endangered Species Act (CESA) defines an endangered species as:

> *…a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.*

[7] *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 Wildlife 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 special-status mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Wildlife 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 CNDDB 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:

- SE State-listed as Endangered
- ST State-listed as Threatened
- SR State-listed as Rare
- SCE State candidate for listing as Endangered
- SCT State candidate for listing as Threatened

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

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 is it 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 special-status 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, or California Rare Plant Ranks (CRPR), of which Ranks 1A, 1B, and 2 are particularly considered special-status:

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

The CNPS recently added "threat ranks" which parallel the ranks used by the CNDDB. These ranks are added as a decimal code (e.g., Rank 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).

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

Sensitive Plant Communities

Sensitive plant communities include those habitat types considered rare by resource agencies, namely the CDFW, due to their scarcity and/or their ability to support State and Federally-listed Endangered, Threatened, and Rare vascular plants, as well as several special-status bird and reptile species. CDFW maintains a natural plant community list, the *List of California Terrestrial Natural Communities*.[8] Sensitive natural communities (also referred to by CDFW as 'rare' or 'special concern') are identified on the list by an asterisk and are considered high priority vegetation types (CDFW 2010, CDFW 2000a).

4.8.3 Local Sensitive Resource Protection and Classifications

City of Colton General Plan, Open Space and Conservation Element

As part of the City of Colton's General Plan, the general objective of the Open Space and Conservation Element is to establish and maintain an open space and conservation system which will ensure the conservation and wise utilization of valuable resources and will meet local and regional open space needs. The Open Space and Conservation Element outlines the Principles and Standards by which the City intends to meet this objective, which include the following related to biological resources:

Principles:

- Principle 1: Preserve and protect hillside and environmentally sensitive areas designated for growth through the use of strict hillside development standards.

- Principle 2: Ensure a wide range of active and passive recreational uses through the promotion of a coordinated system of open space areas and linkages directed to scenic, scientific, cultural, and nature-oriented uses.

- Principle 5: Establish education and incentive programs for energy and resource conservation.

- Principle 6: Restrict development in canyons and hillsides and control the plan of development to prevent obstruction of natural runoff or water courses and to prevent unwarranted scarring of hillsides.

Standards:

[8] *Available online at: http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp.*

- Standard 2: Intensive human uses, such as residential development or major vehicular traffic improvements, shall be prohibited in areas of documented ecological significance.

- Standard 3: The use of natural and drought-tolerant vegetation shall be encouraged for landscaping in order that maintenance and water consumption are minimized.

- Standard 5: Hillside development standards shall be adopted.

City of Colton Street Tree Ordinance

Per the Street Tree Ordinance of the City of Colton (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs), Section 12.20.040 requires that "No Person, firm or corporation Shall trim, prune, plant, injure or interfere with any tree, shrub or plant upon any Public Street, Planting Strip, Parkway or Alley in the City without Permission from the Recreation and Parks Director and the Recreation and Parks Director is authorized to grant a Permit at his discretion, provided, however, such authority Shall not arbitrarily be withheld."

In addition, Section 12.20.050 states that "Any Person, firm or corporation maintaining any overhead wires or any pipes or underground conduits along or across any Street, Parkway or Alley in the City, or owning any Property abutting upon any Street, Parkway or Alley in the City desiring to have any tree, shrub or plant cut, trimmed, pruned or removed Shall file with the Recreation and Parks Director a Written request that such work be done, and such request Shall describe the work desired to be done and it Shall be within the discretion of the Recreation and Parks Director to require a Written agreement upon the Part of the petitioner to pay the cost thereof and to do such work in the manner and within the time stipulated by the Director before the issuance of any Permit hereunder."

4.8.4 Sensitive Plant Communities

The project site and off-site study areas support two sensitive plant community, black willow thicket (0.46 acre within the off-site study areas) and black willow thicket/ornamental (0.26 acre within the project site), which are considered habitats that are high priority for inventory by CDFW per their *Natural Communities List* (CDFW 2010), as indicated in Figure 5 and Table 1 above.

4.8.5 Special-Status Plant Species

Special-status plants include those listed, or candidates for listing, by the USFWS and CDFW, as well as species considered special-status by the CNPS (particularly Ranks 1A, 1B, and 2). Several special-status plant species were reported in the vicinity based on CNDDB, totaling 47 species within the 9-quadrangle search that are included in **Appendix B**, *Special-Status Plant Species*. A total of 19 of these species were identified as having a potential to occur within the project site and off-site study areas based on the literature review and habitat (see Appendix B).

No special-status plant species were observed on the project site during surveys conducted on April 16, 29, and August 10, 2015.

No focused surveys for special-status plant species were conducted within the off-site study areas. However, the majority of the off-site study areas are comprised of developed areas (i.e., within existing paved

roadways), disturbed areas (i.e., areas that are generally devoid of vegetation within the existing, maintained right-of-ways along the paved roads and Highgrove Channel), ruderal areas (i.e., which are dominated by weedy, non-native plant species), and ornamental vegetation (i.e., comprised of non-native landscaping species), which do not support suitable habitat for potential special-status plants. Portions of the off-site study areas that support native habitat include brittle bush scrub, California sagebrush scrub, disturbed/brittle bush scrub, ruderal/brittle bush scrub, and black willow thicket. The 2.49 acre of brittle bush scrub, 0.07 acre of California sagebrush scrub, and 0.53 acre of ruderal/brittle bush scrub that occur within the off-site study areas are all immediately adjacent to the project site (along the western and northwestern portions of the project site), which was surveyed for special-status plant species. All species observed within the project site during the focused survey, as well as all of the surveys conducted during 2013 through 2015 were compiled into the comprehensive compendium provided in Appendix A. Because of the proximity of these areas being immediately adjacent to the project site, a significant population of special-status plant species would have been observed during focused surveys on the project site. Therefore, due to the negative findings of focused surveys on the project site, special-status plants are not expected to occur within the brittle bush scrub, California sagebrush scrub, and ruderal/brittle bush scrub that occur within the off-site study areas. As previously mentioned, 0.46 acre of black willow thicket occurs within the western portion of the off-site study area where the Riverside Avenue bridge crosses over the Santa Ana River. Within the westernmost portion of the off-site study areas, there is also 0.10 acre of disturbed/brittle bush scrub immediately adjacent to the bridge, which is a primarily disturbed community, but has a component of native brittle bush scrub. The proposed hanging of power lines will be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged solely on the bridge), and no access into the Santa Ana River or the disturbed/brittle bush scrub is proposed as part of the project. The project proposes trimming of trees only for installation of the conduit, and there are no special-status tree species with potential to occur within this area. It should be noted that the Santa Ana River supports suitable habitat for special-status plant species (e.g., Santa Ana River woollystar); however, since all work will be confined to the bridge and out of any potential habitat, no special-status plants are expected to occur within the project's development footprint.

In addition, Southern California black walnut, which is a CRPR 4.2 species ("Watch List" plants of limited distribution; fairly endangered in California [20-80% occurrences threatened]), was observed within the project site and off-site study areas. A total of 37 southern California black walnuts were identified within the southeastern portion of the project site and off-site study areas (24 within the project site, 13 within the off-site study areas), as shown in **Figure 10**, *Southern California Black Walnut Locations*. However, because this species is a CRPR 4.2, which is a "watch list" species and no official protection is provided under this ranking, it is therefore not considered special-status.[9]

4.8.6 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 CNDDB, totaling 40 species within the 9-quadrangle search that are included in **Appendix C**, *Special-Status Wildlife Species*. A total of 18 of these species were identified as having a potential to occur within the project site and off-site study areas based on the literature review and habitat (see Appendix C).

[9] *Special-status species includes species with a CRPR of 1A, 1B, or 2.*

SOURCE: Google Maps, 2015.

Roquet Ranch

Figure 10

Southern California Black Walnut Locations

ESA PCR

In addition, focused surveys were conducted for the burrowing owl and coastal California gnatcatcher in accordance with recommended protocols, and the potential for foraging and nesting migratory bird and raptor species were also analyzed due to known presence within the project site or within the vicinity (see Appendix C). The species with a potential to occur on the project site and off-site study areas, the results of the burrowing owl and coastal California gnatcatcher surveys, and the migratory birds and raptors assessment are discussed below.

Species With Potential to Occur On-site

Coast horned lizard (*Phrynosoma blainvillii*): This reptile species is a state species of special concern. This species 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 within the project site based on the presence of potentially suitable scrub habitat, including brittle bush scrub, California buckwheat scrub, and California sagebrush scrub. Although suitable habitat exists on the project site, the potential was considered moderate since much of the habitat is isolated either by disturbed areas, which are primarily unvegetated and lack suitable cover, or by existing development, mainly to the east of the project site. No incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015.

Orange-throated whiptail (*Aspidoscelis hyperythra*): This reptile species is a state species of special concern. This species 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. Suitable habitat on the project site for this species includes brittle bush scrub, California buckwheat scrub, and California sagebrush scrub, and orange-throated whiptail was observed within the project site in 2015.

Red diamond rattlesnake (*Crotalus ruber*): This reptile species is a state species of special concern. This species prefers chaparral, woodland, and arid desert habitats in rocky areas with dense vegetation. Suitable habitat on the project site includes rocky areas interspersed with brittle bush scrub, California buckwheat scrub, and California sagebrush scrub, and this species was observed within the project site during a focused plant survey conducted in 2015.

Swainson's hawk (*Buteo swainsoni*): This bird species is listed as state threatened species. It prefers Great Basin grasslands, riparian forests, riparian woodlands, and valley and foothill grasslands. Swainson's hawk was determined to have a potential to forage within the project site and a few fossorial burrows were observed on-site, suggesting the presence of small mammals that could provide a possible food source. Swainson's hawks are known to breed within arid regions within the Central Valley and Mojave Desert, with very limited breeding reported from Antelope Valley (CDFW 2006). The Project site does not support nesting habitat for the Swainson's hawk. This species was observed flying over the project site on two separate occasions (during a coastal California gnatcatcher survey and a burrowing owl survey) in 2014.

Burrowing owl (*Athene cunicularia*): This bird species is a state species of special concern and is known to occur in the project vicinity based on CNDDB occurrence records. This species prefers coastal prairie, coastal scrub, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, valley and foothill grassland and disturbed habitats. Burrowing owl was determined to have potential to occur within the project site based on the presence of suitable habitat on-site, including disturbed, low-growing vegetation, bare ground, and a few small fossorial mammal burrows. The subsequent focused surveys conducted within the project

site in 2014 (and for a portion of the project site in 2015) did not identify burrowing owls, burrows, or sign on the project site or within an approximately 500-foot buffer. Therefore, the project site and adjacent area do not currently support burrow owls. The results of the focused surveys are detailed in separate survey reports attached as **Appendix D**, *2014 Focused Burrowing Owl Survey Report*, and **Appendix E**, *2015 Focused Burrowing Owl Survey Report*. No focused surveys were conducted within the off-site study areas.

Southwestern willow flycatcher (*Empidonax traillii extimus*): This bird species is a federal and state endangered species. This species prefers wet meadows and riparian woodlands that contain water and low growing willow thickets. The Santa Ana River is designated critical habitat for southwestern willow flycatcher, as shown in **Figure 11**, *Critical Habitat*. Although the project site does not support suitable habitat for this species, since the black willow thicket/ornamental is isolated and limited in acreage (0.26 acre), the portion of the off-site study areas that includes the Riverside Avenue bridge over the Santa Ana River contains suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. No focused surveys were conducted within the off-site study areas.

It should also be noted that the state endangered willow flycatcher (*Empidonax traillii*) was observed during focused surveys conducted for coastal California gnatcatcher. One individual was observed in elderberry trees growing in Drainage E1. However, this individual was determined to be a migrant due to lake of suitable habitat (dense willow thickets) and the timing of the observation (during peak migration season).

Loggerhead shrike (*Lanius ludovicianus*): This bird species is a state species of special concern. This species prefers broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands; desert oases, scrub, and washes; and open country with perches for hunting and relatively dense shrubs for nesting. This species has a moderate potential to occur on the project site due to the presence of brittlebush scrub, California buckwheat scrub, and California sagebrush scrub. No incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015.

Least Bell's vireo (*Vireo bellii pusillus*): This bird species is a federal and state endangered species. This species prefers riparian forest, riparian scrub, and riparian woodland. Although the project site does not support suitable habitat for this species, since the black willow thicket/ornamental is isolated and limited in acreage (0.26 acre), the portion of the off-site study areas that includes the Riverside Avenue bridge over the Santa Ana River contains suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. No focused surveys were conducted within the off-site study areas. This species was observed immediately adjacent to the northwestern portion of the project site as documented by USFWS and CNDDB occurrences in 2005, 2007, 2008, and 2015, and around and immediately adjacent to the Riverside Avenue bridge per USFWS occurrences in 2004, 2005, 2007, and 2008.

Yellow-breasted chat (*Icteria virens*): This bird species is a state species of special concern. This species prefers to nest in low, dense riparian willow thickets and other brushy tangles (e.g., blackberry, wild grape) near water, and forages and nests within 10 feet of ground. Although the project site does not support suitable habitat for this species, since the black willow thicket/ornamental is isolated and limited in acreage (0.26 acre), the portion of the off-site study areas that includes the Riverside Avenue bridge over the Santa Ana River contains suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. No focused surveys were conducted within the off-site study areas. A CNDDB occurrence of this species was recorded 6 miles to the southwest in 2015.

SOURCE: Google Maps, 2015.

Roquet Ranch
Figure 11
Critical Habitat

ESA PCR

Yellow warbler (*Setophaga petechia*): This bird species is a state species of special concern. This species prefers riparian woodlands, montane chaparral, open ponderosa pine and mixed coniferous habitat with significant brush. Although the project site does not support suitable habitat for this species, since the black willow thicket/ornamental is isolated and limited in acreage (0.26 acre), the portion of the off-site study areas that includes the Riverside Avenue bridge over the Santa Ana River contains suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. No focused surveys were conducted within the off-site study areas. A CNDDB occurrence of this species was recorded 6 miles to the southwest in 2015.

Coastal California gnatcatcher (*Polioptila californica californica*): This bird species is listed as federally threatened and is a state species of special concern and is known to occur in the project vicinity based on CNDDB occurrence records. This species prefers coastal bluff scrub and coastal scrub habitats were coastal sage scrub is the dominant plant. Coastal California gnatcatcher was determined to have potential to occur within the project site based on the presence of suitable habitat on-site, including brittle bush scrub, brittle bush scrub/rock outcrop, brittle bush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, disturbed/brittle bush scrub, disturbed/California sagebrush scrub, rock outcrop/brittle bush scrub, ruderal/brittle bush scrub, and ruderal/California sagebrush scrub. Additionally, the project site and off-site study areas are within designated critical habitat mapped by USFWS (USFWS 2015b), as shown in Figure 11. This species was recorded in an USFWS occurrence from 1995 within the northwestern portion of the project site. However, no coastal California gnatcatchers were detected on the project site during the focused surveys conducted in 2014 and 2015 in accordance with USFWS protocols. Therefore, the project site does not currently support coastal California gnatcatchers. The results of the focused surveys are detailed in separate survey reports attached as **Appendix F**, *2014 Focused Coastal California Gnatcatcher Survey Report*, and **Appendix G**, *2015 Focused Coastal California Gnatcatcher Survey Report*. Additionally, the majority of the scrub habitat on the project site is comprised of monotypic brittle bush that is marginal habitat to support the gnatcatcher. Although there are some patches of scrub on the project site that contain California sagebrush, which are slightly more suitable since California sagebrush is preferred by this species, these patches are small, isolated patches within the overall marginal habitat. Furthermore, there is no contiguous high quality suitable habitat within the immediately surrounding vicinity to support this species.

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*): This mammal species is listed as a state species of special concern. This species prefers chaparral and coastal sage scrub habitats, in addition to grassland and Riversidean alluvial fan sage scrub habitats. Northwestern San Diego pocket mouse was determined to have a moderate potential to occur within the project site based on the presence of suitable habitat, including brittle bush scrub, California buckwheat scrub, and California sagebrush scrub, and a few fossorial burrows. The nearest CNDDB occurrence record is from 2001, roughly four miles east of the project site; however, the I-215 separates this record location from the project site. No incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015.

Los Angeles pocket mouse (*Perognathus longimembris brevinasus*): This mammal species is listed as a state species of special concern. It prefers sparsely vegetated habitat areas in patches of fine sandy soils associated with washes. Los Angeles pocket mouse was determined to have a potential to occur within the project site based on the presence of potentially suitable wash habitat near Drainage E and a few fossorial burrows that were observed on-site. However, the potential was considered low since the habitat on the project site is not optimal (wash habitat patch is isolated and only 0.21 acre). Additionally, the majority of the site is surrounded by development and a large portion of suitable habitat is disturbed. No incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*): This mammal species is a California Species of Special Concern. This species prefers open brushlands and scrub habitats. San Diego black-tailed jackrabbit was determined to have a potential to occur within the project site based on the presence of some potentially suitable habitat, including short grasses with some shrub cover. This species was observed during a general biological survey conducted in 2013.

Western mastiff bat (*Eumops perotis californicus*): This mammal species is a state species of special concern. This species prefers chaparral, cismontane woodlands, coastal scrub, and valley and foothill grassland habitats, roosting in crevices in cliff faces, high buildings, trees, and tunnels. Western mastiff bat was determined to have a very low potential to occur for foraging only within the project site. Although bats in this family are known to be strong fliers and can fly long distances to forage, there is no suitable roosting habitat present on the project site, and the majority of the project site is surrounded by development and a large portion of existing habitat is disturbed. The nearest CNDDB occurrence record is from 1908, roughly 2.5 miles north of the project site. and no incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015.

San Diego desert wood rat (*Neotoma lepida intermedia*): This mammal is a state species of special concern and occurs in coastal scrub and chaparral habitats. San Diego desert wood rat was determined to have a moderate potential to occur within the project site based on the presence of suitable habitat, including brittlebrush scrub, California buckwheat scrub, California sagebrush scrub, and rock outcrops. Nearest CNDDB occurrence record is from 1994 roughly 7 miles north of the project site near Lytle Creek.

Southern grasshopper mouse (*Onychomys torridus ramona*): This mammal species is a state species of special concern. This species prefers grasslands, desert areas, and especially scrub with friable soils. Southern grasshopper mouse was determined to have a low potential to occur within the project site based on the presence of potential habitat, including brittle bush scrub, California buckwheat scrub, and California sage scrub, and a few fossorial burrows observed on-site. The nearest CNDDB occurrence record is from 1923, roughly 3 miles east of the project site. No signs of this species were observed during any site surveys conducted in 2013, 2014, or 2015.

American badger (*Taxidea taxus*): This mammal species is a state species of special concern. This species prefers open shrub, forest and herbaceous habitats with friable soils. American badger was determined to have a low potential to occur within the project site based on the presence of shrub habitat and a few fossorial burrows on-site, suggesting the presence of small mammals that could provide a possible food source. However, the potential was considered low since the majority of the project site is surrounded by development and a large portion of suitable habitat is disturbed. The nearest CNDDB occurrence record is from 1908, roughly 4 miles east of the project site. The project site and CNDDB record location are separated by the I-215 freeway. No incidental sightings of this species were made during site surveys conducted in 2013, 2014, or 2015.

Pallid bat (*Antrozous pallidus*): This bat species is a state species of special concern and occurs in chaparral, scrub, riparian woodland, montane coniferous forests, and grasslands. This species prefers roosting in rock outcrops and cliffs near open areas that provide foraging opportunities and is very sensitive to disturbance. Pallid bat was determined to have a very low potential to occur for roosting and foraging within the project site. Although rock outcrops may provide roosting opportunities and scrub habitat present for potential foraging, the majority of the project site is surrounded by development and a large portion of existing habitat is disturbed. Because this species is extremely sensitive to disturbance, the

potential was considered very low. There is only one CNDDB occurrence record from 1929, roughly 9 miles northeast of the project site and no signs of this species were observed during any surveys conducted in 2013, 2014, or 2015.

Migratory Birds and Raptors

The project site and off-site study areas support some potential nesting and foraging habitat for migratory birds and raptors. Several species of birds were observed on-site, including raptor species (e.g. Cooper's hawk [*Accipiter cooperii*], red-shouldered hawk [*Buteo lineatus*], red-tailed hawk [*Buteo jamaicensis*], and [Swainson's hawk]) and songbird species (e.g. blue-gray gnatcatcher [*Polioptila caerulea*], Say's phoebe [*Sayornis saya*], and Townsend's warbler [*Dendroica townsendi*]). A complete list of bird species observed on the project site is listed in Appendix A. Additionally, 10 special-status bird species were identified by CNDDB as potentially occurring within the 9-quadrangle search area, one of which was observed on the project site (Swainson's hawk) (see Appendix C).

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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 plant 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:

- "Substantial adverse effect" 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 plant 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 quadrangle for the project site, namely San Bernardino South. 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 site is considered to comprise the following USGS topographic quadrangles: Devore, Fontana, Harrison Mountain, Redlands, Riverside East, Riverside West, San Bernardino North, and Sunnymead.
- "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 the proposed project. 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 4.8, *Sensitive Biological Resources*.

6.1.1 Federal Regulations

As previously discussed in Section 4.8.1, 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 would require permitting pursuant to Sections 404 and 401 of the CWA, respectively.

6.1.2 State of California Regulations

As previously discussed in Section 4.8.2, *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 Wildlife 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 4.8.2, *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 ranked species are not protected per se, but warrant consideration in the preparation of biological assessments. CNPS has developed five

categories of rarity, of which Ranks 1A, 1B, and 2 are considered to meet the significance thresholds defined in Section 5.0, *Thresholds of Significance* above.

6.1.4 Local Regulations

The City of Colton has a Street Tree Ordinance (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs) and requires a permit from the Recreation and Parks Director for trimming or removal of any street trees (refer to Section 4.8.3 above).

6.2 PROJECT RELATED 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 site. For the purpose of this assessment, 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 project sites.

The determination of impacts in this analysis is based on both the proposed project development plan and the biological values of the habitat and/or sensitivity of plant and wildlife species to be affected. Any recommended mitigation measures to address impacts are discussed in Section 7.0 below, and compliance with existing regulations are also outlined in Section 7.0 as Conditions of Approval.

The biological values of resources within, adjacent to, and outside the area to be affected by the proposed 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 systems, 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 and guidelines on temporary impact areas for the drainage

crossings, both provided by the project engineer. Acreages of impacts were calculated by overlaying the CAD data over GPS data of biological resources collected by ESA 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 Wildlife or U.S. Wildlife Service?

Less than Significant with Mitigation Incorporated

6.3.1.1 Special-Status Plant Species

Development of the project site and off-site study areas would result in the direct removal of numerous common plant species; a list of plant species observed within the project site and off-site study areas is included in Appendix A. Common plant species present within the project site and off-site study areas 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 not be considered a significant impact and no mitigation measures are required.

A total of 28 special-status plant species of the 47 species identified as occurring in the project vicinity in available databases (see Section 4.8.5 above) are not expected to occur within the project site or off-site study areas due to the lack of suitable habitat or because the project site or off-site study areas are outside the known distribution or elevation range for the species. These species are listed in Appendix B. As discussed in Section 4.8.5, above, the remaining 19 sensitive plant species were determined to have a potential to occur on-site. However, no special-status plant species were observed on the project site during focused surveys. No focused surveys were conducted within the off-site study areas; however, based on existing disturbance within these areas, lack of suitable habitat, and/or the proximity of some of the off-site study areas being immediately adjacent to the areas of the project site where focused surveys were conducted, the potential for these areas to support special-status species was ruled out. As such, no impacts would occur as a result of project project and no mitigation measures are required.

Southern California black walnut is a CRPR 4.2 species ("Watch List" plants of limited distribution; fairly endangered in California [20-80% occurrences threatened]). A total of 37 southern California black walnuts were identified within the southeastern portion of the project site and off-site study areas (24 within the project site, 13 within the off-site study areas). However, because this species is a CRPR 4.2, which is a "watch list" species and no official protection is provided under this ranking, it is therefore not considered special-status.[10] Therefore, this species is not analyzed further in this document.

[10] *Special-status species includes species with a CRPR of 1A, 1B, or 2.*

6.3.1.2 Special-Status Wildlife Species

Development of the project site 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 large acreage of disturbed areas and the level of existing human activity within the vicinity (e.g., nearby development), 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 not be considered a significant impact and no mitigation measures are required.

A total of 22 special-status wildlife species of the 40 species identified as occurring in the project vicinity in available databases (see Section 4.8.6 above) are not considered to have a potential to occur within the project site due to the lack of suitable habitat or because the site is outside the known distribution range for the species. These species are listed in Appendix C. Since these species are not expected to be present on the project site, no impacts would occur as a result of project development and no mitigation measures are required.

As discussed in Section 4.8.6 and Appendix C, the remaining 18 special-status wildlife species were determined to have a potential to occur on-site based on the presence of suitable habitat. These species and potential impacts are discussed in further detail below.

Threatened and Endangered Species:

The state threatened Swainson's hawk was observed flying over the Project site on two occasions. Swainson's hawks are known to breed within arid regions within the Central Valley and Mojave Desert, with very limited breeding reported from Antelope Valley (CDFW 2006). The Swainson's hawk is a long-distance migrator that travels from breeding grounds in North America to austral summer grounds in Central America (England et al. 1997). Migrating individuals move south through the southern and central interior of California in September and October, and north March through May (CDFW 2006). Based on a review of the CNDDB, the nearest documented occurrence of Swainson's hawk was observed nesting within the Santa Ana River approximately 13 miles southwest of the Project site in 1917 (CDFW 2016). As Swainson's hawks are currently known to breed much farther north, this early 1917 occurrence was likely due to the expansive agriculture that previously existed within the Southern California area, which has since been replaced by development. The Project site does not support nesting habitat for the Swainson's hawk. The Swainson's hawks observed flying over the Project site during the spring were likely migrants.

As Swainson's hawks migrate through the southern and central interior of California on their way to and from Central America they can forage opportunistically. Swainson's hawks require open habitats, typically grasslands, to forage (CDFW 2006). The Project site does support some limited potential foraging habitat for migrating Swainson's hawks; however, it is considered marginal due to its distance from suitable nesting habitat and because it is surrounded by development. Although migrant Swainson's hawks were observed flying over the Project site and not foraging, they could opportunistically forage on the Project site while migrating through. However, they would not be dependent on the Project site for foraging habitat while breeding or nesting. Migrating Swainson's hawks passing through Southern California will have the opportunity to forage on much higher quality areas such as agricultural fields, pastures, open desert, and grasslands.

As stated above, Swainson's hawks are known to breed within arid regions of the Central Valley and Mojave Desert. The Project site does not support suitable nesting habitat for the Swainson's hawk and although it is within their historic breeding range, it is out of their current breeding range. Furthermore, the Swainson's hawks observed flying over the Project site during the spring were likely migrants. Therefore, the proposed Project would not result in significant impacts to nesting habitat for this species.

As stated above, the Project site does support some limited potential foraging habitat for migrating Swainson's hawks; however, it is considered marginal due to its distance from suitable nesting habitat (Central Valley and Mojave Desert) and adjacent land use. Although the Project site could be used for opportunistic foraging by migrant hawks, the Project site would not be utilized while breeding or nesting. Open space areas still remain within the vicinity of the Santa Ana River to the west and within the undeveloped area to the north and to the southwest of the Project site that provide extensive foraging habitat similar or superior to the marginal foraging habitat found on-site which will provide continued resources for migrants that may opportunistically forage within the immediate area. Furthermore, agricultural fields similar to their Central Valley foraging grounds are still prevalent on their migratory route in the City of Riverside, Redlands, Hemet, and Mentone. The proposed Project would permanently impact approximately 184.71 acres of marginal foraging habitat (i.e., consisting of scrub, non-native grassland, disturbed, rock outcrop, and wash communities). The proposed project may also temporarily impact approximately 18.55 acres of marginal foraging habitat from the 20-foot construction buffer around the grading footprint which may or may not require impacts as part of over-excavation and slope stabilization. However, the proposed Project would avoid and preserve as open space approximately 150.92 acres, the majority of which is comprised of native plant communities (e.g., brittle bush scrub, rock outcrop/brittle bush scrub). Although migrant Swainson's hawks were observed flying over the Project site and not foraging, they could opportunistically forage on the Project site while migrating through. However, they would not be dependent on the Project site for foraging habitat as higher quality foraging habitat exists throughout their migratory route. As such, impacts to migrating Swainson's hawk marginal foraging habitat as a result of the proposed Project would be less than significant, and would not require mitigation.

The federally and state endangered southwestern willow flycatcher has potential to occur within the Santa Ana River. Although the project site does not support suitable habitat for this species, since the on-site black willow thicket/ornamental in Drainage A is isolated and limited in acreage (0.26 acre), the portion of the off-site study areas that includes the Riverside Avenue bridge over the Santa Ana River contains some potentially suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. It should also be noted that the state endangered willow flycatcher (*Empidonax traillii*) was observed during focused surveys conducted for coastal California gnatcatcher. One individual was observed in elderberry trees growing in Drainage E1. However, this individual was determined to be a migrant due to lack of suitable habitat (dense willow thickets) and the timing of the observation (during peak migration season). The reach of Santa Ana River adjacent to the project site (to the north and west) is also designated critical habitat for the southwestern willow flycatcher, as shown in **Figure 12**, *Impacts to Critical Habitat*. The off-site study areas include 1.05 acres of critical habitat, and the proposed project will impact up to 0.46 acre of critical habitat within the off-site study areas, as shown in Figure 12. No focused surveys were conducted within the off-site study areas. The project will be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge; no access into the Santa Ana River is proposed). However, the project proposes trimming of trees only for installation of the conduit, and up to 0.46 acre of temporary impacts may occur to vegetation in order to trim back large trees from the work area. No impacts are proposed within the Santa Ana River streambed. It should be noted that vegetation trimming will be a

one-time, temporary impact only. Any vegetation trimmed is expected to re-establish following completion of the installation work. Furthermore, it appears that vegetation is already trimmed along the bridge, suggesting that it may currently be regularly maintained (e.g., due to the existing electrical easement for overhead power lines along the bridge). The actual limits of trimming will be evaluated and minimized to the greatest feasible extent prior to processing of regulatory permits by the resource agencies. The need for federal regulatory permits (i.e., CWA Section 404 permit issued by the USACE) provides a "federal nexus" by which a Section 7 consultation can occur. This statute imposes the obligation on federal agencies to ensure that their actions (such as issuing federal CWA permits for this project) are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. This obligation is enforced through the procedural requirement that agencies, such as the USACE, initiate consultation with USFWS on any actions that may affect a threatened or endangered species. During the FESA Section 7 consultation anticipated for this project, USFWS will gather all relevant information concerning the proposed project and the potential project-related impacts on the southwestern willow flycatcher (i.e., the project applicant will submit a species-specific Biological Assessment), prepare its opinion with respect to whether the project is likely to jeopardize the continued existence of the species (i.e., the USFWS will issue a Biological Opinion), and recommend mitigation/conservation measures where appropriate. Due to the minimal impacts proposed, which are temporary in nature, it is anticipated that at least informal consultation with the USFWS regarding the southwestern willow flycatcher will be necessary. Additionally, the need for state regulatory permits (i.e., Fish and Wildlife Code Section 1602 Streambed Alteration Agreement issued by the CDFW) will require a Consistency Determination from the CDFW for the state-listed southwestern willow flycatcher under CESA. Therefore, the removal of suitable habitat that has the potential to support the southwestern willow flycatcher, which is designated as critical habitat, and would therefore be considered potentially significant. As such, a mitigation measure is proposed in Section 7.2.1.1, *Measures to Mitigate Potentially Significant Impacts to Southwestern Willow Flycatcher and Critical Habitat* of this BRA. Implementation of this mitigation measure would reduce impacts to a less than significant level.

The federally and state endangered least Bell's vireo has potential to occur within the Santa Ana River. Although the project site does not support suitable habitat for this species, since the black willow thicket/ornamental in on-site Drainage A is isolated and limited in acreage (0.26 acre), the portion of the off-site study areas that includes the Riverside Avenue bridge over the Santa Ana River contains some potentially suitable habitat within the black willow thicket habitat immediately adjacent to the bridge. No focused surveys were conducted within the off-site study areas. However, this species was observed immediately adjacent to the northwestern portion of the project site as documented by USFWS and CNDDB occurrences in 2005, 2007, 2008, and 2015, and around and immediately adjacent to the Riverside Avenue bridge per USFWS occurrences in 2004, 2005, 2007, and 2008. The project will be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge; no access into the Santa Ana River is proposed). However, the project proposes trimming of trees only for installation of the conduit, and up to 0.46 acre of temporary impacts may occur to vegetation in order to trim back large trees from the work area. No impacts are proposed within the Santa Ana River streambed. It should be noted that vegetation trimming will be a one-time, temporary impact only. Any vegetation trimmed is expected to re-establish following completion of the installation work. Furthermore, it appears that vegetation is already trimmed along the bridge, suggesting that it may currently be regularly maintained (e.g., due to the existing electrical easement for overhead power lines along the bridge). The actual limits of trimming will be evaluated and minimized to the greatest feasible extent prior to processing of regulatory permits by the resource agencies. The need for federal regulatory permits (i.e., CWA Section 404 permit issued by the USACE) provides a "federal nexus" by which a Section 7 consultation can occur. This statute imposes the

obligation on federal agencies to ensure that their actions (such as issuing federal CWA permits for this project) are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. This obligation is enforced through the procedural requirement that agencies, such as the USACE, initiate consultation with USFWS on any actions that may affect a threatened or endangered species. During the FESA Section 7 consultation anticipated for this project, USFWS will gather all relevant information concerning the proposed project and the potential project-related impacts on the southwestern willow flycatcher (i.e., the project applicant will submit a species-specific Biological Assessment), prepare its opinion with respect to whether the project is likely to jeopardize the continued existence of the species (i.e., the USFWS will issue a Biological Opinion), and recommend mitigation/conservation measures where appropriate. Due to the minimal impacts proposed, which are temporary in nature, it is anticipated that at least informal consultation with the USFWS regarding the least Bell's vireo will be necessary. Additionally, the need for state regulatory permits (i.e., Fish and Wildlife Code Section 1602 Streambed Alteration Agreement issued by the CDFW) will require a Consistency Determination from the CDFW for the state-listed least Bell's vireo under CESA. Regardless, the removal of suitable habitat that has the potential to support the least Bell's vireo would be considered potentially significant. As such, a mitigation measure is proposed in Section 7.2.1.2, *Measures to Mitigate Potentially Significant Impacts to Least Bell's Vireo* of this BRA. Implementation of this mitigation measure would reduce impacts to a less than significant level.

The federally threatened and state species of special concern coastal California gnatcatcher was recorded in an USFWS occurrence from 1995 within the northwestern portion of the project site. However, no coastal California gnatcatchers were detected on the project site during the focused surveys conducted in 2014 and 2015 in accordance with USFWS protocols. Therefore, the project site does not currently support coastal California gnatcatchers and no impacts to coastal California gnatcatcher individuals are anticipated. Additionally, the majority of the scrub habitat on the project site is comprised of monotypic brittle bush that is marginal habitat to support the gnatcatcher (B. Leatherman, pers. comm., 2016). Although there are some patches of scrub on the project site that contain California sagebrush, which are slightly more suitable since California sagebrush is preferred by this species, these patches are small, isolated patches within the overall marginal habitat. Furthermore, there is no contiguous high quality suitable habitat within the immediately surrounding vicinity to support this species. The project site and off-site study areas are within designated critical habitat mapped by USFWS (USFWS 2015b), and include 313.73 acre of critical habitat within the project site and 15.62 acres within the off-site study areas. The proposed project will impact 167.05 acre of critical habitat within the project site, and 15.62 acres within the off-site study areas, as shown in Figure 12. However, because the scrub habitat on the project site is marginal habitat to support the gnatcatcher and this species was not found during focused surveys conducted in 2014 and 2015, the scrub habitat within the designated critical habitat on the project site is not expected to be critical for the long-term conservation of the species. In addition, a total of 146.68 acre of unoccupied designated coastal California gnatcatcher critical habitat within the project site will be avoided, the majority of which is comprised of native habitat

SOURCE: Google Maps, 2015.

Roquet Ranch
Figure 12
Impacts to Critical Habitat

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(e.g., brittle bush scrub and rock outcrop/brittle bush scrub) within the La Loma Hills. Impacts to designated critical habitat that has the potential to support the coastal California gnatcatcher would be considered potentially significant. As such, a mitigation measure is proposed in Section 7.2.1.3, *Measures to Mitigate Potentially Significant Impacts to Coastal California Gnatcatcher Critical Habitat* of this BRA. Implementation of this mitigation measure would reduce impacts to a less than significant level.

None of the other threatened and endangered wildlife species listed in Appendix C are expected to occur within the project site or off-site study areas due to the lack of suitable habitat or because the proposed project footprint does not encompass suitable habitat.

Species of Special Concern: Three species of special concern (orange-throated whiptail, red-diamond rattlesnake and San Diego black-tailed jackrabbit) were observed on-site. Several other species were considered to have potential to occur, including a high potential for three species (coast horned lizard, yellow-breasted chat, and yellow warbler); a moderate potential for three species (loggerhead shrike, northwestern San Diego pocket mouse, and San Diego desert wood rat); a low potential for four species (Los Angeles pocket mouse, western mastiff bat, southern grasshopper mouse, and American badger); and a very low potential for one species (pallid bat). Of those special-status species that have the potential to occur, only three species were observed on-site on either a single or a few occasions each over three years of multiple surveys that occurred on the project site, while the remaining special-status species were never encountered. Thus, the species discussed above would be expected to occur in only limited numbers based on the lack of sightings during three years of surveys on the site and the quality of the isolated habitat, a large portion of which is disturbed (e.g., due to discing, being dominated by non-native species) and is surrounded by development to the immediate east and south, as well as to the north and west beyond the Santa Ana River. Furthermore, of the 335.97 acres on the project site and 43.90 acre of the off-site study areas, a total of 176.58 acres of the project site and 12.60 acres of the off-site study areas will be permanently impacted (the majority of which is in disturbed and ruderal communities). Thus, a total of 159.39 acres of the project site and 31.30 acres of the off-site study areas will be only temporarily impacted or avoided, the majority of which is comprised of native plant communities (e.g., brittle bush scrub, rock outcrop/brittle bush scrub). These avoidance areas will be preserved on-site and will continue to provide habitat for any special-status species that occur. As such, any loss of individuals due to project development would not be expected to reduce regional population numbers of these species, and would be considered less than significant; thus, no mitigation is required.

Additionally, due to the presence of suitable habitat, focused surveys were conducted within the project site for burrowing owls in 2014 (and for a portion of the project site in 2015). No burrowing owls, burrows, or sign were detected during the focused surveys and therefore, no impacts to burrowing owl individuals are anticipated within the project site. No focused surveys were conducted within the off-site study areas. However, due to the presence of suitable habitat within the off-site study areas, focused surveys are recommended. If burrowing owls are found within the off-site study areas, any project-associated impacts to this species would be considered potentially significant. As such, a mitigation measure is proposed in Section 7.2.1.4, *Measures to Mitigate Potentially Significant Impacts to Burrowing Owl* of this BRA. Implementation of this mitigation measure would reduce impacts to a less than significant level.

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 plant 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?

Less than Significant with Mitigation Incorporated

6.3.2.1 Sensitive Plant Communities

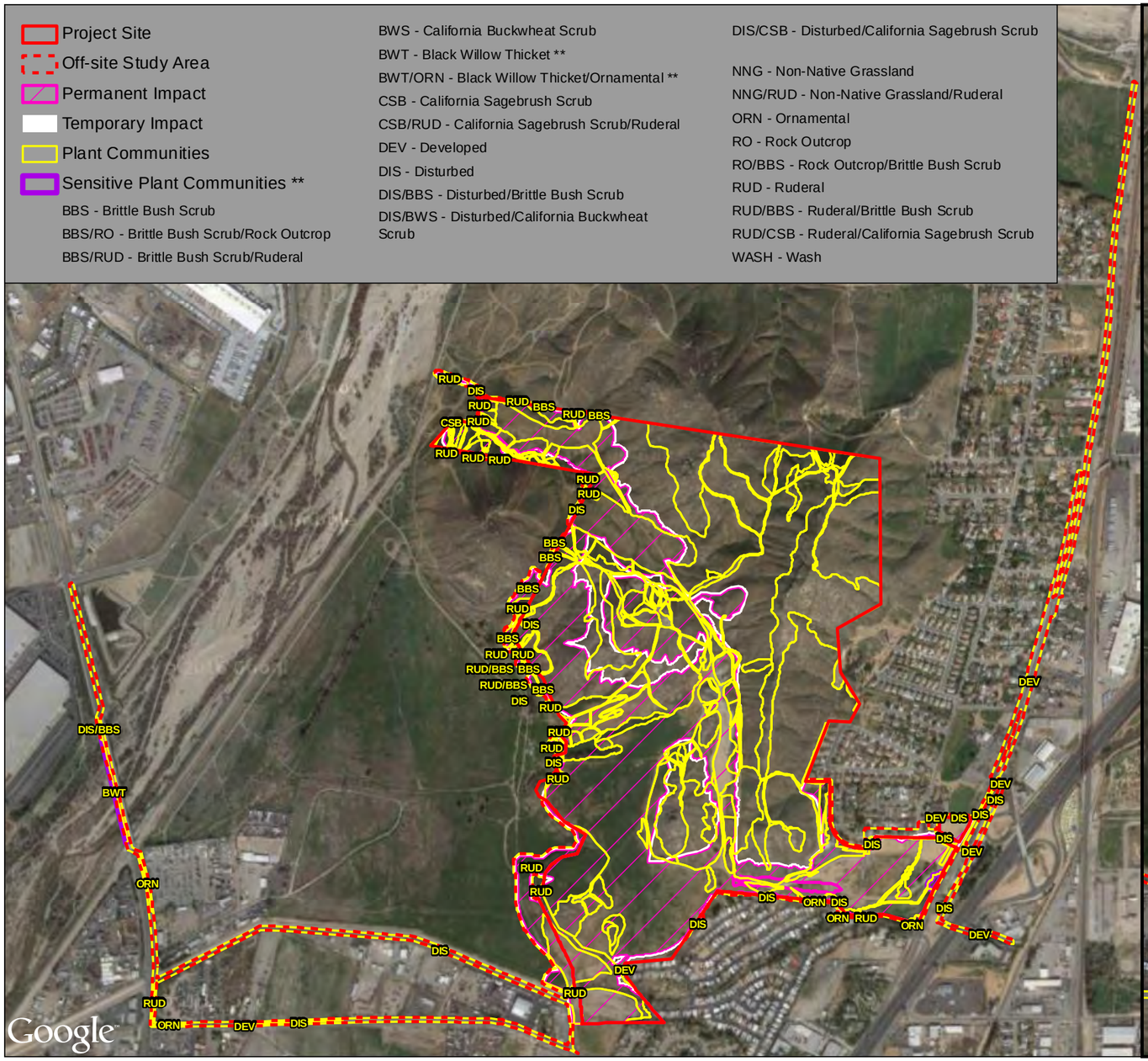
The project site and off-site study areas support two sensitive plant communities, black willow thicket and black willow thicket/ornamental, which are considered habitats that are high priority for inventory by CDFW.

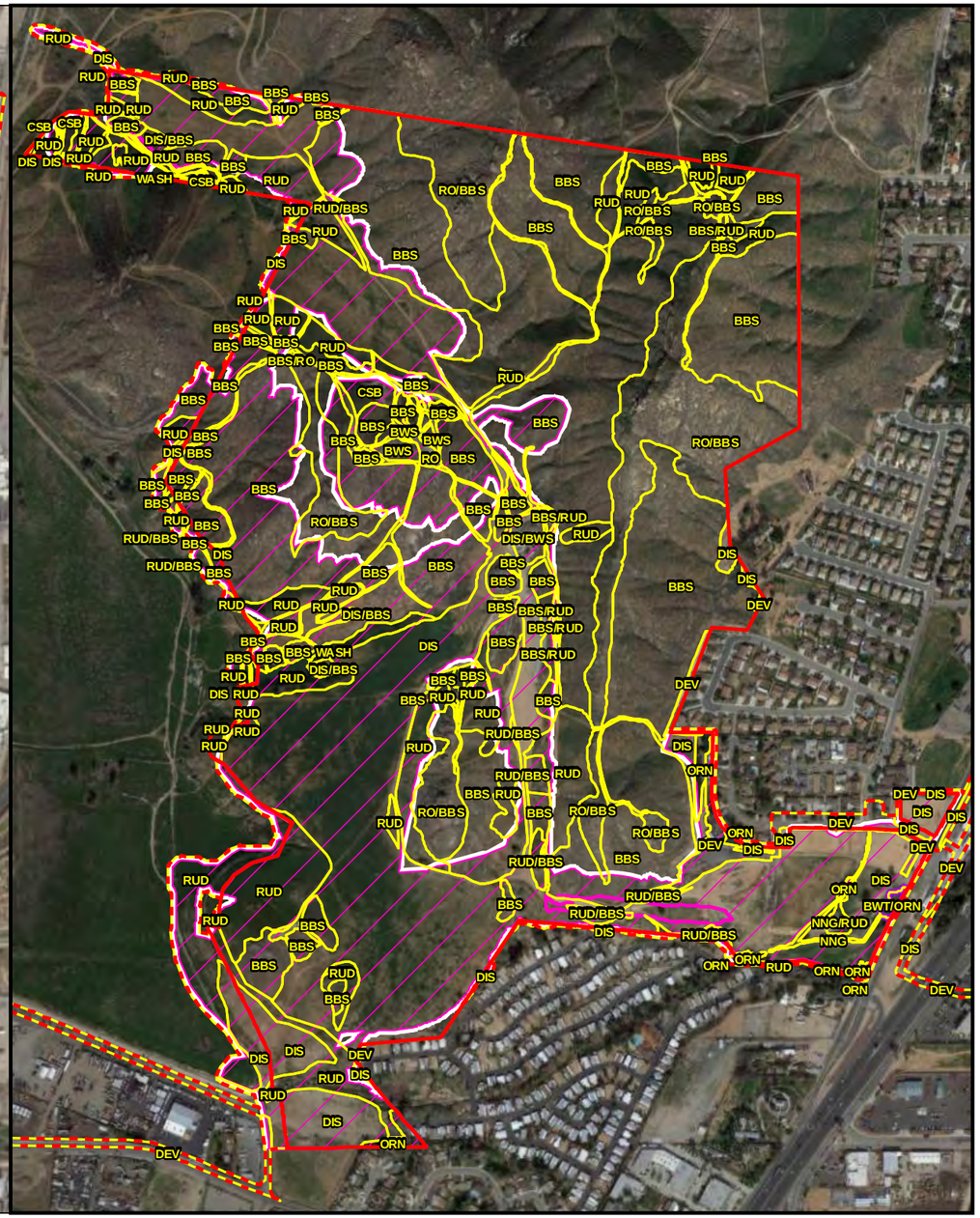
Of the 0.46 acre of black willow thicket that occurs within the off-site study areas, up to 0.46 acre may be temporarily impacted by the proposed project, as indicated in **Figure 13**, *Impacts to Plant Communities* and **Table 3**, *Impacts to Plant Communities*, below, in order to trim vegetation away from the bridge for conduit installation. Although the project will be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge; no access into the Santa Ana River is proposed), a 40-foot buffer surrounding the bridge was added to define this portion of the off-site study area. The vegetation community underneath and immediately surrounding the bridge within the Santa Ana River was mapped as black willow thicket. Although no impacts are proposed within the Santa Ana River streambed, up to 0.46 acre of temporary impacts may occur to vegetation in order to trim back large trees from the work area for the installation of the conduit. It should be noted that vegetation trimming will be a one-time, temporary impact only. Any vegetation trimmed is expected to re-establish following completion of the installation work. Furthermore, it appears that vegetation is already trimmed along the bridge, suggesting that it may currently be regularly maintained (e.g., due to the existing electrical easement along the bridge). Moreover, the final extent of tree trimming will be determined closer to processing of regulatory permits for the project in conjunction with the resource agencies and may be significantly reduced in size and scope. As this impact would be temporary in nature, and vegetation trimmed would be minimal and is expected to re-establish, impacts are considered less than significant and no mitigation specifically for impacts to sensitive plant communities is recommended.

Of the 0.26 acre of black willow thicket/ornamental that occurs within the project site, 0.26 acre will be permanently impacted by the proposed project (refer to Figure 13 and Table 3). The black willow thicket/ornamental proposed for impacts by the project are associated with Drainage A, and are not considered high quality due to the disturbed/non-contiguous composition, including the presence of non-native and ornamental species, and the lack of vegetation structure and density. In particular, the black willow thicket/ornamental is re-establishing following historical disturbance and currently lacks the vegetation structure and density that typically supports protected plant or animal species. As a result, impacts to this lower quality sensitive community would not threaten the existence of high quality stands of this community type. Nevertheless, impacts to these sensitive vegetation communities would be considered potentially significant. As such, a mitigation measure is proposed in Section 7.2.2, *Measures to Mitigate Potentially Significant Impacts to a Sensitive Plant Community* of this BRA. Implementation of this mitigation measure would reduce impacts to a less than significant level.

Project Site
Off-site Study Area
Permanent Impact
Temporary Impact
Plant Communities
Sensitive Plant Communities **

BBS - Brittle Bush Scrub
BBS/RO - Brittle Bush Scrub/Rock Outcrop
BBS/RUD - Brittle Bush Scrub/Ruderal
BWS - California Buckwheat Scrub
BWT - Black Willow Thicket **
BWT/ORN - Black Willow Thicket/Ornamental **
CSB - California Sagebrush Scrub
CSB/RUD - California Sagebrush Scrub/Ruderal
DEV - Developed
DIS - Disturbed
DIS/BBS - Disturbed/Brittle Bush Scrub
DIS/BWS - Disturbed/California Buckwheat Scrub
DIS/CSB - Disturbed/California Sagebrush Scrub
NNG - Non-Native Grassland
NNG/RUD - Non-Native Grassland/Ruderal
ORN - Ornamental
RO - Rock Outcrop
RO/BBS - Rock Outcrop/Brittle Bush Scrub
RUD - Ruderal
RUD/BBS - Ruderal/Brittle Bush Scrub
RUD/CSB - Ruderal/California Sagebrush Scrub
WASH - Wash





SOURCE: Google Maps, 2015.

Roquet Ranch
Figure 13
Impacts to Plant Communities

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Table 3

Plant Communities

Plant Communities	Existing			Permanent Impacts			Temporary Impacts		
	Project Site (Acres)	Off-Site Study Areas (Acres)	Total (Acres)	Project Site (Acres)	Off-Site Study Areas (Acres)	Total (Acres)	Project Site (Acres)	Off-Site Study Areas (Acres)	Total (Acres)
Brittle Bush Scrub	149.20	2.49	**151.69**	50.00	1.80	**51.80**	5.76	0.69	**6.45**
Brittle Bush Scrub/Rock Outcrop	0.02	-	**0.02**	-	-	**-**	-	-	**-**
Brittle Bush Scrub/Ruderal	1.18	-	**1.18**	0.71	-	**0.71**	0.11	-	**0.11**
California Buckwheat Scrub	1.03	-	**1.03**	1.03	-	**1.03**	-	-	**-**
California Sagebrush Scrub	1.93	0.07	**2.00**	1.56	0.02	**1.58**	0.21	0.05	**0.26**
California Sagebrush Scrub/Ruderal	0.13	-	**0.13**	-	-	**-**	0.08	-	**0.08**
Black Willow Thicket*	-	0.46	**0.46**	-	-	**-**	-	0.46	**0.46**
Black Willow Thicket*/Ornamental	0.26	-	**0.26**	0.26	-	**0.26**	-	-	**-**
Non-Native Grassland	0.45	-	**0.45**	0.45	-	**0.45**	-	-	**-**
Non-Native Grassland/Ruderal	0.33	-	**0.33**	0.33	-	**0.33**	-	-	**-**
Ornamental	1.68	0.66	**2.34**	1.57	0.02	**1.59**	0.11	0.21	**0.32**
Disturbed	97.64	9.69	**107.33**	88.23	3.14	**91.37**	3.75	1.31	**5.06**
Disturbed/ Brittle Bush Scrub	1.09	0.10	**1.19**	1.00	-	**1.00**	0.08	-	**0.08**
Disturbed/California Buckwheat Scrub	0.99	-	**0.99**	0.99	-	**0.99**	-	-	**-**
Disturbed/California Sagebrush Scrub	0.04	-	**0.04**	-	-	**N/A**	-	-	**-**
Rock Outcrop	0.53	-	**0.53**	0.53	-	**0.53**	-	-	**-**
Rock Outcrop/ Brittle Bush Scrub	34.97	-	**34.97**	0.85	-	**0.85**	0.60	-	**0.60**
Ruderal	39.52	9.95	**49.47**	24.96	6.94	**31.90**	2.44	2.85	**5.29**
Ruderal/ Brittle Bush Scrub	2.00	0.53	**2.53**	1.81	0.28	**2.090**	0.18	0.26	**0.44**
Ruderal/California Sagebrush Scrub	0.09	-	**0.09**	-	-	**-**	0.05	-	**0.05**
Wash	0.21	-	**0.21**	0.08	-	**0.08**	0.13	-	**0.13**
Developed	2.68	19.95	**22.63**	2.22	0.40	**2.62**	0.08	1.46	**1.54**
Total	**335.97**	**43.90**	**379.87**	**176.58**	**12.60**	**189.18**	**13.58**	**7.29**	**20.87**

* *Indicates a sensitive plant community.*

Source: ESA PCR, 2013, 2014, & 2016.

The remaining native communities (brittle bush scrub, brittle bush scrub/rock outcrop, brittle bush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, rock outcrop, rock outcrop/brittle bush scrub, and wash), and non-native dominated communities (non-native grassland, non-native grassland/ruderal, ornamental, disturbed, disturbed/brittle bush scrub, disturbed/California buckwheat scrub, disturbed/California sagebrush scrub, ruderal, ruderal brittle bush scrub, ruderal/California sagebrush scrub, and developed) are not considered sensitive habitats. Impacts to

plant communities are shown in Figure 13, and Table 3 lists existing and impact acreages for each plant community within the project site and off-site study areas.

6.3.2.2 CDFW Jurisdiction

The project site and off-site study areas support drainages that are considered jurisdictional streambed pursuant to Section 1602 of the California Fish and Game Code, as regulated by CDFW, that are proposed for permanent impacts. Permanent impacts are proposed to approximately 1.17 acres of on-site, and approximately 0.52 acre of off-site non-wetland streambeds and riparian vegetation, for a total of 1.69 acre of permanent impacts to CDFW jurisdiction required to implement the project as depicted on **Figure 14**, *Impacts to Jurisdictional Features*. Impact acreages are summarized in **Table 4**, *Impacts to CDFW Jurisdictional Features*.

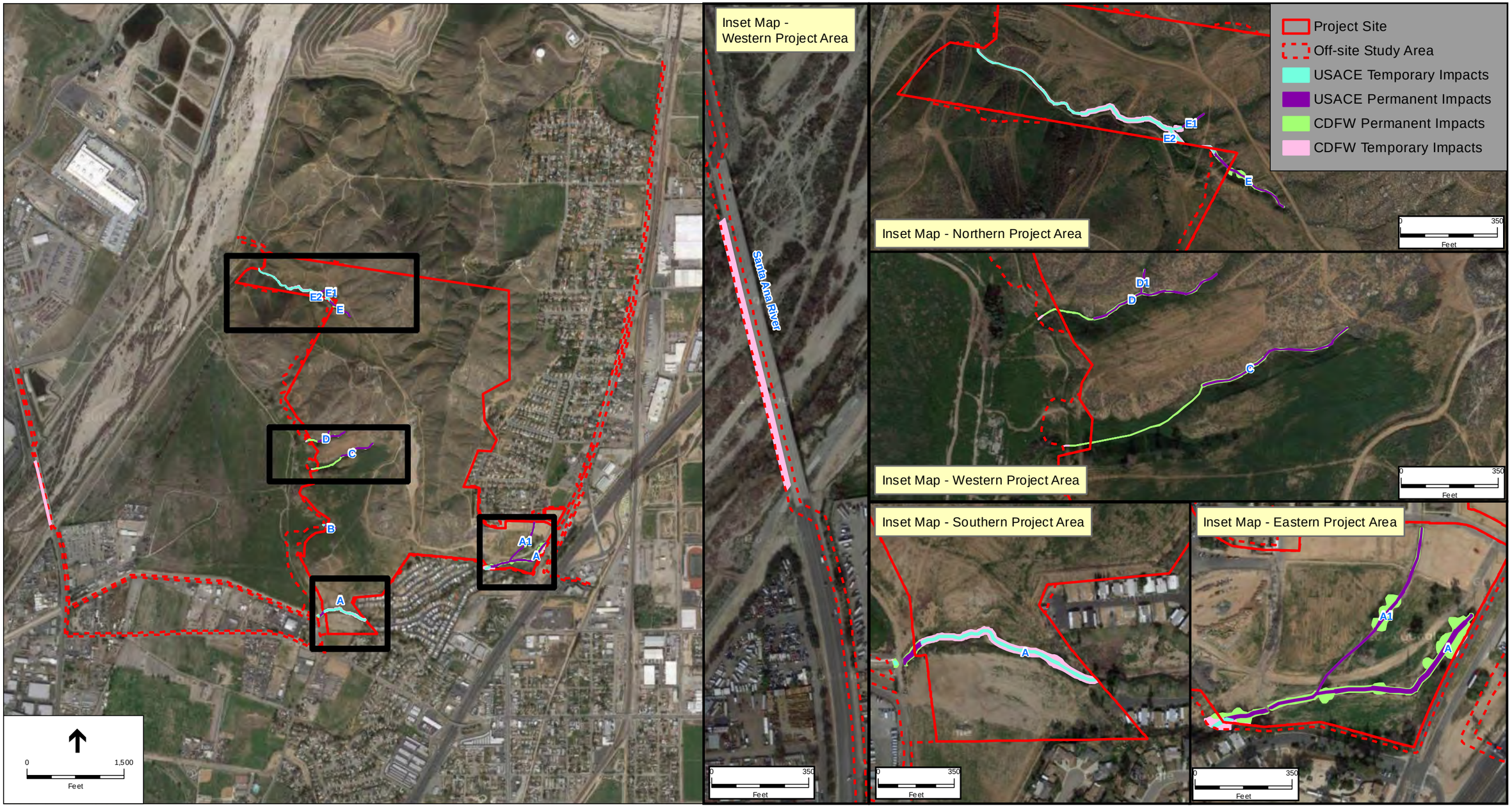
Table 4

Impacts to CDFW Jurisdictional Features

	Permanent Impacts			Temporary Impacts		
Drainage	Project Site	Off-Site Study Area	Total	Project Site	Off-Site Study Area	Total
A	0.74	0.04	**0.78**	0.41	0.08	**0.49**
A1	0.21	-	**0.21**	-	-	**-**
B	0.01	-	**0.01**	-	<0.01	**<0.01**
C	0.08	<0.01	**0.08**	-	<0.01	**<0.01**
D	0.05	<0.01	**0.05**	-	<0.01	**<0.01**
D1	0.01	-	**0.01**	-	-	**-**
E	0.06	0.02	**0.08**	0.31	0.01	**0.32**
E1	0.01	-	**0.01**	0.02	-	**0.02**
E2	-	-	**-**	0.01	-	**0.01**
Santa Ana River	-	0.46	**0.46**	-	-	**-**
Total	**1.17**	**0.52**	**1.69**	**0.75**	**0.09**	**0.84**

Source: ESA PCR, 2013, 2014, & 2016.

Impacts to CDFW jurisdictional features would be required to comply with Section 1602 of the California Fish and Game Code, including applying for a Streambed Alteration Agreement to include on-site and/or off-site compensatory mitigation. A mitigation measure is proposed in Section 7.2.3 of this BRA, *Measures to Mitigate Potentially Significant Impacts to Jurisdictional Features,* intended 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.



SOURCE: Google Maps, 2015.

Roquet Ranch

Figure 14

Impacts to Jurisdictional Features

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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 Mitigation Incorporated

The project site and off-site study areas do not support USACE/CDFW jurisdictional wetlands but do support non-wetland "waters of the U.S." regulated under Sections 404/401 of the Clean Water Act proposed for permanent impacts. Implementation of the project will require approximately 0.38 acre of permanent impact to on-site, and approximately 0.03 acre of permanent impact to off-site USACE/RWQCB jurisdictional waters, for a total of approximately 0.41 acre of permanent impacts to non-wetland "waters of the U.S." as depicted on Figure 14. Impact acreages are summarized in **Table 5**, *Impacts to USACE/RWQCB Jurisdictional Features*.

Table 5

Impacts to USACE/RWQCB Jurisdictional Features

	Permanent Impacts			Temporary Impacts		
Drainage	Project Site (Acres)	Off-Site Study Area (Acres)	Total (Acres)	Project Site (Acres)	Off-Site Study Area (Acres)	Total (Acres)
A	0.24	0.02	**0.45**	0.20	0.02	**0.22**
A1	0.08	-	**0.08**	-	-	-
B	<0.01	<0.01	**<0.01**	-	<0.01	**<0.01**
C	0.02	-	**0.02**	-	-	-
D	0.02	-	**0.02**	-	-	-
D1	<0.01	-	**<0.01**	-	-	-
E	0.02	0.01	**0.03**	0,09	<0.01	**0.09**
E1	<0.01	-	**<0.01**	<0.01	-	**<0.01**
E2	-	-	-	-	-	-
Santa Ana River	-	-	-	-	-	-
Total	**0.38**	**0.03**	**0.42**	**0.29**	**0.02**	**0.31**

Source: ESA PCR, 2013, 2014, & 2016.

Impacts to USACE and/or RWQCB jurisdictional features would be required to comply with Sections 404 and 401 of the CWA, respectively, through issuance of corresponding permits. The proposed project has been designed to require no more than minimal adverse impacts to USACE/RWQCB jurisdictional waters as required to qualify for a USACE Section 404 Nationwide Permit, which will require adequate on-site and/or off-site compensatory mitigation prior to issuance. A recommended mitigation measure of this BRA is proposed in Section 7.2.3, *Measures to Mitigate Potentially Significant Impacts to Jurisdictional Features,* intended 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 and implementation of this mitigation measure are intended to reduce impacts to a less than significant level.

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 Mitigation Incorporated

6.2.4.1 Wildlife Movement

As described in Section 4.5.2 above, the project site and off-site study areas support potential live-in and movement habitat for species on a local scale (e.g., for reptile, bird, and mammal species), but it likely provides little to no function to facilitate wildlife movement for 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 development and disturbances 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 adapted to urban areas would be expected to persist on-site following construction, particularly within the open space areas containing native habitat that will be avoided by the proposed project. Furthermore, the majority of Drainage E will be avoided by the proposed project aside from temporary impacts that will return the streambed to pre-project conditions following the completion of construction. As such, Drainage E avoidance efforts are expected to preserve the existing streambed habitat that may be utilized by wildlife for local movement within these areas. As such, impacts to local movement 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 are warranted.

6.2.4.2 Migratory Species

Migratory Birds and Raptors

As previously discussed in Section 4.8.6, *Sensitive Wildlife Species*, the project site and off-site study areas support potential nesting and foraging habitat for migratory birds and raptors. Based on the disturbed nature of the site and the surrounding development, the quality of foraging habitat is considered to be low. Higher quality foraging habitat is considered to occur in less developed areas with larger expanses of open space, and within the adjacent Santa Ana River corridor. The loss of a relatively small acreage of low quality foraging habitat as a result of the project would not be expected to impact the foraging of these species. In addition the project proposes avoidance of open space areas that could provide potential foraging and nesting areas. Therefore, impacts to foraging habitat would be considered less than significant and no mitigation measures are considered required.

The project site and off-site study areas have the potential to support songbird and raptor nests due to the presence of shrubs, ground cover, and limited trees on-site. 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 Wildlife Code Section 3503. As such direct impacts to

breeding birds (e.g., through nest removal) or indirect impacts (e.g., by noise causing abandonment of the nest) is considered a potentially significant impact as defined by the thresholds of significance (Threshold BIO-D) in Section 5.0 above. Compliance with the MBTA would reduce impacts to a less than significant level, as detailed in MM BIO-7 (see Section 7.2.4, *Measures to Mitigate Potentially Significant Impacts to Migratory or Nesting Birds*).

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?

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The project site does not support any street trees regulated under the City's ordinance. However, the off-site study areas support trees along City streets that may be subject to the Street Tree Ordinance of the City of Colton. No focused surveys were conducted for the off-site study areas. A tree inventory is recommended for any street trees which may potentially be trimmed or removed by the proposed project.

In accordance with the City of Colton has a Street Tree Ordinance (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs), a permit is required from the Recreation and Parks Director for trimming or removal of any street trees (refer to Section 4.8.3 above). The Condition of Approval outlined in Section 7.2.5, *Measures to Mitigate Potentially Significant Impacts to the City of Colton Street Tree Ordinance* will ensure that the project does not conflict with the City's Street Tree Ordinance.

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?

No Impacts

There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan with which the proposed project would conflict.

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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 (identified in Section 7.2 below). 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 under the proposed 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 (identified in Section 7.2 below).

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 development project.

7.2.1 Measures to Mitigate Potentially Significant Impacts to Special-Status Wildlife Species

7.2.1.1 Measures to Mitigate Potentially Significant Impacts to Southwestern Willow Flycatcher and Critical Habitat

COA BIO-1 The project proposes trimming of trees for installation of the conduit, and up to 0.46 acre of temporary impacts may occur to black willow thicket in order to trim back large trees from the work area. The vegetation trimming will be a one-time, temporary impact only. However, the black willow thicket habitat has the potential to support the southwestern willow flycatcher, and is also designated as critical habitat for this species.

Prior to the issuance of any grading permit for the project, the project applicant shall obtain federal and state take authorizations via regulatory permits (including a CWA

Section 404 permit issued by the USACE, discussed in further detail in MM BIO-6 below) which will require that the USFWS be consulted as provided for by Section 7 of the FESA (i.e., for permanent impacts to coastal California gnatcatcher designated critical habitat and temporary impacts to southwestern willow flycatcher designated critical habitat).

MM BIO-1 The following would be proposed mitigation for potential impacts to southwestern willow flycatcher, subject to USFWS and CDFW approval:

1. If vegetation trimming and all work can be conducted outside of the breeding season for southwestern willow flycatcher (nesting season is typically May 15 through August 31), then due to the temporary nature of the impacts, no impacts to southwestern willow flycatcher are anticipated, and because vegetation trimmed would be minimal and is expected to re-establish, no mitigation for critical habitat is proposed.

2. If vegetation trimming or work must be conducted within the breeding season for southwestern willow flycatcher (nesting season is typically May 15 through August 31), then focused surveys should be conducted in accordance with USGS guidelines in *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher* (2010) to determine the presence/absence of southwestern willow flycatcher within the off-site study areas. If southwestern willow flycatcher are present, the following would be required:

    a. A qualified biologist shall identify a 300-foot avoidance buffer from any occupied habitat if construction occurs during the breeding season. If work is required within 300-feet during the breeding season, the biologist shall monitor all work to ensure no impacts occur to the southwestern willow flycatcher. Written documentation shall be prepared and submitted to USFWS and CDFW on completion of construction during the breeding season to outline any monitoring activities.

    b. Construction limits in and around any occupied southwestern willow flycatcher habitat shall be delineated with flags and/or fencing prior to the initiation of any grading or construction activities to clearly identify the limits of the habitat and/or the 300-foot avoidance buffer during the breeding season.

    c. Prior to construction, a worker awareness program should be developed and implemented to inform all workers on the project about listed species, sensitive habitats, and the importance of complying with avoidance and minimization measures.

    d. All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in

high noise levels according to the construction hours determined by the City of Colton.

e. During any construction within or immediately adjacent to the 300-foot avoidance buffer, the construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise to the maximum extent possible. The mufflers shall be installed consistent with manufacturers' standards. The construction contractor shall also place all stationary construction equipment so that emitted noise is directed away from the occupied southwestern willow flycatcher habitat.

f. The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and occupied habitat during all project construction occurring during the breeding season.

g. If the monitoring biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of the birds, the construction supervisor shall be informed and work within no less than 300 feet of construction areas shall be ceased until appropriate measures are implemented. This may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within the occupied southwestern willow flycatcher habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW.

h. If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of the birds is being affected, work within no less than 300 feet shall be ceased and the USFWS and CDFW shall be contacted to discuss the appropriate course of action.

i. Because only minimal vegetation is proposed to be trimmed and is expected to re-establish, on- and/or off-site restoration and/or enhancement of southwestern willow flycatcher habitat at a ratio no less than 0.5:1 for temporary impacts. Off-site restoration and/or enhancement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program supporting southwestern willow flycatcher.

7.2.1.2 Measures to Mitigate Potentially Significant Impacts to Least Bell's Vireo

COA BIO-2 The project proposes trimming of trees for installation of the conduit, and up to 0.46 acre of temporary impacts may occur to black willow thicket in order to trim back large trees from the work area. The vegetation trimming will be a one-time, temporary impact only.

However, the black willow thicket habitat has the potential to support the least Bell's vireo.

Prior to the issuance of any grading permit for the project, the project applicant shall obtain federal and state take authorizations via regulatory permits which will require that the USFWS be consulted as provided for by Section 7 of the FESA. Due to the minimal impacts proposed, which are temporary in nature, it is anticipated that at least informal consultation with the USFWS regarding the least Bell's vireo will be necessary. Additionally, the need for state regulatory permits (i.e., Fish and Wildlife Code Section 1602 Streambed Alteration Agreement issued by the CDFW) will require a Consistency Determination from the CDFW for the state-listed least Bell's vireo under CESA.

MM BIO-2 The following would be proposed mitigation for potential impacts to least Bell's vireo, subject to USFWS and CDFW approval:

1. If vegetation trimming and all work can be conducted outside of the breeding season for least Bell's vireo (nesting season is typically March 15 through July 31), then due to the temporary nature of the impacts, no impacts to least Bell's vireo are anticipated, and because vegetation trimmed would be minimal and is expected to re-establish, no mitigation for critical habitat is proposed.

2. If vegetation trimming or work must be conducted within the breeding season for least Bell's vireo (nesting season is typically March 15 through July 31), then focused surveys should be conducted in accordance with USFWS's *Least Bell's Vireo Survey Guidelines* (2001) to determine the presence/absence of least Bell's vireo within the off-site study areas. If least Bell's vireo are present, the following would be required:

    a. A qualified biologist shall identify a 300-foot avoidance buffer from any occupied habitat if construction occurs during the breeding season. If work is required within 300-feet during the breeding season, the biologist shall monitor all work to ensure no impacts occur to the least Bell's vireo. Written documentation shall be prepared and submitted to USFWS and CDFW on completion of construction during the breeding season to outline any monitoring activities.

    b. Construction limits in and around any occupied least Bell's vireo habitat shall be delineated with flags and/or fencing prior to the initiation of any grading or construction activities to clearly identify the limits of the habitat and/or the 300-foot avoidance buffer during the breeding season.

    c. Prior to construction, a worker awareness program should be developed and implemented to inform all workers on the project about listed species, sensitive habitats, and the importance of complying with avoidance and minimization measures.

d. All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Colton.

e. During any construction within or immediately adjacent to the 300-foot avoidance buffer, the construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise to the maximum extent possible. The mufflers shall be installed consistent with manufacturers' standards. The construction contractor shall also place all stationary construction equipment so that emitted noise is directed away from the occupied least Bell's vireo habitat.

f. The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and occupied habitat during all project construction occurring during the breeding season.

g. If the monitoring biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of the birds, the construction supervisor shall be informed and work within no less than 300 feet of construction areas shall be ceased until appropriate measures are implemented. This may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within the occupied least Bell's vireo habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW.

h. If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of the birds is being affected, work within no less than 300 feet shall be ceased and the USFWS and CDFW shall be contacted to discuss the appropriate course of action.

i. Because only minimal vegetation is proposed to be trimmed and is expected to re-establish, on- and/or off-site restoration and/or enhancement of least Bell's vireo habitat at a ratio no less than 0.5:1 for temporary impacts would be required. Off-site restoration and/or enhancement may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program supporting least Bell's vireo.

7.2.1.3 Measures to Mitigate Potentially Significant Impacts to Coastal California Gnatcatcher Critical Habitat

COA BIO-3 The project site does not currently support coastal California gnatcatchers and no impacts to coastal California gnatcatcher individuals are anticipated. Additionally, the project site contains marginal habitat to support the gnatcatcher, which is not expected to be critical for the long-term conservation of the species. However, the proposed project will impact 167.05 acre of unoccupied designated coastal California gnatcatcher critical habitat within the project site, and 15.62 acres within the off-site study areas, the majority of which are disturbed communities. A total of 146.68 acre of unoccupied designated coastal California gnatcatcher critical habitat within the project site will be avoided, the majority of which is comprised of native habitat (e.g., brittle bush scrub and rock outcrop/brittle bush scrub).

Prior to the issuance of any grading permit for the project, the project applicant shall obtain federal and state take authorizations via regulatory permits which will require that the USFWS be consulted as provided for by Section 7 of the FESA (i.e., for permanent impacts to coastal California gnatcatcher designated critical habitat). This statute imposes the obligation on federal agencies to ensure that their actions (such as issuing federal CWA permits for this project) are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. This obligation is enforced through the procedural requirement that agencies, such as the USACE, initiate consultation with USFWS on any actions that may affect a threatened or endangered species. During the FESA Section 7 consultation anticipated for this project, USFWS will gather all relevant information concerning the proposed project and the potential project-related impacts on the coastal California gnatcatcher (i.e., the project applicant will submit a species-specific Biological Assessment), prepare its opinion with respect to whether the project is likely to jeopardize the continued existence of the species (i.e., the USFWS will issue a Biological Opinion), and recommend mitigation/conservation measures where appropriate.

MM BIO-3 The following would be incorporated into the Biological Assessment proposed mitigation for potential impacts to coastal California gnatcatcher critical habitat:

1. For areas within designated critical habitat within the project site that will be avoided, a legal protection mechanism (e.g., conservation easement, deed restriction, etc.) will be required to ensure these areas are conserved for the benefit of the coastal California gnatcatcher and will not be developed or disturbed in the future.

2. An environmental awareness display, which will include up to two informative kiosks, will be installed in areas adjacent to the open space and educational brochures will be distributed by the Homeowners Association to individual homeowners upon purchase of a home to educate residents about the sensitive biological resources within the conserved areas.

7.2.1.4 Measures to Mitigate Potentially Significant Impacts to Burrowing Owl

COA BIO-4 Due to the presence of suitable habitat, a protocol survey for burrowing owl should be conducted within the off-site study areas. The surveys shall be conducted pursuant to the protocol provided as Appendix D of the Staff Report on Burrowing Owl Mitigation published by the California Department of Fish and Wildlife (CDFW) dated March 7, 2012. A qualified biologist, as defined in the CDFW Staff Report, shall conduct the surveys. Surveys shall preferably be conducted during the breeding season which requires 4 site visits, including at least one site visit between February 15 and April 15; and a minimum of three site visits at least three weeks apart between April 15 and July 15, with at least one visit after June 15.

In addition, a pre-construction take avoidance survey for burrowing owls should be conducted within the project site and off-site study areas no less than 14 days prior to initiating ground disturbance activities in accordance with the guidelines in the Staff Report on Burrowing Owl Mitigation (CDFW 2012) to determine the presence of burrowing owls and avoid potential direct take of burrowing owls if present.

MM BIO-4 If burrowing owls are determined present during the focused survey, occupied burrows and habitat shall be avoided if feasible following the guidelines in the above referenced CDFW Staff Report. This includes, but is not limited to, avoiding direct or indirect destruction of burrows, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. Avoidance measures shall be implemented under the direction of the qualified biologist. If occupied burrows or habitat cannot be avoided, appropriate compensation measures shall be determined by the qualified biologist in accordance with the guidelines detailed in the CDFW staff report and subject to approval by CDFW. This includes a Burrowing Owl Exclusion Plan for temporary or permanent exclusion of owls from occupied burrows, and/or a Mitigation Land Management Plan for permanent conservation of similar vegetation communities to provide for burrowing owl nesting, foraging, wintering and dispersal comparable to or of higher quality than the impact area.

7.2.2 Measures to Mitigate Potentially Significant Impacts to a Sensitive Plant Community

MM BIO-5 Compensatory mitigation for impacts to one sensitive plant community (black willow thicket/ornamental) shall be provided at a ratio no less than 1:1 by on- and/or off-site creation, restoration, enhancement, and/or preservation.

Purchase of any mitigation credits through an agency-approved mitigation bank or in-lieu fee program should occur prior to any impacts to sensitive plant communities. Any mitigation proposed on-site, or on land acquired for the purpose of in-perpetuity mitigation that is not part of an agency-approved mitigation bank or in-lieu fee program, shall include the creation, restoration, enhancement, and/or preservation of similar habitat pursuant to a Habitat

Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to the issuance of a grading permit, and shall provide details as to the implementation of the mitigation, performance standards, 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. The HMMP shall describe the offset of impacts to these habitats, and the on-site and/or off-site mitigation shall be preserved in perpetuity pursuant to City-approved legal protection mechanism.

7.2.3 Measures to Mitigate Potentially Significant Impacts to Jurisdictional Features

MM BIO-6 Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features, the project applicant shall obtain regulatory permits from the USACE, RWQCB, and CDFW. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

1. For permanent impacts, in order to replace jurisdictional "waters of the U.S." within the same watershed, on-site and/or off-site creation, restoration, enhancement, and/or preservation of USACE/RWQCB jurisdictional "waters of the U.S." at a ratio no less than 1:1. However, if the mitigation occurs outside of the watershed, a higher mitigation ratio of 2:1 is proposed to compensate for the jurisdictional resources that may be lost within the watershed where the impacts will occur (which may include on-site and/or off-site creation, restoration, enhancement, and/or preservation of USACE/RWQCB jurisdictional "waters of the U.S.").

   Any temporary impacts will be restored 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 or in-lieu fee program.

2. For permanent impacts, in order to replace the jurisdictional streambed and associated riparian habitat resources within the same watershed, as well as to provide compensatory mitigation for the temporal loss of habitat that will take some time to establish and grow, on-site and/or off-site creation, restoration, enhancement, and/or preservation of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1. However, if the mitigation occurs outside of the watershed, a higher mitigation ratio of 3:1 is proposed to compensate for the jurisdictional resources that may be lost within the watershed where the impacts will occur (which may include on-site and/or off-site creation, restoration, enhancement, and/or preservation of CDFW jurisdictional streambed and associated riparian habitat).

   Any temporary impacts will be restored 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 or in-lieu fee program.

Purchase of any mitigation credits through an agency-approved mitigation bank or in-lieu fee program should occur prior to any impacts to jurisdictional drainages. Any mitigation proposed on land acquired for the purpose of in-perpetuity mitigation that is not part of an agency-approved mitigation bank or in-lieu fee program shall include the creation, restoration, enhancement, and/or preservation of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to any impacts to jurisdictional features, and shall provide details as to the implementation of the mitigation, performance standards, maintenance, and future monitoring. The goal of the mitigation shall be to create, restore, enhance, and/or preserve similar habitat with equal or greater function and value than the impacted habitat.

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

MM BIO-7 Prior to the issuance of any grading permit that would remove potentially suitable nesting habitat for raptors or songbirds, the project applicant shall demonstrate to the satisfaction of the City of Colton that either of the following have 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 vegetation removal activities. If any active nests are detected, a buffer of 300 feet (500 feet for raptors) around the nest will be delineated, flagged, and avoided until the nesting cycle is complete (e.g., it is determined by a qualified biologist that the nestlings have fledged, or the nest has failed). The buffer may be modified and/or other recommendations proposed as determined appropriate by the biological monitor to minimize impacts.

7.2.5 Measures to Mitigate Potentially Significant Impacts to the City of Colton Street Tree Ordinance

COA BIO-5 Prior to the issuance of any grading permit, a tree inventory should be conducted for any street trees which may potentially be trimmed or removed by the proposed project. The project applicant should consult with the City of Colton's Recreation and Parks Director to obtain a permit for trimming or removal of any street trees in accordance with the Street Tree Ordinance of the City of Colton (City of Colton Municipal Code, Chapter 12.20 Trees and Shrubs).

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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 special-status wildlife species, sensitive plant communities, jurisdictional features, migratory and/or nesting birds, and regulated trees.

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)].

Cumulative impacts to the biological resources listed below for the project site and off-site study areas are considered to be less than significant based on implementation of the mitigation measures and conditions of approval outlined above in Section 7.0, *Mitigation Measures and Conditions of Approval*. Therefore, with the proposed mitigation and conditions of approval, impacts would not be considered cumulatively significant. A summary is provided below. Since the project site and off-site study areas were determined not to support any special-status plant species or function as a regional wildlife movement corridor, these biological resources are not included below.

- Special-status wildlife species (i.e., southwestern willow flycatcher and its critical habitat, least Bell's vireo, coastal California gnatcatcher critical habitat, and burrowing owl);
- Sensitive plant communities (i.e., black willow thicket/ornamental);
- Jurisdictional drainages (i.e., USACE, RWQCB and CDFW jurisdictional features);
- Migratory and/or nesting birds; and
- Regulated trees (pursuant to the City of Colton Street Tree Ordinance).

Special-Status Wildlife Species: For potential impacts to southwestern willow flycatcher and least Bell's vireo, USFWS will be consulted and avoidance and minimization measures are proposed to avoid impacts to the birds. For impact to coastal California gnatcatcher critical habitat, USFWS will be consulted and a legal protection mechanism (e.g., conservation easement, deed restriction, etc.) will be required to ensure undeveloped, avoided areas are conserved for the benefit of the coastal California gnatcatcher. If any burrowing owls are observed within the project site or off-site study areas in the future, mitigation is

proposed that would avoid direct impacts in compliance with the Staff Report on Burrowing Owl Mitigation. With these mitigation measures, any impacts would not be considered cumulatively significant.

Mitigation is also proposed to avoid direct impacts to raptors and migratory bird species through compliance with the MBTA. The loss of potential foraging habitat for raptor species (such as Swainson's hawk), bats, and other state species of species concern identified in Section 6.0, *Project Related Impacts* is not expected to substantially affect these species to a point where their survival in the region is threatened. These species are relatively mobile and are expected to locate additional foraging habitat remaining in the region. In addition, a total of 159.39 acres of the project site and 31.30 acres of the off-site study areas will be only temporarily impacted or avoided, the majority of which is comprised of native plant communities (e.g., brittle bush scrub, rock outcrop/brittle bush scrub). The avoided habitats would remain in open space areas and be available for wildlife use. There will also still be open space areas within the vicinity along the Santa Ana River and within the undeveloped area to the north and to the southwest of the project site that provide extensive foraging habitat. Even with the development of the reasonably foreseeable future projects within the area (Hub City Centre to the northwest, Southwest Regional Operations Center Project to the north, Agua Mansa Commerce Center to the west), there will still be open space area along the Santa Ana River and within undeveloped areas to the north of the project site which provide additional foraging habitat. As such, impacts would not be considered cumulatively significant.

Sensitive Plant Communities: Mitigation is proposed at a 1:1 ratio that would compensate for the loss of the black willow thicket/ornamental plant community. With this mitigation measure, there would be no net loss to sensitive plant communities, and 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. With the proposed mitigation and compliance with existing regulations through the permitting process, there would be no net loss of drainages and impacts would not be considered cumulatively significant.

Regulated Trees: Impacts to trees regulated through the City of Colton tree ordinance would require a permit from the Recreation and Parks Director for trimming or removal of any street trees. With the proposed compliance of this ordinance through approvals with the City of Colton, impacts would not be considered cumulatively significant.

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Appendix A: Floral and Faunal Compendium

APPENDIX A - FLORAL AND FAUNAL COMPENDIUM

FERNS (PTERIDOPHYTES)

Scientific Name	Common Name
Pteridaceae	**Maidenhair Fern Family**
Pellaea mucronata	birdfoot cliffbrake

ANGIOSPERMS (DICOTYLEDONS)

	Scientific Name	Common Name
Adoxaceae		**Muskroot Family**
	Sambucus nigra ssp. *caerulea*	blue elderberry
Anacardiaceae		**Sumac or Cashew Family**
*	*Schinus molle*	Peruvian pepper tree
Asteraceae		**Sunflower Family**
	Ambrosia acanthicarpa	flatspine bur ragweed
	Ambrosia psilostachya	ragweed
	Artemisia californica	California sagebrush
	Baccharis salicifolia	mule fat
	Brickellia desertorum	desert brickellbush
*	*Centaurea melitensis*	tocalote
	Corethrogyne filaginifolia	common sandaster
	Deinandra kelloggii	Kellogg's tarweed
	Encelia californica	California sunflower
	Encelia farinosa	brittlebush
	Ericameria pinifolia	pinebush
*	*Erigeron bonariensis*	flaxleaved fleabane
	Erigeron canadensis	horseweed
	Eucrypta chrysanthemifolia	common eucrypta
*	*Filago gallica*	narrow-leaved filago
	Gutierrezia californica	San Joaquin snakeweed
	Helianthus annuus	common sunflower
	Helianthus gracilentus	slender sunflower
	Heterotheca grandiflora	telegraphweed
	Heterotheca villosa	hairy false goldenaster
	Hypochaeris glabra	smooth cat's ear
*	*Lactuca serriola*	prickly lettuce

* non-native

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
* *Oncosiphon piluliferum*	stinknet
Pseudognaphalium beneolens	fragrant everlasting
Pseudognaphalium californicum	ladies' tobacco
Pseudognaphalium canescens	Wright's cudweed
* *Pseudognaphalium luteoalbum*	Jersey cudweed
* *Salsola tragus*	prickly Russian thistle
* *Sonchus asper*	spiny sowthistle
* *Sonchus oleraceus*	common sowthistle
* *Verbesina encelioides*	golden crownbeard
Xanthium strumarium	cocklebur
Boraginaceae	**Borage Family**
Amsinckia intermedia	common fiddleneck
Cryptantha intermedia	common cryptantha
Emmenanthe penduliflora	whispering bells
Pectocarya linearis	sagebrush combseed
Phacelia cicutaria	caterpillar phacelia
Phacelia minor	wild canterbury-bells
Brassicaceae	**Mustard Family**
* *Brassica nigra*	black mustard
* *Brassica tournefortii*	Sahara mustard
* *Hirschfeldia incana*	short pod mustard
* *Nasturtium officinale*	watercress
* *Raphanus sativus*	wild radish
* *Sisymbrium irio*	London rocket
Cactaceae	**Cactus Family**
Cylindropuntia californica var. *parkeri*	cane cholla
Cylindropuntia parryi	valley cholla
Opuntia littoralis	coast prickly pear
Chenopodiaceae	**Goosefoot Family**
Chenopodium ambrosioides	Mexican tea
* *Chenopodium murale*	nettle-leaved goosefoot
Crassulaceae	**Stonecrop Family**
Dudleya lanceolata	lanceleaf liveforever
Cucurbitaceae	**Gourd Family**
Cucurbita palmata	coyote gourd
Marah macrocarpa	wild cucumber

* non-native

ANGIOSPERMS (DICOTYLEDONS)

	SCIENTIFIC NAME	COMMON NAME
	Euphorbiaceae	**Spurge Family**
	Croton californicus	California croton
	Croton setigerus	dove weed
	Euphorbia albomarginata	rattlesnake weed
*	*Euphorbia maculata*	spotted spurge
	Euphorbia serphyllifolia	thyme-leaved spurge
*	*Ricinus communis*	castor bean
	Stillingia linearifolia	linear-leaved stillingia
	Fabaceae	**Legume Family**
	Acmispon glaber var. *glaber*	deerweed
	Astragalus pomonensis	Pomona milkvetch
*	*Melilotus albus*	white sweet clover
*	*Melilotus officinalis*	yellow sweet clover
*	*Parkinsonia aculeata*	Mexican palo verde
	Fagaceae	**Oak Family**
	Quercus agrifolia	coast live oak
	Geraniaceae	**Geranium Family**
*	*Erodium cicutarium*	red-stemmed filaree
	Juglandaceae	**Walnut Family**
	Juglans californica	California black walnut
	Lamiaceae	**Mint Family**
*	*Marrubium vulgare*	horehound
	Salvia mellifera	black sage
	Malvaceae	**Mallow Family**
*	*Malva parviflora*	cheeseweed
	Montiaceae	**Purslane Family**
*	*Portulaca oleracea*	common purslane
	Moraceae	**Mulberry Family**
*	*Ficus carica*	common fig
	Myrsinaceae	**Myrsine Family**
*	*Anagallis arvensis*	scarlet pimpernel
	Myrtaceae	**Myrtle Family**
*	*Eucalyptus* sp.	gum tree
	Nyctaginaceae	**Four O'Clock Family**
	Bougainvillea buttiana	bougainvillea
	Mirabilis laevis	wishbone bush

* non-native

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Oleaceae	**Olive Family**
* *Fraxinus uhdei*	shamel ash
Fraxinus dipetala	California ash
Fraxinus latifolia	Oregon ash
* *Olea europaea*	olive tree
Onagraceae	**Evening Primrose Family**
Epilobium angustifolium	fireweed
Epilobium ciliatum	fringed willowherb
Ludwigia peploides	yellow waterweed
Phrymaceae	**Lopseed Family**
Diplacus longiflorus	bush monkeyflower
Plantaginaceae	**Plantago and Snapdragon Family**
Keckiella cordifolia	heart-leaved penstemon
Plantago major	plantain
* *Veronica anagallis-aquatica*	water speedwell
Polygonaceae	**Buckwheat Family**
Eriogonum fasciculatum	California buckwheat
* *Polygonum arenastrum*	common knotweed
Polygonum lapathifolium	willow-weed
* *Rumex crispus*	curly dock
Rumex salicifolius	willow dock
Salicaceae	**Willow Family**
Populus fremontii	Fremont's cottonwood
Salix gooddingii	black willow
Salix laevigata	red willow
Salix lasiolepis	arroyo willow
Scrophulariaceae	**Figwort Family**
Antirrhinum nuttallianum	Nuttall's snapdragon
Simaroubaceae	**Simarouba Family**
* *Ailanthus altissima*	tree of heaven
Solanaceae	**Nightshade Family**
Datura wrightii	jimsonweed
* *Nicotiana glauca*	tree tobacco
Physalis crassifolia	yellow nightshade groundcherry
Solanum douglasii	Douglas' nightshade
Solanum xanti	purple nightshade

* non-native

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Tamaricaceae	**Tamarisk Family**
* *Tamarix ramosissima*	Mediterranean tamarisk
Zygophyllaceae	**Caltrop Family**
* *Tribulus terrestris*	puncture vine

ANGIOSPERMS (MONOCOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Arecaceae	**Palm Family**
* *Washingtonia robusta*	Mexican fan palm
Cyperaceae	**Sedge Family**
* *Cyperus difformis*	rice flat sedge
Cyperus eragrostis	umbrella sedge
Liliaceae	**Lily Family**
Bloomeria crocea	common goldenstar
Poaceae	**Grass Family**
* *Avena fatua*	wild oat
* *Avena barbata*	slender wild oat
* *Bromus diandrus*	ripgut grass
* *Bromus madritensis* ssp. *rubens*	foxtail chess
* *Cynodon dactylon*	Bermuda grass
* *Echinochloa colona*	jungle rice grass
* *Echinochloa crus-galli*	barnyard grass
* *Ehrharta erecta*	panic veldtgrass
Leptochloa uninervia	Mexican sprangletop
Melica imperfecta	coast range melic
* *Pennisetum setaceum*	fountain grass
* *Piptatherum miliaceum*	smilo grass
* *Polypogon monspeliensis*	annual beard grass
* *Schismus barbatus*	Mediterranean schismus
Setaria parviflora	marsh bristle grass
* *Sorghum halepense*	Johnson grass

* non-native

REPTILES

SCIENTIFIC NAME	COMMON NAME
Gekkonidae	**Geckos**
Coleonyx variegatus	western banded gecko
Phrynosomatidae	**Zebratail, Earless, Horned, Spiny, Fringe-Toed Lizards**
Sceloporus occidentalis	western fence lizard
Viperidae	**Vipers**
Crotalus ruber	red diamond rattlesnake

BIRDS

SCIENTIFIC NAME	COMMON NAME
Cathartidae	**Vultures**
Cathartes aura	turkey vulture
Anatidae	**Waterfowl**
Anas platyrhynchos	mallard
Branta canadensis	Canada goose
Odontophoridae	**Quails**
Callipepla californica	California quail
Accipitridae	**Hawks**
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	red-tailed hawk
Buteo lineatus	red-shouldered hawk
Buteo swainsoni	Swainson's hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Charadriidae	**Plovers**
Charadrius vociferus	killdeer
Columbidae	**Pigeons and Doves**
Columba livia	rock pigeon
* *Streptopelia decaocto*	Eurasian collared-dove
Zenaida macroura	mourning dove
Cuculidae	**Cuckoos and Roadrunners**
Geococcyx californianus	greater roadrunner
Apodidae	**Swifts**
Aeronautes saxatalis	white-throated swift

* non-native

BIRDS

SCIENTIFIC NAME	COMMON NAME
Trochilidae	**Hummingbirds**
Archilochus alexandri	black-chinned hummingbird
Calypte anna	Anna's hummingbird
Calypte costae	Costa's hummingbird
Selasphorus sasin	Allen's hummingbird
Picadae	**Woodpeckers**
Picoides nuttallii	Nuttall's woodpecker
Colaptes auratus	northern flicker
Tyrannidae	**Tyrant Flycatchers**
Contopus sordidulus	western wood-pewee
Empidonax difficilis	pacific-slope flycatcher
Sayornis nigricans	black phoebe
Sayornis saya	Say's phoebe
Myiarchus cinerascens	ash-throated flycatcher
Tyrannus verticalis	western kingbird
Tyrannus vociferans	Cassin's kingbird
Corvidae	**Jays and Crows**
Aphelocoma californica	western scrub-jay
Corvus brachyrhynchos	American crow
Corvus corax	common raven
Alaudidae	**Larks**
Eremophila alpestris	horned lark
Hirundinidae	**Swallows**
Hirundo rustica	barn swallow
Petrochelidon pyrrhonota	cliff swallow
Stelgidopteryx serripennis	northern rough-winged swallow
Tachycineta bicolor	tree swallow
Aegithalidae	**Bushtits**
Psaltriparus minimus	bushtit
Troglodytidae	**Wrens**
Salpinctes obsoletus	rock wren
Thryomanes bewickii	Bewick's wren
Troglodytes aedon	house wren
Polioptilidae	**Gnatcatcher**
Polioptila caerulea	blue-gray gnatcatcher

* non-native

BIRDS

SCIENTIFIC NAME	COMMON NAME
Turdidae	**Thrushes**
Catharus guttatus	hermit thrush
Sialia mexicana	western bluebird
Timaliidae	**Wrenetit**
Chamaea fasciata	wrentit
Mimidae	**Thrashers**
Mimus polyglottos	northern mockingbird
Sturnidae	**Starlings**
* *Sturnus vulgaris*	European starling
Motacillidae	**Pipits and Wagtails**
Anthus rubescens	American pipit
Ptilogonatidae	**Silky Flycatcher**
Phainopepla nitens	phainopepla
Parulidae	**Wood Warblers**
Dendroica coronata	yellow-rumped warbler
Dendroica petechia	yellow warbler
Dendroica townsendi	Townsend's warbler
Geothlypis trichas	common yellowthroat
Vermivora celata	orange-crowned warbler
Vermivora ruficapilla	Nashville Warbler
Wilsonia pusilla	Wilson’s warbler
Emberizidae	**Emberizids**
Aimophila ruficeps	rufous-crowned sparrow
Amphispiza belli	sage sparrow
Amphispiza bilineata	black-throated sparrow
Melospiza melodia	song sparrow
Melozone crissalis	California towhee
Passerculus sandwichensis	savannah sparrow
Spizella passerina	chipping sparrow
Zonotrichia leucophrys	white-crowned sparrow
Cardinalidae	**Buntings, Grosbeaks, and Tanagers**
Pheucticus melanocephalus	black-headed grosbeak
Icteridae	**Blackbirds**
Euphagus cyanocephalus	Brewer's blackbird
Icterus bullockii	Bullock's oriole

* non-native

BIRDS

SCIENTIFIC NAME	COMMON NAME
Icterus cucullatus	hooded oriole
Quiscalus mexicanus	great-tailed grackle
Sturnella neglecta	western meadowlark
Fringillidae	**Finches**
Carpodacus mexicanus	house finch
Spinus lawrencei	Lawrence's goldfinch
Carduelis psaltria	lesser goldfinch
Spinus tristis	American goldfinch
Passeridae	**Old World Sparrows**
* *Passer domesticus*	house sparrow

MAMMALS

SCIENTIFIC NAME	COMMON NAME
Canidae	**Wolves and Foxes**
Canis latrans	coyote
Leporidae	**Hares and Rabbits**
Lepus californicus	black-tailed jackrabbit
Sylvilagus audubonii	desert cottontail
Muridae	**Mice, Rats, and Voles**
Neotoma sp.	woodrat
Procyonidae	**Rigntails and Raccoons**
Procyon lotor	northern raccoon

* non-native

Appendix B: Special-Status Plant Species

APPENDIX B: SPECIAL-STATUS PLANT SPECIES

Scientific Name	Common Name	Bloom Period	Federal	State	CNPS	Preferred Habitat	Potential For Occurrence
Ferns							
Thelypteridaceae	**Marsh Fern Family**						
Thelypteris puberula var. sonorensis	Sonoran maiden fern	Jan.-Sep.	None	None	2B.2	Meadows and seeps, along streams or near seeps. 50-610 meters.	None
ANGIOSPERMS (DICOTS)							
Apiaceae							
Perideridia parishii ssp. parishii	Parish's yampah	Jun.-Aug.	None	None	2B.2	Lower and upper montane coniferous forest, meadows; in moist meadows or along streams, typically within an open-pine canopy. 1465-3000 meters.	None
Asteraceae	Sunflower Family						
Ambrosia monogyra	singlewhorl burrobrush	Aug.-Nov.	None	None	2B.2	Chaparral, Sonoran desert scrub; sandy soils. 10-500 m.	None
Ambrosia pumila	San Diego ambrosia	Apr.-Oct.	FE	None	1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools, sandy loam or clay; occasionally in disturbed areas, sometimes alkaline. 20-450 meters.	Not Expected
Centromadia pungens ssp. *laevis*	smooth tarplant	Apr.-Sep.	None	None	1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline. 0-640 meters.	Not Expected
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Aug.-Oct.	None	None	1A	Marshes and swamps (saltwater and freshwater). 10-1675 meters.	None

NONE = Species not expected to occur due to the lack of suitable habitat, or the project site's location outside of the species' range; **NOT EXPECTED** = Preferred habitat was considered present based on the literature review and observed habitat on the project site, however no individuals were observed during the focused special-status plant surveys; **POTENTIAL** = Preferred habitat was considered present based on the literature review and habitat observed on the project site; **OBSERVED** = This species was observed during the focused special-status plant surveys.

Scientific Name	Common Name	Bloom Period	Federal	State	CNPS	Preferred Habitat	Potential For Occurrence
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Feb.-Jun.	None	None	1B.1	Marshes and swamps (coastal salt), playas, vernal pools. 1-1220 meters.	None
Senecio aphanactis	chaparral ragwort	Jan.-Apr.	None	None	2B.2	Chaparral, cismontane woodland, coastal scrub; sometimes alkaline soil. 15-800 meters.	Not Expected
Symphyotrichum defoliatum	San Bernardino aster	Jul.-Nov.	None	None	1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic); near ditches, streams, and springs. 2-2040 meters.	Not Expected
Berberidaeeae	Barberry Family						
Berberis nevinii	Nevin's barberry	Mar.-Jun.	FE	SE	1B.1	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 scrub, oak woodland, and/or riparian scrub or woodland. 274 - 825 meters.	Not Expected
Boraginaceae	Borage Family						
Phacelia stellaris	Brand's star phacelia	Mar.-Jun.	None	None	1B.1	Coastal scrub, coastal dunes; open areas. 1-400 meters.	Not Expected
Brassicaceae							
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	Jan.-Jul.	None	None	1B.2	Chaparral, coastal scrub; dry soils and shrubby areas. 1-885 meters.	Not Expected
Nasturtium gambelii	Gambel's water	Apr.-Oct.	None	None	1B.1	Marshes and swamps (freshwater	None

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Scientific Name	Common Name	Bloom Period	Federal	State	CNPS	Preferred Habitat	Potential For Occurrence
	cress					and brackish); along the edge of lakes or streams, in or just above the water level. 5-330 meters.	
Streptanthus campestris	southern jewel-flower	Mar.-Jul.	None	None	1B.3	Chaparral, lower montane coniferous forest, pinyon-juniper woodland; open, rocky areas. 900-2300 meters.	None
Cactaceae	Cactus Family						
Opuntia basilaris var. brachyclada	short-joint beavertail	Apr.-Jun.	None	None	1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon-juniper woodland, riparian woodland; sandy or granitic soils. 425-1800 meters.	None
Cylindropuntia californica var. californica	snake cholla	Apr.-Jul.	None	None	1B.1	Chapparal, coastal scrub. 30-150 meters.	Not Expected
Caryophyllaceae	Pink Family						
Arenaria paludicola	marsh sandwort	May-Aug.	FE	SE	1B.1	Marshes and swamps; found within dense mats of *Typha*, *Juncus*, and *Scirpus*, in freshwater marsh. 10-170 meters.	None
Convolvulaceae	Morning-glory Family						
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	Jul.-Oct.	None	None	2B.2	Marshes and swamps (freshwater). 15-280 meters.	None
Fabaceae	Pea Family						
Astragalus hornii var. hornii	Horn's milk-vetch	May-Oct.	None	None	1B.1	Meadows and seeps, playas, lake margins; alkaline areas. 60-850 meters.	None
Geraniaceae	Geranium Family						
California macrophylla	many-stemmed dudleya	Mar.-May	None	None	1B.1	Cismontane woodland, valley and foothill grassland; clay soils.	None

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Scientific Name	Common Name	Bloom Period	Federal	State	CNPS	Preferred Habitat	Potential For Occurrence
						15-1200 meters.	
Grossulariaceae	Gooseberry Family						
Ribes divaricatum var. parishii	Parish's gooseberry	Feb.-Apr.	None	None	1A	Riparian woodland; found in *Salix* swales. 65-300 meters.	Not Expected
Juglandaceae	Walnut Family						
Juglans californica	California black walnut	Mar.-Jun.	None	None	4.2	Chaparral, coastal scrub, cismontane woodland, slopes, canyons, alluvial habitats. 50-900 meters.	Observed
Lamiaceae	Mint Family						
Monardella macrantha ssp. *hallii*	Hall's monardella	Jun.-Oct.	None	None	1B.3	Broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. 730 - 2195 meters.	None
Monardella pringlei	Pringle's monardella	May-Jun.	None	None	1A	Coastal scrub, sandy hills. 300-400 meters.	None
Malvaceae	Stick-leaf Family						
Malacothamnus parishii	Parish's bush-mallow	Jun.-Jul.	None	None	1A	Chaparral, coastal sage scrub; in washes. 305-455 meters.	Not Expected
Sidalcea malviflora ssp. dolosa	Bear Valley checkerbloom	May-Aug.	None	None	1B.2	Meadows and seeps, riparian woodland, lower montane coniferous forest, upper montane coniferous forest; forested wet areas, sensitive to hydrological changes. 1495-2685 meters.	None
Sidalcea neomexicana	salt spring checkerbloom	Mar.-Jun.	None	None	2B.2	Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas; alkaline and mesic soils. 0-1530 meters.	Not Expected

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Scientific Name	Common Name	Bloom Period	Federal	State	CNPS	Preferred Habitat	Potential For Occurrence
Nyctaginaceae	Four O'Clock Family						
Abronia villosa var. *aurita*	chaparral sand-verbena	Jan.-Sep.	None	None	1B.1	Chaparral, coastal scrub, desert dunes; sandy soils. 75-1600 meters.	Not Expected
Orobanchaceae	Broom-rape Family						
Castilleja lasiorhyncha	San Bernardino Mountains owl's-clover	May-Aug.	None	None	1B.2	Meadows and seeps, pebble plain, upper montane coniferous forest, chaparral, riparian woodland; along open edges of streams, meadows, or in vernally wet areas; mesic to dry soils. 1300-2390 meters.	None
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	May-Oct.	FE	SE	1B.2	Coastal salt marsh, coastal dunes; restricted to upper salt marsh habitats. 0-30 meters.	None
Polemoniaceae	Phlox Family						
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	May-Sep.	FE	SE	1B.1	Chaparral, coastal scrub (alluvial fan); sandy or gravelly soils. 90-610 meters.	Not Expected
No focused surveys for special-status plants were conducted within the off-site study areas. It should be noted that this species has potential to occur within the Santa Ana River; however, the project will be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge). No access into the Santa Ana River is proposed, and therefore, this species is not expected to occur within the project's development footprint.							
Polygonaceae	Buckwheat Family						
Chorizanthe parryi var. *parryi*	Parry's spineflower	Apr.-Jun.	None	None	1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; sandy or rocky openings. 275-1220 meters.	Not Expected
Chorizanthe xanti var. *leucotheca*	white-bracted spineflower	Apr.-Jun.	None	None	1B.2	Coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodland; sandy or gravelly. 300-1200 meters.	Not Expected
Dodecahema leptoceras	slender-horned	Apr.-Jun.	FE	SE	1B.1	Chaparral, cismontane woodland,	Not Expected

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Scientific Name	Common Name	Bloom Period	Federal	State	CNPS	Preferred Habitat	Potential For Occurrence
	spineflower					coastal scrub (alluvial fan); sandy soils. 200-760 meters.	
Rosaceae	Rose Family						
Horkelia cuneata var. *puberula*	mesa horkelia	Feb.-Sep.	None	None	1B.1	Chaparral (maritime), cismontane woodland, coastal scrub; sandy or gravelly soils. 70-810 meters.	Not Expected
Ivesia argyrocoma var. argyrocoma	silver-haired ivesia	Jun.-Aug.	None	None	1B.2	Meadows, pebble plains, upper montane coniferous forest. 1460-2960 meters.	None
Rubiaceae	Madder Family						
Galium californicum ssp. primum	Alvin Meadow bedstraw	May-Jul.	None	none	1B.2	Chaparral, lower montane coniferous forest; grows in shady areas at the edge of pine forests or in pine forest-chaparral. 360 meters.	None
Saxifragaceae	Saxifrage Family						
Heuchera parishii	Parish's alumroot	Jun.-Aug.	None	None	1B.3	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest, alpine boulder & rock field; rocky areas. 1500-3800 meters.	None
Solanaceae	Nightshade Family						
Lycium parishii	Parish's desert-thorn	Mar.-Apr.	None	None	2B.3	Coastal scrub, Sonoran desert scrub. 135-1000 meters.	Not Expected
ANGIOSPERMS (MONOCOTS)							
Cyperaceae	Sedge Family						
Carex comosa	bristly sedge	May-Sep.	None	None	2B.1	Marshes and swamps, lake margins, wet places; below sea level on a Delta island.	None

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Scientific Name	Common Name	Bloom Period	Federal	State	CNPS	Preferred Habitat	Potential For Occurrence
						-5-1005 meters.	
Fimbristylis thermalis	hot springs fimbristylis	Jul.-Sep.	None	None	2B.2	Alkaline meadows near hot springs. 110-1340 meters.	None
Schoenus nigricans	black bog-rush	Aug.-Sep.	None	None	2B.2	Marshes and swamps (often alkaline). 150-2000 meters.	None
Liliaceae	Lily Family						
Calochortus palmeri var. palmeri	Palmer's mariposa lily	Apr.-Jul.	None	None	1B.2	Meadows and seeps, chaparral, lower montane coniferous forest (yellow-pine forest); vernally moist sites. 1000-2390 meters.	None
Lilium parryi	lemon lily	Jul.-Aug.	None	None	1B.2	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. 1220-2745 meters.	None
Poaceae	Grass Family						
Imperata brevifolia	California satintail	Sep.-May	None	None	2B.1	Coastal scrub, chaparral, riparian scrub, Mojavean scrub, meadows and seeps (alkali), riparian scrub; mesic areas. 0-1215 meters.	Not Expected
Sphenopholis obtusata	prairie wedge grass	Apr.-Jul.	None	None	2B.2	Cismontane woodland, meadows and seeps; open, damp areas near rivers and springs; alkaline desert seeps. 300-2000 meters.	None
Themidaceae	Butcher's-Broom Family						
Brodiaea filifolia	thread-leaved brodiaea	Mar.-Jun.	FT	SE	1B.1	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools; often found in clay soils.	None

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Scientific Name	Common Name	Bloom Period	Federal	State	CNPS	Preferred Habitat	Potential For Occurrence
						25-1120 meters.	

Key to Species Listing Status Codes

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

Source: ESA PCR, 2016

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Appendix C: Special-Status Wildlife Species

APPENDIX C: SPECIAL-STATUS WILDLIFE SPECIES

Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Invertebrates					
Anostraca	Fairy Shrimp				
Streptocephalus woottoni	Riverside fairy shrimp	FE	NONE	Coastal scrub, valley and foothill grassland, vernal pool, wetland.	**NONE** No suitable habitat within the project site or off-site study areas.
Diptera	Flies				
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	FE	NONE	Found in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside Counties. Requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation.	**NONE** No required Delhi Sands soils occur within the area, nor were any Aeolian sands observed within the project site or off-site study areas. The project site and off-site study areas are not located within the Delhi Sands mapped within the Colton Recovery Unit of the Final Recovery Plan for the Delhi Sands Flower-Loving Fly (USFWS 1997a). Furthermore, a habitat assessment for this species was previously conducted by SWCA in 2009 for a larger area that included the project site and the majority of the off-site study areas; due to the extensive and recent soil disturbance and the lack of suitable host plants, it was determined that this species was not expected to occur within the project site (SWCA 2009). Extensive and recent soil disturbance (e.g., due to discing) was also observed during surveys conducted by ESA PCR from 2013 through 2015.

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Fishes					
Catostomidae	Suckers				
Catostomus santaanae	Santa Ana sucker	FT	NONE	Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, & algae.	**NONE** No suitable habitat within the project site. A portion of the off-site study areas includes the Riverside Avenue bridge over the Santa Ana River. The Santa Ana River is critical habitat for Santa Ana sucker, and this species was observed immediately south of the Riverside Avenue bridge as documented by CNDDB occurrences in 2002 and 2007. Although the Santa Ana River contains suitable habitat for this species, the project will be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge; no access into the Santa Ana River is proposed). Therefore, no impacts will occur to suitable habitat for this species.
Cyprinidae	Carps and Minnows				
Gila orcutti	arroyo chub	NONE	SSC	Aquatic and south coast flowing waters; slow water stream sections with mud or sand bottoms; feeds heavily on aquatic vegetation and associated invertebrates.	**NONE** No suitable habitat within the project site. A portion of the off-site study areas includes the Riverside Avenue bridge over the Santa Ana River. Although the Santa Ana River contains suitable habitat for this species, the project will be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge; no access into the Santa Ana River is proposed). Therefore, no impacts will occur to suitable habitat for this species.

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Rhinichthys osculus ssp. 3	Santa Ana speckled dace	NONE	SSC	Aquatic and south coast flowing waters. Prefer stony habitat where there are hiding spaces between stones, washed by moderate current.	**NONE** No suitable habitat within the project site. A portion of the off-site study areas includes the Riverside Avenue bridge over the Santa Ana River. Although the Santa Ana River contains potentially suitable habitat for this species, the project will be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge; no access into the Santa Ana River is proposed). Therefore, no impacts will occur to suitable habitat for this species.
Amphibians					
Ranidae	True Frogs				
Rana draytonii	California red-legged frog	FT	SSC	Aquatic, flowing and standing waters, marsh and swamps, riparian areas, wetlands. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	**NONE** No suitable habitat within the project site or off-site study areas.
Rana muscosa	southern mountain yellow-legged frog	FE	SE	Prefers rocky stream courses in the mountains of southern California. Inhabits mid- to upper-elevation, perennial streams, often in locations with bedrock pools. Always encountered within a few feet of water.	**NONE** No suitable habitat within the project site or off-site study areas.

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Scaphiopodidae	North American Spadefoots				
Spea hammondii	western spadefoot	NONE	SSC	Primary habitat is vernal pools or other standing water free of exotic species below 1500 meters. Secondary habitats include adjacent chaparral, sage scrub, grassland and alluvial scrub.	**NONE** No suitable habitat within the project site or off-site study areas.
Reptiles					
Anniellidae	Legless Lizards				
Anniella pulchra pulchra	silvery legless lizard	NONE	SSC	Frequents sparse vegetation of beaches, chaparral, pine-oak woodland, and streamside growth of sycamores, cottonwoods, and oaks. Needs loose soil for burrowing, moisture, warmth, and plant cover. Moisture is essential.	**NONE** No suitable habitat within the project site or off-site study areas. The project site lacks required moisture. Nearest CNDDB occurrence record is from 1992 over 8 miles north of the project site near Lytle Creek.
Boidae	Boas				
Charina umbratica	southern rubber boa	NONE	ST	Prefers meadow and seep, riparian forest, riparian woodland, upper montane coniferous forest, and wetland habitats.	**NONE** No suitable habitat within the project site or off-site study areas.
Colubridae	Colubrid Snakes				
Thamnophis hammondii	two-striped garter snake	NONE	SSC	Riparian and freshwater marshes with perennial water.	**NONE** No suitable habitat within the project site or off-site study areas.
Phrynosomatidae	Zebratail, Earless, Horned, Spiny, Fringe-Toed Lizards				
Phrynosoma blainvillii	coast horned lizard	NONE	SSC	Chaparral; cismontane woodland; coastal bluff scrub; coastal scrub; desert wash; pinyon and juniper	**POTENTIAL [HIGH]** This site is within the species range and suitable habitats on-site include brittlebush scrub,

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
				woodlands; riparian scrub; riparian woodland; valley and foothill grassland.	California buckwheat scrub, and California sagebrush scrub. However, suitable habitat is surrounded primarily by disturbed, lower quality habitat and development. The buffer from the nearest CNDDB occurrence recorded from 1992 overlaps with the southeastern portion of the project site.
Teiidae	Whiptail Lizards				
Aspidoscelis hyperythra	orange-throated whiptail	NONE	SSC	Chaparral; cismontane woodland; coastal scrub.	**OBSERVED** This species was observed within the project site in 2015.
Viperidae	Vipers				
Crotalus ruber	red diamond rattlesnake	NONE	SSC	Chaparral, woodland, and arid desert habitats in rocky areas with dense vegetation.	**OBSERVED** This species was observed within the project site in 2015.

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Birds					
Accipitridae	Hawks				
Buteo swainsoni	Swainson's hawk	NONE	ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires suitable foraging areas adjacent to breading areas such as grasslands that support rodent populations.	**NONE [N]; LOW POTENTIAL [F]** Swainson's hawks are known to breed within arid regions within the Central Valley and Mojave Desert, with very limited breeding reported from Antelope Valley. Migrating individuals move south through the southern and central interior of California in September and October, and north March through May. The Project site does not support nesting habitat for the Swainson's hawk. The Swainson's hawks observed flying over the Project site during the spring were likely migrants. Swainson's hawks require open habitats, typically grasslands, to forage. The Project site does support some limited potential foraging habitat; however, it is considered marginal due to its distance from suitable nesting habitat and because it is surrounded by development.
Haliaeetus leucocephalus	bald eagle	NONE	SE	Lower montane coniferous forest; old growth.	**NONE** No suitable habitat within the project site or off-site study areas.

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Cuculidae	Cuckoos, Roadrunners, and Anis				
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FC	SE	Riparian thickets and forests dominated by willows abutting slow-moving watercourses, backwaters, or seeps, with an understory of blackberry, nettles, and wild grape.	**NONE** No suitable habitat within the project site. Black willow thicket/ornamental is isolated and limited in acreage (0.26 acre). A portion of the off-site study areas includes the Riverside Avenue bridge over the Santa Ana River. Although this species occurred historically within the Santa Ana River adjacent to the project site when prime habitat existed, as documented by a CNDDB occurrence from the 1930s, the habitat has since changed and no longer contains thick riparian forests with dense native understory within this reach of the river. Rather, the habitat provides some riparian canopy with little understory in this area of the open wash. Thus, this species is not expected to occur within the off-site study areas.
Strigidae	True Owls				
Athene cunicularia	burrowing owl	NONE	SSC	Disturbed; low-growing vegetation within coastal prairie, coastal scrub, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, valley and foothill grassland; bare ground, disturbed.	**NOT EXPECTED (WITHIN THE PROJECT SITE); POTENTIAL (WITHIN THE OFF-SITE STUDY AREAS)** Suitable habitat present. Focused surveys were conducted within the project site in 2014 (and for a portion of the project site in 2015); no burrowing owls were observed. No focused surveys were conducted within the off-site study areas. The nearest CNDDB occurrence from 2006 was 1.6 miles to the west, but has since been developed. Due to the presence of suitable habitat, burrowing owls have potential to occur within the off-site study areas.

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Tyrannidae	Tyrant Flycatchers				
Empidonax traillii extimus	southwestern willow flycatcher	FE	SE	Wet meadows, riparian woodlands that contain water and low growing willow thickets.	**NONE (WITHIN THE PROJECT SITE); POTENTIAL (WITHIN THE OFF-SITE STUDY AREAS)** No suitable habitat on-site. Black willow thicket/ornamental is isolated and limited in acreage (0.26 acre). A portion of the off-site study areas includes the Riverside Avenue bridge over the Santa Ana River. The Santa Ana River is critical habitat for southwestern willow flycatcher, and this species was observed approximately 9 miles to the east of the project site as documented in the CNDDB 1999. It should be noted that the state endangered willow flycatcher (*Empidonax traillii*) was observed during focused surveys conducted for coastal California gnatcatcher. One individual was observed in elderberry trees growing in Drainage E1. However, this individual was determined to be a migrant due to lack of suitable habitat (dense willow thickets) and the timing of the observation (during peak migration season).
Laniidae	Shrikes				
Lanius ludovicianus	loggerhead shrike	NONE	SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, & riparian woodlands, desert oases, scrub & washes; open country with perches for hunting and relatively dense shrubs for nesting.	**POTENTIAL (MODERATE)** Suitable habitats on-site include brittlebush scrub, California buckwheat scrub, and California sagebrush scrub. However, suitable habitat is surrounded primarily by disturbed, lower quality habitat and development. The nearest CNDDB occurrence was recorded 9 miles east of the project site in 1999.

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Vireonidae	Vireos				
Vireo bellii pusillus	least Bell's vireo	FE	SE	Riparian forest; riparian scrub; riparian woodland.	**NONE (WITHIN THE PROJECT SITE); POTENTIAL (WITHIN THE OFF-SITE STUDY AREAS)** No suitable habitat on-site. Black willow thicket/ornamental is isolated and limited in acreage (0.26 acre). A portion of the off-site study areas includes the Riverside Avenue bridge over the Santa Ana River. This species was observed immediately adjacent to the northwestern portion of the project site as documented by USFWS and CNDDB occurrences in 2005, 2007, 2008, and 2015, and around and immediately adjacent to the Riverside Avenue bridge per USFWS occurrences in 2004, 2005, 2007, and 2008.
Parulidae	Wood Warblers				
Icteria virens	yellow-breasted chat	NONE	SSC	Nests in low, dense riparian willow thickets & other brushy tangles (e.g. blackberry, wild grape) near water. Forages and nests within 10 feet of ground.	**NONE (WITHIN THE PROJECT SITE); POTENTIAL (WITHIN THE OFF-SITE STUDY AREAS)** No suitable habitat on-site. Black willow thicket/ornamental is isolated and limited in acreage (0.26 acre). A portion of the off-site study areas includes the Riverside Avenue bridge over the Santa Ana River. A CNDDB occurrence of this species was recorded 6 miles to the southwest in 2015.

NONE = Species not expected to occur due to the lack of suitable habitat, or the project site's location is outside of the species' range.

NONE (N) = Species not expected to nest or roost due to the lack of suitable habitat, or the project site's location is outside of the species' range.

NONE (F) = Species not expected to forage due to lack of food sources, or the project site's location is outside of the species' range.

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OBSERVED = Species was observed during surveys conducted on the project site.

Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Setophaga petechia	yellow warbler	NONE	SSC	Riparian woodlands, montane chaparral, open ponderosa pine and mixed coniferous habitat with significant brush.	**NONE (WITHIN THE PROJECT SITE); POTENTIAL (WITHIN THE OFF-SITE STUDY AREAS)** No suitable habitat on-site. Black willow thicket/ornamental is isolated and limited in acreage (0.26 acre). A portion of the off-site study areas includes the Riverside Avenue bridge over the Santa Ana River. A CNDDB occurrence of this species was recorded 6 miles to the southwest in 2015.
Polioptilidae	Gnatcatchers				
Polioptila californica californica	coastal California gnatcatcher	FT	SSC	Coastal bluff scrub; coastal scrub.	**NOT EXPECTED** Suitable habitat present. The project site is within critical habitat for coastal California gnatcatcher. This species was recorded in an USFWS occurrence from 1995 within the northwestern portion of the project site. However, presence/absence surveys conducted on-site in 2014 and 2015 with no CAGN observed.
Icteridae	Blackbirds				
Agelaius tricolor	tricolored blackbird	NONE	SSC	Highly colonial species. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	**NONE** No suitable habitat within the project site or off-site study areas. The nearest CNDDB occurrence is 2 miles to the southwest of the project site from 1951.

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OBSERVED = Species was observed during surveys conducted on the project site.

Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Mammals					
Heteromyidae	Pocket Mice and Kangaroo Rats				
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None	SSC	Coastal scrub, chaparral, grasslands, sagebrush; sandy, herbaceous areas, usually in association with rocks or coarse gravel.	**POTENTIAL [MODERATE]** A few fossorial burrows were observed on-site. Suitable habitat includes brittlebrush scrub, California buckwheat scrub, and California sagebrush scrub. However, the majority of the project site is surrounded by development and a large portion of suitable habitat is disturbed. Nearest CNDDB occurrence record is from 2001 roughly 4 miles east of the project site. The project site and CNDDB record location are separated by the I-215 freeway.
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None	SSC	Desert areas in eastern San Diego County; desert wash, desert scrub, desert succulent scrub, and pinyon-juniper. Sandy herbaceous areas, typically in sites with rocks or coarse gravel.	**NONE** No suitable habitat within the project site or off-site study areas.

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OBSERVED = Species was observed during surveys conducted on the project site.

Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE	None	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	**NOT EXPECTED** A few fossorial burrows were observed within the project site. Sandy loam is mapped on project site, but alluvial fans or flood plains are not present. Nearest CNDDB occurrence record is from 1917 roughly 4 miles east of the project site, and is separated by the I-215 freeway. A habitat assessment for San Bernardino kangaroo rat was conducted by Cereus Environmental biologist Jason Berkley on July 27, 2016 and it was determined that no potentially suitable habitat (based on habitat, soils, and potential burrows) for this species occurred within the project site. A portion of the off-site study areas includes the Riverside Avenue bridge over the Santa Ana River. Although the Santa Ana River contains suitable habitat for this species, the project will be confined to the Riverside Avenue bridge (i.e., installation of a conduit via equipment to be staged on the bridge; no access into the Santa Ana River is proposed). Therefore, no impacts will occur to suitable habitat for this species.
Dipodomys stephensi	Stephens' kangaroo rat	FE	ST	Open grasslands or sparse shrub lands. Sandy to sandy loam soils with low clay to gravel content.	**NOT EXPECTED** A few fossorial burrows were observed on-site. Suitable habitat includes brittlebrush scrub, California buckwheat scrub, and California sagebrush scrub in addition to sandy loam soils. Based on personal correspondence with mammalogist Michael O'Farrell, who previously conducted trapping within this area, no Stephens' kangaroo rat occur within the project site or immediate area (pers. comm., 2016). Nearest CNDDB occurrence record is from 1988 approximately 3 miles east of the project site within Reche Canyon, and is separated by the I-215 freeway.

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OBSERVED = Species was observed during surveys conducted on the project site.

Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Perognathus alticolus alticolus	white-eared pocket mouse	None	SSC	Ponderosa & Jeffrey pine habitats; also found in mixed chaparral & sagebrush habitats in the San Bernardino Mountains. Requires loose soil to dig burrows.	**NONE** No suitable habitat within the project site or off-site study areas.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None	SSC	Lower elevation grasslands and coastal sage communities. Sparsely vegetated habitat areas in patches of fine sandy soils associated with washes. May not dig burrows, rather using weeds and dead leaves.	**POTENTIAL [LOW]** Potentially suitable wash habitat occurs near Drainage E in the northwestern corner of the project site; other potentially suitable habitat includes coastal sagebrush scrub. However, wash habitat is isolated and minimal (only 0.21 acre). Additionally, the majority of the site is surrounded by development and a large portion of suitable habitat is disturbed. Nearest CNDDB occurrence record is from 2000 approximately 1 mile north from the project site.
Leporidae	Hares and Rabbits				
Lepus californicus bennettii	San Diego black-tailed jackrabbit	NONE	SSC	Arid regions with short grasses; coastal scrub.	**OBSERVED** Species observed within the project site in 2013.
Molossidae	Free-Tailed Bats				
Eumops perotis californicus	western mastiff bat	NONE	SSC	Chaparral; cismontane woodland; coastal scrub; valley and foothill grassland. Roosts in crevices in cliff faces, high buildings, trees, and tunnels	**NONE [N]; POTENTIAL [F, VERY LOW]** No suitable roosting habitat on-site. However, bats in this family are known to be strong fliers and can fly long distances to forage. There is a very low probability that individuals may travel from roosts to forage on insects on the project site based on the disturbance present on-site and presence of surrounding development. Nearest CNDDB occurrence record is from 1908 roughly 2.5 miles north of the project site.
Nyctinomops femorosaccus	pocketed free-tailed bat	NONE	SSC	Joshua tree woodland; pinyon and juniper woodland; desert scrub, palm oasis, desert wash, and desert riparian;	**NONE [N, F]** Although the project site contains rock outcrops, this species typically prefers arid habitats.

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
				Sonoran desert scrub. Typically roost in caves and rocky outcrops; prefers cliffs in order to obtain flight speed. Feeds on insects flying, over bodies of water or arid desert habitats to capture prey.	Nearest CNDDB occurrence record is from 1985 approximately 1 mile northwest of the project site.
Muridae	Mice, Rats, and Voles				
Neotoma lepida intermedia	San Diego desert woodrat	NONE	SSC	Coastal scrub and chaparral. Prefer areas with moderate to dense canopy cover. Frequently found in areas with rock outcrops and cliffs.	**POTENTIAL [MODERATE]** A few fossorial burrows were observed on-site. Suitable habitat includes brittlebrush scrub, California buckwheat scrub, and California sagebrush scrub. Nearest CNDDB occurrence record is from 1994 roughly 7 miles north of the project site near Lytle Creek.
Onychomys torridus ramona	southern grasshopper mouse	NONE	SSC	Grasslands, desert areas, especially scrub with friable soils. Food source is arthropods, especially scorpions and grasshoppers.	**POTENTIAL [LOW]** A few fossorial burrows were observed on-site. Suitable habitat includes brittlebrush scrub, California buckwheat scrub, and California sagebrush scrub. However, the majority of the project site is surrounded by development and a large portion of existing habitat is disturbed. Nearest CNDDB occurrence record is from 1923 roughly 2 miles east of the project site.

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence
Mustelidae	Weasels, Badgers, and Otters				
Taxidea taxus	American badger	NONE	SSC	Open shrub, forest, and herbaceous habitats, with friable soils to dig burrows. Requires rodent populations for food source.	**POTENTIAL [LOW]** Shrub habitat is present on-site. A few fossorial burrows were observed, suggesting the presence of small mammals that could provide a possible food source. However, the majority of the site is surrounded by development and a large portion of suitable habitat is disturbed. Nearest CNDDB occurrence record is from 1908 roughly 4 miles east of the project site. The project site and CNDDB record location are separated by the I-215 freeway.
Sciuridae	Squirrels and Chipmunks				
Glaucomys sabrinus californicus	San Bernardino flying squirrel	None	SSC	Prefers broadleaved upland forest, and lower montane coniferous forest.	**NONE** No suitable habitat within the project site or off-site study areas.
Vespertilionidae	Evening Bats				
Antrozous pallidus	pallid bat	NONE	SSC	Chaparral, coastal scrub, desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, riparian woodland, Sonoran desert scrub, upper montane coniferous forest, and valley and foothill grassland. Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Very sensitive to disturbance of roosting sites.	**POTENTIAL [N, VERY LOW];** **POTENTIAL [F, VERY LOW]** Some suitable roosting and foraging habitat present on-site. However, this species is very unlikely to occur on the project site since there is a high level of disturbance on-site and within the vicinity. There is only one CNDDB occurrence record from 1929 roughly 8 miles northeast of the project site.
Lasiurus xanthinus	western yellow bat	NONE	SSC	Desert wash. Known to occur in palm oases.	**NONE [N, F]** No suitable habitat on-site.

Key to Species Listing Status Codes

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Scientific Name	Common Name	Federal	State	Preferred Habitat	Potential For Occurrence

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

Source: ESA PCR, 2016

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Appendix D: 2014 Focused Burrowing Owl Survey Report

July 17, 2014

Mr. Bill Lo
SUNMEADOWS LLC
27127 Calle Arroyo, Suite 1910
San Juan Capistrano, CA 92675

Re: RESULTS OF FOCUSED BURROWING OWL SURVEYS FOR THE ROQUET RANCH PROJECT SITE, CITY OF COLTON, SAN BERNARDINO COUNTY, CALIFORNIA

Dear Mr. Lo:

This report summarizes the methodology and findings of focused surveys for the burrowing owl (*Athene cunicularia*) (BUOW) conducted by PCR Services Corporation (PCR) on the approximately 314.7-acre Roquet Ranch Property ("project site") in the City of Colton, California (**Figure 1**, *Regional Map*, attached). The surveys encompassed the project site and a 500-foot buffer surrounding the perimeter of the project site where suitable habitat is present. The surveys were conducted in accordance with California Department of Fish and Wildlife *Staff Report on Burrowing Owl Mitigation* (2012).[1] No BUOW were observed within the survey area during the four focused surveys conducted.

PROJECT SITE

Location

The proposed project is located in the City of Colton, San Bernardino County, California. The project site is located north of Moreno Valley Freeway 60 and west of Riverside Freeway 215. The Santa Ana River borders the project site to the west. Specifically, the project site is located within the U.S. Geological Survey (USGS) San Bernardino South, 7.5 Minute Series Quadrangle map (**Figure 2**, *Vicinity Map*, attached).

PLANT COMMUNITIES

Plant communities found within the project site include brittlebush scrub, brittlebush scrub/rock outcrop, brittlebush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, disturbed/brittlebush scrub, disturbed/California buckwheat scrub, disturbed/California sagebrush scrub, non-native grassland, non-native grassland/ruderal, rock outcrop, rock outcrop/brittlebush scrub, ruderal/brittlebush scrub, developed,

[1] *California Fish and Wildlife. March 7, 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency.*

disturbed, ornamental, ruderal, southern willow scrub/ornamental, wash, and ruderal/California sagebrush scrub. **Figure 3**, *Plant Communities*, attached, depicts the location of all the communities observed on-site, including the potentially suitable habitat surveyed for BUOW within the survey area. A description of the potentially suitable BUOW habitats, which include disturbed, ruderal non-native grassland, and non-native grassland/ruderal, are presented below.

Disturbed

Disturbed areas within the study area consist of dirt road, disced fields, and areas with little to no vegetation that exhibited signs of previous human disturbance (e.g., associated with previous agricultural practices). Sparse densities of species that were observed within this community include shortpod mustard (Hirschfeldia incana), fiddleneck (Amsinckia sp.), rocket (Sisymbrium sp.), prickly pear (Opuntia littoralis), dove weed (Croton setigerus), Mexican palo verde (Parkinsonia aculeata), redstem stork's bill (Erodium cicutarium), brittlebush (Encelia *farinosa*), Peruvian peppertree (*Schinus molle*), horehound (*Marrubium vulgare*), and purple nightshade (*Solanum xanti*). Disturbed areas comprise 85.91 acres of the project site.

Ruderal

Ruderal areas are dominated by weedy, non-native plant species. Species observed within this community include shortpod mustard, fiddleneck, rocket, tocalote (*Centaurea melitensis*), ripgut grass (*Bromus diandrus*), western ragweed (*Ambrosia psilostachya*), cheeseweed (*Malva parviflora*), wild radish (*Raphanus raphanistrum*), foxtail chess (*Bromus madritensis*), wild oat (*Avena* sp.), gum tree (*Eucalyptus* sp.), mule fat (*Baccharis salicifolia*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), pinebush (*Ericameria pinifolia*), Mexican palo verde, tree tobacco (*Nicotiana glauca*), vetch (*Astragalus* sp.), and dove weed. Ruderal areas comprise 35.74 acres throughout the project site.

Non-Native Grassland

The non-native grassland community is dominated by jungle rice grass (Echinochloa colona). Associated species found within this community include umbrella sedge (Cyperus eragrostis), smilo grass (Piptatherum miliaceum), tree tobacco, western ragweed, jimson weed (Datura wrightii), black willow (Salix gooddingii), watercress (Nasturtium officinale), and common plantain (Plantago major). Non-native grassland comprises 0.42 acre in the southeastern portion of the project site.

Non-Native Grassland/Ruderal

This community is dominated by Mexican sprangletop (Leptochloa uninervia) and wild radish (Raphanus raphanistrum), with a subdominance of jimson weed and native umbrella sedge.

Associated species found within this community include black willow, western ragweed, jungle rice grass, Fremont's cottonwood (Populus fremontii), horseweed (Conyza canadensis), Peruvian peppertree, cheeseweed, curly dock (Rumex crispus), castor bean (Ricinus communis), nettle-leaved goosefoot (Chenopodium murale), fragrant everlasting (Pseudognaphalium beneolens), cocklebur (Xanthium strumarium), watercress, Douglas' nightshade (Solanum douglasii), fountain grass (Pennisetum setaceum), tree tobacco, rice flat sedge (Cyperus difformis), common plantain, Mexican palo verde, common sunflower (Helianthus annuus), willow-weed (Polygonum lapathifolium), Mediterranean tamarisk (Tamarix ramosissima), water speedwell (Veronica anagallis-aquatica), and Johnson grass (Sorghum halepense). Non-native grassland/ruderal comprises 0.33 acres in the southeastern portion of the study area.

METHODOLOGY

Step I - Habitat Assessment

The surveys were conducted in compliance with California Fish and Wildlife *Staff Report on Burrowing Owl Mitigation* issued March 7, 2012. The habitat assessment concluded that the project site and buffer zone exhibited suitable BUOW habitat consisting of disturbed, low-growing vegetation; bare ground; debris piles; and a few small fossorial mammal burrows. Due to inaccessibility, off-site areas within the 500-foot buffer zone were surveyed using binoculars.

Step II – Focused Burrow and Burrowing Owl Survey

Step II surveys were conducted within the project site plus a 150-meter (approximately 500 feet) buffer zone around the project site perimeter. Surveys focused on the detection of small fossorial mammal burrows potentially suitable for BUOW, BUOW burrows, individual BUOW, 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). Off-site areas within the 500-foot buffer zone were surveyed with the use of binoculars.

Surveys were conducted on March 20, April 16, May 9, and June 18, 2014 by PCR biologists Bob Huttar, Florence Chan, Ezekiel Cooley, Amy Lee, and Maile Tanaka. Surveys consisted of four site visits, on four separate days, and were conducted between morning civil twilight and 10:00 AM during suitable weather conditions. Transects were utilized in all accessible areas, spaced no more than 100 feet apart, to allow for 100 percent visibility (**Figure 4**, *Transect Map*, attached). In addition, inaccessible portions of the buffer were observed with binoculars. A complete list of all avian species observed within the project site during breeding season surveys is included in **Appendix A**, *Avian Compendium*, attached. Weather conditions consisted of 10% to 100% cloud

cover with winds between 0 and 3 mph and air temperatures ranging from 54° to 73° Fahrenheit. Survey data is presented in **Table 1**, *Survey Data*, below.

Table 1
Survey Data

Date	Time	Wind (mph) (start/end)	Temperature (F) (start-end)	Weather (start-end)	Results	Surveyors
03/20/14	0715 – 1015	0-2/0-2	59° –73°	80% Cloud Cover – 70% Cloud Cover	No BUOW or BUOW sign	Chan, Cooley, Tanaka
04/16/14	0600 –0915	0-1/0-2	54° – 68°	100% Cloud Cover – 70% Cloud Cover	No BUOW or BUOW sign	Chan, Cooley, Lee
05/09/14	0600 – 0900	0-2/0-2	57° – 59°	10% Cloud Cover – 20% Cloud Cover	No BUOW or BUOW sign	Huttar, Lee, Tanaka
06/18/14	0600 – 0830	0-1/2-3	59°– 70°	35% Cloud Cover – 10% Cloud Cover	No BUOW or BUOW sign	Huttar, Chan , Lee

Source: PCR Services Corporation, 2014.

RESULTS

The following results present the findings of the Step I Habitat Assessment and Step II Focused Burrow and Burrowing Owl Survey.

Step I - Habitat Assessment

Results of the Step I, Habitat Assessment concluded that the project site and buffer zone exhibited suitable BUOW habitat consisting of disturbed, low-growing vegetation; bare ground; and a few small fossorial mammal burrows. Some areas on-site were determined to be unsuitable due to the lack of suitable BUOW habitat (e.g., areas dominated by scrub with greater than 30% ground cover). **Figure 5**, *Site Photographs*, contains representative photos of suitable BUOW habitat.

Step II – Locating Burrows and Burrowing Owls

The Step II surveys did not identify BUOW sign or BUOW within the project site or within the 500-foot buffer zone. Per the guidelines in the California Department of Fish and Wildlife *Staff*

Report on Burrowing Owl Mitigation (2012), locations of potential BUOW burrows were collected using a Global Positioning System (GPS) and mapped on Figure 4. A complete list of all avian species observed within the project site is included in Appendix A, *Avian Compendium*.

It should be noted that evidence of discing for weed abatement was observed on-site within the survey area during the May 9, 2014 survey. The owner was immediately notified that weed abatement activities should not occur during protocol surveys and all weed abatement activities were immediately ceased. Although the weed abatement occurred in suitable BUOW habitat, half of the BUOW protocol surveys had already been conducted with negative results.

Should you have any questions concerning the methodology or findings in this report, please contact Maile Tanaka (m.tanaka@pcrnet.com) at (949) 753-7001.

Sincerely,
PCR SERVICES CORPORATION

Maile Tanaka
Senior Biologist I

Amy Lee
Biologist

Attachments:
Figure 1: Regional Map
Figure 2: Vicinity Map
Figure 3: Plant Communities
Figure 4: Transect Map
Figure 5: Site Photographs

Appendix A: Avian Compendium

PCR

N

0 5 10 Miles

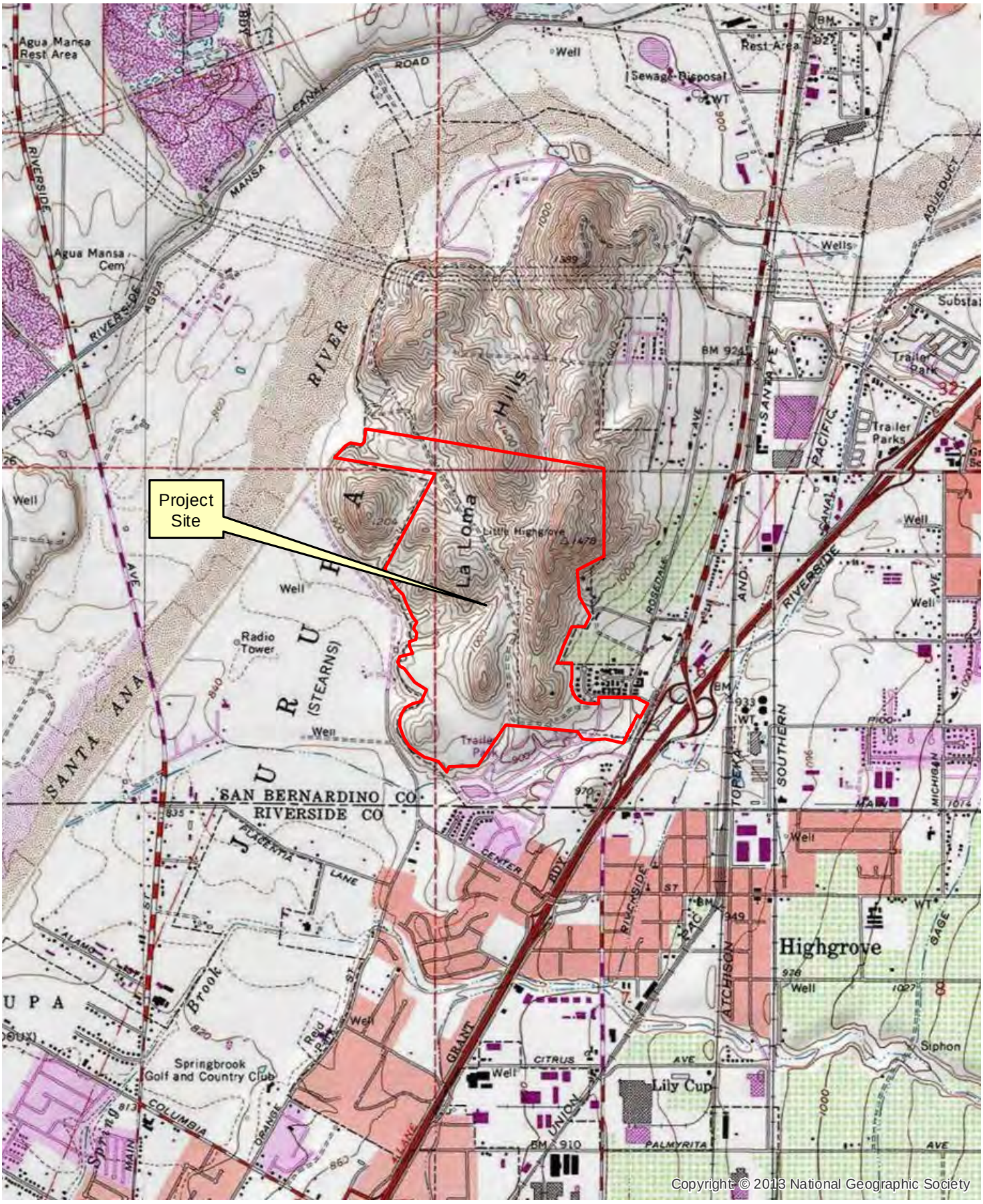
Regional Map

Roquet Ranch

Source: ESRI Street Map, 2009; PCR Services Corporation, 2014.

FIGURE

1



PCR

N

0 2,000 4,000 Feet

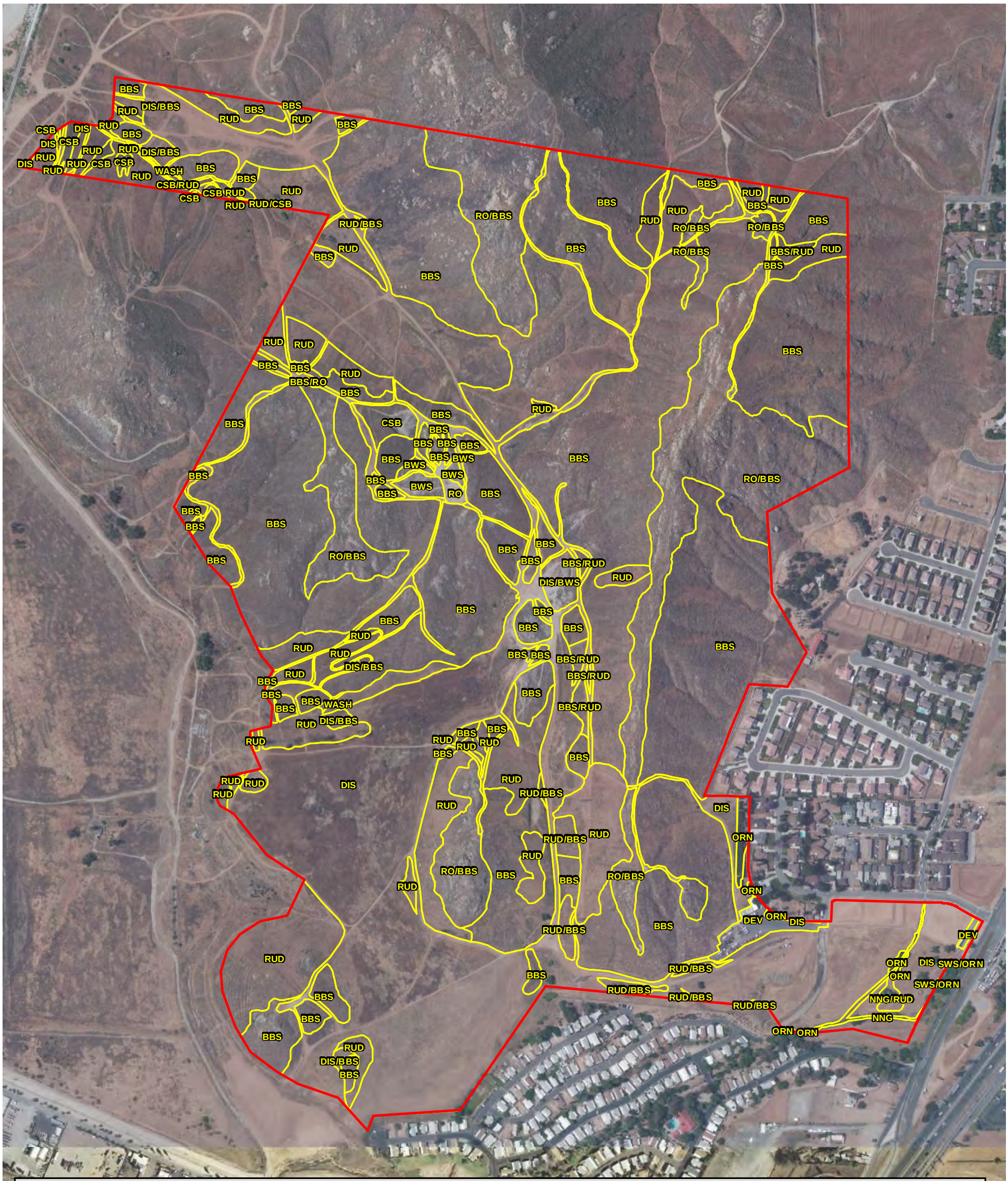
Vicinity Map

Roquet Ranch

Source: USGS Topographic Series (San Bernardino South, CA); PCR Services Corporation, 2014.

FIGURE

2



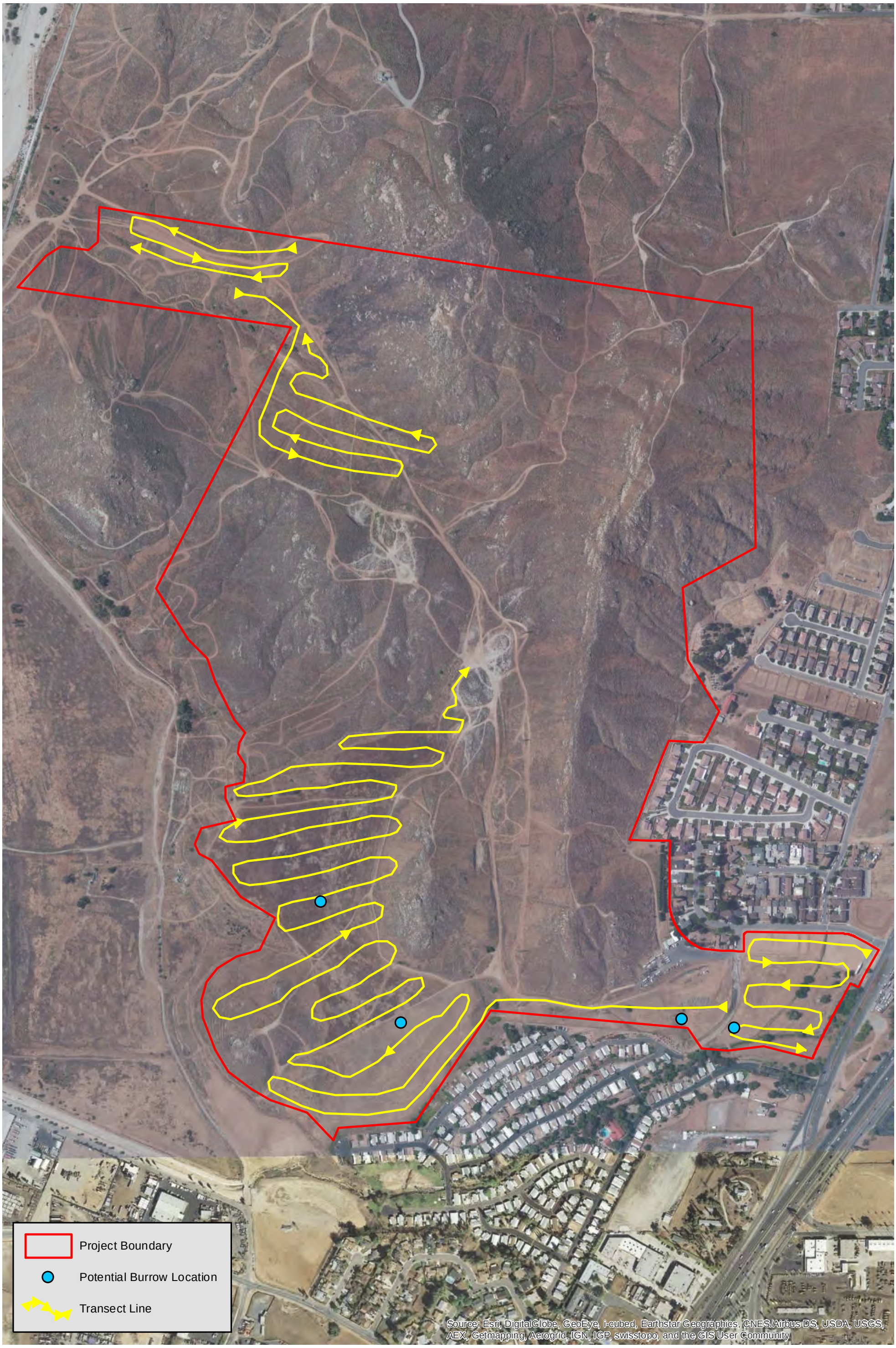
Plant Communities

Roquet Ranch

Source: Microsoft, 2010 (Aerial); PCR Services Corporation, 2014.

FIGURE

3



PCR

N

0 500 1,000 Feet

Transect Map

Roquet Ranch

Source: Microsoft, 2010 (Aerial); PCR Services Corporation, 2014.

FIGURE

4

Photograph 1: Suitable BUOW habitat during March 20, 2014 survey (looking east).

Photograph 2: Suitable BUOW habitat during May 9, 2014 survey (looking east).

Photograph 3: Suitable BUOW habitat in northern portion of the site during April 16, 2014 survey (looking east).

Photograph 4: Suitable BUOW habitat in northern portion of the site during May 9, 2014 survey (looking east).

PCR

Site Photographs

Roquet Ranch

Source: PCR Services Corporation, 2014.

FIGURE

5

Appendix A: Avian Compendium

BIRDS

SCIENTIFIC NAME	COMMON NAME
Anatidae	**Waterfowl**
Anas platyrhynchos	mallard
Branta canadensis	Canada goose
Odontophoridae	**Quails**
Callipepla californica	California quail
Accipitridae	**Hawks**
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	red-tailed hawk
Buteo lineatus	red-shouldered hawk
Buteo swainsoni	Swainson's hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Charadriidae	**Plovers**
Charadrius vociferus	killdeer
Columbidae	**Pigeons and Doves**
Columba livia	rock dove
* *Streptopelia decaocto*	Eurasian collared-dove
Zenaida macroura	mourning dove
Cuculidae	**Cuckoos and Roadrunners**
Geococcyx californianus	greater roadrunner
Trochilidae	**Hummingbirds**
Calypte anna	Anna’s hummingbird
Selasphorus sasin	Allen’s hummingbird
Picadae	**Woodpeckers**
Colaptes auratus	northern flicker
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	black phoebe
Sayornis saya	Say’s phoebe
Tyrannus verticalis	western kingbird
Tyrannus vociferans	Cassin’s kingbird
Corvidae	**Jays and Crows**
Aphelocoma californica	western scrub-jay
Corvus brachyrhynchos	American crow
Corvus corax	common raven

* = Non-native Species

BIRDS

SCIENTIFIC NAME	COMMON NAME
Alaudidae	**Larks**
Eremophila alpestris	horned lark
Hirundinidae	**Swallows**
Hirundo rustica	barn swallow
Petrochelidon pyrrhonota	cliff swallow
Stelgidopteryx serripennis	northern rough-winged swallow
Tachycineta bicolor	tree swallow
Aegithalidae	**Bushtits**
Psaltriparus minimus	bushtit
Troglodytidae	**Wrens**
Salpinctes obsoletus	rock wren
Thryomanes bewickii	Bewick's wren
Troglodytes aedon	house wren
Turdidae	**Thrushes**
Sialia mexicana	western bluebird
Mimidae	**Thrashers**
Mimus polyglottos	northern mockingbird
Sturnidae	**Starlings**
* *Sturnus vulgaris*	European starling
Emberizidae	**Emberizids**
Melospiza melodia	song sparrow
Passerculus sandwichensis	savannah sparrow
Pipilo crissalis	California towhee
Spizella passerina	chipping sparrow
Zonotrchia leucophrys	white-crowned sparrow
Cardinalidae	**Buntings, Grosbeaks, and Tanagers**
Pheucticus melanocephalus	black-headed grosbeak
Icteridae	**Blackbirds**
Euphagus cyanocephalus	Brewer's blackbird
Icterus bullockii	Bullock's oriole
Icterus cucullatus	hooded oriole
Quiscalus mexicanus	great-tailed grackle
Sturnella neglecta	western meadowlark
Fringillidae	**Finches**
Carpodacus mexicanus	house finch
Spinus lawrencei	Lawrence's goldfinch
Spinus psaltria	lesser goldfinch

* = Non-native Species

BIRDS

SCIENTIFIC NAME	COMMON NAME
Spinus tristis	American goldfinch
Passeridae	**Old World Sparrows**
* *Passer domesticus*	house sparrow

* = Non-native Species

Appendix E: 2015 Focused Burrowing Owl Survey Report

July 17, 2015

Mr. Bill Lo
SUNMEADOWS LLC
27127 Calle Arroyo, Suite 1910
San Juan Capistrano, CA 92675

Re: RESULTS OF FOCUSED BURROWING OWL SURVEYS FOR THE ROQUET RANCH STUDY AREA, CITY OF COLTON, SAN BERNARDINO COUNTY, CALIFORNIA

Dear Mr. Lo:

This report summarizes the methodology and findings of focused surveys for the burrowing owl (*Athene cunicularia*) (BUOW) conducted by **PCR Services Corporation (PCR)** on the approximately 10-acre addition ("study area") to the Roquet Ranch Property in the City of Colton, California (**Figure 1**, *Regional Map*, attached). The surveys encompassed the study area and a 500-foot buffer zone surrounding the perimeter of the study area where suitable habitat is present. No BUOW were observed within the survey area or the 500-foot buffer zone during the four focused surveys conducted.

STUDY AREA

Location

The study area is located in the City of Colton, San Bernardino County, California. The study area is located north of Moreno Valley Freeway 60 and west of Riverside Freeway 215. Specifically, the study area is located within the U.S. Geological Survey (USGS) San Bernardino South, 7.5 Minute Series Quadrangle map (**Figure 2**, *Vicinity Map*, attached).

Vegetation

Plant communities found within the study area and buffer zone include ruderal and disturbed habitat. Suitable BUOW habitat found within the study area is dominated by ruderal vegetation such as red brome (*Bromus madritensis*), ripgut brome (*Bromus diandrus*), short-pod mustard (*Hirschfeldia incana*), and red stemmed filaree (*Erodium cicutarium*).

METHODOLOGY

Step I - Habitat Assessment

The habitat assessment concluded that the study area and buffer zone exhibited suitable BUOW habitat consisting of disturbed, low-growing vegetation; bare ground; debris piles; and a few small fossorial mammal burrows. Due to inaccessibility, off-site areas within the 500-foot buffer zone were surveyed using binoculars.

Step II – Focused Burrow and Burrowing Owl Survey

Step II surveys were conducted within the study area plus a 500-foot buffer zone around the study area perimeter. Surveys focused on the detection of small fossorial mammal burrows potentially suitable for BUOW, BUOW burrows, individual BUOW, 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). Off-site areas within the 500-foot buffer zone were surveyed with the use of binoculars.

Surveys were conducted on May 7, June 2, June 23, and July 13, 2015 by PCR biologist Ezekiel Cooley. Surveys consisted of four site visits, on four separate days, and were conducted between morning civil twilight and 10:00 AM during suitable weather conditions. Transects were utilized in all accessible areas, spaced no more than 100 feet apart, to allow for 100 percent visibility (**Figure 3**, *Transect Map*, attached). In addition, inaccessible portions of the buffer were observed with binoculars. A complete list of all avian species observed within the study area during breeding season surveys is included in **Appendix A**, *Avian Compendium*, attached. Weather conditions consisted of 10% to 100% cloud cover with winds between 0 and 2 mph and air temperatures ranging from 59° to 73° Fahrenheit. Survey data is presented in **Table 1**, *Survey Data*, below.

Table 1
Survey Data

Date	Time	Wind (mph) (start/end)	Temperature (F) (start-end)	Weather (start-end)	Results	Surveyors
05/07/15	0630 – 0800	0-2/0-2	59° –62°	80% Cloud Cover – 75% Cloud Cover	No BUOW or BUOW sign	Cooley
06/02/15	0645 –0835	0-1/0-2	60° – 64°	100% Cloud Cover – 10% Cloud Cover	No BUOW or BUOW sign	Cooley
06/23/15	0625 – 0835	0-1/0-1	67° – 73°	45% Cloud Cover – 65% Cloud Cover	No BUOW or BUOW sign	Cooley
07/13/15	0545 – 0745	0-1/0-1	67°– 72°	100% Cloud Cover – 100% Cloud Cover	No BUOW or BUOW sign	Cooley

Source: PCR Services Corporation, 2015.

RESULTS

The following results present the findings of the Step I Habitat Assessment and Step II Focused Burrow and Burrowing Owl Survey.

Step I - Habitat Assessment

Results of the Step I Habitat Assessment concluded that the study area and buffer zone exhibited suitable BUOW habitat consisting of disturbed, low-growing vegetation; bare ground; debris piles; and a few small fossorial mammal burrows.

Step II – Locating Burrows and Burrowing Owls

The Step II surveys did not identify BUOW sign or BUOW within the study area or within the 500-foot buffer zone. A complete list of all avian species observed within the study area is included in Appendix A, *Avian Compendium*.

Additionally, it should also be noted that the site is heavily visited by neighboring residents for recreational purposes.

Should you have any questions concerning the methodology or findings in this report, please contact Ezekiel Cooley (e.cooley@pcrnet.com) at (949) 753-7001.

Sincerely,
PCR SERVICES CORPORATION

Ezekiel Cooley
Senior Biologist I

Attachments:
Figure 1: Regional Map
Figure 2: Vicinity Map
Figure 3: Transect Map

Appendix A: Avian Compendium

PCR

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0 5 10 Miles

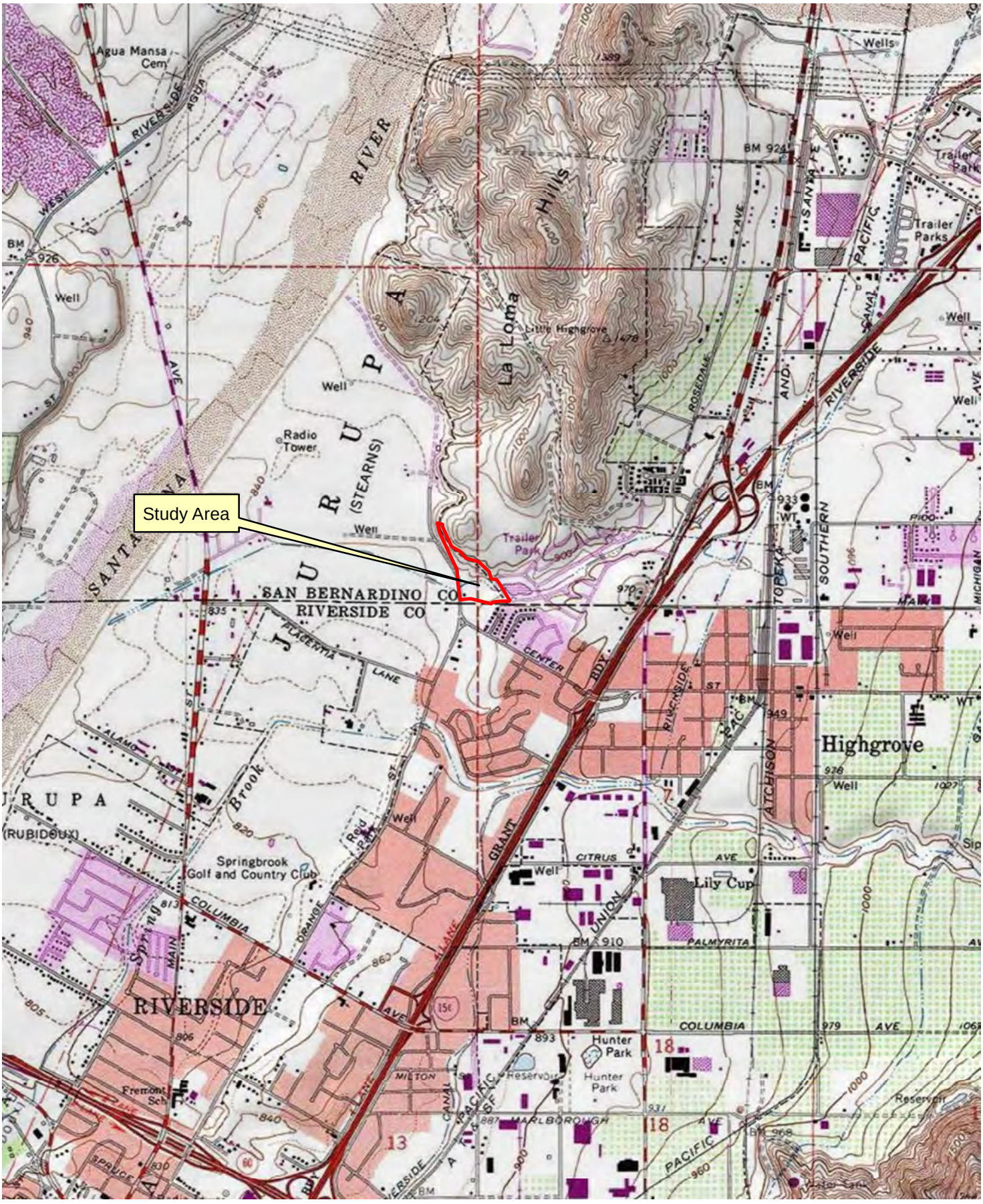
Regional Map

Roquet Ranch

Source: ESRI Street Map, 2009; PCR Services Corporation, 2015.

FIGURE

1



PCR

0 2,000 4,000 Feet

Vicinity Map

Roquet Ranch

Source: USGS Topographic Series (San Bernardino South, CA); PCR Services Corporation, 2015.

FIGURE

2

PCR

N

0 325 650 Feet

Transect Map

Roquet Ranch

Source: Microsoft, 2010 (Aerial); PCR Services Corporation, 2015.

FIGURE

3

Appendix A: Avian Compendium

BIRDS

SCIENTIFIC NAME	COMMON NAME
Accipitridae	**Hawks**
Buteo jamaicensis	red-tailed hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Charadriidae	**Plovers**
Charadrius vociferus	killdeer
Columbidae	**Pigeons and Doves**
Columba livia	rock dove
* *Streptopelia decaocto*	Eurasian collared-dove
Zenaida macroura	mourning dove
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	black phoebe
Tyrannus verticalis	western kingbird
Corvidae	**Jays and Crows**
Corvus brachyrhynchos	American crow
Hirundinidae	**Swallows**
Petrochelidon pyrrhonota	cliff swallow
Aegithalidae	**Bushtits**
Psaltriparus minimus	bushtit
Mimidae	**Thrashers**
Mimus polyglottos	northern mockingbird
Sturnidae	**Starlings**
* *Sturnus vulgaris*	European starling
Parulidae	**Wood Warblers**
Geothlypis trichas	common yellowthroat
Emberizidae	**Emberizids**
Melospiza melodia	song sparrow
Pipilo crissalis	California towhee
Icteridae	**Blackbirds**
Icterus bullockii	Bullock's oriole
Sturnella neglecta	western meadowlark

* = Non-native Species

BIRDS

SCIENTIFIC NAME	COMMON NAME
Fringillidae	**Finches**
Haemorhous mexicanus	house finch
Spinus psaltria	lesser goldfinch

* = Non-native Species

Appendix F: 2014 Focused California Gnatcatcher Survey Report

July 17, 2014

Stacey Love
U.S. FISH AND WILDLIFE SERVICE
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

Re: RESULTS OF FOCUSED COASTAL CALIFORNIA GNATCATCHER SURVEYS FOR THE ROQUET RANCH PROJECT SITE, CITY OF COLTON, SAN BERNARDINO COUNTY, CALIFORNIA

Dear Ms. Love:

This letter report summarizes the methodology and findings of surveys for the coastal California gnatcatcher (*Polioptila californica californica*) (CAGN) on the approximately 314.7-acre Roquet Ranch Property ("project site") in the City of Colton, California (**Figure 1**, *Regional Map*, attached). Approximately 189.28 acres of potentially suitable habitat occurs on the project site. Surveys were conducted by Leatherman Bioconsulting Inc. biologists Brian Leatherman, Adam DeLuna, and James Huelsman, authorized under permit number TE-827493-7 to determine the presence and location or absence of CAGN within the survey area. No CAGN were observed within the survey area during the six breeding season surveys conducted.

PROJECT SITE

Location

The proposed project is located in the City of Colton, San Bernardino County, California. The project site is located north of Moreno Valley Freeway 60 and west of Riverside Freeway 215. The Santa Ana River borders the project site to the west. Specifically, the project site is located within the U.S. Geological Survey (USGS) San Bernardino South, 7.5 Minute Series Quadrangle map (**Figure 2**, *Vicinity Map*, attached).

PLANT COMMUNITIES

Plant communities found within the project site include brittlebush scrub, brittlebush scrub/rock outcrop, brittlebush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, disturbed/brittlebush scrub, disturbed/California buckwheat scrub, disturbed/California sagebrush scrub, non-native grassland, non-native grassland/ruderal, rock outcrop, rock outcrop/brittlebush scrub, ruderal/brittlebush scrub, developed, disturbed, ornamental, ruderal, southern willow scrub/ornamental, wash, and ruderal/California sagebrush scrub. **Figure 3**, *Plant Communities*, attached, depicts the location of all the communities

observed on-site, including the potentially suitable habitat surveyed for CAGN within the survey area. A description of the potentially suitable CAGN habitats, which include brittlebush scrub, brittlebush scrub/rock outcrop, brittlebush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, disturbed/brittlebush scrub, disturbed/California sagebrush scrub, rock outcrop/brittlebush scrub, ruderal/brittlebush scrub, and ruderal/California sagebrush scrub, are presented below. It should be noted that the majority of sage scrub habitats that comprise the potentially suitable CAGN habitat on-site are brittlebush scrub communities, which consist of nearly monotypic communities dominated almost entirely by brittlebush (*Encelia farinosa*). California sagebrush, which is a plant species that is preferred by the CAGN, was very limited and very sparsely distributed within these communities (with the exception of those areas mapped as California sagebrush scrub communities, which had higher concentrations of California sagebrush). Thus, the overall habitat on-site is of marginal quality to support CAGN. **Figure 4**, *Site Photographs*, contains representative photographs of the suitable CAGN habitat on the project site.

Brittlebush Scrub

Brittlebush scrub is dominated by an almost monotypic community of brittlebush. Associated species observed within this community include sparse amounts of California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), common sandaster (*Corethrogyne filaginifolia*), pinebush (*Ericameria pinifolia*), desert brickellbush (*Brickellia desertorum*), wishbone bush (*Mirabilis laevis*), bush monkeyflower (*Diplacus longiflorus*), wild cucumber (*Marah macrocarpus*), phacelia (*Phacelia* sp.), valley cholla (*Cylindropuntia parryi*), linear-leaved stillingia (*Stillingia linearifolia*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), and Sahara mustard (*Brassica tournefortii*). Brittlebush scrub encompasses the majority of the study area with approximately 146.73 acres within the project site.

Brittlebush Scrub/Rock Outcrop

Brittlebush scrub/rock outcrop is dominated by the species within the brittlebush scrub community with rock outcroppings interspersed within the brittlebush scrub vegetation. Brittlebush scrub/rock outcrop comprises approximately 0.02 acre in the western portion of the project site.

Brittlebush Scrub/Ruderal

Brittlebush scrub/ruderal is dominated by the species within the brittlebush scrub community (mainly brittlebush) with ruderal species interspersed throughout the brittlebush scrub community. Species observed within the ruderal community include shortpod mustard (*Hirschfeldia incana*), fiddleneck (*Amsinckia* sp.), rocket (*Sisymbrium* sp.), tocalote (*Centaurea melitensis*), ripgut grass

(*Bromus diandrus*), western ragweed (*Ambrosia psilostachya*), cheeseweed (*Malva parviflora*), wild radish (*Raphanus raphanistrum*), foxtail chess (*Bromus madritensis*), wild oat (*Avena* sp.), gum tree (*Eucalyptus* sp.), mule fat (*Baccharis salicifolia*), blue elderberry, pinebush, Mexican palo verde (*Parkinsonia aculeata*), tree tobacco (*Nicotiana glauca*), vetch (*Astragalus* sp.), and dove weed (*Croton setigerus*). Brittlebush scrub/ruderal comprises approximately 1.18 acres in the northeastern portion of the project site.

California Buckwheat Scrub

California buckwheat scrub is dominated by California buckwheat with a subdominance of brittlebush. Other associated species observed within this community include California sagebrush, redstem stork's bill (*Erodium cicutarium*), tocalote, and shortpod mustard. California buckwheat scrub comprises 1.03 acres in the northwestern portion of the project site.

California Sagebrush Scrub

California sagebrush scrub is dominated by almost monotypic stands of California sagebrush. Other native species observed within this community include brittlebush, California buckwheat, and non-native species including shortpod mustard. California sagebrush scrub comprises 1.87 acres in the northern portion of the project site.

California Sagebrush Scrub/Ruderal

California sagebrush scrub/ruderal is dominated by the species within the California sagebrush community with ruderal, weedy vegetation interspersed throughout. California sagebrush scrub/ruderal comprises 0.13 acre in the northwestern portion of the project site.

Disturbed/Brittlebush Scrub

Disturbed/brittlebush scrub is dominated by bare ground with species associated with the brittlebush scrub interspersed throughout the disturbed areas. Disturbed/brittlebush scrub comprises 1.08 acres mainly in the central portion and a small patch in the northwestern portion of the project site. **Disturbed/California Buckwheat Scrub**

Disturbed/California buckwheat scrub is dominated by bare ground and interspersed with California buckwheat scrub species. Disturbed/California buckwheat scrub comprises 0.99 acre in the central portion of the project site.

Disturbed/California Sagebrush Scrub

Disturbed/California sagebrush scrub is dominated by bare ground with California sagebrush scrub species interspersed throughout. Disturbed/California sagebrush scrub comprises less than 0.01 acre[1] of the project site.

Rock Outcrop/Brittlebush Scrub

Rock outcrop/brittlebush scrub consists of rock outcrop areas that are interspersed with vegetation that is characteristic of the brittlebush scrub community within the project site. Rock outcrop/brittlebush scrub comprises 34.46 acres primarily along the ridgelines within the project site.

Ruderal/Brittlebush Scrub

Ruderal/brittlebush scrub is dominated by ruderal, weedy species but exhibit sparse, remnant species associated with the brittlebush scrub community, mainly consisting of brittlebush. Ruderal/brittlebush scrub comprises 1.70 acres, the largest area being in the southern portion of the project site.

Ruderal/California Sagebrush Scrub

Ruderal/California sagebrush scrub is dominated by ruderal, weedy species but exhibit sparse, remnant species associated with the California sagebrush community, including California sagebrush, California buckwheat, and brittlebush, interspersed throughout the community. Ruderal/California sagebrush scrub comprises 0.09 acre in the northwestern portion of the project site.

METHODOLOGY

Surveys for CAGN were conducted by biologists Brian Leatherman, Adam DeLuna, and James Huelsman (Permit No. TE-827493-7). Methods employed were in conformance with U.S. Fish and Wildlife Service (USFWS) *Coastal California Gnatcatcher Presence/Absence Survey Guidelines* issued July 28, 1997.[2] Accordingly, six (6) surveys were performed between April 7, 2014 and June 4, 2014. Surveys were conducted no less than one week apart, between 6:00 A.M. and 12:00 P.M., within all portions of the survey area containing potentially suitable habitat. Weather conditions were suitable for surveys, with skies ranging from clear to cloudy and winds ranging

[1] *The community accounts for approximately 0.001 acre of the project site.*
[2] *U.S. Fish and Wildlife Service. Department of the Interior. Coastal California Gnatcatcher (Polioptila californica californica): Presence/Absence Survey Guidelines. Unpublished paper. Sacramento, California.*

from 0 to 15 miles per hour (mph). Temperatures during surveys ranged between 50 and 91 degrees Fahrenheit.

The permitted field investigators slowly walked along or within the potentially suitable habitat, stopping intermittently to look and listen for CAGN, uttering pishing sounds, and playing a digital copy of recorded CAGN vocalizations. The recording was played for several seconds at each interval, followed by a brief pause to listen for a response. Suitable CAGN habitat within the project site was divided into three survey areas, Areas 1, 2, and 3, as depicted on **Figure 5**, *CAGN Survey Areas 1, 2, and 3*, attached. Surveys were conducted on April 7, 14, 22, 28, and 29; May 6, 7, 13, 14, 20, 21, 28, and 30; June 4, 2014. Survey details are presented in **Table 1**, *Survey Data*, below.

Table 1

Survey Data

Survey No.	Date	Biologist*	Time (start-end)	Temperature (start/end) °F	Winds (start/end) mph	Cloud Cover (start/end)	Results
Area 1	04/14/2014	JH	0645-1140	55°/80°	0-1/1-2	clear/clear	No CAGN Observed
	04/22/2014	AD	0600-1100	59°/62°	2-4/2-4	100%/100%	No CAGN Observed
	05/07/2014	JH	0645-1130	55°/65°	0-1/0-1	100%/90%	No CAGN Observed
	05/14/2014	JH	0615-1105	75°/90°	4-6/1-2	clear/clear	No CAGN Observed
	05/21/2014	AD	0600-1130	55°/70°	0-2/2-4	10%/clear	No CAGN Observed
	05/28/2014	AD	0630-1130	65°/82°	0-2/2-4	100%/20%	No CAGN Observed
Area 2	04/07/2014/	JH	0720-1145	55°/80°	1-2/1-2	clear/clear	No CAGN Observed
	04/14/2014	AD	600-1130	51°/84	2-4/2-4	clear/clear	No CAGN Observed
	04/28/2014	AD	615-1130	50°/80°	0-2/2-4	clear/clear	No CAGN Observed
	05/06/2014	AD	620-1200	52°/79°	0-2/2-4	30%/clear	No CAGN Observed
	05/14/2014	AD	600-1115	65°/91°	2-4/2-6	clear/clear	No CAGN Observed
	06/04/2014	AD	620-1115	58°/87°	0-2/0-2	clear/clear	No CAGN Observed
Area 3	04/07/2014	BL	615-1145	52°/82°	0-2/2-4	clear/clear	No CAGN Observed
	04/22/2014	JH	0640-1115	65°/70°	0-2/2-4	100%/100%	No CAGN Observed
	04/29/2014	JH	0630-1100	70°/80°	4-6/10-15	clear/clear	No CAGN Observed

Table 1

Survey Data

Survey No.	Date	Biologist*	Time (start-end)	Temperature (start/end) °F	Winds (start/end) mph	Cloud Cover (start/end)	Results
	05/13/2014	AD	600-1115	64°/89°	4-6/6-8	clear/clear	No CAGN Observed
	05/20/2014	AD	630-1130	59°/68°	4-6/6-8	70%/50%	No CAGN Observed
	05/30/2014	AD	600-1130	59°/81°	0-2/0-2	clear/clear	No CAGN Observed

**AD = Adam DeLuna, BL = Brian Leatherman, JH = James Huelsman*

Source: Leatherman Bioconsulting Inc., 2014

RESULTS

No CAGN were observed within the survey area during the six breeding season surveys conducted. A complete list of avian species observed within the survey area is provided in **Appendix A**, *Avian Compendium*.

It should be noted that evidence of discing for weed abatement was observed in the canyon between Survey Areas 2 and 3 during the May 13, 2014 survey. As a result of the weed abatement activity, a small portion of potentially suitable CAGN habitat associated with a brittlebush scrub community was removed. The owner was immediately notified that weed abatement activities should not occur during protocol surveys and all weed abatement activities were immediately ceased. Although a small portion of potentially suitable habitat totaling approximately 1.38 acres of brittlebush scrub was removed as a result of this weed abatement activity, approximately half of the CAGN surveys, which were conducted within the window that the USFWS considers the peak CAGN breeding season (mid-April to mid-May), had already been conducted with negative results prior to discing activities. Moreover, the brittlebush scrub community that was removed is considered to be of marginal quality and, based on the survey results throughout this vegetation community and all other potentially suitable CAGN habitat on other portions of the project site, would not have been anticipated to support CAGN. Therefore, we believe that the results of the surveys should be considered valid in light of the weed abatement activities.

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.

Should you have any questions regarding the methodology or findings in this report, please contact Maile Tanaka (m.tanaka@pcrnet.com) at (949) 753-7001.

Sincerely,
PCR SERVICES CORPORATION

Maile Tanaka
Senior Biologist

Brian Leatherman
Wildlife Biologist
Permit No. TE-827493-7

Adam DeLuna
Wildlife Biologist
Permit No. TE-827493-7

James Huelsman
Wildlife Biologist
Permit No. TE-827493-7

Attachments:
Figure 1: Regional Map
Figure 2: Vicinity Map
Figure 3: Plant Communities
Figure 4: Site Photographs
Figure 5: CAGN Survey Areas 1, 2, and 3

Appendix A: Avian Compendium

PCR

N

0 5 10 Miles

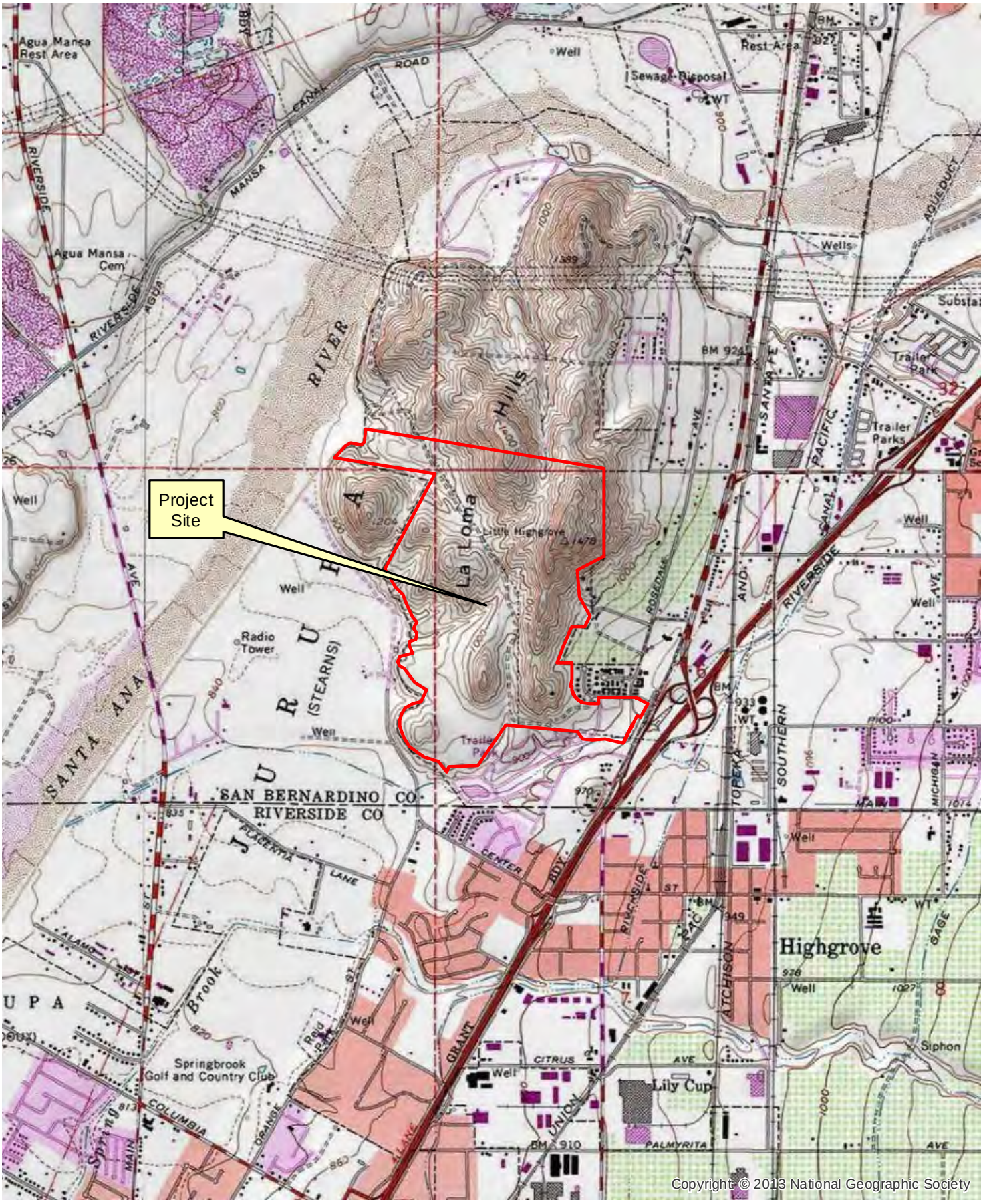
Regional Map

Roquet Ranch

Source: ESRI Street Map, 2009; PCR Services Corporation, 2014.

FIGURE

1



PCR

N

0 2,000 4,000 Feet

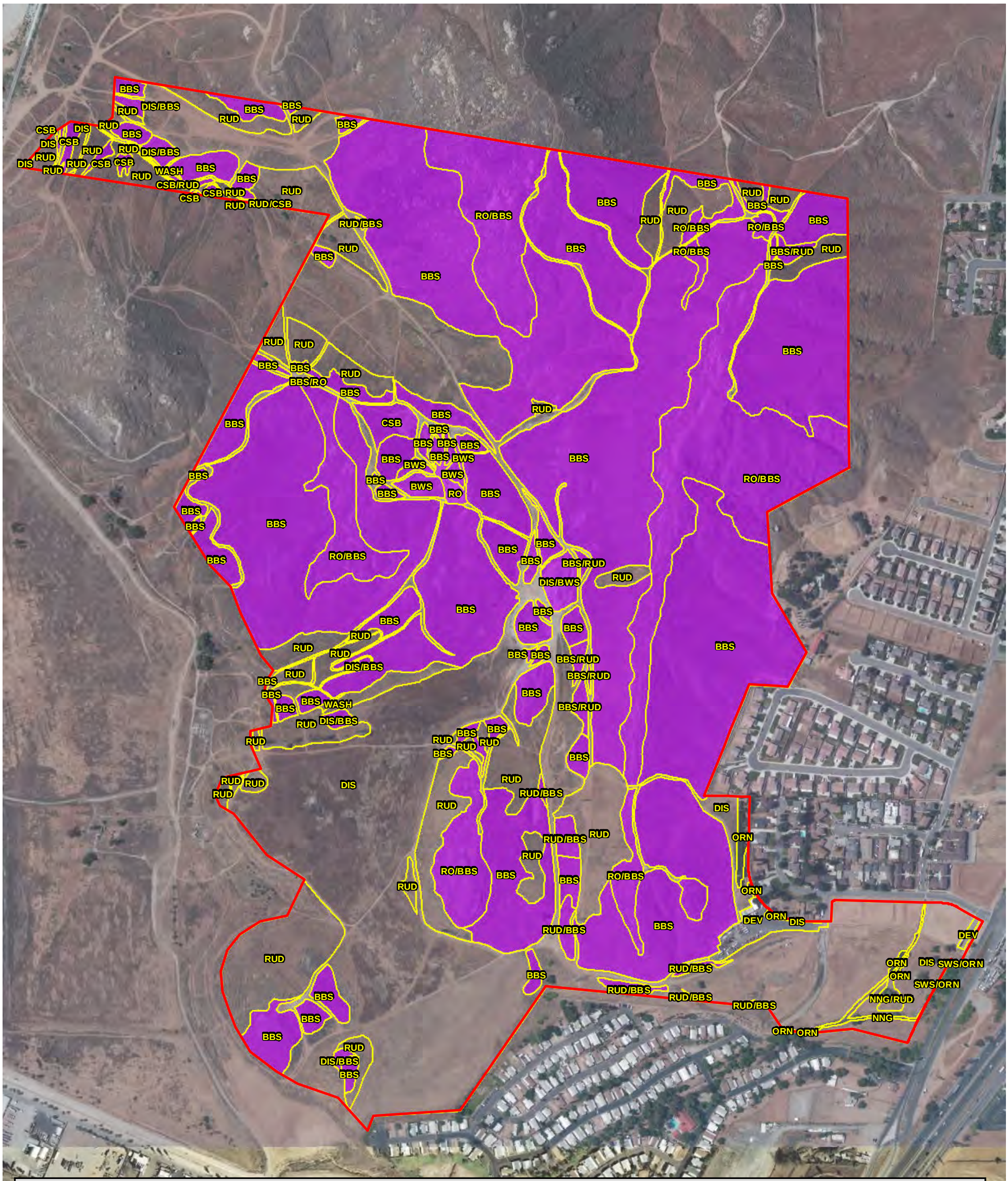
Vicinity Map

Roquet Ranch

Source: USGS Topographic Series (San Bernardino South, CA); PCR Services Corporation, 2014.

FIGURE

2


BBS
RUD
DIS/BBS
CSB
DIS
WASH
BBS/RUD
CSB/RUD
RUD/CSB
RO/BBS
RUD/BBS
BBS/RO
DIS/BWS
BWS
RO
ORN
DEV
SWS/ORN
NNG/RUD
NNG
Project Site
Plant Communities
BBS - Brittlebush Scrub
BBS/RO - Brittlebush Scrub/Rock Outcrop
BBS/RUD - Brittlebush Scrub/Ruderal
BWS - California Buckwheat Scrub
CSB - California Sagebrush Scrub
CSB/RUD - California Sagebrush Scrub/Ruderal
DEV - Developed
DIS - Disturbed
DIS/BBS - Disturbed/Brittlebush Scrub
DIS/BWS - Disturbed/California Buckwheat Scrub
DIS/CSB - Disturbed/California Sagebrush Scrub
NNG - Non Native Grassland
NNG/RUD - Non Native Grassland/Ruderal
ORN - Ornamental
RO - Rock Outcrop
RO/BBS - Rock Outcrop/Brittlebush Scrub
RUD - Ruderal
RUD/BBS - Ruderal/Brittlebush Scrub
RUD/CSB - Ruderal/California Sagebrush Scrub
SWS/ORN - Southern Willow Scrub/Ornamental
WASH - Wash
Potentially Suitable CAGN Habitat
AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
PCR
N
0
500
1,000 Feet
Plant Communities
Roquet Ranch
Source: Microsoft, 2010 (Aerial); PCR Services Corporation, 2014.
FIGURE
3

Photograph 1: View of brittlebush scrub within the central portion of the project site.

Photograph 2: View of brittlebush scrub intermixed with ruderal areas within the southern-central portion of the project site.

Photograph 3: View of a disturbed dirt road within the central portion of the project site that is surrounded by brittlebush scrub on either side.

Photograph 4: View of brittlebush scrub within the southern portion of the project site.

PCR

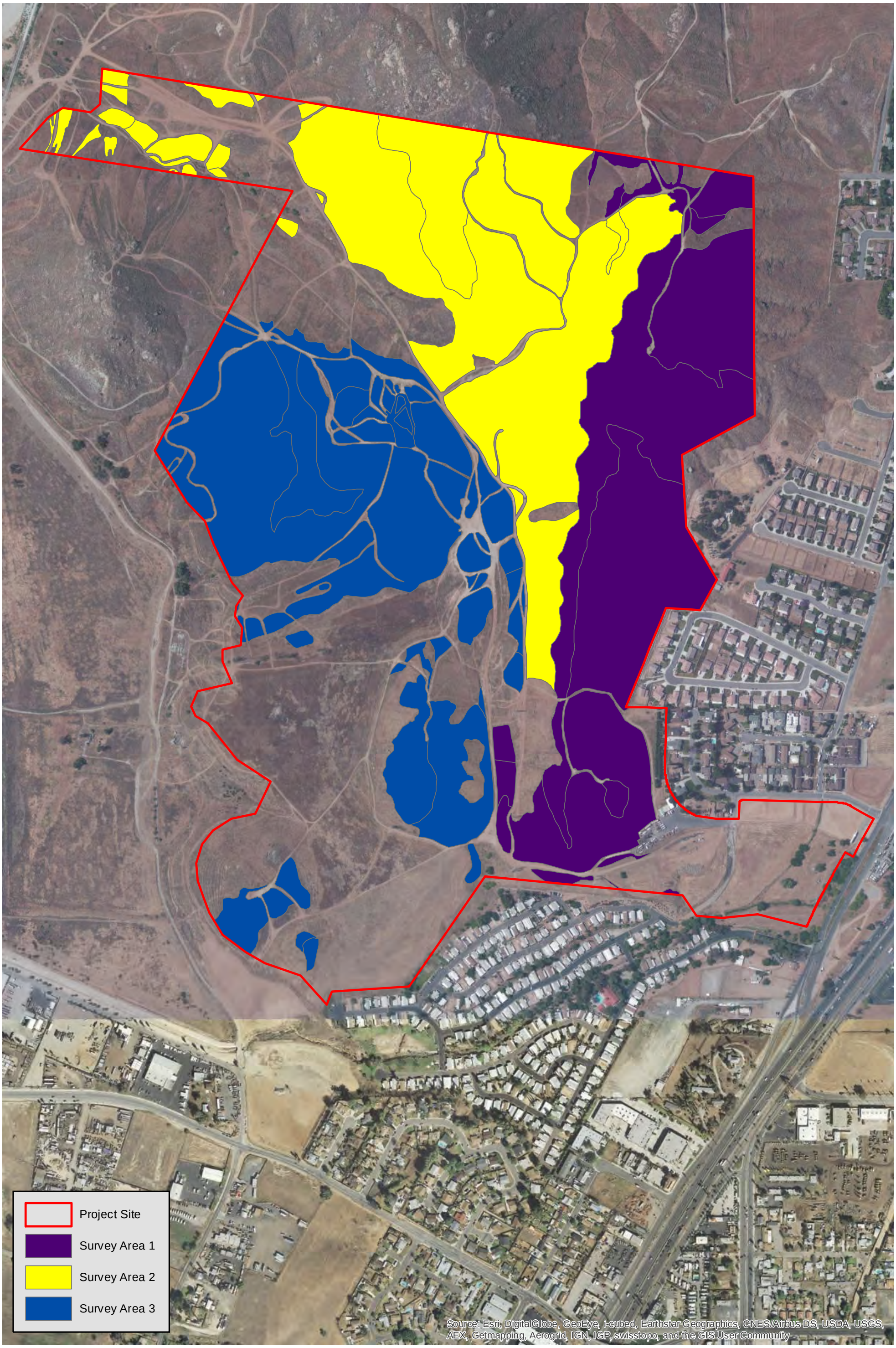
Site Photographs

Roquet Ranch

Source: PCR Services Corporation, 2014.

FIGURE

4



PCR

CAGN Survey Areas 1, 2, and 3

Roquet Ranch

Source: Microsoft, 2010 (Aerial); PCR Services Corporation, 2014.

FIGURE

5

Appendix A: Avian Compendium

BIRDS

	SCIENTIFIC NAME	COMMON NAME
	Vultures	**Cathartidae**
	turkey vulture	*Cathartes aura*
	Hawks, Eagles and Kites	**Accipitridae**
**	Cooper's hawk	*Accipiter cooperii*
**	Swainson's hawk	*Buteo swainsoni*
	red-tailed hawk	*Buteo jamaicensis*
	Falcons	**Falconidae**
	American kestrel	*Falco sparverius*
	Pigeons and Doves	**Columbidae**
*	rock pigeon	*Columba livia*
	mourning dove	*Zenaida macroura*
	Cuckoos and Roadrunners	**Cuculidae**
	greater roadrunner	*Geococcyx californianus*
	Swifts	**Apodidae**
	white-throated swift	*Aeronautes saxatalis*
	Hummingbirds	**Trochilidae**
	black-chinned hummingbird	*Archilochus alexandri*
	Anna's hummingbird	*Calypte anna*
**	Costa's hummingbird	*Calypte costae*
**	Allen's hummingbird	*Selasphorus sasin*
	Woodpeckers	**Picidae**
**	Nuttall's woodpecker	*Picoides nuttallii*
	northern flicker	*Colaptes auratus*
	Tyrant Flycatchers	**Tyrannidae**
	western wood-pewee	*Contopus sordidulus*
	pacific-slope flycatcher	*Empidonax difficilis*
	black phoebe	*Sayornis nigricans*
	Say's phoebe	*Sayornis saya*
	ash-throated flycatcher	*Myiarchus cinerascens*
	Cassin's kingbird	*Tyrannus vociferans*
	western kingbird	*Tyrannus verticalis*
	Jays and Crows	**Corvidae**
	American crow	*Corvus brachyrhynchos*
	common raven	*Corvus corax*
	Swallows	**Hirundinidae**
	northern rough-winged swallow	*Stelgidopteryx serripennis*
	barn swallow	*Hirundo rustica*
	Bushtits	**Aegithalidae**
	bushtit	*Psaltriparus minimus*
	Wrens	**Troglodytidae**
	rock wren	*Salpinctes obsoletus*
	Bewick's wren	*Thryomanes bewickii*
	house wren	*Troglodytes aedon*

*=Non-native/Invasive

**= Species on the California Department of Fish and Wildlife's special animal list

BIRDS

	SCIENTIFIC NAME	COMMON NAME
	Gnatcatchers	**Sylviidae**
	blue-gray gnatcatcher	*Polioptila caerulea*
	Bluebirds and Thrushes	**Turdidae**
	hermit thrush	*Catharus guttatus*
	Wrentits	**Timaliidae**
	wrentit	*Chamaea fasciata*
	Mockingbirds and Thrashers	**Mimidae**
	northern mockingbird	*Mimus polyglottos*
	Starlings	**Sturnidae**
*	European starling	*Sturnus vulgaris*
	Pipits and Wagtails	**Motacillidae**
	American pipit	*Anthus rubescens*
	Silky Flycatchers	**Ptilogonatidae**
	phainopepla	*Phainopepla nitens*
	Wood Warblers	**Parulidae**
	orange-crowned warbler	*Vermivora celata*
	Nashville Warbler	*Vermivora ruficapilla*
**	yellow warbler	*Dendroica petechia*
	yellow-rumped warbler	*Dendroica coronata*
	Townsend's warbler	*Dendroica townsendi*
	Wilson’s warbler	*Wilsonia pusilla*
	Towhees and Sparrows	**Emberizidae**
	California towhee	*Pipilo crissalis*
**	rufous-crowned sparrow	*Aimophila ruficeps*
**	chipping sparrow	*Spizella passerina*
	black-throated sparrow	*Amphispiza bilineata*
**	sage sparrow	*Amphispiza belli*
	song sparrow	*Melospiza melodia*
	white-crowned sparrow	*Zonotrichia leucophrys*
	Blackbirds and Orioles	**Icteridae**
	western meadowlark	*Sturnella neglecta*
	Brewer’s blackbird	*Euphagus cyanocephalus*
	hooded oriole	*Icterus cucullatus*
	Bullock’s oriole	*Icterus bullockii*
	Finches	**Fringillidae**
	house finch	*Carpodacus mexicanus*
	lesser goldfinch	*Carduelis psaltria*
**	Lawrence’s goldfinch	*Carduelis lawrencei*
	Old World Sparrows	**Passeridae**
	house sparrow	*Passer domesticus*

*=Non-native/Invasive

**= Species on the California Department of Fish and Wildlife’s special animal list

Appendix G: 2015 Focused California Gnatcatcher Survey Report

August 11, 2015

Stacey Love
U.S. FISH AND WILDLIFE SERVICE
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

Re: RESULTS OF FOCUSED COASTAL CALIFORNIA GNATCATCHER SURVEYS FOR THE ROQUET RANCH PROJECT SITE, CITY OF COLTON, SAN BERNARDINO COUNTY, CALIFORNIA

Dear Ms. Love:

This letter report summarizes the methodology and findings of surveys for the coastal California gnatcatcher (*Polioptila californica californica*) (CAGN) on the approximately 314.7-acre Roquet Ranch Property ("project site") in the City of Colton, California (**Figure 1**, *Regional Map*, attached). Approximately 189.28 acres of potentially suitable habitat ("survey area") occurs on the project site. Surveys were conducted by Leatherman Bioconsulting Inc. biologists Brian Leatherman, and Adam DeLuna authorized under permit number TE-827493-7 to determine the presence and location or absence of CAGN within the survey area. No CAGN were observed within the survey area during the six breeding season surveys conducted.

PROJECT SITE

Location

The proposed project is located in the City of Colton, San Bernardino County, California. The project site is located north of Moreno Valley Freeway 60 and west of Riverside Freeway 215. The Santa Ana River borders the project site to the west. Specifically, the project site is located within the U.S. Geological Survey (USGS) San Bernardino South, 7.5 Minute Series Quadrangle map (**Figure 2**, *Vicinity Map*, attached).

PLANT COMMUNITIES

Plant communities found within the project site include brittlebush scrub, brittlebush scrub/rock outcrop, brittlebush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, disturbed/brittlebush scrub, disturbed/California buckwheat scrub, disturbed/California sagebrush scrub, non-native grassland, non-native grassland/ruderal, rock outcrop, rock outcrop/brittlebush scrub, ruderal/brittlebush scrub, developed, disturbed, ornamental, ruderal, southern willow scrub/ornamental, wash, and ruderal/California sagebrush scrub. **Figure 3**, *Plant Communities*, attached, depicts the location of all the communities

observed on-site, including the potentially suitable habitat surveyed for CAGN within the survey area. A description of the potentially suitable CAGN habitats, which include brittlebush scrub, brittlebush scrub/rock outcrop, brittlebush scrub/ruderal, California buckwheat scrub, California sagebrush scrub, California sagebrush scrub/ruderal, disturbed/brittlebush scrub, disturbed/California sagebrush scrub, rock outcrop/brittlebush scrub, ruderal/brittlebush scrub, and ruderal/California sagebrush scrub, are presented below. It should be noted that the majority of sage scrub habitats that comprise the potentially suitable CAGN habitat on-site are brittlebush scrub communities, which consist of nearly monotypic communities dominated almost entirely by brittlebush (*Encelia farinosa*). California sagebrush, which is a plant species that is preferred by the CAGN, was very limited and very sparsely distributed within these communities (with the exception of those areas mapped as California sagebrush scrub communities, which had higher concentrations of California sagebrush). Thus, the overall habitat on-site is of marginal quality to support CAGN. **Figure 4**, *Site Photographs*, contains representative photographs of the suitable CAGN habitat on the project site.

Brittlebush Scrub

Brittlebush scrub is dominated by an almost monotypic community of brittlebush. Associated species observed within this community include sparse amounts of California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), common sandaster (*Corethrogyne filaginifolia*), pinebush (*Ericameria pinifolia*), desert brickellbush (*Brickellia desertorum*), wishbone bush (*Mirabilis laevis*), bush monkeyflower (*Diplacus longiflorus*), wild cucumber (*Marah macrocarpus*), phacelia (*Phacelia* sp.), valley cholla (*Cylindropuntia parryi*), linear-leaved stillingia (*Stillingia linearifolia*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), and Sahara mustard (*Brassica tournefortii*). Brittlebush scrub encompasses the majority of the project site with approximately 146.73 acres throughout the property.

Brittlebush Scrub/Rock Outcrop

Brittlebush scrub/rock outcrop is dominated by the species within the brittlebush scrub community with rock outcroppings interspersed within the brittlebush scrub vegetation. Brittlebush scrub/rock outcrop comprises approximately 0.02 acre in the western portion of the project site.

Brittlebush Scrub/Ruderal

Brittlebush scrub/ruderal is dominated by the species within the brittlebush scrub community (mainly brittlebush) with ruderal species interspersed throughout the brittlebush scrub community. Species observed within the ruderal community include shortpod mustard (*Hirschfeldia incana*), fiddleneck (*Amsinckia* sp.), rocket (*Sisymbrium* sp.), tocalote (*Centaurea melitensis*), ripgut grass

(*Bromus diandrus*), western ragweed (*Ambrosia psilostachya*), cheeseweed (*Malva parviflora*), wild radish (*Raphanus raphanistrum*), foxtail chess (*Bromus madritensis*), wild oat (*Avena* sp.), gum tree (*Eucalyptus* sp.), mule fat (*Baccharis salicifolia*), blue elderberry, pinebush, Mexican palo verde (*Parkinsonia aculeata*), tree tobacco (*Nicotiana glauca*), vetch (*Astragalus* sp.), and dove weed (*Croton setigerus*). Brittlebush scrub/ruderal comprises approximately 1.18 acres in the northeastern portion of the project site.

California Buckwheat Scrub

California buckwheat scrub is dominated by California buckwheat with a subdominance of brittlebush. Other associated species observed within this community include California sagebrush, redstem stork's bill (*Erodium cicutarium*), tocalote, and shortpod mustard. California buckwheat scrub comprises 1.03 acres in the northwestern portion of the project site.

California Sagebrush Scrub

California sagebrush scrub is dominated by almost monotypic stands of California sagebrush. Other native species observed within this community include brittlebush, California buckwheat, and non-native species including shortpod mustard. California sagebrush scrub comprises 1.87 acres in the northern portion of the project site.

California Sagebrush Scrub/Ruderal

California sagebrush scrub/ruderal is dominated by the species within the California sagebrush community with ruderal, weedy vegetation interspersed throughout. California sagebrush scrub/ruderal comprises 0.13 acre in the northwestern portion of the project site.

Disturbed/Brittlebush Scrub

Disturbed/brittlebush scrub is dominated by bare ground with species associated with the brittlebush scrub interspersed throughout the disturbed areas. Disturbed/brittlebush scrub comprises 1.08 acres mainly in the central portion and a small patch in the northwestern portion of the project site. **Disturbed/California Buckwheat Scrub**

Disturbed/California buckwheat scrub is dominated by bare ground and interspersed with California buckwheat scrub species. Disturbed/California buckwheat scrub comprises 0.99 acre in the central portion of the project site.

Disturbed/California Sagebrush Scrub

Disturbed/California sagebrush scrub is dominated by bare ground with California sagebrush scrub species interspersed throughout. Disturbed/California sagebrush scrub comprises less than 0.01 acre[1] of the project site.

Rock Outcrop/Brittlebush Scrub

Rock outcrop/brittlebush scrub consists of rock outcrop areas that are interspersed with vegetation that is characteristic of the brittlebush scrub community within the project site. Rock outcrop/brittlebush scrub comprises 34.46 acres primarily along the ridgelines within the project site.

Ruderal/Brittlebush Scrub

Ruderal/brittlebush scrub is dominated by ruderal, weedy species but exhibit sparse, remnant species associated with the brittlebush scrub community, mainly consisting of brittlebush. Ruderal/brittlebush scrub comprises 1.70 acres, the largest area being in the southern portion of the project site.

Ruderal/California Sagebrush Scrub

Ruderal/California sagebrush scrub is dominated by ruderal, weedy species but exhibit sparse, remnant species associated with the California sagebrush community, including California sagebrush, California buckwheat, and brittlebush, interspersed throughout the community. Ruderal/California sagebrush scrub comprises 0.09 acre in the northwestern portion of the project site.

METHODOLOGY

Surveys for CAGN were conducted by biologists Brian Leatherman, and Adam DeLuna (Permit No. TE-827493-7). Methods employed were in conformance with U.S. Fish and Wildlife Service (USFWS) *Coastal California Gnatcatcher Presence/Absence Survey Guidelines* issued July 28, 1997.[2] Accordingly, six (6) surveys were performed between May 7, 2015 and June 19, 2015. Surveys were conducted no less than one week apart, between 6:00 A.M. and 12:00 P.M., within all portions of the survey area containing potentially suitable habitat. Weather conditions were suitable for surveys, with skies ranging from clear to 100% cloud cover and winds ranging from 0 to 6 miles per hour (mph). Temperatures during surveys ranged between 53 and 95 degrees Fahrenheit.

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[1] *The community accounts for approximately 0.001 acre of the project site.*

[2] *U.S. Fish and Wildlife Service. Department of the Interior. Coastal California Gnatcatcher (Polioptila californica californica): Presence/Absence Survey Guidelines. Unpublished paper. Sacramento, California.*

The permitted field investigators slowly walked along or within the potentially suitable habitat, stopping intermittently to look and listen for CAGN, uttering pishing sounds, and playing a digital copy of recorded CAGN vocalizations. The recording was played for several seconds at each interval, followed by a brief pause to listen for a response. Suitable CAGN habitat within the project site was divided into three survey areas, Areas 1, 2, and 3, as depicted on **Figure 5**, *CAGN Survey Areas 1, 2, and 3*, attached. Surveys were conducted on May 7, 8, 14, 15, 21, 22, 28, and 29; June 4, 5, 11, 12, 19, 24, 2014. Survey details are presented in **Table 1**, *Survey Data*, below.

Table 1
Survey Data

Survey Area	Date	Biologist*	Time (start-end)	Temperature (start/end) °F	Winds (start/end) mph	Cloud Cover (start/end)	Results
Area 1	05/07/2015	AD	0600-1200	58°/69°	0-2/2-4	90%/90%	No CAGN Observed
	05/14/2015	BL	0600-1200	55°/64°	2-4/1-3	80%/100%	No CAGN Observed
	05/21/2015	AD	0615-1200	61°/63°	1-3/1-3	90%/100%	No CAGN Observed
	05/28/2015	BL	0615-1145	58°/81°	4-6/1-2	clear/clear	No CAGN Observed
	06/04/2015	AD	0600-1200	61°/75°	1-3/1-3	100%/90%	No CAGN Observed
	06/19/2015	AD	0530-1130	64°/95°	0-2/1-3	clear/clear	No CAGN Observed
Area 2	05/07/2015	BL	0600-1200	58°/69°	0-2/2-4	90%/90%	No CAGN Observed
	05/14/2015	AD	0600-1200	55°/64°	2-4/0-4	80%/100%	No CAGN Observed
	05/21/2015	BL	0615-1200	61°/63°	1-3/1-3	90%/100%	No CAGN Observed
	05/28/2015	AD	0615-1145	58°/81°	0-2/2-4	50%/clear	No CAGN Observed
	06/11/2015	AD	0600-1200	63°/80°	0-2/1-3	100%/70%	No CAGN Observed
	06/24/2015	BL	0600-1130	68°/91°	0-2/2-4	clear/clear	No CAGN Observed
Area 3	05/08/2015	AD	0600-1200	47°/65°	0-2/0-2	100%/100%	No CAGN Observed
	05/15/2015	BL	0600-1015	53°/57°	2-4/2-4	100%/100%	No CAGN Observed
	05/22/2015	AD	0615-1200	54°/69°	1-3/1-3	100%/90%	No CAGN Observed
	05/29/2015	AD	0600-1145	58°/79°	0-2/0-2	100%/clear	No CAGN Observed
	06/05/2015	AD	0600-1150	60°/72°	0-2/0-4	95%/50%	No CAGN Observed
	06/12/2015	AD	0600-1200	62°/78°	0-2/1-3	100%/clear	No CAGN Observed

**AD = Adam DeLuna, BL = Brian Leatherman*

Source: Leatherman Bioconsulting Inc., 2015

RESULTS

No CAGN were observed within the survey area during the six breeding season surveys conducted. A complete list of avian species observed within the survey area is provided in **Appendix A**, *Avian Compendium*. Sensitive avian species observed during surveys are identified in Appendix A with a denotation (**) identifying them as being listed on the California Department of Fish and Wildlife (CDFW) Special Animals List[1]. The only California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA) listed species observed was the State Endangered willow flycatcher (*Empidonax traillii*).

The willow flycatcher was observed on May 28, 2015 in blue elderberry trees (*Sambucus nigra* spp. *caerulea*) in a drainage at the north end of the survey area. Based on the lack of suitable nesting habitat, the timing of the observation (during peak migration), and the lack of subsequent observations in the area, the bird was considered a migrant by the surveyors (who are permitted to conduct presence/absence surveys for the willow flycatcher).

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.

Should you have any questions regarding the methodology or findings in this report, please contact Ezekiel Cooley (e.cooley@pcrnet.com) at (949) 753-7001.

Sincerely,
PCR SERVICES CORPORATION

Ezekiel Cooley
Senior Biologist

Brian Leatherman
Wildlife Biologist
Permit No. TE-827493-7

Adam DeLuna
Wildlife Biologist
Permit No. TE-827493-7

[1] *California Department of Fish and Wildlife, Natural Diversity Database. July 2015. Special Animals List. Periodic publication. 51 pp.*

Attachments:
Figure 1: Regional Map
Figure 2: Vicinity Map
Figure 3: Plant Communities
Figure 4: Site Photographs
Figure 5: CAGN Survey Areas 1, 2, and 3

Appendix A: Avian Compendium

PCR

0 5 10 Miles

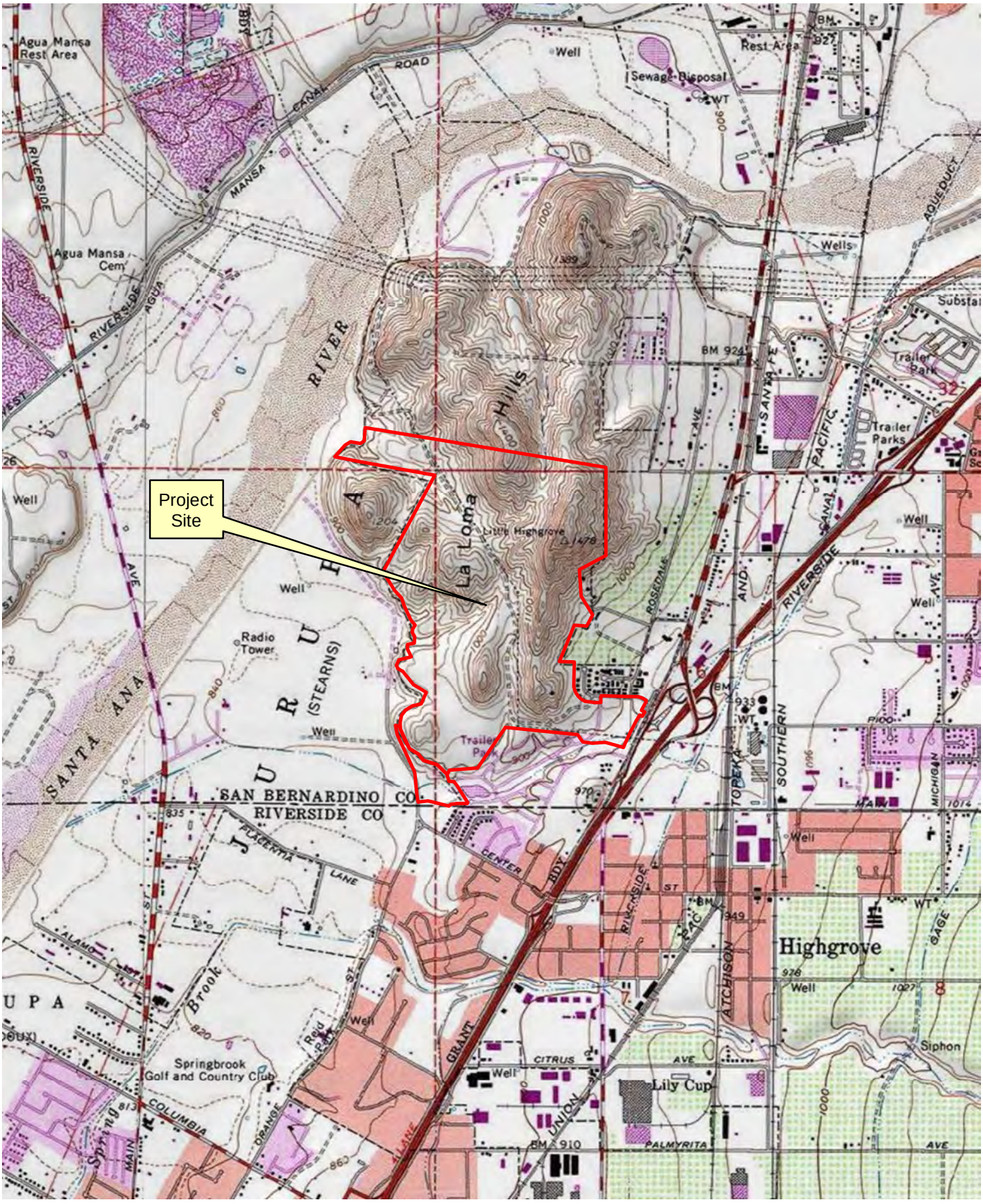
Regional Map

Roquet Ranch

Source: ESRI Street Map, 2009; PCR Services Corporation, 2015.

FIGURE

1



PCR

N

0 2,000 4,000 Feet

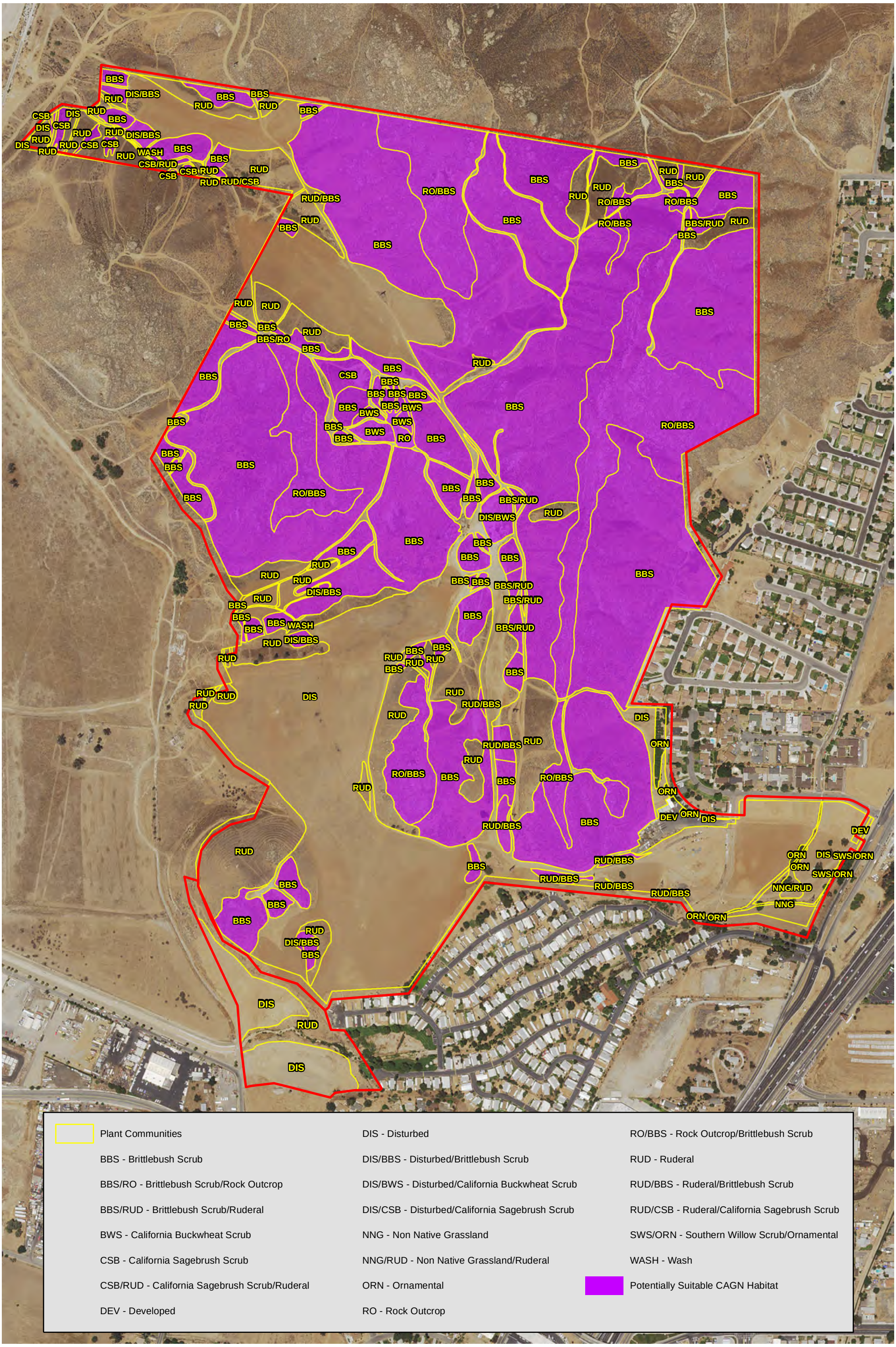
Vicinity Map

Roquet Ranch

Source: USGS Topographic Series (San Bernardino South, CA); PCR Services Corporation, 2015.

FIGURE

2



PCR

Plant Communities

FIGURE 3

Roquet Ranch

Source: Microsoft, 2010 (Aerial); PCR Services Corporation, 2015.

Photograph 1: View of brittlebush scrub within the central portion of the project site.

Photograph 2: View of brittlebush scrub intermixed with ruderal areas within the southern-central portion of the project site.

Photograph 3: View of a disturbed dirt road within the central portion of the project site that is surrounded by brittlebush scrub on either side.

Photograph 4: View of brittlebush scrub within the southern portion of the project site.

PCR

Site Photographs

Roquet Ranch

Source: PCR Services Corporation, 2014.

FIGURE

4

Survey Area 1 (Approximately 61 acres)

Survey Area 2 (Approximately 65 acres)

Survey Area 3 (Approximately 63 acres)

N

0 500 1,000 Feet

PCR

CAGN Survey Areas 1, 2, and 3

Roquet Ranch

Source: Microsoft, 2010 (Aerial); PCR Services Corporation, 2015.

FIGURE

5

Appendix A: Avian Compendium

BIRDS

	SCIENTIFIC NAME	COMMON NAME
	Vultures	**Cathartidae**
	turkey vulture	*Cathartes aura*
	Hawks, Eagles and Kites	**Accipitridae**
**	Cooper's hawk	*Accipiter cooperii*
	Red-shouldered hawk	*Buteo lineatus*
	red-tailed hawk	*Buteo jamaicensis*
	Quail	**Odontophoridae**
	California quail	*Callipepla californica*
	Falcons	**Falconidae**
	American kestrel	*Falco sparverius*
**	Peregrine falcon	*Falco peregrinus*
	Pigeons and Doves	**Columbidae**
*	rock pigeon	*Columba livia*
	White-winged dove	*Zenaida asiatica*
	mourning dove	*Zenaida macroura*
	Owls	**Strigidae**
	Great-horned owl	*Bubo virginianus*
	Cuckoos and Roadrunners	**Cuculidae**
	greater roadrunner	*Geococcyx californianus*
	Swifts	**Apodidae**
	white-throated swift	*Aeronautes saxatalis*
	Hummingbirds	**Trochilidae**
	Anna's hummingbird	*Calypte anna*
**	Costa's hummingbird	*Calypte costae*
**	Allen's hummingbird	*Selasphorus sasin*
	Tyrant Flycatchers	**Tyrannidae**
	western wood-pewee	*Contopus sordidulus*
**	willow flycatcher	*Empidonax traillii*
	black phoebe	*Sayornis nigricans*
	Say's phoebe	*Sayornis saya*
	ash-throated flycatcher	*Myiarchus cinerascens*
	Cassin's kingbird	*Tyrannus vociferans*
	western kingbird	*Tyrannus verticalis*
	Vireos	**Vireonidae**
	warbling vireo	*Vireo gilvus*
	Jays and Crows	**Corvidae**
	common raven	*Corvus corax*
	Swallows	**Hirundinidae**
	northern rough-winged swallow	*Stelgidopteryx serripennis*
	cliff swallow	*Petrochelidon pyrrhonota*
	barn swallow	*Hirundo rustica*
	bank swallow	*Riparia riparia*
	Bushtits	**Aegithalidae**

*=Non-native/Invasive
**= Species on the California Department of Fish and Wildlife's special animal list

Appendix A: Avian Compendium

	bushtit	*Psaltriparus minimus*
Wrens		**Troglodytidae**
	rock wren	*Salpinctes obsoletus*
	Bewick's wren	*Thryomanes bewickii*
Wrentits		**Timaliidae**
	wrentit	*Chamaea fasciata*
Mockingbirds and Thrashers		**Mimidae**
	northern mockingbird	*Mimus polyglottos*
	California thrasher	*Toxostoma redivivum*
Starlings		**Sturnidae**
*	European starling	*Sturnus vulgaris*
Silky Flycatchers		**Ptilogonatidae**
	phainopepla	*Phainopepla nitens*
Wood Warblers		**Parulidae**
**	yellow warbler	*Dendroica petechia*
	Townsend's warbler	*Dendroica townsendi*
	Wilson's warbler	*Wilsonia pusilla*
Towhees and Sparrows		**Emberizidae**
	California towhee	*Pipilo crissalis*
**	rufous-crowned sparrow	*Aimophila ruficeps*
**	sage sparrow	*Amphispiza belli*
Blackbirds and Orioles		**Icteridae**
	western meadowlark	*Sturnella neglecta*
	Brewer's blackbird	*Euphagus cyanocephalus*
	hooded oriole	*Icterus cucullatus*
	Bullock's oriole	*Icterus bullockii*
Finches		**Fringillidae**
	house finch	*Carpodacus mexicanus*
	lesser goldfinch	*Carduelis psaltria*
**	Lawrence's goldfinch	*Carduelis lawrencei*

*=Non-native/Invasive
**= Species on the California Department of Fish and Wildlife's special animal list