



Rio Rockwell Residential Development Project

Appendix B

Biological Resource Assessment

Rio Rockwell Site

Biological Resource Assessment for the Rio Rockwell Project

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Appendix B	Special Status Wildlife Species Potential Occurrence Determination
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1.0 Introduction

1.1 Background and Purpose

This report presents the findings of a Biological Resource Assessment (BRA) conducted by Carlson Strategic Land Solutions (SLS) for the 11.54-acre proposed Rio Rockwell residential development project located within the City of Oceanside (City). This BRA also includes information on the 6.30-acre off-site Rancho Del Oro site that the Project Applicant is proposing to dedicate into the Oceanside Subarea Habitat Conservation for preservation for the impacts on the Rio Rockwell site. No impacts will occur at the Rancho Del Oro site rather, the Rancho Del Oro site will be set aside as a conservation area and included as a Hardline Preserve area under the Multiple Habitat Conservation Plan and the Oceanside Subarea Habitat Conservation Plan/Natural Communities Conservation Plan (Subarea Plan). It should be noted the MHCP is a comprehensive, multiple jurisdictional planning program designed to create, manage, and monitor an ecosystem preserve in northwestern San Diego County. The City of Oceanside implements the MHCP policies within the Subarea Plan to guide preservation and conservation within the City. 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 is requesting from the City of Oceanside 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, and jurisdictional waters and wetlands delineation was conducted by Carlson SLS Biologists on the Rio Rockwell site. A general biological survey, vegetation mapping and focused coastal California gnatcatcher (*Poliioptila californica californica*) survey was conducted by Carlson SLS Biologists on the Rancho Del Oro site. The information sources used in preparation of this BRA are provided in Section 9.0, *References*.

1.3 Project Location

1.3.1 Rio Rockwell Site

The approximately 12-acre Rio Rockwell site is located in the City of Oceanside, San Diego County California on the U.S Geological Survey (USGS) Map San Luis Rey topographic map, Section 9, Township 11 South, Range 4 West. The site is located west of Frazee Road and north of Old Grove Road (**Figures 1 and 2**). The Assessor's Parcel Number (APN) for the site includes 158-101-28 and the southern portion of 158-103-15. The site is located within the boundaries of the Subarea Plan (**Figure 3**).

1.3.2 Rancho Del Oro Site

The approximately 6-acre Rancho Del Oro site is located in the City of Oceanside, San Diego County California on the USGS 7.5-Minute San Luis Rey topographic map, Section 17, Township

11 South, Range 4 West. The site is located west of Rancho Del Oro Drive and south of Highway 76 (see **Figures 1 and 4**). The site is located on the north eastern portion of APN 160-020-49. The site is located within the boundaries of Subarea Plan (**Figure 5**).

1.4 Existing Conditions

1.4.1 Rio Rockwell Site Characteristics

The approximately 12-acre Rio Rockwell site consists primarily of ruderal/disturbed habitat with small patches of sandbar willow thicket and southern cottonwood/willow riparian forest vegetation types. The site supports one drainage feature (Feature 1) located along the western extent of the site and consists of a riprap lined drainage outlet.

Immediate surrounding land uses include residential development to the south, west and east. The San Luis Rey River is located off-site, but immediately adjacent to the site to the north.

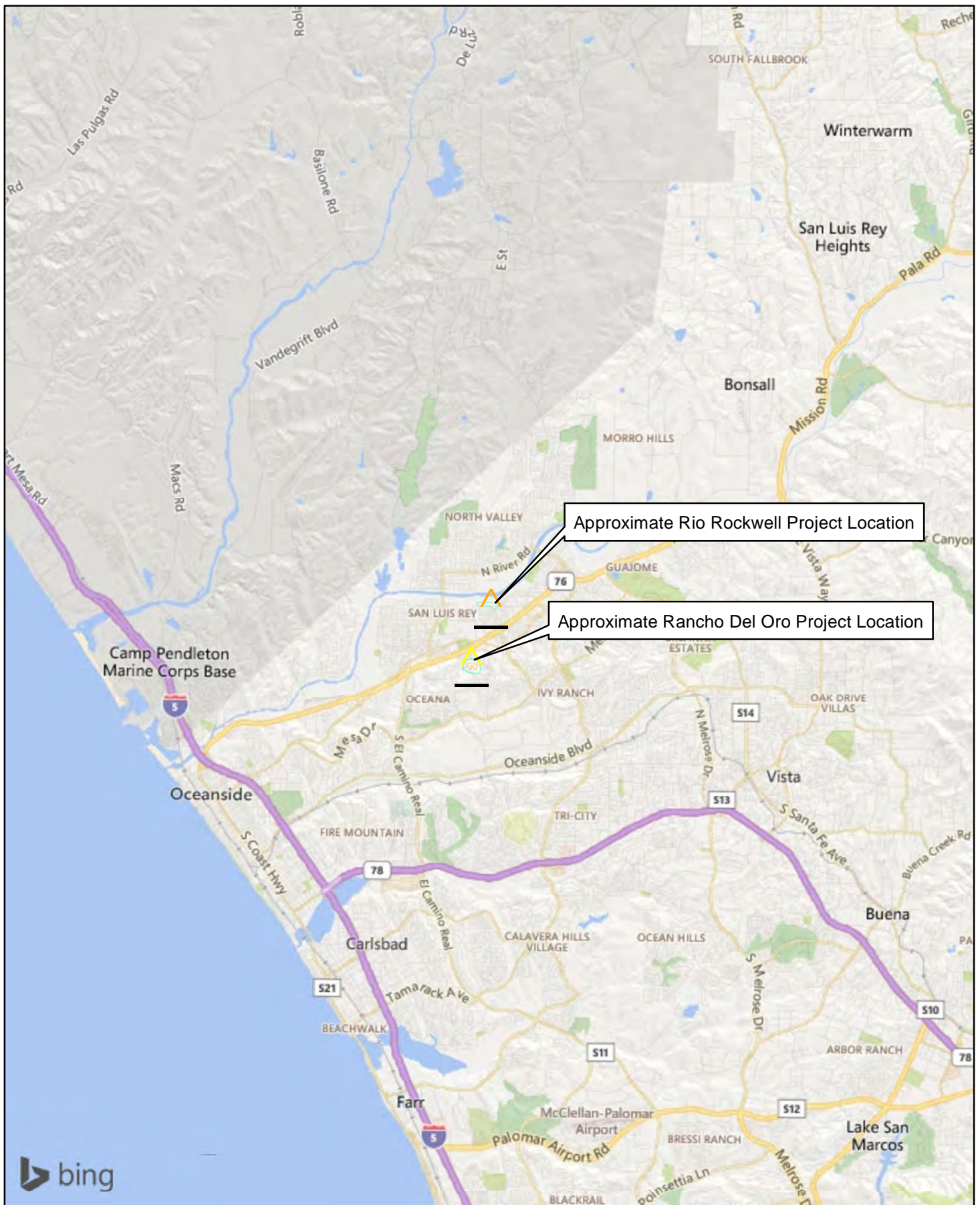
1.4.2 Rancho Del Oro Site Characteristics

The approximately 6-acre Rancho Del Oro site consists primarily of coastal sage scrub and non-native grassland vegetation types. A small area of the site (>1 acre) was found to support ornamental vegetation. Topography of the site consists of moderate to steep northeast-facing and southwest facing hills.

Immediate surrounding land uses include residential development immediately to the northwest and open space areas to the northeast, south and southwest. Several additional residential areas are located short distances from the site.

1.5 Scope of Study

The scope of this BRA encompasses descriptions of both sites, methods of study, and existing site conditions including vegetation communities and the potential for sensitive biological resources. Since the Rancho Del Oro site will not be impacted by the proposed project, the evaluation of impacts to sensitive biological resources is limited to those potentially resulting from the proposed development at the Rio Rockwell site. Impacts to the Subarea Hardline Preserve area at the Rio Rockwell site, are reduced to no impact with the inclusion of the Rancho Del Oro site into the City's mapping of the Subarea Plan Hardline Preserve area (**Figure 5**). Further, avoidance, minimization, and/or mitigation measures are included within this BRA to reduce any potentially significant impacts to sensitive species.



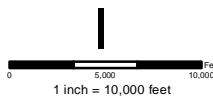
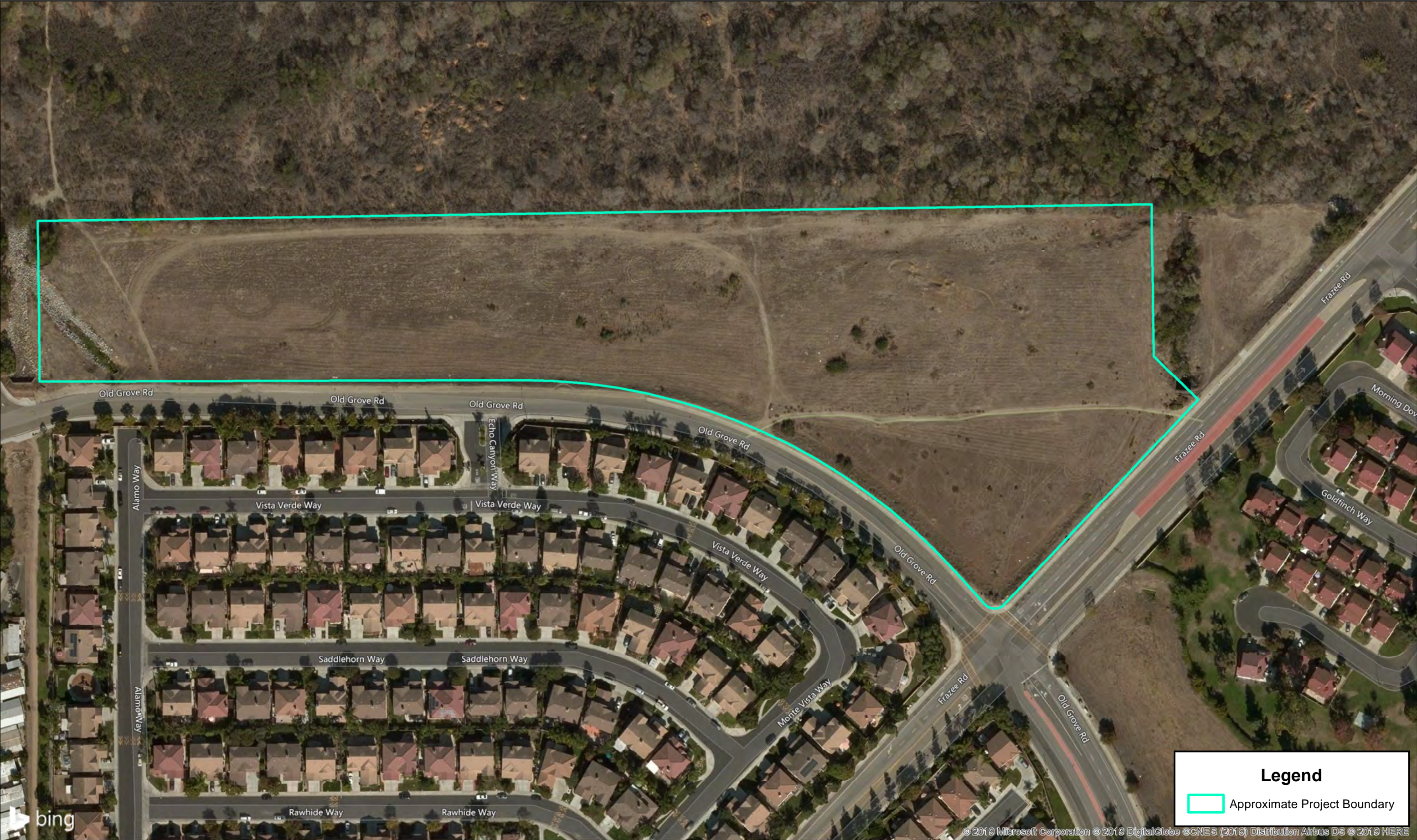
<p>Prepared By: Carlson SLS</p> <p>Map Created: 01/03/2019</p>		<p>Data Source: Bing Maps</p>	<p>Rio Rockwell and Rancho Del Oro Project Regional Location Map</p>
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FIGURE 1



<p>Prepared By: Carlson SLS</p> <p>Map Created: 07/21/2017</p>	<p>0 125 250 500 Feet</p> <p>1 inch = 125 feet</p>	<p>Data Source: Bing Maps</p>	<p>Rio Rockwell and Rancho Del Oro Project Rio Rockwell Project Vicinity Map</p>
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FIGURE 2



Prepared by:
Carlson SLS

Source: City of Oceanside Habitat Conservation
Plan/Natural Community Conservation Plan
Figure 4-1 (2010)

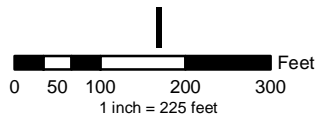
Rio Rockwell and Rancho Del Oro Project
Subarea Plan Map and the Project Site

Figure 3



GIS Prepared By:
Carlson SLS

Created: October 03, 2017



Data Source: Bing Maps
Field Visit 10/04/17
SANDAG GIS

Rio Rockwell and Rancho Del Oro Project
Rancho Del Oro Project Vicinity Map

FIGURE 4



Prepared by:
Carlson SLS

Source: City of Oceanside Habitat Conservation
Plan/Natural Community Conservation Plan
Figure 4-1 (2010)

Rancho Del Oro Project
Subarea Plan Map and the Project Site

Figure 5

2.0 Project Description

2.1 Project Description

The Rio Rockwell project is a proposed residential development on approximately 11.54 acres. The northern boundary of the Rio Rockwell project site is adjacent to the Mitigation Lands as specified in the Restrictive Covenant (DOC# 2014-0419421). Of the 11.54 acres, approximately 6-acres occurs within the Subarea Hardline Preserve area per the recorded Restrictive Covenant for the San Luis Rey. However, the approximately 6-acres that occur within the Subarea Hardline Preserve area is designated as disturbed habitat in the Subarea Plan vegetation mapping. Currently, this area consists of primarily ruderal vegetation with small patches of sandbar willow and southern cottonwood and willow riparian forest found along the northern Rio Rockwell site boundary. Further, the Restrictive Covenant includes language within Covenants, Terms, Conditions, and Restrictions 5 (e) which states:

Notwithstanding anything set forth herein to the contrary, nothing in this Restrictive Covenant is intended nor shall be applied to in any way limit Declarant from (1) constructing, placing, installing, and/or erecting any improvements upon the portions of the Project not constituting the Restricted Property, (2) installing and/or maintaining the subsurface infrastructure improvements, utility lines, landscaping (including irrigation and runoff), landscape mitigation, and/or similar nonstructural improvements within the Restricted Property, and/or (3) developing adjoining property for any purposes, except as limited by any local, state or federal permit requirements for such development and provided that for all of the above clauses (1), (2), and (3) neither such activity nor any effect resulting from such activity amounts to a use of the Restricted Property, or has an impact upon the Restricted Property, that is prohibited by Section 4 above.

The remainder of the site will remain as natural open space. The open space area averages approximately 100-feet along the length of the Rio Rockwell northern site boundary, providing a buffer between the adjacent riparian habitat associated with the San Luis Rey River and the proposed residential development. This area is proposed to be planted with a riparian vegetation along the northern most boundary transitioning to a cactus scrub habitat closer to the proposed residential development. Two access points to the development will occur from Old Grove Road. Water, sewer, electric, telephone and gas service mains will be extended onto the site from existing utilities (**Figure 6**).

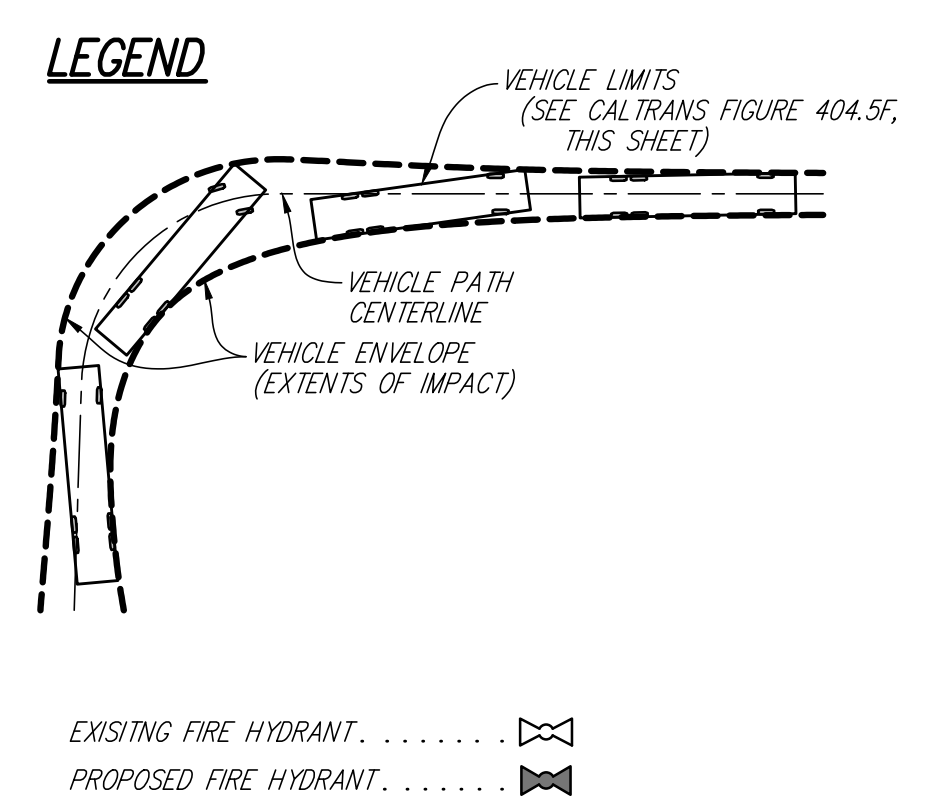
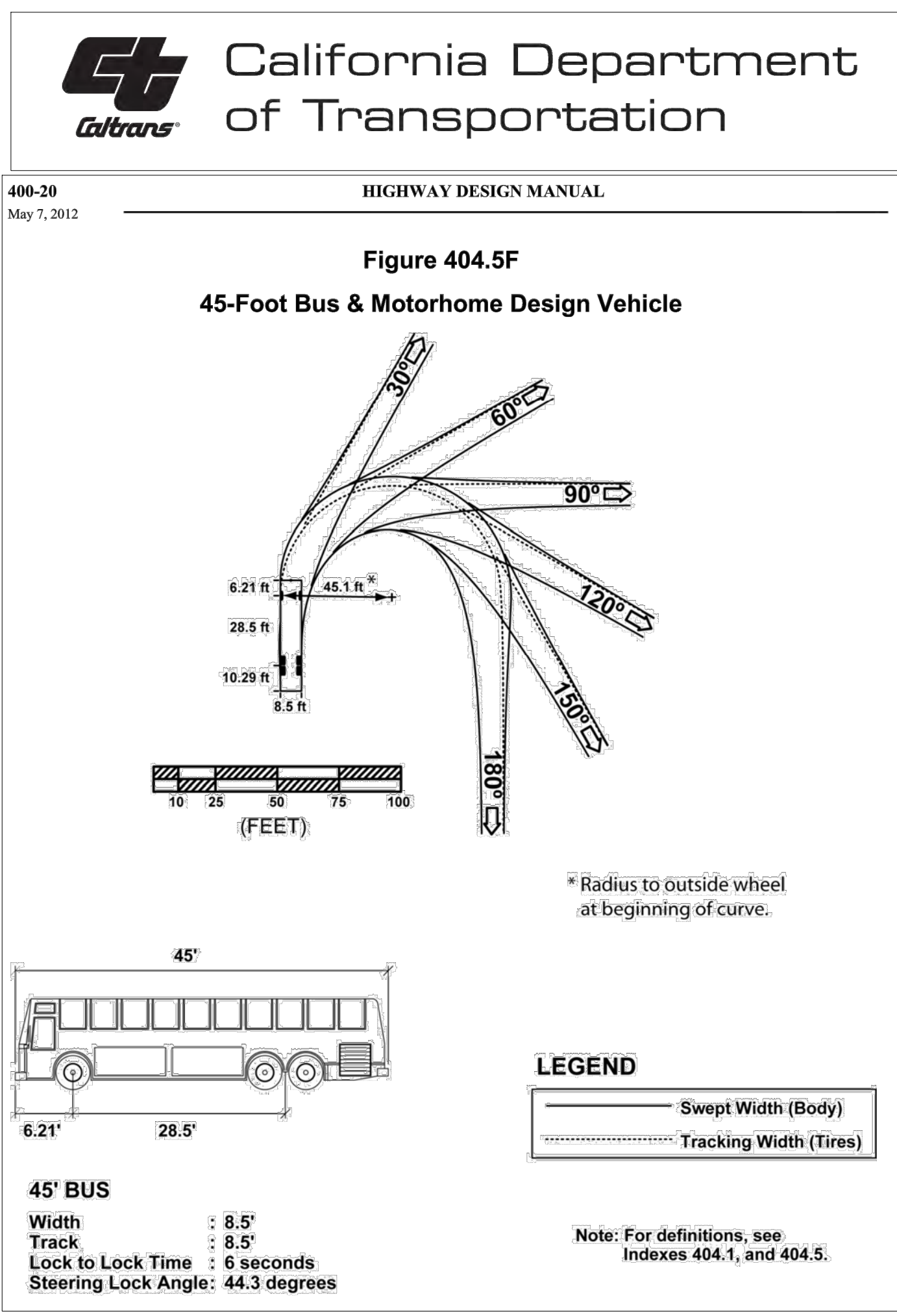
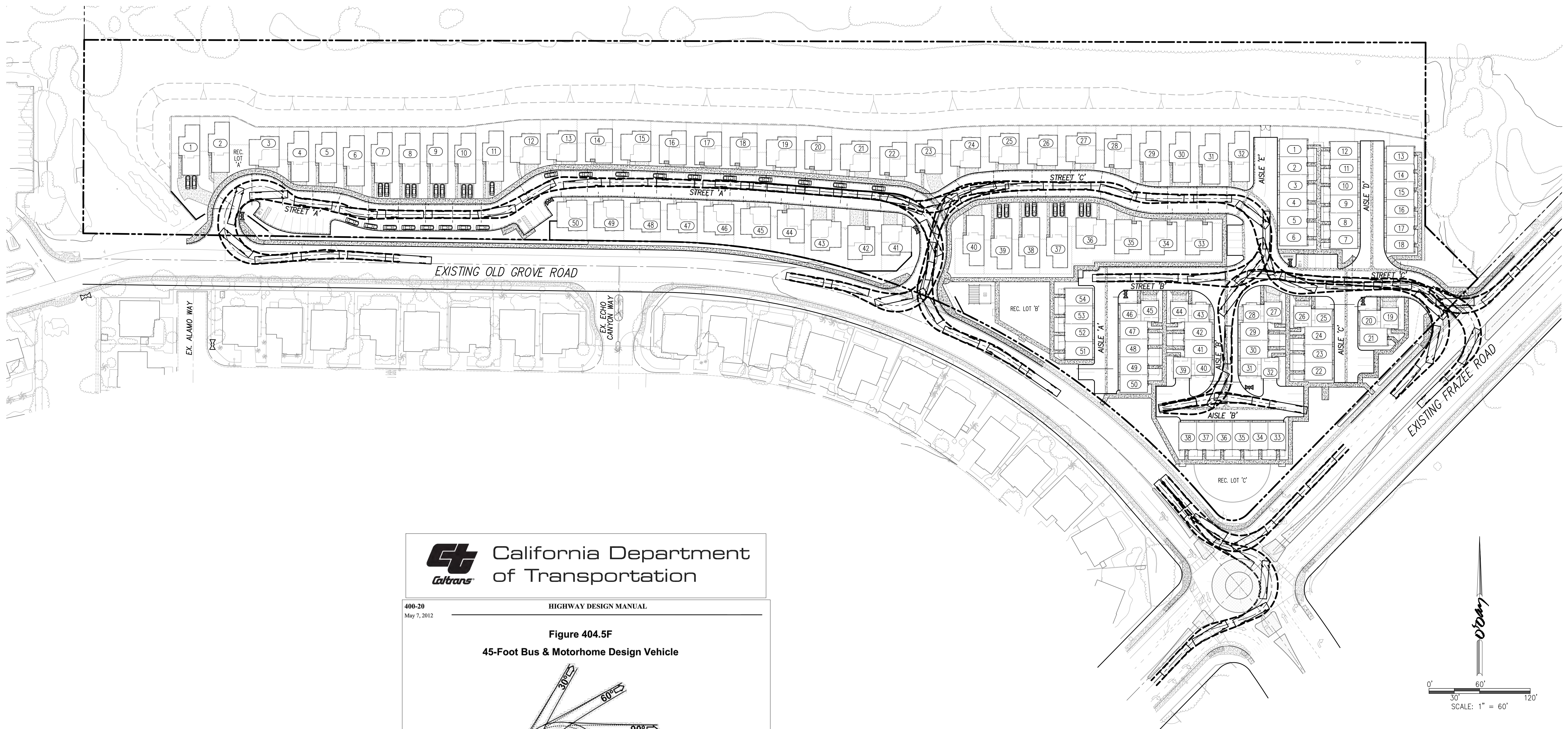
The Rancho Del Oro site is owned by the City of Oceanside and will remain in the City's ownership. The Project proposes to offset impacts to the Subarea Hardline Preserve area at the Rio Rockwell site with the inclusion and incorporation of the Rancho Del Oro site within the City's mapping of the Subarea hardline (**Figure 5**). The Rancho Del Oro site contains superior coastal California sage scrub habitat with diversity of plant species, along with occupation of the federally endangered coastal California gnatcatcher (CAGN). Furthermore, the Rancho Del Oro site contains large ornamental trees and open grasslands providing nesting and foraging habitat for avian species.

2.2 Project Avoidance

The 11.54-acre Rio Rockwell site proposes to maintain an open space buffer averaging 100 feet wide along the length of the northern edge of the Project site, and effectively the edge of the riparian habitat associated with the San Luis Rey River (River). This open space buffer will ensure avoidance of direct and indirect impacts to the southern cottonwood and willow riparian forest biological resources occurring offsite within the riparian habitat associated with the San Luis Rey River and the onsite southern cottonwood and willow riparian forest. Currently, the proposed open space buffer area consists of predominately ruderal species with small patches of sandbar willow. The open space buffer will be planted with riparian species (Sandbar Willow (*Salix exigua* var. *hindsiana*), Mulefat (*Bacharris salifolia*), Elderberry (*Sambucus nigra*)) adjacent to the River and transition to a traditional upland plant palette closer to the proposed residential development (cactus scrub/coastal sage scrub). Planting this open space buffer will also provide consistency under the Subarea Plan, which states the conservation and buffer requirements along the San Luis Rey River require “a minimum 100-foot biological buffer shall be established for upland habitats, beginning at the outer edge of riparian vegetation.” Additionally, avoidance of this area will avoid potential impacts to nesting least Bell’s vireo, if present, USFWS designated critical habitat for the least Bell’s vireo, as well as indirect impacts to biological resources potentially occurring in the River.

Furthermore, the incorporation of the Rancho Del Oro into the City’s mapping of the Hardline Preserve provides superior biological value compared to the vegetation community found within the Hardline Preserve area on the Rio Rockwell site. The impacts to the Rio Rockwell site occur predominately to ruderal species, along with a minimal patch of sandbar willow. The Rancho Del Oro site supports 2.63 acres of high quality coastal sage scrub habitat (which is considered sensitive by the California Department of Fish and Wildlife (CDFW) and Habitat Type C under the Subarea Plan. The site has been documented as supporting the federally-threatened coastal California gnatcatcher (Kidd 2018). Although the Rancho Del Oro site is not currently located within a Hardline Preserve, it is located immediately east of the Mission View On-site Preserve. Further, the Rancho Del Oro site is located within a designated Local Gnatcatcher Corridor within Constrained Area I. The Subarea Plan places emphasis on conserving and enhancing a regionally important “stepping stone” for gnatcatcher across the plan area. The most constrained areas for coastal California gnatcatcher movement is considered to be within Oceanside (URS 2007). The mapping and inclusion of this site into the City’s mapping of the Hardline Preserve area would contribute to the regional conservation efforts and movement of the coastal California gnatcatcher.

The proposed project avoids the 0.11 acre of jurisdictional Waters of the State found within an existing riprap lined storm drain feature that occurs along the western edge of the site and drains into the San Luis Rey River.



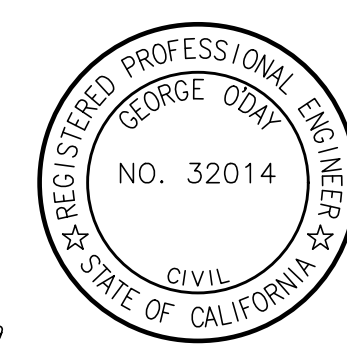
TENTATIVE MAP
EMERGENCY FIRE ACCESS

NOTE!!
ELECTRONIC DATA FILES ARE FOR REFERENCE ONLY AND ARE NOT TO BE USED FOR HORIZONTAL OR VERTICAL SURVEY CONTROL.

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Xrefs: 1841A-WAPC, 1841A-TOPD-VA, 1841A-SITE-CIVL, 1841A-TM-ANNO, 1841A-SITE-CVIL-VehTurn, 1841A-TM-SHET, 1841A-ROAD-Roundabout, 1841A-UTIL, 1841A-SITE-LANDSCAPE, BL-S001-D_Oceanside_2019 1212

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SHEET 10 OF 10

Figure 6

3.0 Regulatory Framework

The following discussion describes the plant and wildlife species present, or potentially present, within each of the sites that have been afforded special recognition by Federal, State, or local resource conservation agencies and organizations. These species have declining or limited population sizes, typically resulting from habitat loss. Also discussed are sensitive habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by either Federal or State resource management agencies, or both, as threatened or endangered, under provisions of the Federal and State Endangered Species Acts (FESA and CESA, respectively).

3.1 Federal Sensitive Resource Protection and Classifications

3.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (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.

3.1.2 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 (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.

3.1.3 Federal Clean Water Act, Section 401

The Clean Water Act (CWA), Section 401 provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator to obtain a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The RWQCB administers the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the USACE that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The USACE implementing regulations are found at 33 CFR 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the United States Environmental Protection Agency in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

3.1.4 Wetlands and Other Waters of the United States

The USACE exerts jurisdiction over waters of the United States, including all waters that are subject to the ebb and flow of the tide; wetlands and other waters such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the above features. The extent of waters of the United States is generally defined as the portion that falls within the limits of the Ordinary High-Water Mark (OHWM). The OHWM is defined as the "line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by USACE as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by USACE (USACE 1987).

3.2 State Sensitive Resource Protection

3.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under the CESA. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA would satisfy the CESA if CDFW determines that the federal incidental take authorization is “consistent” with the CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of a species listed under the CESA only, the project operator would have to apply for a take permit under Section 2081(b).

3.2.2 Protection of Birds

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

3.2.3 California Fish and Game Code

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 CDFW of the proposed project. CDFW reviews the proposed project to determine whether it affects streambed habitats within the project area. 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.

3.2.4 California Fully Protected Species

California fully protected species are described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

3.2.5 Native Plant Protection Act

California's Native Plant Protection Act (NPPA) requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that would otherwise be destroyed. The project operator is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

3.2.6 California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California (CNPS 2012). The list serves as the candidate list for Threatened and Endangered by CDFW. CNPS has developed five categories of rarity, of which Ranks 1A, 1B, and 2 are particularly considered sensitive.

Sensitive species that occur or potentially could occur within each of the project sites 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 CNDDDB; and (3) the project site is within known distribution of a species and contains appropriate habitat.

3.2.7 Sensitive Plant Communities

Sensitive plant communities include those habitat types considered sensitive by resource agencies, namely 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 sensitive bird and reptile species. CDFW maintains a natural plant community list, the List of California Terrestrial Natural Communities. Sensitive natural communities (also referred to by CDFW as 'rare', 'special-status', or 'special concern') are identified on the list by an asterisk and are considered high priority vegetation types (CDFW 2003; CDFW 2000).

3.2.8 Clean Water Act

Under Section 401 of the CWA, the local RWQCB (for this project, the San Diego RWQCB) must certify that actions receiving authorization under Section 404 of the CWA also meet state water quality standards. The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. Compensatory mitigation for impacts to wetlands and/or waters of the state is required.

3.2.9 Porter-Cologne Water Quality Act

The RWQCB also has jurisdiction over waters deemed “isolated” or not subject to Section 404 jurisdiction under the Solid Waste Agency of Northern Cook County v. USACE decision. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the state and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of Porter-Cologne Act.

3.3 Local Sensitive Resource Protection and Classifications

3.3.1 North County Multiple Habitat Conservation Plan (MHCP) and Oceanside’s Subarea Plan (Subarea Plan)

The North County MHCP is a comprehensive, multiple jurisdictional planning program designed to create, manage, and monitor an ecosystem preserve in northwestern San Diego County. It is one of several large, multiple jurisdictional habitat planning efforts in San Diego County, each of which constitutes a “subregional” plan under the State of California’s Natural Community Conservation Planning Act of 1991. The preserve system is intended to protect viable populations of native plant and animal species and their habitats in perpetuity, while accommodating continued economic development and quality of life for residents of North County. The MHCP subregion encompasses the seven incorporated cities of northwestern San Diego County (Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista). These jurisdictions will implement their portions of the MHCP plan through citywide “subarea” plans, which describe the specific policies each city will institute for the MHCP.

The City of Oceanside’s draft Subarea Plan (Subarea Plan) has yet to be adopted by the City or approved by CDFW or USFWS, though the City uses it as guidance when reviewing impacts to biological resources. The City has no specific ordinances that regulate biological resources resulting in reliance on its existing planning regulations, CEQA, and using the draft Subarea Plan as guidance for determining the significance of impacts and mitigation. Mitigation ratios for impacts to habitats reflect the intention to preserve areas within the Focused Planning Area (FPA) as identified for the MHCP in each jurisdiction or within specific areas identified in each Subarea Plan.

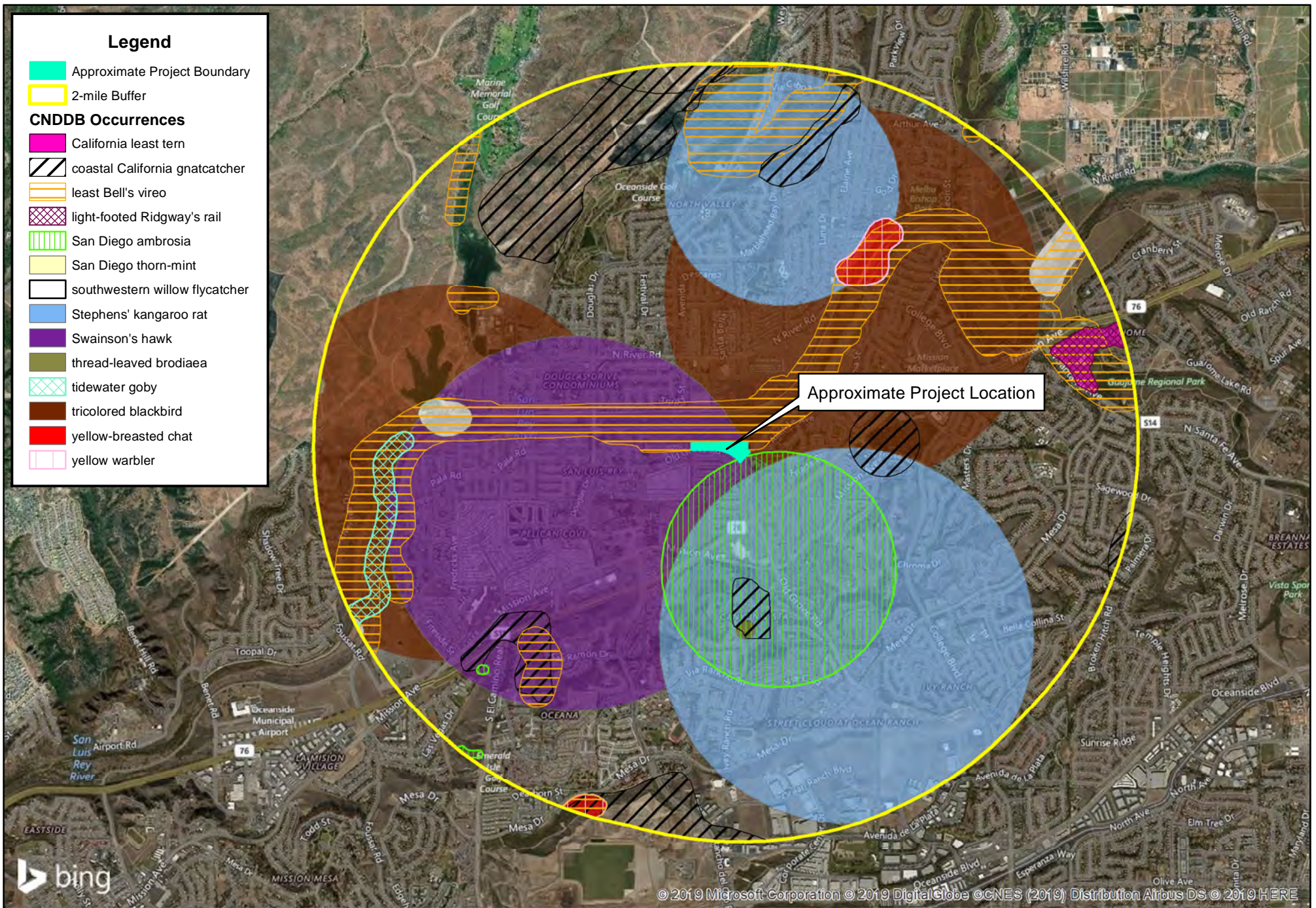
4.0 Methods of Study

4.1 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 focused coastal California gnatcatcher survey, and a jurisdictional waters and wetlands delineation.

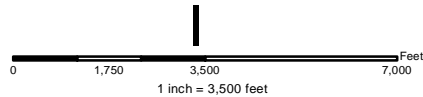
4.2 Literature Review

Assessment of each of the project sites began with a review of relevant literature on the biological resources of the sites and the surrounding vicinities. The California Natural Diversity Database (CNDDB), a CDFW species account database, was reviewed for all pertinent information regarding the localities of known observations of sensitive species and habitats in the vicinity of the sites (CNDDB 2018; **Figures 7 and 8**). The vicinity of the sites included the following USGS topographic quadrangles: San Luis Rey, Morro Hill, Bonsall, San Marcos, Las Pulgas Canyon, Rancho Santa Fe and Encinitas. Federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) (USFWS 2018a), CDFW, and the California Native Plant Society (CNPS) (CNPS 2018) were reviewed in conjunction with anticipated listed species with potential to occur within the project vicinity. Additional data sources reviewed include USFWS critical habitat maps (USFWS 2018b) and United States Department of Agriculture Natural Resources Conservation Service (NRCS) soils mapping (NRCS 2018). In addition, numerous regional flora and fauna field guides were utilized to assist in the identification of species and suitable habitats, in addition to relevant local policies such as the MHCP (SANDAG 2003) and Subarea Plan (City of Oceanside 2010). A list of all relevant references reviewed is included in Section 9.0, *References*.



Prepared By:

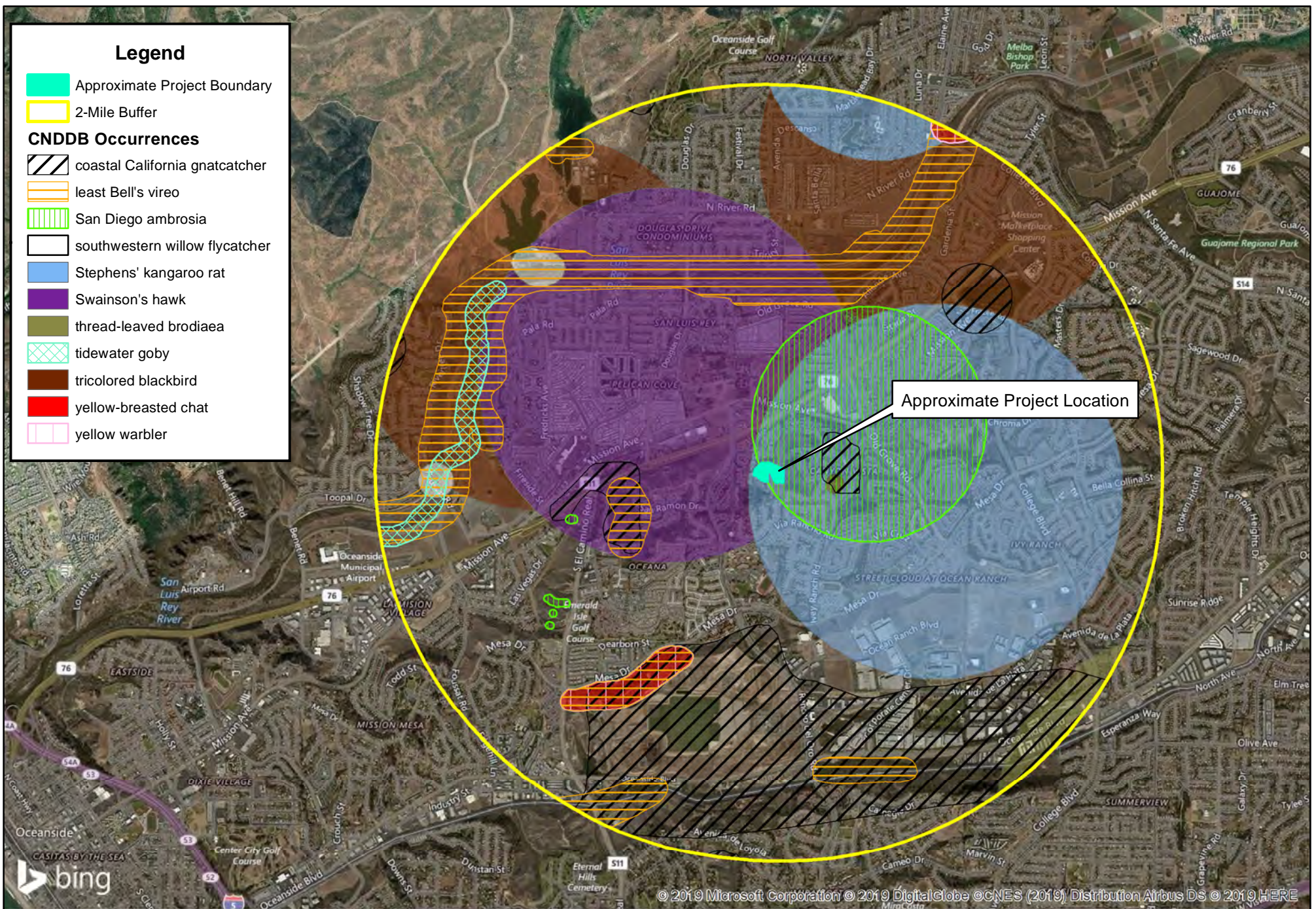
Carlson SLS Map Created: 01/30/2019



Data Source: Bing Maps
CNDDDB (02/2019)
CH (03/2015)

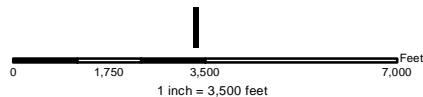
Rio Rockwell and Rancho Del Oro Project
Rio Rockwell CNDDDB Occurrences Results

FIGURE 7



GIS Prepared By:
Carlson SLS

Created: January 31, 2019



Data Source: Bing Maps
CNDDDB (02/2019)

Rio Rockwell and Rancho Del Oro Project
Rancho Del Oro CNDDDB Occurrences Results

FIGURE 8

4.2.1 Plant Community Mapping

Plant communities were mapped in the field directly onto a 200-scale (1" = 200') focusing on dominant plant species. Plant community names, codes, and descriptions follow the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986) as modified in *Draft Vegetation Communities of San Diego County* (Oberbauer, Kelly, and Buegge 2008). The Subarea Plan Habitat Group designation of each vegetation community was also included. After completing the fieldwork, the plant community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages.

4.2.2 Sensitive Habitats

Sensitive habitats are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. Sensitive habitats are often threatened with local extirpation and are therefore considered valuable biological resources. Sensitive Habitats are considered "sensitive" by the California Native Plant Society (CNPS), CDFW, and Subarea Plan if they meet any of the criteria listed below.

- The habitat is recognized and considered sensitive by CDFW, USFWS, and/or special interest groups such as CNPS and Subarea Plan.
- The habitat is under the jurisdiction of the Corps pursuant to Section 404 of the CWA.
- The habitat is under the jurisdiction of CDFW pursuant to Sections 1600 through 1612 of the California Fish and Game Code.
- The habitat is known or believed to be of high priority for inventory in the California Natural Diversity Database (CNDDB).
- The habitat is considered regionally rare.
- The habitat has undergone a large scale reduction due to increased encroachment and development.
- The habitat supports special status plant and/or wildlife species (defined below).
- The habitat functions as an important corridor for wildlife movement.

4.2.3 Sensitive Plant Species

The potential for sensitive plant species was assessed based upon the known occurrence of species in the area as identified from CDFW, USFWS and CNPS databases, and the presence or absence of suitable habitat within each site. Suitable habitat is defined as areas with appropriate vegetation communities, soils and/or topography (elevation at MSL) to support sensitive plant species based on known occurrences in those habitats. The available literature, databases, and existing field conditions were reviewed and compared to identify sensitive plant species that have the potential to occur within the sites (**Appendix A**). During each of the field assessments, any observed special plant species location(s) and extent(s) were recorded in field notes and mapped using GPS.

4.2.4 Critical Habitat

Under the ESA, the federal government is required to designate "critical habitat" for any species it lists under the ESA (**Figures 9 and 10**). Federal agencies are prohibited from authorizing, funding or carrying out actions that "destroy or adversely modify" critical habitats. Section 3 of the ESA defines critical habitat as:

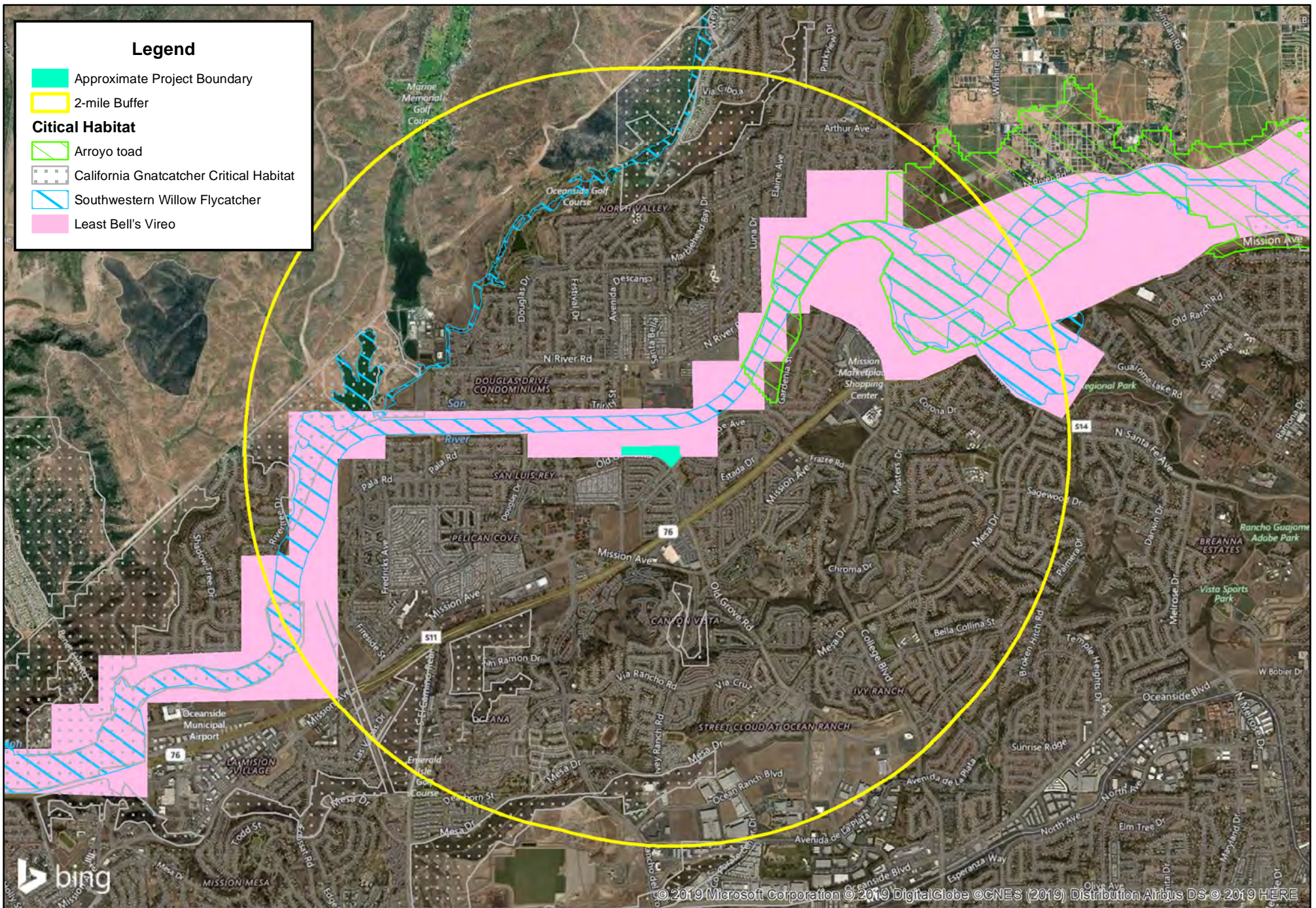
- The specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection.
- The specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

"Conservation" means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the ESA is no longer necessary. Critical habitat receives protection under Section 7(a)(2) of the ESA through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a federal agency. Section 7(a)(2) also requires conferences on federal actions that are likely to result in the destruction or adverse modification of proposed critical habitat.

The USFWS's online service for information regarding Threatened and Endangered Species Final Critical Habitat designation within California was reviewed to determine if the either of the project sites were within any species' designated Critical Habitat. The USFWS regulatory mapping process for the designation of critical habitat is an imprecise, broad-based, mapping exercise of areas that may or may not include constituent elements of the critical habitat designation. Due to this approach in mapping, large areas are designated as critical habitat regardless of the existing habitat, and as a result may include developed areas, such as buildings, roads, hardscape, and other such facilities, as well as natural habitats, which is the case on the Rio Rockwell project site.

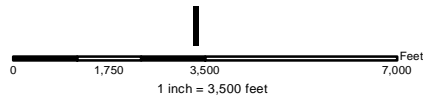
The constituent elements of the critical habitat designation consider the physical and biological features needed for life processes and successful reproduction of the listed species. These included:

- Space for individual and population growth for normal behavior;
- Habitat cover or shelter;
- Food, water, or other nutritional or physiological requirements;
- Sites for breeding and rearing offspring; and
- Habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species.



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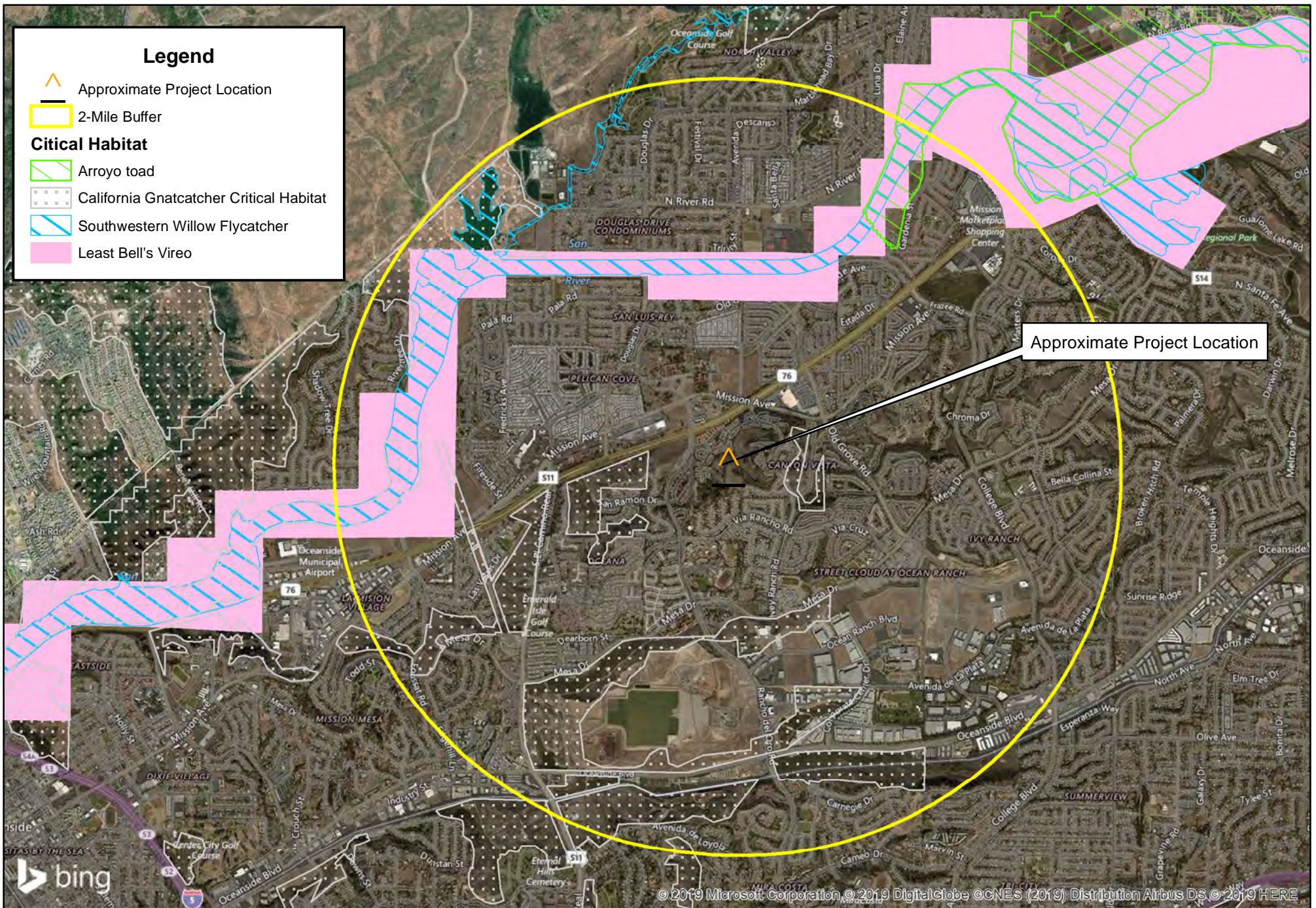
Carlson SLS Map Created: 07/21/2017



Data Source: Bing Maps
CH (03/2015)

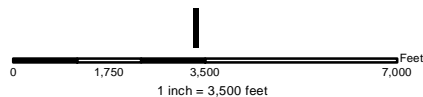
Rio Rockwell and Rancho Del Oro Project
Rio Rockwell Critical Habitat Results

FIGURE 9



GIS Prepared By:
Carlson SLS

Created: October 03, 2017



Data Source: Bing Maps
CH (03/2015)

Rio Rockwell and Rancho Del Oro Project
Rancho Del Oro Critical Habitat Results

FIGURE 10

4.2.5 Sensitive Wildlife Species

The potential for sensitive wildlife species was assessed based upon the known occurrence of species in the area as identified from CDFW and USFWS databases, and the presence or absence of suitable habitat within each site. Suitable habitat is defined as areas with appropriate vegetation communities and/or topography (elevation at MSL) to support sensitive wildlife species based on known occurrences in those habitats and/or CDFW and USFWS documented habitat descriptions for the species. The available literature, databases, and existing field conditions were reviewed and compared to identify sensitive wildlife species that have the potential to occur within the sites (**Appendix B**).

Coastal California Gnatcatcher

The Rancho Del Oro site supports high quality coastal sage scrub habitat, which is considered habitat for the federally-threatened coastal California gnatcatcher. Protocol USFWS breeding season surveys were conducted by Kidd Biological, Inc. in 2018 to determine presence/absence of this species on the Rancho Del Oro site.

Methods employed were in conformance with USFWS coastal California gnatcatcher presence/absence survey guidelines for conducting breeding season surveys within a NCCP area (USFWS 1997). Accordingly, three (3) diurnal surveys were conducted during the breeding season, at least (1) week apart. Surveys were conducted between 7:30 a.m. and 10:30 a.m. within all portions of the site supporting potentially suitable habitat. The permitted biologist slowly walked through the site while visually examining the area for coastal California gnatcatcher and stopping at appropriate intervals to observe bird activity. If no coastal California gnatcatcher were detected within 20-30 minutes at each interval, uttering pishing sounds and/or playing a digital recording of coastal California gnatcatcher vocalizations was conducted at each spot. The audio was played for several seconds at each interval, followed by a 5-minute pause to listen for a response. Intervals were not predetermined but were instead determined organically by the surveyor based on topography, suitability/quality of habitat and bird activity. The complete Focused CAGN Survey is Included within **Appendix C**.

4.2.6 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 was to determine if the change of the existing land use within each site that would have significant impacts on the regional wildlife movement associated with the site and the immediate vicinity. The Subarea Plan was also reviewed to identify the presence of designated habitat linkages and dispersal corridors within the sites (SANDAG 2003, City of Oceanside 2010).

4.3 Field Investigations

A general biological survey, vegetation mapping and a delineation of jurisdictional waters and wetlands was conducted for the Rio Rockwell project site by SLS biologist Brianna Bernard on July 21, 2017 and June 4, 2018. A general biological survey and vegetation mapping was conducted for the Rancho Del Oro preservation site by SLS biologist Brianna Bernard on October 4, 2017. Three focused CAGN Surveys were performed at the Rancho Del Oro site by USFWS permitted biologists Miki A. Kern (Permit number TE56726A-1), assisted by Brianna Bernard. The Focused CAGN Surveys took place on June 11, 2018, June 18, 2018, and June 27, 2018.

During the field visits, the biologist assessed the existing habitat within the sites. The plant communities observed were identified and mapped. The biologist paid special attention to those habitat areas that appeared to provide suitable habitat for special status plant and wildlife species. Aerial photographs and maps were used to assist in the delineation of plant community boundaries.

4.3.1 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). All plant species observed were recorded in field notes.

4.3.2 General Wildlife Inventory

All wildlife species observed within each 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. All wildlife species detected were recorded in field notes.

4.4 Jurisdictional Delineation

Due to the presence of jurisdictional features on the Rio Rockwell site, a jurisdictional delineation to denote the limits of the features was conducted by SLS biologist Brianna Bernard on June 4, 2018. 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), "waters of the State" and/or wetlands under the jurisdiction of the Regional Water Quality Control Board (RWQCB), and/or streambed and associated riparian habitat under the jurisdiction of CDFW. All areas were delineated using the protocol stipulated by CDFW under Section 1600-1607 of the California Fish and Wildlife Code and by the USACE under Section 404 of the Clean Water Act (CWA). Any wetlands were delineated using the procedures stipulated in the USACE Wetland Delineation Manual (Environmental Laboratory 1987) and Arid West Supplement (USACE 2008a and 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 Ordinary High-Water Mark (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 each of the denoted elements 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 any identified jurisdictional wetlands, waters, and streambed was completed. The documentation includes 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.

5.0 Results

5.1 Critical Habitat and CNDDDB Occurrences

5.1.1 Rio Rockwell Site

The northern boundary of the site (approximately 9.56 acres) is located within U.S. Fish and Wildlife Service (USFWS) designated critical habitat for the federally-threatened least Bell's vireo ([LBV] *Pusilus vireo bellii*) (USFWS 1994). Furthermore, USFWS critical habitat for arroyo toad (*Bufo californicus*), coastal California gnatcatcher, and southwestern willow flycatcher (*Empidonax traillii extimus*) are located within a two-mile radius of the site (**Figure 9**).

The USFWS regulatory mapping process for the designation of critical habitat is an imprecise, broad-based, mapping exercise of areas that may or may not include constituent elements of the critical habitat designation, which in the case of the LBV is riparian habitat. Due to this approach in mapping, large areas are designated as critical habitat regardless of the existing habitat, and as a result may include ruderal and disturbed areas, as well as natural habitats, which is the case on the Rio Rockwell site. The Primary Constituent Elements (PCE's) defined for the LBV include riparian woodland vegetation that generally contains both canopy and shrub layers and diverse riparian woodlands along watercourses, specifically cottonwood-willow woodlands/forests, oak woodlands, and mulefat scrub (USFWS 1994). Additional constituent elements include presence of dense cover and dense stratified canopy for foraging. Of the 9.56 acres of designated LBV critical habitat occurring onsite, only 1.16 acres consist of riparian habitat. Of the 1.16 acres of riparian habitat, a total of 0.40 acres of Southern Cottonwood and Willow Riparian Forest is suitable habitat fulfilling the constituent element for LBV. The remaining 0.76 acres of willow thicket and 8.40 acres of ruderal and disturbed plant communities do not meet the constituent element for LBV.

5.1.2 Rancho Del Oro Site

The Rancho Del Oro site is not located within USFWS critical habitat for federally threatened and endangered species. The closest USFWS critical habitat is located approximately 0.30 miles east of the site for the coastal California gnatcatcher (**Figure 10**).

5.2 Subarea Plan

5.2.1 Rio Rockwell Site

The site is located within the boundaries of the Subarea Plan. The northern portion of the site, approximately 6-acres, falls within a Hardline Preserve Area. The Subarea Plan indicates this area is intended for permanent preservation. Within Section 5 (page 5-18) of the Subarea Plan, the conservation and buffer requirements along the San Luis Rey River require "a minimum 100-foot biological buffer shall be established for upland habitats, beginning at the outer edge of riparian

vegetation.” The site is not located within any pre-approved or off-site mitigation zones, coastal zones, wildlife corridor planning zones (regional or coastal California gnatcatcher), or coastal California gnatcatcher priority conservation areas under the Subarea Plan (**Figure 3**).

5.2.2 Rancho Del Oro Site

The site is located within the boundaries of Subarea Plan. The site is not located within any hardline or soft line Preserve Area. However, the site is located directly to the west of the Mission View On-site Preserve. Furthermore, the site is located within a designated Local Gnatcatcher Corridor within Constrained Area I. The site is not located within any pre-approved or off-site mitigation zones, regional wildlife planning zones or priority restoration areas under the Subarea Plan (**Figure 5**).

5.3 Plant Communities

Descriptions of each of the plant communities found within the Rio Rockwell and Rancho Del Oro sites with MCV codes are provided below, and locations of each of the plant communities are shown in **Figures 11** and **12**. **Tables 1** and **2**, lists each of the plant communities observed, as well as the acreages. Representative photographs of plant communities found are included in **Figures 13** and **14**.

5.3.1 Rio Rockwell Plant Communities

Sandbar Willow Thicket (61209)

A total of 0.76 acre of sandbar willow thicket was mapped within the central portions of the site. On-site, this community is almost completely dominated by sandbar willow (*Salix exigua*) with Fremont’s cottonwood (*Populus fremontii*) saplings sparsely scattered throughout. This thicket was not noted as being a mature riparian plant community in structure and plant diversity. The thicket also contains mustard (*Brassica nigra*) and giant reed (*Arundo donax*).

Southern Cottonwood and Willow Riparian Forest (61330)

A total of 0.40 acre of southern cottonwood and willow riparian forest was mapped along the northern edge of the site. Southern cottonwood willow riparian forest (SCWRF), is dominated by willow species (*Salix* sp.), mulefat (*Baccharis salicifolia* ssp. *salicifolia*), Fremont’s cottonwood, elderberry (*Sambucus* sp.), and western sycamore (*Platanus racemosa*). Portions of SCWRF consists of white alder (*Alnus rhombifolia*), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), and eucalyptus trees (*Eucalyptus* sp.). This community is associated with the San Luis Rey River.

Disturbed Habitat (11300)

The remaining area on the site (10.38 acres) was mapped as disturbed habitat. The disturbed habitat area is associated with past maintenance activities (disked/mowed); and sparsely vegetated by non-native weedy species including Russian thistle (*Salsola tragus*), black mustard, tocalote (*Centaurea melitensis*), giant reed, castor bean, mulefat, tamarisk (*Tamarisk* sp.), red

brome (*Bromus madritensis* ssp. *rubens*), slender oat (*Avena barbata*), and ripgut grass (*Bromus diandrus*). Furthermore, this area consists of bare ground with some debris/trash.

Table 1. Rio Rockwell Plant Communities Observed

Vegetation Community	-Habitat Group ¹	Acreage
Sandbar Willow Thicket (61209)	A	0.76
Southern Cottonwood and Willow Riparian Forest (61330)	A	0.40
Disturbed Habitat (11300)	F	10.38
TOTAL	-	11.54

Notes:

1. Habitat Group A consists of wetland/riparian communities that are subject to the Subarea Plan goal of no net loss in acreage, function, and value.
Habitat Group B consists of rare upland communities, subject to Subarea Plan goal to avoid impact as much as possible and conserve on-site existing habitat areas.
Habitat Group C consists of coastal sage scrub, with a Subarea Plan goal to minimize impacts as much as possible.
Habitat Group D consists of chaparral communities (with the exception of southern maritime chaparral), with a Subarea Plan goal to minimize impacts to these communities within Focused Planning Areas (FPAs).
Habitat Group D consists of annual (nonnative) grasslands, with a Subarea Plan goal to minimize impacts within FPAs as much as possible.
Group F consist of other lands such as disturbed or agricultural, which should be considered for avoidance if active uses are discontinued and these lands may support habitat for plants or wildlife species.

Sources: Holland 1986; Oberbauer et al. 2008; SANDAG 2003; Carlson SLS 2017.

5.3.2 Rancho Del Oro Plant Communities

Diegan Coastal Sage Scrub (32500)

A total of 2.63 acres of Diegan coastal sage scrub (CSS) was mapped throughout the northeastern and southwestern portions of the site. The CSS is dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis*), California brittlebush (*Encelia californica*), and white sage (*Salvia apiana*). Portions of the CSS contain shrubs such as Laurel sumac (*Malosma laurina*), toyon (*Heteromeles arbutifolia*), and coastal prickly pear (*Opuntia littoralis*). The CSS is considered high quality because of its health, species diversity, and plant density.

Disturbed Diegan Coastal Sage Scrub (11300/32500)

A total of 0.05 acres of disturbed CSS habitat was mapped in the southwestern portion of the site. The disturbed CSS includes mainly non-native forbs and grasses but also includes individuals of native vegetation indicative of coastal sage scrub. These species include California buckwheat, California sagebrush, coyote brush, slender oat (*Avena barbata*), rattail fescue (*Vulpia myuros*), and tocalote (*Centaurea melitensis*).

Non-Native Grasslands (42200)

Approximately 2.71 acres of the within the central and southeastern portions of the site is comprised of a non-native grassland habitat association. The non-native grassland habitat is dominated with grass and forb species including rattail fescue, summer mustard (*Hersfeldia incana*), tocalote, Italian thistle (*Carduus pycnocephalus*), slender oat, red brome (*Bromus madritensis subsp. rubens*), tree tobacco (*Nicotiana glauca*), and ripgut brome (*Bromus diandrus*). Areas of non-native grasslands appear to have been maintained through disking or mowing activities for fuel abatement.

Ornamental Habitat (11300)

A total of 0.91 acres of ornamental habitat was mapped within the southwestern and southeastern portions of the site. The ornamental habitat type is dominated by eucalyptus, tree of heaven (*Ailanthus altissima*), lemonade berry (*Rhus integrifolia*), and toyon. Portions of the ornamental habitat type in this area consists of bare ground and trash.

Table 2. Rancho Del Oro Plant Communities Observed

Vegetation Community	Habitat Group¹	Acreage
Diegan Coastal Sage Scrub (32500)	C	2.63
Disturbed Habitat/Diegan Coastal Sage Scrub (11300/32500)	C	0.05
Non-Native Grasslands (42200)	E	2.71
Ornamental Habitat (11300)	F	0.91
TOTAL	-	6.30
<u>Notes:</u> Habitat Group A consists of wetland/riparian communities that are subject to the Subarea Plan goal of no net loss in acreage, function, and value. Habitat Group B consists of rare upland communities, subject to Subarea Plan goal to avoid impact as much as possible and conserve on-site existing habitat areas. Habitat Group C consists of coastal sage scrub, with a Subarea Plan goal to minimize impacts as much as possible. Habitat Group D consists of chaparral communities (with the exception of southern maritime chaparral), with a Subarea Plan goal to minimize impacts to these communities within FPAs. Habitat Group E consists of annual (nonnative) grasslands, with a Subarea Plan goal to minimize impacts within FPAs as much as possible. Group F consist of other lands such as disturbed or agricultural, which should be considered for avoidance if active uses are discontinued and these lands may support habitat for plants or wildlife species.		
<i>Sources: Holland 1986; Oberbauer et al. 2008; SANDAG 2003; Carlson SLS 2017.</i>		

5.4 General Wildlife Inventory

The plant communities discussed above provide habitat for common wildlife species. Observations regarding the wildlife species present were made during the field visits to each of the sites (**Tables 3 and 4**). Sensitive wildlife species occurring or potentially occurring are discussed below in Section 5.7, *Sensitive Wildlife Species*.

Table 3: Wildlife Species Observed on the Rio Rockwell Site

Scientific Name	Common Name
<i>Carpodacus mexicanus</i>	house finch
<i>Corvus brachyrhynchos</i>	American crow
<i>Zenaida macroura</i>	mourning dove
<i>Melospiza crissalis</i>	California towhee
<i>Zonotrichia leuophrys</i>	white crowned sparrow
<i>Calypte anna</i>	Anna's hummingbird
** Indicates a sensitive/listed species. Source: Carlson SLS, 2017	

Table 4: Wildlife Species Observed on the Rancho Del Oro Site

Scientific Name	Common Name
<i>Poliophtila californica californica</i>	coastal California gnatcatcher**
<i>Carpodacus mexicanus</i>	house finch
<i>Corvus brachyrhynchos</i>	American crow
<i>Zenaida macroura</i>	mourning dove
<i>Melospiza crissalis</i>	California towhee
<i>Zonotrichia leuophrys</i>	white crowned sparrow
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Aphelocoma californica</i>	western scrub jay
<i>Calypte anna</i>	Anna's hummingbird
<i>Callipepla californica</i>	California quail
<i>Sayornis nigricans</i>	black phoebe
<i>Corvus corax</i>	common raven
<i>Psaltiriparus minimus</i>	bushtit
<i>Thryomanes bewickii</i>	Bewick's wren
<i>Chamaea fasciata</i>	wrentit
<i>Mimus polyglottos</i>	northern mockingbird
<i>Toxostoma redivivum</i>	California thrasher
<i>Pipilo maculatus</i>	spotted towhee
<i>Spinus psaltria</i>	lesser goldfinch
** Indicates a sensitive/listed species. Source: Carlson SLS, 2017	



FIGURE 11

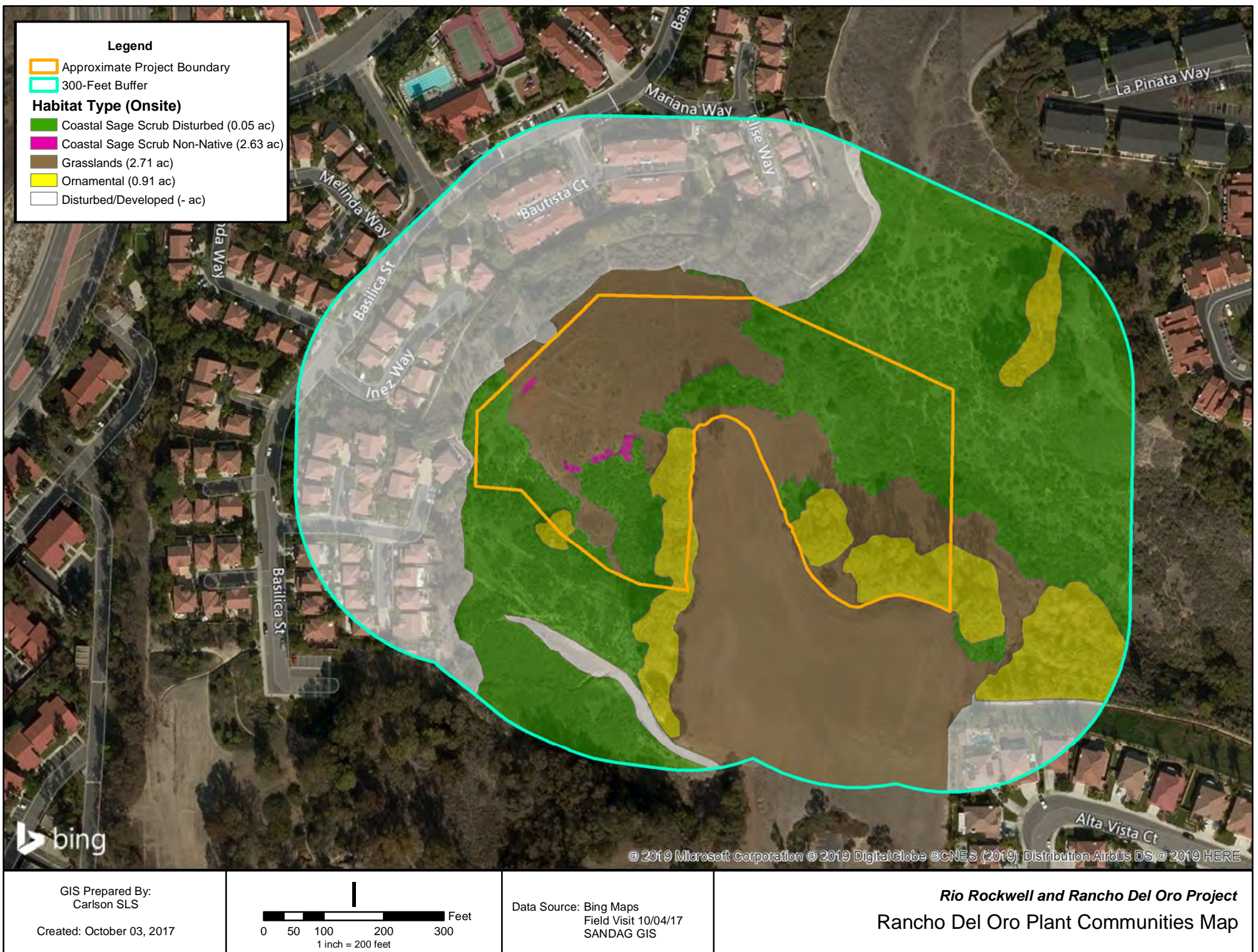


FIGURE 12

Figure 13 Rio Rockwell Photographs



Sandbar Willow Thicket with sparse Cottonwood Trees.



Ruderal/Disturbed habitat type within the Project site.

Figure 13 Rio Rockwell Photographs



Looking east at the Ruderal/Disturbed habitat type within the Project site.



Looking east at the Cottonwood and Willow Riparian Forest drainage area.

Figure 13 Rio Rockwell Photographs



Looking west at the Project site, which is primarily ruderal/disturbed habitat type.



Looking west at the Sandbar Willow Thicket with sparse cottonwood.

Figure 13 Rio Rockwell Photographs



Looking northwest at the Project site, which is primarily ruderal/disturbed habitat type with the San Luis Rey River in the distance.



Looking north at the riprap line drainage area.

Figure 14 Rancho Del Oro Photographs



Looking northwest at non-native grassland and CSS interface.



Looking west from the Project site at the CSS habitat onsite and adjacent to the project site.

Figure 14 Rancho Del Oro Photographs



Looking east at the non-native grasslands, ornamental habitat types within the Project site.



Looking north at the CSS habitat.

Figure 14 Rancho Del Oro Photographs



Looking south at the non-native grasslands and ornamental habitat type.



Some of the *Opuntia* sp. found within the CSS habitat.

Figure 14 Rancho Del Oro Photographs



Looking south at the non-native grasslands habitat type.



Looking north at the plant diversity of the CSS habitat type.

5.5 Sensitive Plant Communities

5.5.1 Rio Rockwell Sensitive Plant Communities

The Rio Rockwell site supports three plant communities including sandbar willow thicket (0.76 acre), southern cottonwood willow riparian forest (0.40 acre) and disturbed habitat (10.38 acres). Southern cottonwood willow riparian forest is considered a sensitive habitat by CDFW. Further, this community has been designated as Habitat Group A under the Subarea Plan which are subject the goal of no net loss in acreage, function and value. Although not considered sensitive by CDFW, sandbar willow thicket also meets the definition of Habitat Group A due to the dominance of riparian plant species. The remaining plant community, disturbed habitat, is not considered sensitive by CDFW. It is designated as Habitat Group F under the Subarea Plan, which is defined as other lands such as disturbed or agricultural, which should be considered for avoidance if active uses are discontinued and these lands may support habitat for plants or wildlife species.

5.5.2 Rancho Del Oro Sensitive Plant Communities

The Rancho Del Oro site supports four plant communities including Diegan coastal sage scrub (2.63 acres), disturbed habitat/Diegan coastal sage scrub (0.05 acre), non-native grassland (2.71 acres) and disturbed habitat (0.91 acre). Diegan coastal sage scrub is considered a sensitive habitat by CDFW. This community has also been designated as Habitat Group C under the Subarea Plan, which consists of coastal sage scrub, with a Subarea Plan goal to minimize impacts as much as possible. Disturbed habitat and non-native grassland are not considered sensitive habitats by CDFW. However, non-native grassland has been designated as Habitat Group E under the Subarea Plan, which consists of annual (nonnative) grasslands, with a Subarea Plan goal to minimize impacts within Focus Planning Areas (FPAs) as much as possible. Disturbed habitat, as noted above, is not considered sensitive by CDFW and is designated as Habitat Group F under the Subarea Plan, which is defined as other lands such as disturbed or agricultural, which should be considered for avoidance if active uses are discontinued and these lands may support habitat for plants or wildlife species.

5.6 Sensitive Plant Species

Sensitive plants include those listed, or candidates for listing, by the USFWS and CDFW; and species considered sensitive by the CNPS (particularly Lists 1A, 1B, and 2). Several sensitive plant species were reported in the vicinity of both sites based on the CNDDDB, within the 9-quadrangle search. The potential for sensitive plant species to occur on each of the sites is discussed further below and as indicated in **Appendix A**.

5.6.1 Sensitive Plant Species with Potential to Occur on the Rio Rockwell Site

Seven sensitive plant species were determined to have the potential to occur on-site due to the presence of suitable habitat. Based on the existing habitat onsite the follow species have potential to occur: San Diego sagewort (*Artemisia palmeri*), southern tarplant (*Centromadia parryi* ssp. *australis*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), golden-rayed pentachaeta (*Pentachaeta aurea* ssp. *aurea*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), Engelmann oak (*Quercus engelmannii*), and Fish's milkwort (*Polygala cornuta* var. *fishiae*). Suitable habitat was considered potentially present based on the literature review and habitat on-site. However, no individuals were observed on-site during the site assessment, which was conducted during the known blooming periods for these species.

5.6.2 Sensitive Plant Species with Potential to Occur on the Rancho Del Oro Site

Twelve federally or state listed plant species were determined to have the potential to occur on-site due to the presence of suitable habitat. Based on the existing habitat onsite the follow species have potential to occur: San Diego ambrosia (*Ambrosia pumila*), golden-rayed pentachaeta, chaparral ragwort (*Senecio aphanactis*), San Diego County viguiera (*Viguiera laciniata*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), sticky dudleya (*Dudleya viscida*), Munz's sage (*Salvia munzii*), seaside cistanthe (*Cistanthe maritima*), Lewis' evening-primrose (*Camissoniopsis lewisii*), Parry's tetracoccus (*Tetracoccus dioicus*), Orcutt's spineflower (*Chorizanthe orcuttiana*), and thread-leaved brodiaea (*Brodiaea filifolia*). Suitable habitat was considered potentially present based on the literature review and habitat on-site. However, no individuals were observed on-site during the site assessment, which was conducted during the known blooming periods for these species.

An additional ten sensitive species were also determined to have the potential to occur on-site due to the presence of suitable habitat. Based on the existing habitat onsite the follow species have potential to occur: San Diego barrel cactus (*Ferocactus viridescens*), Palmer's goldenbush (*Ericameria palmeri* var. *palmeri*), Orcutt's hazardia (*Hazardia orcuttii*), graceful tarplant (*Holocarpha virgata* ssp. *elongata*), decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), white rabbit-tobacco, chaparral ragwort (*Senecio aphanactis*), Coulter's saltbush (*Atriplex coulteri*), Nuttall's scrub oak (*Quercus dumosa*), and California box-thorn (*Lycium californicum*). Preferred habitat was considered potentially present based on the literature review and anticipated habitat on-site. However, no individuals were observed on-site during the site assessment, which was conducted during the known blooming periods for these species.

5.7 Sensitive Wildlife Species

Sensitive wildlife include those species listed as Endangered or Threatened under the FESA or CESA, candidates for listing by the USFWS or CDFW, and California Watch List, Fully Protected

and Species of Special Concern to CDFW. Several sensitive wildlife species were reported in the vicinity of both sites based on the CNDDDB, within the 9-quadrangle search, and known localities documented in the Subarea Plan. In addition, focused surveys were conducted for the coastal California gnatcatcher on the Rancho Del Oro site in accordance with USFWS protocol, and the potential for foraging and nesting migratory bird and raptor species were also analyzed. The potential for sensitive wildlife species to occur on each of the sites is discussed further below (and as indicated in **Appendix B**), including the results of the coastal California gnatcatcher surveys (**Appendix C**).

5.7.1 Sensitive Wildlife Species With Potential to Occur On the Rio Rockwell Site

Six sensitive wildlife species were determined to have the potential to occur on the Rio Rockwell site, including Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), least Bell's vireo (*Vireo bellii pusillus*), yellow warbler (*Setophaga petechia*), and yellow-breasted chat (*Icterus virens*). Additional information on each of these species and their potential to occur on-site is included below.

5.7.1.1 Cooper's hawk

This species is a California Watch List species and a proposed Covered Species under the Subarea Plan. Suitable habitat for this species is considered to be mature forest, open woodlands, wood edges, river groves. Nests in coniferous, deciduous, and mixed woods, typically those with tall trees and with openings or edge habitat nearby. Also found among trees along rivers through open country, and increasingly in suburbs and cities where some tall trees exist for nest sites.

Potentially suitable habitat for this species is present on-site due to the presence of southern cottonwood willow riparian forest. This habitat is associated with the San Luis Rey River and provides potentially suitable roosting sites and nesting opportunities. This species was not observed during the site assessment. The potential for this species to nest on-site is considered low due to the lack of mature tall riparian species on-site. The Subarea Plan documents 18 known localities for this species in the City of Oceanside (City of Oceanside 2010). The nearest documented occurrence of this species from the CNDDDB was in 2003 approximately 3.25 miles to the northeast (**Figure 7**).

5.7.1.2 Northern harrier

This species is designated as a California Species of Special Concern. This species prefers coastal scrub, great basin grassland, marsh and swamp, riparian scrub, valley and foothill grassland and wetlands. Potentially suitable habitat for this species is present on-site due to the presence of southern cottonwood willow riparian forest. This habitat is associated with the San Luis Rey River and provides potentially suitable roosting sites and foraging opportunities. However, the

potential for this species to nest on-site is considered low due to the lack of undisturbed tracts of wetlands and grasslands with low, thick vegetation. This species was not observed during the site assessment. The nearest documented occurrence of this species from the CNDDDB was in 1982 approximately 2.74 miles to the northwest (see **Figure 7**).

5.7.1.3 *White-tailed kite*

This bird species is a California Fully-Protected Species. This species prefers cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetland habitats.

Potentially suitable habitat occurs on-site due to the presence of southern cottonwood willow riparian forest plant communities. This habitat is associated with the San Luis Rey River and provides potentially suitable roosting and nesting sites; and foraging opportunities. However, the potential for this species to nest on-site is considered low due to the lack of mature riparian species. This species was not observed during the site assessment. The nearest documented occurrence of this species from the CNDDDB was in 2005 approximately 2.09 miles to the southeast (see **Figure 7**).

5.7.1.4 *Least Bell's vireo*

This bird species is listed as Federally Endangered, State Endangered, and a proposed Covered Species under the Subarea Plan. Further, the Subarea Plan has designated this species as an Obligate Wetland Species. This species preferred habitats include: riparian forests, riparian scrub, and riparian woodland, usually dominated by willow species. Under the Subarea Plan, obligate wetland species are species for which all life requisites provided in the area are expected to be within open water or wetland vegetation communities, which are subject to the no net loss policy.

Potentially suitable breeding habitat occurs on-site due to the presence of southern cottonwood willow riparian forest plant community. The sandbar willow thicket was determined to have a very low potential of supporting this species due to the lack of mature willows on-site and the adjacency of the San Luis Rey River, which has more suitable habitat. This plant community was found to only support sandbar willow and scattered Fremont's cottonwood saplings. This community doesn't support the structure and maturity necessary to support nesting LBV, nor meet the requirements of constituent elements for the species. Although this species was not observed on-site during the site assessment, this species is known to occur in the project vicinity based on documented occurrences. Further, the site is located within USFWS designated critical habitat for this species (see **Figure 9**) (USFWS 1994). The Subarea Plan documents 293 known localities for this species in the City of Oceanside (City of Oceanside 2010). The nearest

documented occurrence of this species from the CNDDDB was in 2013 immediately adjacent to the site within the San Luis Rey River (see **Figure 7**).

5.7.1.5 Yellow warbler

This bird species is listed as a California Species of Special Concern. This species prefers wet brushy habitat, such as willow and cottonwood thickets.

This species was determined to have a potential to occur within the site based on the presence of riparian habitats. Although this species was not observed on-site during the site assessment, this species is known to occur in the project vicinity based on CNDDDB documented occurrences. The nearest documented occurrence of this species from the CNDDDB was in 2003 approximately 1 mile to the northeast (see **Figure 7**).

5.7.1.6 Yellow-breasted chat

This bird species is listed as a California Species of Special Concern and a proposed Covered Species under the Subarea Plan. Further, the Subarea Plan has designated this species as an Obligate Wetland Species. This species prefers dense riparian thickets of willow, vine tangles, and dense brush associated with streams, swampy grounds, and the borders of small ponds.

This species was determined to have a potential to occur within the site based on the presence of southern cottonwood willow riparian forest. The Subarea Plan documents 53 known localities for this species in the City of Oceanside (City of Oceanside 2010). The nearest documented occurrence of this species from the CNDDDB was in 2003 approximately 1 mile to the northeast (see **Figure 7**).

5.7.2 Sensitive Wildlife Species With Potential to Occur On the Rancho Del Oro Site

Twelve sensitive wildlife species were determined to have the potential to occur on the Rancho Del Oro site. These species include red-diamond rattle snake (*Crotalus ruber*), orange-throated whiptail (*Aspidoscelis hyperythra*), Cooper's hawk, northern harrier, white-tailed kite, coastal California gnatcatcher, southern California rufous-crowned sparrow (*Aimophila ruficeps*), Bell's sage sparrow (*Artemisiospiza belli belli*), Dulzura pocket mouse (*Chaetodipus californicus femoralis*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), Stephens' kangaroo rat (*Dipodomys stephensi*), and San Diego desert woodrat (*Neotoma lepida intermedia*). Below provides additional information on each of these species and their potential to occur on-site.

5.7.2.1 *Red-diamond rattle snake*

This reptile species is listed as a California Species of Special Concern. This species prefers arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, and cultivated areas.

Potentially suitable habitat for this species occurs on-site due to the presence of Diegan coastal sage scrub and grassland communities. Although this species was not observed on-site during the site assessment, this species is known to occur in the vicinity based on CNDDDB documented occurrences.

5.7.2.2 *Orange-throated whiptail*

This reptile species is listed as a California Species of Special Concern and a proposed Covered Species under the Subarea Plan. Suitable habitat for this species includes southern coastal bluff scrub chaparral, maritime succulent scrub, coastal sage scrub, southern maritime chaparral, and coastal sage scrub/chaparral mix vegetation communities.

Orange-throated whiptail was determined to have a potential to occur on-site based on the presence of a Diegan coastal sage scrub communities. No incidental sightings of this species were made during site assessment. The Subarea Plan documents six known localities for this species in the City of Oceanside (City of Oceanside 2010).

5.7.2.3 *Cooper's hawk*

This species is a California Watch List species and a proposed Covered Species under the Subarea Plan.

Potentially suitable foraging and nesting habitat for this species is present on the site. This species was not observed during the site assessment. The Subarea Plan documents 18 known localities for this species in the City of Oceanside (City of Oceanside 2010).

5.7.2.4 *Northern harrier*

This species is designated as a California Species of Special Concern. This species prefers coastal scrub, great basin grassland, marsh and swamp, riparian scrub, valley and foothill grassland and wetlands.

Potentially suitable habitat for this species is present on-site due to the presence of scrub and grassland plant communities. These habitats provide potentially suitable roosting sites and foraging opportunities. However, the potential for this species to nest on-site is considered low due to the lack of undisturbed tracts of wetlands and grasslands with low, thick vegetation. This species was not observed during the site assessment.

5.7.2.5 *White-tailed kite*

This bird species is a California Fully-Protected Species. This species prefers cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetland habitats.

Potentially suitable foraging and nesting habitat occurs on-site due to the presence of large eucalyptus trees and grasslands. This species was not observed during the site assessment.

5.7.2.6 *Coastal California gnatcatcher*

This bird species is designated as a California Species of Special Concern and is listed as Federally Endangered. Further, this species is a proposed Covered Species under the Subarea Plan. This species prefers southern coastal bluff scrub, maritime succulent scrub, coastal sage scrub, and coastal sage scrub/chaparral mix.

Suitable habitat for this species occurs on-site due to the presence of Diegan coastal sage scrub communities. USFWS protocol surveys were conducted for this species by Kidd Biological, Inc in 2018. One pair of coastal California gnatcatcher were detected during each of the surveys. In addition, one individual was detected at the edge of the site during the first surveys. The results are also outlined in a separate survey report attached as **Appendix C**. The Subarea Plan documents 166 known localities for this species in the City of Oceanside (City of Oceanside 2010).

5.7.2.7 *Southern California rufous-crowned sparrow*

This bird species is designated as a California Watch List Species and is proposed as a Covered Species under the Subarea Plan. Suitable habitat for this species includes coastal sage scrub and coastal sage scrub/chaparral mix plant communities. Potentially suitable habitat for this species occurs on-site due to the presence of Diegan coastal sage scrub habitats. This species was not observed during the site assessment. The Subarea Plan documents six known localities for this species in the City of Oceanside (City of Oceanside 2010).

5.7.2.8 *Bell's sage sparrow*

This bird species is designated as a California Watch List Species and is proposed as a Covered Species under the Subarea Plan. Suitable habitat for this species includes coastal sage scrub and coastal sage scrub/chaparral mix plant communities. Potentially suitable habitat for this species occurs on the site due to the presence of Diegan coastal sage scrub habitats. This species was not observed during the site assessment. There are no known localities for this species in the City of Oceanside (City of Oceanside 2010); therefore, potential to occur on-site is considered low.

5.7.2.9 *Dulzura pocket mouse*

This species is as a California Species of Special Concern. This species prefers chaparral, coastal scrub, and valley and foothill grassland habitats. Potentially suitable habitat for this species occurs on-site due to the presence of Diegan coastal sage scrub habitats. This species was not observed during the site assessment.

5.7.2.10 *Northwestern San Diego pocket mouse*

This species is designated as a California Species of Special Concern and a proposed Covered Species under the Subarea Plan. This species prefers all scrub, oak, and grassland vegetation communities without clay soils. Potentially suitable habitat for this species occurs on the site due to the presence of Diegan coastal sage scrub habitats and sandy soils. There are no known localities for this species in the City of Oceanside (City of Oceanside 2010); therefore, potential to occur on-site is considered low.

5.7.2.11 *Stephen's kangaroo rat*

This mammal species is listed as federally endangered, state threatened, and a proposed Covered species under the Subarea Plan. This species prefers open coastal sage scrub and grassland habitats. This species was determined to have a potential to occur within the site based on the presence of scrub and grassland habitats. This species was not observed during the site assessment, nor were any burrows observed. The Subarea Plan documents one known locality for this species in the City of Oceanside (City of Oceanside 2010).

5.7.2.12 *San Diego desert woodrat:*

This species is designated as a California Species of Special Concern. This species prefers coastal scrub and a variety of other habitats with moderate to dense canopies. This species was determined to have a potential to occur on-site based on the presence of scrub habitat. This species was not observed during the site assessment.

5.7.3 Migratory Birds and Raptors

Both sites support potential nesting and foraging habitat for nesting birds, and also potential foraging habitat for birds including raptors. Several species of birds were observed on-site (see **Tables 3 and 4**) and sensitive bird and raptor species were identified by the CNDDB as potentially occurring within the 9-quadrangle search area (see **Appendix B**), including Cooper's hawk, northern harrier, white-tailed kite, least Bell's vireo, yellow warble and yellow breasted chat on the Rio Rockwell site and Cooper's hawk, northern harrier, white-tailed kite, coastal California gnatcatcher (observed), southern California rufous-crowned sparrow and Bells' sage sparrow on the Rancho Del Oro site.

5.8 Wildlife Movement

5.8.1 Overview

Wildlife movement corridors link areas of suitable wildlife 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, separating different populations of a single species. Corridors effectively act as links between these populations.

Each of the sites were evaluated for evidence of a wildlife movement corridor. The following resources were used to determine the potential for the sites to be used as a wildlife corridor:

- information compiled from the literature review, including, aerial photographs, USGS topographic maps, and resource maps for the vicinity;
- field survey; and
- knowledge of desired topography and resource requirements.

5.8.2 Wildlife Movement Within the Rio Rockwell Site

The site supports limited native habitats and is therefore restricted in its potential to support regional wildlife movement. Further, the site is constrained to the south, east and west by residential development which further constrains potential regional wildlife movement through the site. Although the site is immediately adjacent to the San Luis Rey River, which has been designated under the Subarea Plan as providing habitat connection extending from the ocean to the Subarea Plan’s eastern boundary, it’s functionality and connections are degraded due to disturbances (e.g., ACOE flood control measures) (City of Oceanside 2010).

The Subarea Plan does not identify wildlife corridor zones or coastal California gnatcatcher regional or local corridor areas within the site (City of Oceanside 2010) (see **Figure 3**). Further, the site does not support suitable coastal California gnatcatcher habitat.

Although regional movement through this area is likely limited, there is some potential for smaller or “local” movement through the site. Movement on a smaller scale could occur within the site for species that are less restricted in movement pathway requirements or are adapted to urban areas [e.g., raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), and bird species in general). Habitat within the site is dominated by disturbed habitat with smaller patches of native riparian vegetation. As such, it may support some wildlife movement within the site and/or nearby areas for foraging and shelter. The home range and average dispersal distance of many of these species may be entirely contained within the 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 site at all. Occasionally,

individuals expanding their home range or dispersing from their parental range could attempt to move outside of the site, if feasible, based on the surrounding restrictions to movement from development (see above). Bird species may fly over the development to utilize the 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, specifically within the San Luis Rey River and other open space areas to the north.

In summary, the site may support live-in and movement habitat for species on a local scale. Due to development surrounding the site, the site likely provides little to no function to facilitate movement for wildlife species on a regional scale and it is not identified as a regionally important corridor under the Subarea Plan.

5.8.3 Wildlife Movement Within the Rancho Del Oro Site

Due to the lack of connectivity to expansive open space areas in the surrounding area supporting native vegetation, the site does not likely support regional wildlife movement for larger mammals. Further, the presence of development surrounding the site restricts its potential to support regional movement for larger mammals. However, the site likely provides regional movement habitat for many smaller species dependent on scrub habitats (e.g., coastal California gnatcatcher). The site has been identified in the Subarea Plan, Location I, as a Local Corridor for the coastal California gnatcatcher (City of Oceanside 2010), and coastal California gnatcatcher have been documented on the site (Kidd 2018) and vicinity (CNDDDB 2018) (see **Figure 8**).

The Subarea Plan describes Location I (Local Corridor South of Mission Avenue between Rancho Del Oro Road and Mission Gate Road) as the slopes south of Mission Avenue providing coastal California gnatcatcher breeding habitat that may allow movement of birds east and west between El Camino Real and College Boulevard. However, the segment between Rancho Del Oro Road and occupied habitat at the proposed Canyon Vista Estates Project is fragmented by development. There is a narrow connection still remaining to the west at the south end of the Canyon Vista Estates site. Recent development may inhibit movement through this area (City of Oceanside 2010). Preservation of the site will contribute to the assembly of coastal California gnatcatcher habitat assembly and regional movement.

5.9 Soils

The United States Department of Agriculture NRCS lists several soil types (series) for each of the project sites. Please see below for the following soil type, which can be an indicator of the possibility for sensitive wildlife and plant species, such as Delhi Sands Flower Loving Fly. No unique soil types exist on either of the project sites.

5.9.1 Rio Rockwell Site Characteristics

On-site mapped soils include three soil types (NRCS 2018), as shown in **Figure 15**:

- Riverwash (Rm)
- Tujunga sand, 0-5% slopes (TuB)
Visalia sandy loam, 5-9% slopes (VaC)

5.9.2 Rancho Del Oro Site Characteristics

On-site mapped soils include four soil types (NRCS 2018), as shown in **Figure 16**:

- Diablo clay, 9-15% slopes, warm MAAT, MLRA 20 (DaD)
- Las Flores loamy fine sand, 5-9% slopes, eroded (LeC2)
- Las Flores loamy fine sand, 15-30% slopes, eroded (LeE2)

5.10 Jurisdictional Waters and Wetlands

5.10.1 Rio Rockwell Project Site

Within the Rio Rockwell site there is a single feature on-site that is considered jurisdictional Waters of the State and Waters of the United States, pursuant to Section 1600-1603 of the California Fish and Game Code and Section 401 and 404 of the Clean Water Act, respectively.

The feature is located on the western most portion of the site. This feature appears to be part of the storm drain system with an outlet at the southernmost area adjacent to Old Grove Road. The feature is a rip-rap lined drainage facility with Russian thistle and other invasive species, however, water staining was observed on the rip-rap. This feature does not support wetlands or riparian vegetation.

5.10.1.1 Waters of the United States

The term “Waters of the United States” as it applies to the jurisdictional limits under the authority of the USACE under the CWA and applies to the jurisdiction of the RWQCB under the Porter-Cologne Water Quality Act. The NWI maps (USFWS 2019), NHD, USGS 7.5-minute topo map and an aerial image were reviewed to determine the potential presence or absence of jurisdictional streams/drainages, wetlands, and their location within any watersheds associated with the site, and other features that might contribute to federal authority located within watersheds associated with the site. The feature exhibited biological and physical indicators of Waters of the United States through the presence of an OHWM. This feature was not found to support wetlands. The total inventory of Waters of the U.S. is presented in **Table 5** and shown on **Figure 17**. Representative photos of Feature 1 are shown in **Figure 18**.

Table 5: Rio Rockwell Jurisdictional Waters of the United States

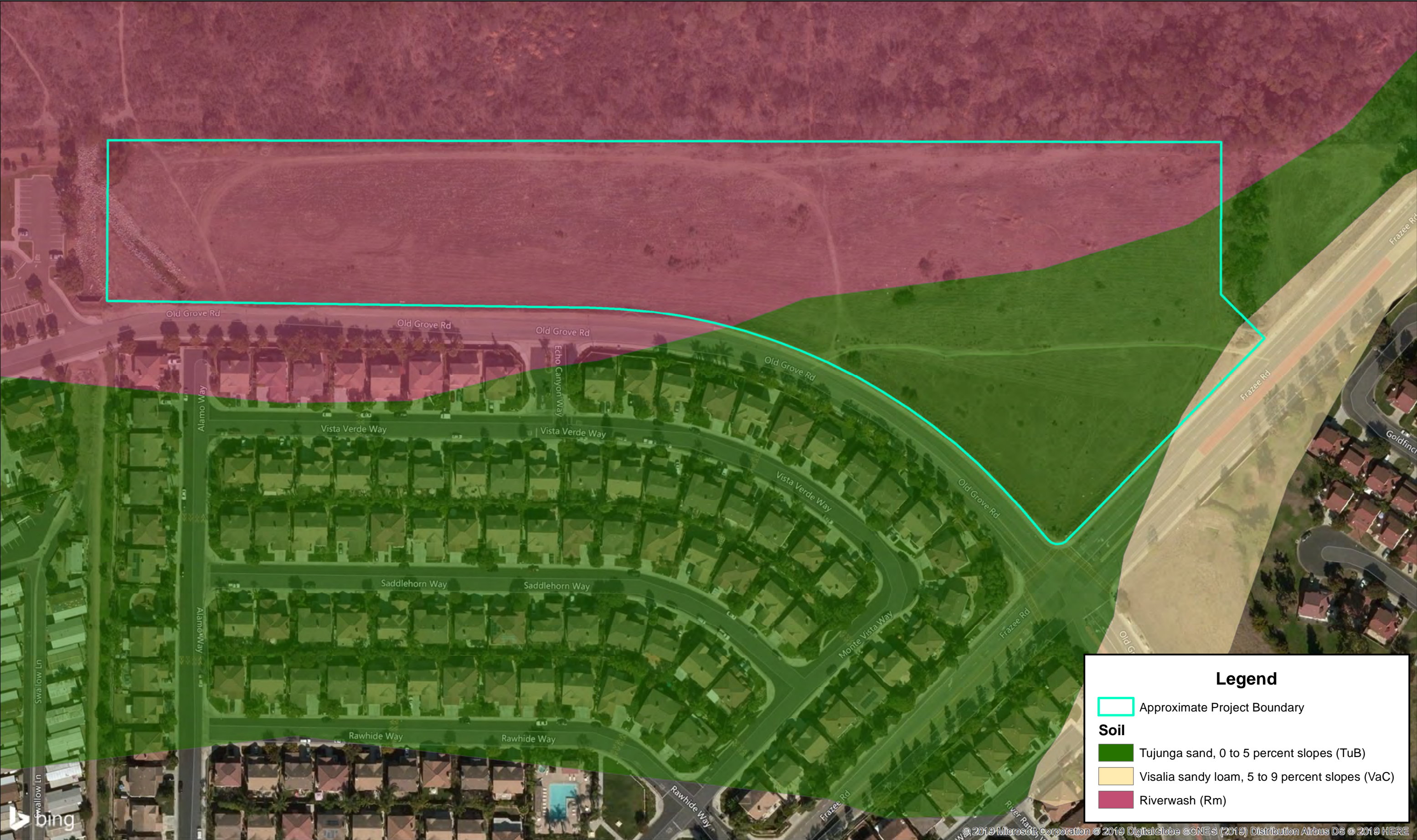
Drainage	Total Acreage
Feature 1	0.03
<i>Source: Carlson SLS, 2017</i>	

5.10.1.2 Waters of the State

The delineation determined that the Rio Rockwell site includes Waters of the State that meet CDFW characteristics that defines waters under the jurisdiction of FGC Section 1600. The feature was considered Waters of the State due to the presence of biological and physical characteristics of a stream subject to the Jurisdiction of CDFW under FGC §1600 et seq. The feature exhibited biological and physical indicators of Waters of the State through the presence of a channel bed and bank. This feature was not found to support associated riparian vegetation. The total inventory of Waters of the State is presented in **Table 6** and shown on see **Figure 17**. Representative photos of Feature 1 are shown in **Figure 18**.

Table 6: Rio Rockwell Jurisdictional Waters of the State

Drainage	Total Acreage
Feature 1	0.11
<i>Source: Carlson SLS, 2017</i>	



Legend

Approximate Project Boundary

Soil

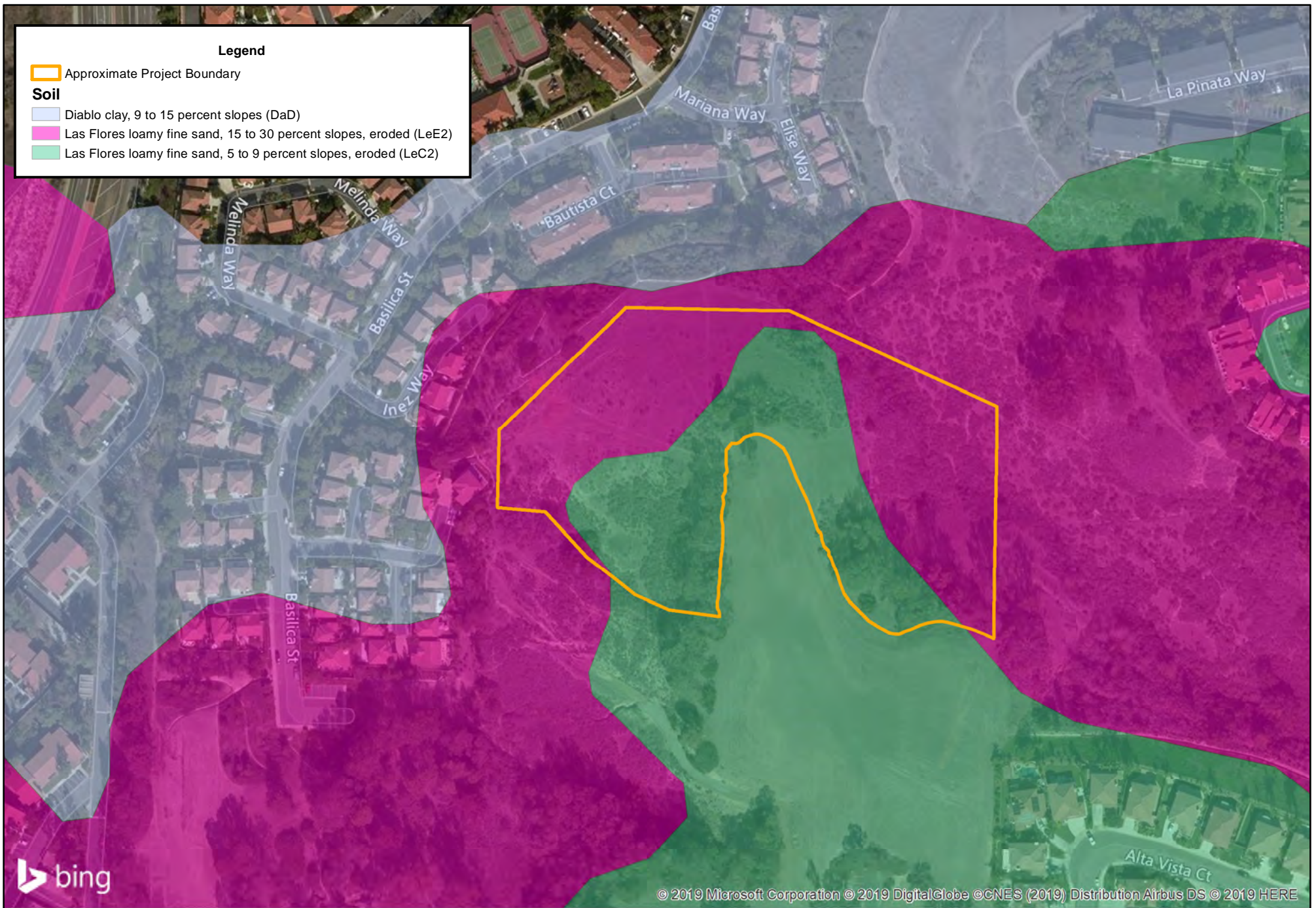
Tujunga sand, 0 to 5 percent slopes (TuB)

Visalia sandy loam, 5 to 9 percent slopes (VaC)

Riverwash (Rm)

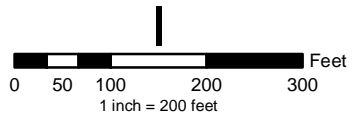
© 2019 Microsoft Corporation © 2019 DigitalGlobe © CNES (2019) Distribution Airbus DS © 2019 HERE

FIGURE 15



GIS Prepared By:
Carlson SLS

Created: January 03, 2019



Data Source: Bing Maps
Field Visit 10/04/17
SANDAG GIS

Rio Rockwell and Rancho Del Oro Project
Rancho Del Oro Soil Map

FIGURE 10

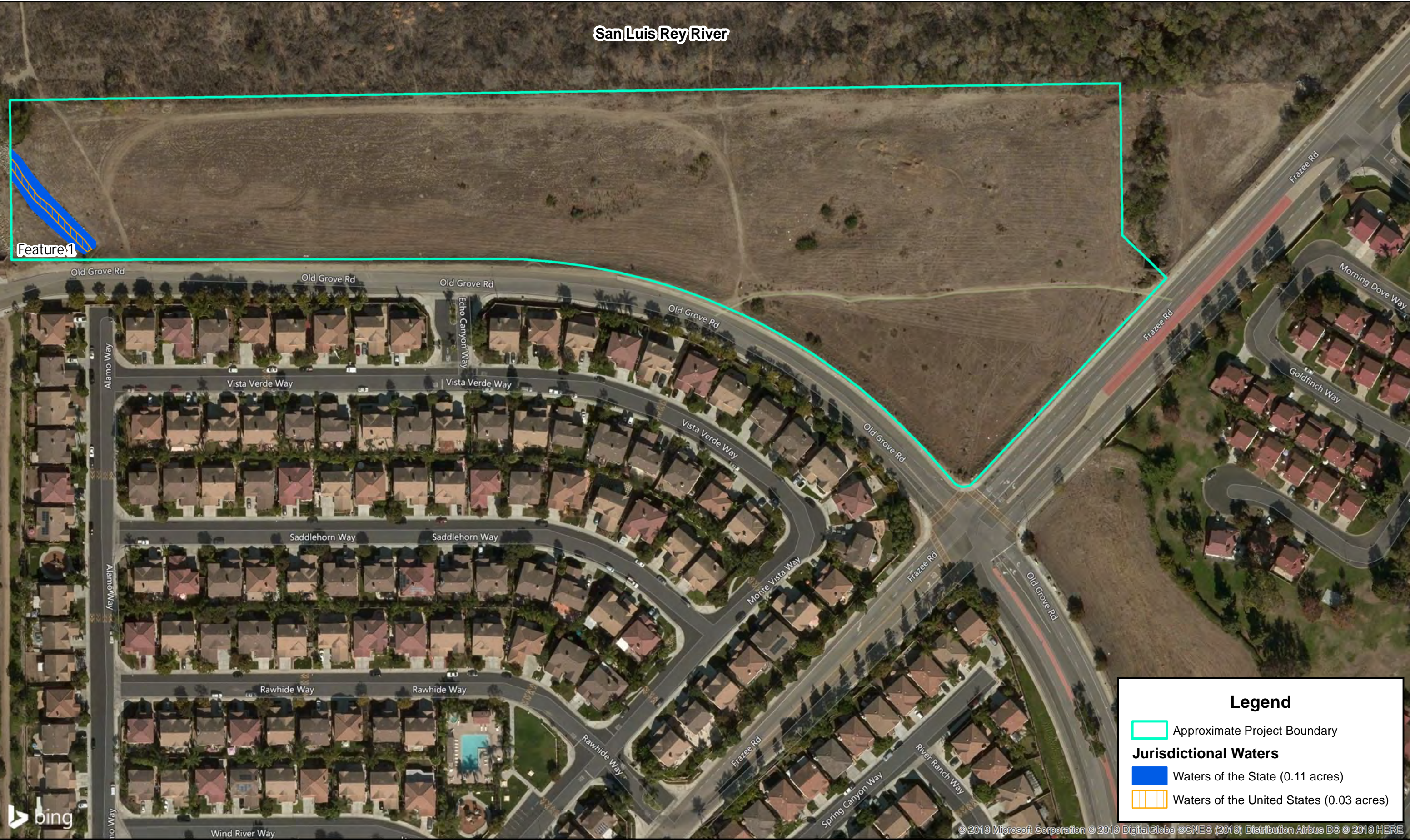


FIGURE 17

Figure 18 Rio Rockwell Jurisdiction Features Photographs



Looking north at the riprap lined Feature 1 found onsite.



Looking north at the riprap lined Feature 1 found onsite.

Figure 18 Rio Rockwell Jurisdiction Features Photographs



Feature 1 contains mustard, trees of heaven, and other non-native species.



Looking south at the riprap lined Feature 1 found onsite.

6.0 Threshold of Significance

Appendix G of the CEQA Guidelines is used by public agencies in determining whether a project may have a significant impact on biological resources. Under Appendix G, a project may have a significant impact on biological resources if it would:

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 CDFW or USFWS.
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 CDFW or USFWS.
Threshold BIO-C	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (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 site.

For some species, the geographic area may extend to the vicinity of the site based on known distributions of the species.

- “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.

7.0 Significance Determination and Proposed Mitigation

7.1 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. Impacts are sometimes locally important but not significant because, although they would result in an adverse alteration of existing local conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

7.2 Project Related Impacts

For the purpose of this assessment, project-related impacts consist of direct and indirect impacts. 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 no to 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 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 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 below, along with compliance of existing regulations. No impacts will occur on the Rancho Del Oro site, rather as discussed in *Section 2.0 Project Description*, the site is anticipated to be mapped and incorporated into the City’s mapping of the Hardline Preserve area to offset the impacts to the

approximately 6-acres of Hardline Preserve area identified on the Rio Rockwell site. Therefore, the discussion of potential impacts presented below is limited to the Rio Rockwell site.

7.3 Threshold BIO-A

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

Less than Significant with Mitigation Incorporated.

7.3.1 Sensitive Plant Species

Development of the Rio Rockwell site would result in the direct removal of common and ruderal plant species. Common plant species present within the site occur in large numbers throughout the region and their removal does not meet the significance threshold. Therefore, impacts to common and ruderal plant species would not be considered a significant impact and no mitigation is required.

Potential short-term and long-term indirect impacts to the on-site avoided and surrounding plant species may occur as a result of the proposed project. Plant species located within the on-site avoidance areas include those within the disturbed habitats, and riparian habitats associated with the San Luis Rey River. As discussed in Section 2.2, *Project Avoidance*, the Subarea Plan requires a 100-foot buffer be established along the San Luis Rey River. This buffer in addition to implementation of standard Best Management Practices (BMP's) and typical restrictions and requirements that address dust control, erosion, and runoff, including the federal Clean Water Act and National Pollution Discharge Elimination System (NPDES) will ensure that short-term and long-term indirect impacts to adjacent plant species would be less than significant.

Seven sensitive plant species, including San Diego sagewort, southern tarplant, smooth tarplant, golden-rayed pentachaeta, white rabbit-tobacco, Engelmann oak, and Fish's milkwort were determined to have the potential to occur on-site due to the presence of suitable habitat. Preferred habitat was considered potentially present based on the literature review and habitat on-site. However, no individuals were observed on-site during the site assessment, which was conducted during the known blooming periods for these species. Therefore, no impacts to sensitive plant species are expected.

7.3.2 Sensitive Wildlife Species

Development of the Rio Rockwell site would result in the disruption and removal of habitat and the loss and displacement of non-sensitive common wildlife species. Due to the limited amount

of native habitat (0.64 acre of sandbar willow thicket) to be removed and the level of existing disturbance from human activity on-site and 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. Therefore, impacts to common wildlife species would not be considered a significant impact and no mitigation is required.

Potential adverse indirect impacts to common wildlife include: increased vehicular traffic and a corresponding increase in road kill and noise; an increase in predatory and feral pets; an increase in litter, pollutants, dust, oil, and other human debris; and, an increase in nighttime lighting. Common wildlife species using habitats on-site would avoid habitats affected by these “spillover” impacts, thereby decreasing diversity beyond the actual development envelope. These impacts by themselves would not be expected to reduce general wildlife populations below self-sustaining levels within the region; therefore, elimination or disruption of habitat for these common wildlife species is less than significant.

Six sensitive wildlife species were determined to have the potential to occur on the Rio Rockwell site, including Cooper’s hawk, northern harrier, white-tailed kite, least Bell’s vireo, yellow warbler, and yellow-breasted chat. The site and off-site areas also have the potential to support migratory birds and raptors that are discussed further below in Section 5.7.3, *Migratory Birds and Raptors*.

Three of the six species are proposed Covered Species under the Subarea Plan, including Cooper’s hawk, least Bell’s vireo, and yellow-breasted chat. Potential impacts to these species may occur should ground disturbances occur during typical nesting season (Jan 1 through August 31 for Raptors and February 15 through August 15 for other avian species). A discussion of potential impacts and associated mitigation measures and condition of approvals for these species is discussed further, below.

7.3.2.1 *Least Bell’s vireo*

The proposed project will not directly impact suitable breeding habitat for this species (southern cottonwood willow riparian forest). However, indirect impacts to this species may occur if construction activities occur during breeding season. Therefore, in order to prevent any indirect impacts to the species, the sandbar willow shall be removed outside of typical nesting season (March 15th through September 15th) as outlined within **Mitigation Measure MM BIO-1**. Furthermore, all grading operations shall begin outside of the LBV breeding season (March 15th through September 15th) and shall remain continuous through the season without interruption or any restart of grading shall occur outside of LBV breeding season as outlined within **Mitigation**

Measure MM BIO-2. Implementation of **Mitigation Measures MM BIO-1 and BIO-2** would reduce potential impacts to this species to a less than significant level.

Additionally, approximately 9.56 acres of the site is located within USFWS designated critical habitat for the least Bell's vireo. The proposed project would result in approximately 6.82 acres of impacts to the critical habitat (**Figure 19**). The 6.82 acres of impacted designated critical habitat consists of 0.64 acre of sandbar willow thicket and 6.18 acres of disturbed habitat, neither of which are considered PCE for the LBV (**Figure 19**). No impacts to critical habitat supporting least Bell's vireo PCE's in the form of breeding habitat (southern cottonwood willow riparian forest) would occur as a result of implementation of the proposed project. Due to the low quality and disturbed nature of the impacted plant communities, their value as a PCE supporting suitable habitat or upland foraging habitat is considered low. Nonetheless, indirect impacts to critical habitat for this species would be considered potentially significant. Therefore, to prevent any indirect impacts to the species, the sandbar willow shall be removed outside of typical nesting season (March 15th through September 15th) as outlined within **Mitigation Measure MM BIO-1** to avoid any incidental take of the species. Furthermore, all grading operations shall begin outside of the LBV breeding season (March 15th through September 15th) and shall remain continuous throughout the season without interruption or any restart of grading shall occur outside of LBV breeding season as outlined within **Mitigation Measure MM BIO-2**. Minimization and best standard practices as outlined in the Subarea Plan in **Mitigation Measure MM BIO-3** shall be adhered to further mitigate for indirect impacts.

Per CNDDb, LBV occurrences have been limited to the high-quality habitat found within the San Luis Rey River and no known occurrences have been recorded within the sparse and low quality of sandbar willow found on-site. Regardless, to further mitigate the indirect impacts of removals of the sandbar willow found onsite within the designated critical habitat, a 1:1 ratio of riparian species (mulefat, willow sp.) shall be incorporated into the riparian transitional area of the 100-foot buffer adjacent to the San Luis Rey River for a no net loss of PCEs defined for LBV. Implementation of **Mitigation Measure BIO-4** would reduce potential impacts to critical habitat for the least Bell's vireo to a less than significant level.

MM BIO-1 *All sandbar willow shall be removed outside of typical LBV breeding season, March 15 through September 15.*

MM BIO-2 *All grading operations shall begin outside of LBV breeding season (March 15 through September 15) and shall remain continuous throughout the breeding season. If grading operations stop more than 3-days during LBV breeding season, the following shall occur prior to the commencement of grading operations:*

1. All grading operations shall not restart until after the end of the LBV breeding season (September 15); or
2. An LBV survey of on-site suitable habitat and suitable habitat within a 300-foot area surrounding construction activities, consistent with the Subarea Plan, shall be conducted by a qualified biologist before any grading or ground disturbance activity commences during the breeding season (March 15 to September 15). The survey shall be conducted in accordance with accepted protocols. Following negative results for nesting LBV, the grading operations may recommence. However, should LBV nesting be observed, either on-site or within 300-feet of the construction activities, the grading shall not restart until nesting is complete and the fledging have left.

MM BIO-3 *The following measures shall be implemented during construction for minimization and Best Management Practices, as outlined in the Subarea Plan:*

1. *Construction limits for the project 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 project disturbances.*
2. *Prior to grading and construction, a training program shall be developed and implemented by the qualified biologist to inform key workers on the project about the listed species, its habitat, and the importance of complying with avoidance and minimization measures.*
3. *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.*
4. *Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitats. All necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters.*
5. *Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within stream channels or on their banks.*
6. *To avoid attracting predators of the target species of concern, the site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s). Pets of*

project personnel shall not be allowed on-site where they may come into contact with any listed species.

7. *Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. All employees shall be instructed that their activities are restricted to the construction areas.*

MM BIO-4 *The project Applicant shall mitigate the impacts to the sandbar willow found onsite at a 1:1 ratio of riparian species (mulefat, willow sp.), for a total of 0.64 acres. The 0.64 acres of riparian species shall be incorporated into the riparian transitional area of the 100-foot buffer adjacent to the San Luis Rey River for a no net loss of acreage, function, and value of a Subarea Plan Habitat Group A.*

7.3.2.2 Cooper's hawk

The proposed project avoids direct impacts to southern cottonwood willow riparian forest, which is suitable habitat for this species. However, indirect impacts to this species may occur if found breeding within 300-feet surrounding the Rio Rockwell site during construction implementation and ground disturbances. Therefore, a pre-construction survey is required in compliance with the MBTA. Implementation of **Mitigation Measure MM BIO-5** would reduce potential impacts to this species to a less than significant level, if nesting individuals are present.

MM BIO-5 *Prior to the issuance of any grading permit that would impact potentially suitable nesting habitat for raptors or songbirds, the project applicant shall demonstrate to the satisfaction of the City 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 typical nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat, on-site and within 300-feet surrounding the site (as feasible), be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If active nests are identified, the biologist would establish buffers around the vegetation (500 feet for raptors*

and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers would be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest). The onsite biologist would review and verify compliance with these nesting boundaries and would verify the nesting effort has finished. Work can resume within these areas when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to City for mitigation monitoring compliance record keeping.

7.3.2.3 Yellow-breasted chat

The proposed project avoids direct impacts to southern cottonwood willow riparian forest, which is suitable habitat for this species. However, indirect impacts to this species may occur if found breeding within 300-feet surrounding the Rio Rockwell site during construction implementation and ground disturbances. Therefore, a pre-construction survey is required in compliance with the MBTA. Implementation of **Mitigation Measure MM BIO-5** would reduce potential impacts to this species to a less than significant level, if nesting individuals are present.

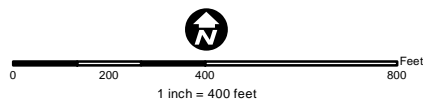
7.3.2.4 Remaining sensitive species

The remaining three sensitive species, northern harrier, white-tailed kite, and yellow warbler are not proposed Covered Species under the Subarea plan. Northern harrier and yellow warbler are listed as California Species of Special Concern by CDFW and white-tailed kite is listed as a California Fully Protected Species. None of these species carry a Federal or State listing as threatened or endangered. However, they are all protected under the MBTA during breeding. These species are dependent on riparian plant communities for foraging and breeding. The proposed project avoids direct impacts to southern cottonwood willow riparian forest, which is suitable habitat for these species. However, indirect impacts to these species may occur if found breeding within 300-feet surrounding the Rio Rockwell site during construction implementation and ground disturbances. Therefore, a pre-construction survey is required in compliance with the MBTA. Implementation of **Mitigation Measure MM BIO-5** would reduce potential impacts to this species to a less than significant level, if nesting individuals are present.

The proposed project, inclusive of mitigation measures and conditions of approval, would have less than significant impacts to sensitive wildlife species and migratory and/or nesting birds.



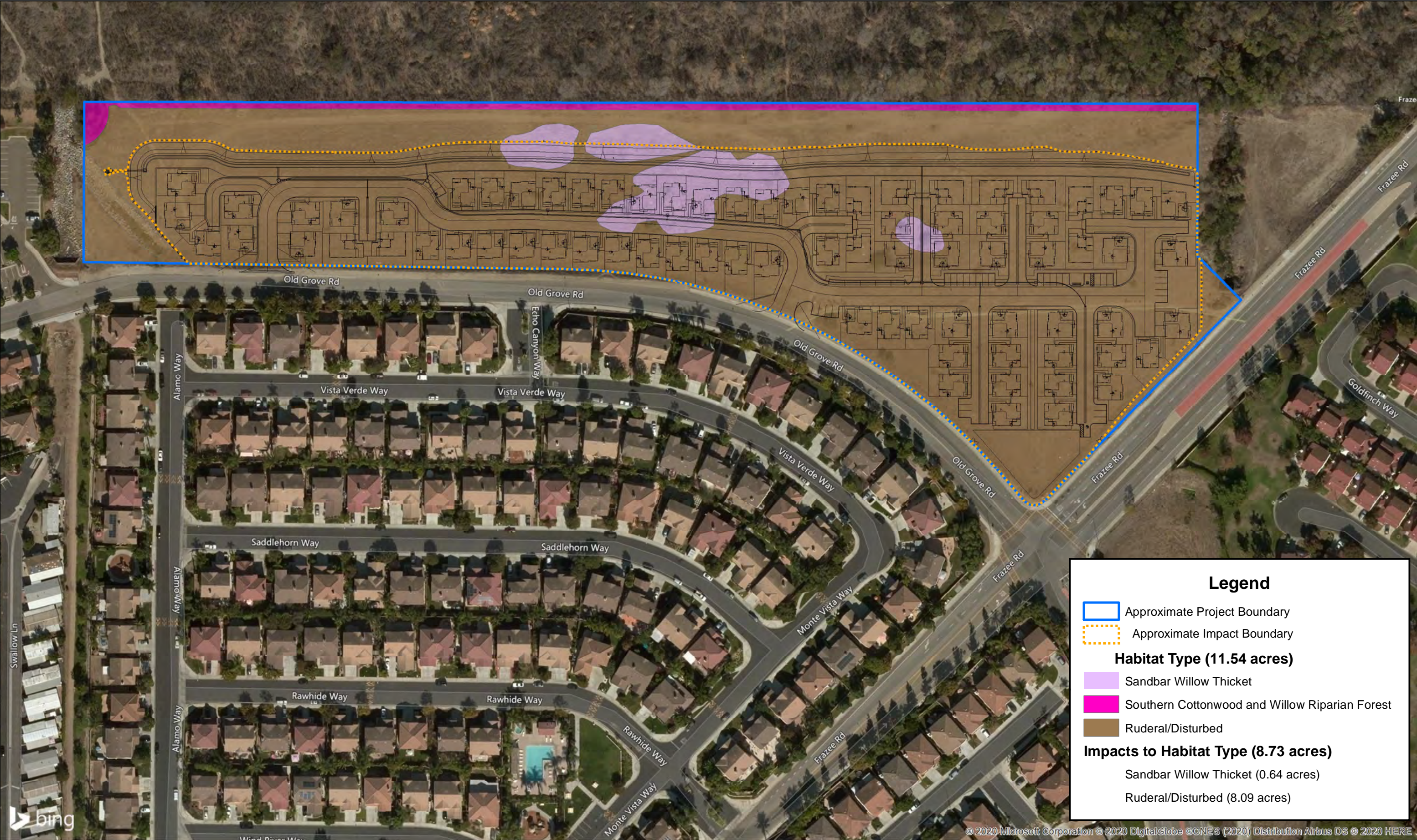
Prepared By:
Carlson SLS Map Created: 03/2020



Data Source: Bing Maps
CH (03/2015)

Rio Rockwell and Rancho Del Oro Project
Rio Rockwell Critical Habitat Impacts

FIGURE 19



Legend

Approximate Project Boundary

Approximate Impact Boundary

Habitat Type (11.54 acres)

Sandbar Willow Thicket

Southern Cottonwood and Willow Riparian Forest

Ruderal/Disturbed

Impacts to Habitat Type (8.73 acres)

Sandbar Willow Thicket (0.64 acres)

Ruderal/Disturbed (8.09 acres)

FIGURE 20

7.4 Threshold BIO - B

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

No impact.

7.4.1 Sensitive Plant Communities

One plant community considered sensitive by CDFW, southern cottonwood willow riparian forest (0.40 acre), was mapped on the Rio Rockwell site. This plant community is also designated under Habitat Group A which is subject to a no-net-loss in acreage, function and value pursuant to the Subarea Plan. The proposed project will avoid impacts to this sensitive plant community; therefore, no impacts are expected. A figure showing impacts to the plant communities is provided in **Figure 20** and summarized in **Table 7**.

Table 7: Rio Rockwell Impacts to Plant Communities

Habitat Type	Total (acres)	Permanent Impacts (acres)	Avoidance (acres)
Sandbar Willow Thicket (61209)	0.76	0.64	0.12
Southern Cottonwood and Willow Riparian Forest (61330)	0.40	0.00	0.40
Disturbed Habitat (11300)	10.38	8.09	2.29
Total	11.54	8.73	2.81
<i>Sources: Carlson SLS 2017.</i>			

7.4.2 CDFW Jurisdiction

The Rio Rockwell site supports 0.11 acre of jurisdictional streambed pursuant to Section 1602 of the California Fish and Game Code, as regulated by CDFW. The proposed project will not impact jurisdictional streambed. Therefore, no impacts would occur.

7.5 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?

No Impact.

The Rio Rockwell site supports 0.03 acre of jurisdictional non-wetland waters regulated under Section 404 of the CWA. The proposed project avoids Feature 1 on-site and does not impact jurisdictional waters. Therefore, no impacts would occur.

7.6 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 corridors, or impede the use of native wildlife nursery sites?

Less than Significant with Mitigation Incorporated.

7.6.1 Wildlife Movement

The site supports potential live-in and movement habitat for species on a local scale (i.e., some limited live-in and marginal movement habitat for reptile, bird, and mammal species), however, the site provides little to no function to facilitate wildlife movement on a regional scale. Furthermore, the site is not identified as a regionally important dispersal or seasonal migration corridor under the Subarea Plan. Movement on a local scale likely occurs with species adapted to urban environments due to the surrounding development and disturbances in the vicinity of the site. Although implementation of the project would result in disturbances to local wildlife movement within the site, those species adapted to urban areas would be expected to persist on-site following construction. As such, impacts would be less than significant, and no mitigation measures would be required.

7.6.2 Migratory Birds and Raptors

The Rio Rockwell site supports potential nesting and foraging habitat for migratory birds, in addition to potential foraging habitat for raptors. Based on the disturbed nature of the site (10.87 acres of the total 11.54-acre site) from human disturbances, 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 (e.g., San Luis Rey River). The loss of a relatively small acreage of low-quality foraging habitat as a result of the proposed project would not be expected to impact the foraging of these species. Therefore, impacts to foraging habitat would be considered less than significant and no mitigation measures are considered required.

The site has the potential to support songbird and raptor nests due to the presence of a few shrubs, ground cover, and the limited riparian vegetation. 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. Compliance with the MBTA would reduce impacts to a less than significant level, as detailed in **MM BIO-5**.

7.7 Threshold BIO - E

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

No Impact.

The site supports several riparian tree species that are associated with the San Luis Rey River. The proposed development of the site will not result in the removal of any tree species; therefore, the proposed project will not conflict with any local policies or ordinances protecting biological resources, such as tree preservations or ordinances.

7.8 Threshold BIO - F

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

Less than Significant with Mitigation Incorporated.

The Rio Rockwell site is located within the bounds of the Subarea Plan, and although the Subarea Plan is not currently approved, the City follows the Plan as guidance for planning purposes and determining the significance of impacts and mitigation. As noted above in Section 5.2, *Subarea Plan Results*, The northern portion of the Rio Rockwell site, approximately 6-acres, falls within a Hardline Preserve Area. The site is not located within any pre-approved or off-site mitigation zones, coastal zones, wildlife corridor planning zones (regional or gnatcatcher), or gnatcatcher priority conservation areas under the Subarea Plan. Impacts associated with the proposed project will occur to disturbed habitat areas and sandbar willow thicket vegetation. Although the quality of the sandbar willow thicket is considered low, it is designated as Habitat Group A under the Subarea Plan, which is subject to a no-net-loss goal. The proposed project includes a minimum 100-foot buffer (totaling approximately 4.10 acres) along the length of the northern project boundary adjacent to the riparian habitat associated with the San Luis Rey River that will be planted with riparian species transitioning to upland coastal sage scrub habitat. The avoidance and planting of this area and implementation of **MM BIO-4** would compensate for the loss of the low-quality sandbar willow thicket, fulfill the no-net loss of habitat, and meet the objectives of the Subarea Plan reducing impacts to a less than significant level.

Further, the project proposes to offset impacts to the Subarea Hardline Preserve area at the Rio Rockwell site (approximately 6-acres), with the inclusion and incorporation of the Rancho Del Oro site into the City's mapping of the Subarea hardline (approximately 6-acres). As a result, the incorporation of the Rancho Del Oro site into the City's mapping of the Hardline Preserve area, this would protect the site for purposes of conserving proposed Covered Species (coastal California gnatcatcher), as well as contributing to the regional movement of this species through the area. The Rancho Del Oro site contains superior coastal California sage scrub habitat with diversity of plant species, along with occupation of CAGN. Furthermore, the Rancho Del Oro site contains large ornamental trees and open grasslands providing nesting and foraging habitat for avian species. The incorporation of the Rancho Del Oro site into the City's mapping of the Subarea Plan Hardline Preserve Area would reduce impacts to a less than significant level.

The Subarea Plan identifies a Habitat Development Fee program for other undeveloped areas, however, this would only occur upon adoption of the Subarea Plan. The Subarea Plan has not been adopted and the fee does not apply.

8.0 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. “Related projects” refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed Project. CEQA deems a cumulative impact analysis to be adequate if a list of “related projects” is included in the EIR or the proposed project is consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(b)(1)(B)]. CEQA also states that no further cumulative impact analysis is necessary for impacts of a proposed project consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(d)].

The Subarea Plan identifies areas for long-term conservation and management. Using the Subarea Plan as guidance for determining significance of impacts and mitigation, cumulative impacts of proposed projects within the Subarea Plan are minimized.

The Rio Rockwell site proposes to maintain an open space buffer averaging 102.54 feet wide from the northern edge of the site, and effectively the San Luis Rey River (River). This open space buffer will ensure avoidance of direct and indirect impacts to the riparian biological resources occurring and off-site within the San Luis Rey River and the onsite southern cottonwood and willow riparian forest. Planting this open space buffer provides consistency under the Subarea Plan, which states the conservation and buffer requirements along the San Luis Rey River require “a minimum 100-foot biological buffer shall be established for upland habitats, beginning at the outer edge of riparian vegetation.” Impacts to the sandbar willow thicket shall be mitigated 1:1 ratio of riparian species (mulefat, willow sp.) and shall be incorporated into the riparian transitional area of the 100-foot buffer adjacent to the San Luis Rey River for a no net loss of PCEs defined for LBV. Furthermore, sandbar willow shall be removed outside of LBV breeding season (March 15 through September 15) and grading operations shall begin outside of the breeding season and shall remain continuous. Additionally, avoidance of this area will prevent any potential indirect impacts to nesting least Bell’s vireo, if present, USFWS designated critical habitat for the least Bell’s vireo, as well as indirect impacts to biological resources potentially occurring in the River.

Furthermore, the dedication and preservation of the Rancho Del Oro provides superior biological value than the vegetation community found within the Hardline Preserve area on the Rio Rockwell site. The impacts to the Rio Rockwell site occur predominately to ruderal species, along with a minimal patch of sandbar willow. The Rancho Del Oro site supports 2.63 acres of high quality coastal sage scrub habitat (which is considered sensitive by the California Department of Fish and Wildlife (CDFW) and Habitat Type C under the Subarea Plan. The site has been documented as supporting the federally-threatened coastal California gnatcatcher. The project proposed incorporation of the Rancho Del Oro site into the City’s mapping of the Hardline Preserve area, offsetting impacts to the Hardline Preserve impacts occurring at the Rio Rockwell site. Furthermore, Rancho Del Oro is located immediately east of the Mission View On-site Preserve and is located within a designated Local Gnatcatcher Corridor within Constrained Area

I. The Subarea Plan places emphasis on conserving and enhancing a regionally important “stepping stone” for gnatcatcher across the plan area. The most constrained areas for coastal California gnatcatcher movement is considered to be within Oceanside (URS 2007). Incorporation and inclusion of the site into the City’s mapping of the Hardline Preserve area would contribute to the regional conservation efforts and movement of the coastal California gnatcatcher.

Therefore, cumulative impacts to the biological resources for implementation of the Project are considered to be less than significant with the implementation of **MM BIO-1 through MM Bio-4** and the incorporation of the Rancho Del Oro site into the City’s mapping of the Hardline Preserve area for no-net loss of biological function and value of these resources, as outlined above in Section 7.0.

With the implementation of the above, the cumulative impacts would be less than significant with mitigation incorporated.

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APPENDIX A

Special Status Plant Species Potential Occurrence Determination

Appendix A: Sensitive Plant Species

Scientific Name	Common Name	California Rare Plant Rank	State Listing Status	Federal Listing Status	Subarea Plan Proposed Covered Species	Flowering Period	Habitat Type	Potential to Occur (Rio Rockwell)	Potential to Occur (Rancho Del Oro)
BRYOPHYTES									
ASPLENIACEAE	SPLEENWORT FAMILY								
<i>Asplenium vespertinum</i>	western spleenwort	4.2	None	None	No	Feb-Jun	Chaparral, Cismontane woodland, Coastal scrub; rocky; 180-3280 ft above msl.	None	None
GYMNOSPERMS									
CACTACEAE	CACTUS FAMILY								
<i>Ferocactus viridescens</i>	San Diego barrel cactus	2B.1	None	None	Yes	May-Jun	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; 3-1475 ft above msl.	None	NE
ANGIOSPERMS (DICOTS)									
APIACEAE	CARROT AND PARSLEY FAMILY								
<i>Eryngium aristulatum</i> <i>var. parishii</i>	San Diego button-celery	1B.1	SE	FE	No	Apr-Jun	Coastal scrub, Valley and foothill grassland, Vernal pools; mesic soils; 20-2035 ft above msl.	None	None
<i>Eryngium pendletonense</i>	Pendleton button-celery	1B.1	None	None	No	Apr-Jun(Jul)	Coastal bluff scrub, Valley and foothill grassland, Vernal pools; clay, vernal mesic; 15-360 ft above msl.	None	None
ASTERACEAE	SUNFLOWER FAMILY								
<i>Ambrosia pumila</i>	San Diego ambrosia	1B.1	None	FE	Yes; Narrow Endemic	Apr-Oct	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; sandy loam or clay, often in disturbed areas, sometimes alkaline; 20-1360 ft above msl.	None	Potential
<i>Artemisia palmeri</i>	San Diego sagewort	4.2	None	None	No	(Feb)May-Sep	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland; sandy, mesic; 15-3000 ft above msl.	NE	None
<i>Baccharis vanessae</i>	Encinitas baccharis	1B.1	SE	FT	No	Aug,Oct,Nov	Chaparral (maritime), Cismontane woodland; sandstone; 60-2360 ft above msl.	None	None
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	1B.1	None	None	No	May-Nov	Marshes and swamps (margins), Valley and foothill grassland (vernal mesic), Vernal pools; 0-1575 ft above msl.	NE	None
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	1B.1	None	None	No	Apr-Sep	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; alkaline; 0-2100 ft above msl.	NE	None
<i>Chaenactis glabriuscula</i> <i>var. orcuttiana</i>	Orcutt's pincushion	1B.1	None	None	No	Jan-Aug	Coastal bluff scrub (sandy), Coastal dunes; 0-330 ft above msl.	None	None
<i>Corethrogyne filaginifolia</i> <i>var. incana</i>	San Diego sand aster	1B.1	None	None	No	Jun-Sep	Coastal bluff scrub, Chaparral, Coastal scrub; 3-375 ft above msl.	None	None
<i>Corethrogyne filaginifolia</i> <i>var. linifolia</i>	Del Mar Mesa sand aster	1B.1	None	None	Yes; Narrow Endemic	May,Jul,Aug, Sep	Coastal bluff scrub, Chaparral (maritime, openings), Coastal scrub; sandy; 15-490 ft above msl.	None	None

<i>Deinandra paniculata</i>	paniculate tarplant	4.2	None	None	No	(Mar)Apr- Nov(Dec)	Coastal scrub, Valley and foothill grassland, Vernal pools; usually vernal mesic, sometimes sandy; 25-3085 ft above msl.	None	None
<i>Ericameria palmeri</i> var. <i>palmeri</i>	Palmer's goldenbush	1B.1	None	None	No	(Jul)Sep-Nov	Chaparral, Coastal scrub; mesic; 30-1970 ft above msl.	None	NE
<i>Hazardia orcuttii</i>	Orcutt's hazardia	1B.1	ST	None	Yes; Narrow Endemic	Aug-Oct	Chaparral (maritime), Coastal scrub; often clay; 80-280 ft above msl.	None	NE
<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>	beach goldenaster	1B.1	None	None	No	Mar-Dec	Chaparral (coastal), Coastal dunes, Coastal scrub; 80-4020 ft above msl.	None	None
<i>Holocarpha virgata</i> ssp. <i>elongata</i>	graceful tarplant	4.2	None	None	No	May-Nov	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; 60-3610 ft above msl.	None	NE
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	1B.2	None	None	No	Apr-Nov	Chaparral, Coastal scrub (sandy, often in disturbed areas); 10-445 ft above msl.	None	NE
<i>Iva hayesiana</i>	San Diego marsh-elder	2B.2	None	None	No	Apr-Oct	Marshes and swamps, Playas; 10-1640 ft above msl.	None	None
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	1B.1	None	None	No	Feb-Jun	Marshes and swamps (coastal salt), Playas, Vernal pools; 1-4005 ft above msl.	None	None
<i>Leptosyne maritima</i>	sea dahlia	2B.2	None	None	No	Mar-May	Coastal bluff scrub, Coastal scrub; 5-490 ft above msl.	None	None
<i>Microseris douglasii</i> ssp. <i>platycarpa</i>	small-flowered microseris	4.2	None	None	No	Mar-May	Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools; clay; 15-3510 ft above msl.	None	None
<i>Pentachaeta aurea</i> ssp. <i>aurea</i>	golden-rayed pentachaeta	4.2	None	None	No	Mar-Jul	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland, Valley and foothill grassland; 80-6070 ft above msl.	NE	Potential
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	2B.2	None	None	No	(Jul)Aug- Nov(Dec)	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; sandy, gravelly; 10-6890 ft above msl.	NE	NE
<i>Psilocarphus brevissimus</i> var. <i>multiflorus</i>	Delta woolly-marbles	4.2	None	None	No	May-Jun	Vernal pools; 10-1640 ft above msl.	None	None
<i>Senecio aphanactis</i>	chaparral ragwort	2B.2	None	None	No	Jan- Apr(May)	Chaparral, Cismontane woodland, Coastal scrub; sometimes alkaline; 15-2625 ft above msl.	None	Potential
<i>Viguiera laciniata</i>	San Diego County viguiera	4.3	None	None	No	Feb- Jun(Aug)	Chaparral, Coastal scrub; 60-2460 ft above msl.	None	Potential
BORAGINACEAE	BORAGE FAMILY								
<i>Cryptantha wigginsii</i>	Wiggins' cryptantha	1B.2	None	None	No	Feb-Jun	Coastal scrub; often clay; 20-900 ft above msl.	None	None
<i>Harpagoneella palmeri</i>	Palmer's grapplinghook	4.2	None	None	No	Mar-May	Chaparral, Coastal scrub, Valley and foothill grassland; Clay; open grassy areas within shrubland; 20-2135 ft above msl.	None	None
BRASSICACEAE	MUSTARD FAMILY								

<i>Caulanthus simulans</i>	Payson's jewelflower	4.2	None	None	No	(Feb)Mar-May(Jun)	Chaparral, Coastal scrub; sandy, granitic; 90-7220 ft above msl.	None	None
<i>Erysimum ammophilum</i>	sand-loving wallflower	1B.2	None	None	No	Feb-Jun	Chaparral (maritime), Coastal dunes, Coastal scrub; sandy, openings; 0-195 ft above msl.	None	None
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	4.3	None	None	No	Jan-Jul	Chaparral, Coastal scrub; 1-2905 ft above msl.	None	Potential
CHENOPODIACEAE	GOOSEFOOT FAMILY								
<i>Atriplex coulteri</i>	Coulter's saltbush	1B.2	None	None	No	Mar-Oct	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland	None	NE
<i>Atriplex pacifica</i>	South Coast saltscale	1B.2	None	None	No	Mar-Oct	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas	None	None
<i>Atriplex parishii</i>	Parish's brittlescale	1B.1	None	None	No	Jun-Oct	Chenopod scrub, Playas, Vernal pools	None	None
<i>Suaeda esteroa</i>	estuary seablite	1B.2	None	None	No	(May)Jul-Oct(Jan)	Marshes and swamps (coastal salt)	None	None
CONVOLVULACEAE	MORNING GLORY FAMILY								
<i>Convolvulus simulans</i>	small-flowered morning-glory	4.2	None	None	No	Mar-Jul	Chaparral (openings), Coastal scrub, Valley and foothill grassland; clay, serpentinite seeps; 30-2430 ft above msl.	None	None
<i>Dichondra occidentalis</i>	western dichondra	4.2	None	None	No	(Jan)Mar-Jul	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; 15-1640 ft above msl.	None	None
CRASSULACEAE	STONECROP FAMILY								
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	1B.1	None	None	Yes	Apl-Jun	Coastal bluff scrub, Chaparral, Coastal scrub, Valley and foothill grassland; rocky, often clay or serpentinite; 40-350 ft above msl.	None	None
<i>Dudleya multicaulis</i>	many-stemmed dudleya	1B.2	None	None	No	Apl-Jun	Chaparral, coastal scrub, valley and foothill grassland; often found in clay; 116-700 ft above msl.	None	None
<i>Dudleya variegated</i>	variegated dudleya	1B.2	None	None	No	Apl-Jun	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools; clay; 300-920 ft above msl.	None	None
<i>Dudleya viscida</i>	sticky dudleya	1B.2	None	None	Yes	May-Jun	Coastal bluff scrub, chaparral, cismontane woodland, coastal scrub; 75-370 ft above msl.	None	Potential
ERICACEAE	HEATH FAMILY								
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	Del Mar manzanita	1B.1	None	FE	No	Dec-Jun	Chaparral (maritime, sandy); 0-1200 ft above msl.	None	None
<i>Arctostaphylos rainbowensis</i>	Rainbow manzanita	1B.1	None	None	No	Dec-Mar	Chaparral; 205-2200 ft above msl.	None	None
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer holly	1B.2	None	None	No	Apr-Jun	Chaparral, Cismontane woodland; 30-2590 ft above msl.	None	None
EUPHORBIACEAE	SPURGE FAMILY								
<i>Euphorbia misera</i>	cliff spurge	2B.2	None	None	No	Dec-Aug(Oct)	Coastal bluff scrub, Coastal scrub, Mojavean desert scrub; rocky; 10-1640 ft above msl.	None	None
FAGACEAE	BEECH FAMILY								

<i>Quercus dumosa</i>	Nuttall's scrub oak	1B.1	None	None	No	Feb-Apr(May-Aug)	Closed-cone coniferous forest, Chaparral, Coastal scrub; sandy, clay loam; 15-1310 ft above msl.	None	NE
<i>Quercus engelmannii</i>	Engelmann oak	4.2	None	None	No	Mar-Jun	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland; 50-4265 ft above msl.	NE	None
FABACEAE	PEA FAMILY								
<i>Acemison prostratus</i>	Nuttall's acemison	1B.1	None	None	No	Mar-Jun(Jul)	Coastal dunes, Coastal scrub (sandy); 0-35 ft above msl.	None	None
<i>Astragalus tener</i> var. <i>titi</i>	coastal dunes milk-vetch	1B.1	SE	FE	No	Mar-May	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie (mesic); often vernal mesic areas; 1-165 ft above msl.	None	None
HYDROPHYLLACEAE	WATERLEAF FAMILY								
<i>Phacelia ramosissima</i> var. <i>australitoralis</i>	south coast branching phacelia	3.2	None	None	No	Mar-Aug	Chaparral, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt); sandy, sometimes rocky; 5-985 ft above msl.	None	None
<i>Phacelia stellaris</i>	Brand's star phacelia	1B.1	None	None	No	Mar-Jun	Coastal dunes, Coastal scrub; 1-1310 ft above msl.	None	None
LAMIACEAE	MINT FAMILY								
<i>Acanthomintha ilicifolia</i>	San Diego thorn-mint	1B.1	SE	FT	Yes; Narrow Endemic	Apr-Jun	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay, openings; 10-3150 ft above msl.	None	None
<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	felt-leaved monardella	1B.2	None	None	No	Jun-Aug	Chaparral, Cismontane woodland; 300-5165 ft above msl.	None	None
<i>Pogogyne abramsii</i>	San Diego mesa mint	1B.1	SE	FE	No	Mar-Jul	Vernal pools; 90-655 ft above msl.	None	None
<i>Salvia munzii</i>	Munz's sage	2B.2	None	None	No	Feb-Apr	Chaparral, Coastal scrub; 115-3495 ft above msl.	None	Potential
MALVACEAE	MALLOW FAMILY								
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	2B.2	None	None	No	Mar-Jun	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic; 15-5020 ft above msl.	None	None
MONTIACEAE	MINERS LETTUCE FAMILY								
<i>Cistanthe maritima</i>	seaside cistanthe	4.2	None	None	No	(Feb)Mar-Jun(Aug)	Coastal bluff scrub, Coastal scrub, Valley and foothill grassland; sandy; 5-985 ft above msl.	None	Potential
NAMACEAE	FIDDLE LEAF FAMILY								
<i>Nama stenocarpa</i>	mud nama	2B.2	None	None	No	Jan-Jul	Marshes and swamps (lake margins, riverbanks); 5-1640 ft above msl.	None	None
NYCTAGINACEAE	FOUR O'CLOCK FAMILY								
<i>Abronia maritima</i>	red sand-verbena	4.2	None	None	No	Feb-Nov	Coastal dunes; 0-330 ft above msl.	None	None
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	1B.1	None	None	No	(Jan)Mar-Sep	Chaparral, Coastal scrub, Desert dunes; sandy; 75-5250 ft above msl.	None	None
ONAGRACEAE	WILLOWHERB FAMILY								
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	3	None	None	No	Mar-May(Jun)	Coastal bluff scrub, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland; sandy or clay; 0-985 ft above msl.	None	Potential

<i>Clarkia delicata</i>	delicate clarkia	1B.2	None	None	No	Apr-Jun	Chaparral, Cismontane woodland; often gabbroic; 235-3280 ft above msl.	None	None
OROBANCHACEAE	BROOMRAPE FAMILY								
<i>Orobanche parishii</i> ssp. <i>brachyloba</i>	short-lobed broomrape	4.2	None	None	No	Apr-Oct	Coastal bluff scrub, Coastal dunes, Coastal scrub; sandy; 3-1000 ft above msl.	None	None
PHRYMACEAE	LOPSEED FAMILY								
<i>Erythranthe diffusa</i>	Palomar monkeyflower	4.3	None	None	No	Apr-Jun	Chaparral, Lower montane coniferous forest; ; 1220-6005 ft above msl.	None	None
PICRODENDRACEAE									
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	1B.2	None	None	No	Apr-May	Chaparral, Coastal scrub; 165-3280 ft above msl.	None	Potential
PLANTAGINACEAE	PLANTAIN FAMILY								
<i>Stemodia durantifolia</i>	purple stemodia	2B.1	None	None	No	(Jan)Apr,Jun, Aug,Sep,Oct, Dec	Sonoran desert scrub (often mesic, sandy); 180-985 ft above msl.	None	None
POLEMONIACEAE	PHLOX FAMILY								
<i>Navarretia fossalis</i>	spreading navarretia	1B.1	None	FT	No	Apr-Jun	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools; 30-2150 ft above msl.	None	None
POLYGONACEAE	BUCKWHEAT FAMILY								
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish's milkwort	4.3	None	None	No	May-Aug	Chaparral, Cismontane woodland, Riparian woodland; 100-3280 ft above msl.	NE	None
<i>Chorizanthe orcuttiana</i>	Orcutt's spineflower	1B.1	SE	FE	No	Mar-May	Closed-cone coniferous forest, Chaparral (maritime), Coastal scrub; sandy openings; 3-410 ft above msl.	None	Potential
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	1B.2	None	None	No	Apr-Jul	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; often clay; 30-5020 ft above msl.	None	None
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	1B.2	None	None	No	Apr-Sep	Coastal dunes; 0-330 ft above msl	None	None
<i>Nemacaulis denudata</i> var. <i>gracilis</i>	slender cottonheads	2B.2	None	None	No	(Mar)Apr-May	Coastal dunes, Desert dunes, Sonoran desert scrub; 15-1310 ft above msl.	None	None
RANUNCULACEAE	BUTTERCUP FAMILY								
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	3.1	None	None	No	Mar-Jun	Valley and foothill grassland, Vernal pools (alkaline); 20-2100 ft above msl.	None	None
RHAMNACEAE	BUCKTHORN FAMILY								
<i>Adolphia californica</i>	California adolphia	2B.1	None	None	No	Dec-May	Chaparral, Coastal scrub, Valley and foothill grassland; Clay; 10-2430 ft above msl.	None	None
<i>Ceanothus verrucosus</i>	wart-stemmed ceanothus	2B.2	None	None	No	Dec-May	Chaparral; 1-1245 ft above msl.	None	None
ROSACEAE	ROSE FAMILY								
<i>Chamaebatia australis</i>	southern mountain misery	4.2	None	None	No	Nov-May	Chaparral (gabbroic or metavolcanic); 300-3345 ft above msl.	None	None
<i>Horkelia truncata</i>	Ramona horkelia	1B.3	None	None	No	May-Jun	Chaparral, Cismontane woodland; clay, gabbroic; 400-4265 ft above msl.	None	None
SOLANACEAE	NIGHTSHADE FAMILY								
<i>Lycium californicum</i>	California box-thorn	4.2	None	None	No	(Dec)Mar,Jun,Jul,Aug	Coastal bluff scrub, Coastal scrub; 5-490 ft above msl.	None	NE
ANGIOSPERMS (MONCOTS)									

JUNCACEAE	RUSH FAMILY								
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	4.2	None	None	No	(Mar)May-Jun	Coastal dunes (mesic), Meadows and seeps (alkaline seeps), Marshes and swamps (coastal salt); 3-2955 ft above msl	None	None
POACEAE	GRASS FAMILY								
<i>Hordeum intercedens</i>	vernal barley	3.2	None	None	No	Mar-Jun	Coastal dunes, Coastal scrub, Valley and foothill grassland (saline flats and depressions), Vernal pools; 5-3280 ft above msl.	None	None
<i>Orcuttia californica</i>	California Orcutt grass	1B.1	SE	FE	No	Apr-Aug	Vernal pools; 15-2165 ft above msl.	None	None
<i>Stipa diegoensis</i>	San Diego County needle grass	4.2	None	None	No	Feb-Jun	Chaparral, Coastal scrub; rocky, often mesic; 10-2625 ft above msl.	None	None
THEMIDACEAE	BUTCHER'S BROOM FAMILY								
<i>Bloomeria clevelandii</i>	San Diego goldenstar	1B.1	None	None	No	Apr-May	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; clay; 50-1525 ft above msl.	None	None
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	1B.1	SE	FT	Yes; Narrow Endemic	Mar-Jun	Chaparral (openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; often clay; 25-3675 ft above msl.	None	Potential
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	1B.1	None	None	No	May-Jul	Closed-cone coniferous forest, Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland, Vernal pools; mesic, clay; 30-5550 ft above msl.	None	None
<i>Nolina cismontana</i>	chaparral nolina	1B.2	None	None	No	(Mar)May-Jul	Chaparral, Coastal scrub; sandstone or gabbro; 140-4185 ft above msl.	None	None

Key:**Federal Listing Status Code:**

FE: Federally listed as Endangered.

FT: Federally listed as Threatened.

FPE: Federally proposed for

FPD: Federally proposed for delisting

FC: Federal candidate species

State Listing Status Codes:

SE: State Listed as Endangered

ST: State Listed as Threatened

SCE: State candidate for listing as Endangered.

SCT: State candidate for listing as Threatened.

SCD: State candidate for delisting.

SSC: State Species of Special Concern.

Subarea Plan Proposed Covered Species: See Section 3.3 of MHCP.**Potential to Occur:**

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

NOT EXPECTED: preferred habitat was considered potentially present based on the literature review and anticipated habitat on the site; however, no individuals were observed and/or suitable habitat was absent based in the general field survey or focused surveys.

POTENTIAL: preferred habitat was considered potentially present based on the literature review and observed habitat on the site.

OBSERVED: Species has been recorded as being present on the site.

California Rare Plant Rank:

Rank 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere.

Rank 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere.

Rank 2A: Plants Presumed Extirpated in California, But Common Elsewhere.

Rank 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere.

Rank 3: Plants About Which More Information is Needed - A Review List.

Rank 4: Plants of Limited Distribution - A Watch List.

0.1: Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat).

0.2: Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat).

0.3: Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

APPENDIX B

Special Status Wildlife Species Potential Occurrence Determination

Appendix B: Sensitive Wildlife Species

[illegible]

<i>Spea hammondi</i>	western spadefoot	SSC	NONE	Yes	None	Primary habitat is vernal pools or other standing water free of exotic species below 1500 meters. Secondary habitat includes adjacent chaparral, sage scrub, grassland and alluvial habitats.	None	None
SCINCIDAE	SKINK FAMILY							
<i>Plestiodon skiltonianus interparietalis</i>	Coronado skink	WL	NONE	No	None	Chaparral; cismontane woodland; pinon and juniper woodlands.	None	None
REPTILES								
ANNIELLIDAE	NORTH AMERICAN LEGLESS LIZARDS							
<i>Anniella stebbins</i>	Southern California legless lizard	SSC	NONE	No	None	coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans.	None	None
COLUBRIDAE	COLUBRID SNAKES							
<i>Arizona elegans occidentalis</i>	California glossy snake	SSC	NONE	No	None	Arid scrub, rocky washes, grasslands, chaparral; microhabitats of open areas and areas with soil loose enough for easy burrowing.	None	None
<i>Salvadora hexalepis virgulata</i>	coast-patch-nosed snake	SSC	NONE	No	None	Semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains.	None	None
<i>Thamnophis hammondi</i>	two-striped garter snake	SSC	NONE	No	None	Found around pools, creeks, cattle tanks, and other water sources, often in rocky areas, in oak woodland, chaparral, brushland, and coniferous forest.	None	None
<i>Thamnophis sirtalis pop.1</i>	south coast garter snake	SSC	NONE	No	None	Forests, mixed woodlands, grassland, chaparral, farmlands, often near ponds, marshes, or streams.	None	None
EMYDIDAE	BOX AND WATER TURTLES							

<i>Emys marmorata</i>	western pond turtle	SSC	NONE	Yes	None	Aquatic environments; artificial flowing waters; marsh and swamp; south coast flowing and standing waters; wetlands.	None	None
PHRYNOSOMATIDAE ZEBRATAIL, EARLESS, HORNED, SPINY, FRINGE-TOED LIZARDS								
<i>Phrynosoma blainvillii</i>	coast horned lizard	SSC	NONE	No	None	Chaparral; cismontain woodland; coastal bluff scrub; desert wash; pinyon and juniper woodlands; riparian scrub; riparian woodland; valley and foothill grassland.	None	None
TEIIDAE WHIPTAIL LIZARDS								
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	WL	NONE	Yes	None	Chaparral; cismontane woodlands; coastal scrub.	None	Potential
<i>Aspidoscelis tigris stejnegeri</i>	San Diego tiger whiptail	SSC	NONE	No	None	Hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	None	None
VIPERIDAE VIPERS								
<i>Crotalus ruber</i>	red-diamond rattlesnake	SSC	NONE	No	None	Arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, cultivated areas. On the desert slopes of the mountains, it ranges into rocky desert flats.	None	Potential
BIRDS								
PELICANIFORMES/ARDEIDAE								
<i>Ixobrychus exilis</i>	least bittern	SSC	NONE	No	None	Fresh marshes, reedy ponds. Mostly freshwater marsh but also brackish marsh, in areas with tall, dense vegetation standing in water.	None	None
CICONIIFORMES/THRESKIORNITHIDAE								
<i>Plegadis chihi</i>	white-faced ibis	WL	NONE	Yes; Wetland Obligate	None	Fresh marshes, irrigated land, tules. For foraging, favors very shallow water, as in marshes, flooded pastures, irrigated fields.	None	None
ACCIPITRIDAE/FALCONIFORMES								

<i>Accipiter cooperii</i>	Cooper's hawk	WL	NONE	Yes	None	Mature forest, open woodlands, wood edges, river groves. Nests in coniferous, deciduous, and mixed woods, typically those with tall trees and with openings or edge habitat nearby. Also found along trees along rivers through open country, and increasingly in suburbs and cities where some tall trees exist for nest	Potential	Potential
<i>Buteo swainsoni</i>	Swainson's hawk	ST	NONE	No	None	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	None	None
<i>Circus hudsonius</i>	northern harrier	SSC	NONE	No	None	Coastal scrub; Great Basin grassland; marsh and swamp; riparian scrub; valley and foothill grassland; wetland.	Potential	Potential
<i>Elanus leucurus</i>	white-tailed kite	SFP	NONE	No	None	Open savannah, grasslands.	Potential	Potential
GRUIFORMES/RALLIDAE								
<i>Latterallus jamaicensis coturniculus</i>	California black rail	ST/SFP	NONE	No	None	Tidal marshes and salicornia on coast; grassy marshes inland. Favors very shallow water, or damp soil with scattered puddles. In coastal marsh, upper limits of highest tides; inland, mostly	None	None
<i>Rallus obsoletus levipes</i>	light-footed Ridgeway's rail	SE/SFP	FE	Yes; Wetland Obligate	None	Salt marshes along the coast, also brackish and freshwater marshes inland. Along the Pacific Coast, strictly a bird of salt marsh, sometimes in adjacent brackish	None	None
CHARADRIIFORMES/CHARADRIIDAE								
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	SSC	FT	No	None	Great Basin standing waters; sand shore; wetland.	None	None
CHARADRIIFORMES/LARIDAE								

<i>Sternula antillarum browni</i>	California least tern	SE/SFP	FE	No	None	Sea beaches, bays, large rivers, salt flats. Along coast generally where sand beaches close to extensive shallow waters for feeding. Inland, found along rivers with broad exposed sandbars, lakes with salt flats.	None	None
CUCULIFORMES/CUCULIDAE								
<i>Coccyzus americanus</i>	western yellow-billed cuckoo	SE	FT	No	None	Riparian forest nester, along broad, lower flood bottoms of larger river systems. Dense willow thickets with cottonwoods.	None	None
PASSERIFORMES/TYRANNIDAE								
<i>Empidonax traillii</i>	southwestern willow flycatcher	SE	FE	Yes; Wetland Obligate	None	Drier willow thickets, alder.	None	None
PASSERIFORMES/VIREONIDAE								
<i>Vireo bellii pusillus</i>	least Bell's vireo	SE	FE	Yes; Wetland Obligate	None	Lower riparian growth in the vicinity of water or in drier river bottoms.	Potential	None
PASSERIFORMES/ALAUDIDAE								
<i>Eremophila alpestris actia</i>	California horned lark	WL	NONE	No	None	Prairies, fields, airports, shores, tundra. Inhabits open ground, generally avoiding areas with trees or even bushes.	None	None
PASSERIFORMES/HIRUNDINIDAE								
<i>Riparia riparia</i>	bank swallow	ST	NONE	No	None	Near water; fields, marshes, streams, lakes. Typically seen feeding in flight over (or near) water at all seasons, even in migration. Nests in colonies in vertical banks of dirt or sand, usually along rivers or ponds, seldom away from water.	None	None
PASSERIFORMES/TROGLODYTIDAE								
<i>Campylorhynchus brunneicapillus</i>	coastal cactus wren	SSC	NONE	No	None	Coastal sage scrub with large stands of Opuntia sp.	None	None
PASSERIFORMES/POLIOPTILLIDAE								
<i>Poliophtila californica californica</i>	coastal California gnatcatcher	SSC	FE	Yes	None	Coastal scrub, dry washes, ravines.	None	Observed
PASSERIFORMES/PARULIDAE								

<i>Setophaga petechia</i>	yellow warbler	SSC	NONE	No	None	Riparian areas and montane shrubbery in coniferous forests.	Potential	None
PASSERIFORMES/ICTERIIDAE								
<i>Icterus virens</i>	yellow-breasted chat	SSC	NONE	Yes; Wetland Obligate	None	Dense, brushy thickets and tangles near water, and thick understory in riparian woodlands.	Potential	None
PASSERIFORMES/PASSERELLIDA								
<i>Aimophila ruficeps</i>	southern California rufous-crowned sparrow	WL	NONE	Yes	None	Resident in so. California coastal sage scrub and sparse mixed chaparral.	None	Potential
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	WL	NONE	Yes	None	Foothills, chaparral and sage scrub.	None	Potential
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	SE	NONE	Yes; Wetland Obligate	None	Salt marshes	None	None
PASSERIFORMES/ICTERIDAE								
<i>Agelaius tricolor</i>	tricolored blackbird	SSC/Candidate	NONE	No	None	Freshwater marsh, swamps, and wetland.	None	None
MAMMALS								
<i>Antrozous pallidus</i>	pallid bat	SSC	None	No	WBWG (High)	Caves, tunnels, mines, crevices, in rock used for roosts.	None	None
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	SSC	None	No	None	Chaparral, coastal scrub, and valley and foothill grassland.	None	Potential
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	SSC	None	Yes	None	Coastal scrub, chaparral, grassland, sagebrush.	None	Potential
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	SSC	None	No	WBWG (High)	Roosts in caves, rock crevices on cliff faces, abandoned mines and tunnels, highway bridges and large culverts, and buildings.	None	None
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	SSC	None	No	WBWG (High)	caves and cave-like roosting habitat, including abandoned mines.	None	None
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	ST	FE	Yes	None	Annual and perennial grassland, coastal scrub or sagebrush scrub, friable or sandy soils.	None	Potential
<i>Eumops perotis californicus</i>	western mastiff bat	SSC	None	No	WBWG (High)	Buildings, crevices in cliffs, trees, tunnels for roosts.	None	None

<i>Lasiurus xanthinus</i>	western yellow bat	SSC	None	No	WBWG (High)	Primarily known from dry, thorny vegetation on Mexican Plateau and in desert regions of the SW US. Prefers palm trees for roosting and nesting but will use other desert riparian habitats.	None	None
<i>Leptonycteris yerbabuenae</i>	lesser long-nosed bat	Delisted	None	No	WBWG (High)	Inland deserts, foraging on cactus flowers and roosting in caves and mines.	None	None
<i>Lepus californicus bennettii</i>	black-tailed jackrabbit	SSC	NONE	Yes	None	Coastal sage scrub, alkali meadow, and disturbed areas.	None	None
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	SSC	None	No	None	Coastal scrub and chaparral.	None	Potential
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC	None	No	WBWG (Medium)	Prefers cliffs for roosting and inland habitats for foraging.	None	None
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	SSC	FE	No	None	Sandy coastal soils of coastal strand, coastal dunes, and coastal sage scrub habitats.	None	None
<i>Taxidea taxus</i>	American badger	SSC	None	No	None	Open shrub, forest, and herbaceous habitats, with friable soils.	None	None

Key:**Federal Listing Code:**

FE: Federally listed as
 FT: Federally listed as
 FPE: Federally proposed for listing as Endangered.
 FPD: Federally proposed for
 FC: Federal candidate species

State Listing Codes:

SE: State Listed as Endangered
 ST: State Listed as Threatened
 SCE: State candidate for listing
 SCT: State candidate for listing as Threatened.
 SCD: State candidate for delisting.
 SSC: State Species of Special Concern.

Western Bat Working Group:

High: Represents those species considered the highest priority for funding, planning, and conservation actions.
 Medium: Designation indicates a level of concern that should warrant closer evaluation, more research, and conservation actions of both the species and possible threats.
 Low: Designation indicates that most of the existing data support stable populations of the species, and that the potential for major changes in status in the near future is considered unlikely.

Subarea Plan
Proposed Covered

See Section 3.3 of MHCP.

Potential to occur:

NONE: species not expected to occur due to lack of suitable habitat or the site's location is outside of the species' range.
 NOT EXPECTED: preferred habitat was considered potentially present based on the literature review and anticipated habitat on the site; however, no individuals were observed and/or suitable habitat was absent based in the general field survey or focused surveys.
 POTENTIAL: preferred habitat was considered potentially present based on the literature review and observed habitat on the site.
 OBSERVED: Species has been recorded as being present on the site.

APPENDIX C

Focused Coastal California Gnatcatcher Report for Rancho Del Oro Project site

2018 BREEDING SEASON
COASTAL CALIFORNIA GNATCATCHER
SURVEY RESULTS
For the
RANCHO DEL ORO PROJECT
OCEANSIDE, CALIFORNIA

Prepared For:

U.S. Fish and Wildlife Service
Carlsbad Field Office
2177 Salk Avenue, Suite 250
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&

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Contact: Recovery Permit
Coordinator

Contact: Brianna Bernard
(949)542-7042

Prepared by:

Kidd Biological, Inc.
23046 Ave de la Carlota, Suite 600-66
Laguna Hills, CA 92653
Contact: Nina J. Kidd
949.632.2756



July 5, 2018

Introduction

This report summarizes the results of a presence/absence survey for the coastal California gnatcatcher (*Polioptila californica californica*) ("CAGN") in accordance with USFWS survey guidelines. Surveys were conducted to determine if the site supports CAGN, as the parcel may be used as a conservation area and potentially be included within a hardline preserve area in the Subarea Habitat Conservation Plan/Natural Community Conservation Plan in the City of Oceanside. The required 15-day notification to conduct focused protocol surveys was submitted by email to the permit coordinator at the Carlsbad U.S. Fish and Wildlife Service (USFWS) Office dated May 15, 2018 (Appendix 1).

Background

The Oceanside Subarea Habitat Conservation Plan/Natural Communities Conservation Plan comprehensively addresses how the City of Oceanside will conserve natural biotic communities and sensitive plant and wildlife species pursuant to the California Natural Community Conservation Planning Act of 1991 and the California and U.S. Endangered Species Acts (CESA and ESA). Vegetation communities that are rare or ecologically important will receive special protection. Coastal sage scrub will be preserved to protect numerous sensitive plant and animal species dependent on them, with focus on larger patches that provide regional habitat connectivity.

This Project site is located within the boundaries of the Oceanside Subarea Habitat Conservation Plan/Natural Community Conservation Plan. A previous biological assessment was conducted in October 2017 to map vegetation communities in the project area and to identify suitable sensitive habitat. Even though the site is not located within the USFWS critical habitat for federally threatened and endangered species, the site contained high quality coastal sage scrub habitat, which is considered habitat for the federally threatened CAGN. Protocol breeding season surveys were then conducted to verify if the habitat does indeed support CAGN. This report contains findings for the presence and/or absence of CAGN and lists any other sensitive species observed.

Site Location

The Rancho Del Oro Project Site (site) is located in the City of Oceanside, San Diego County California. Generally, the project site is located east of Interstate 5, south of highway 76, and Marine Corps Base Camp Pendleton and the San Luis Rey River, and north of highway 78 (Figure 1). Specifically, the project site is located east of Rancho Del Oro Drive, south of Basilica Way, and north of Camino Parque (Figure 2). The project site location can also be described as being located in the City of Oceanside, San Diego County California in Section 17 of Township 11 South, Range 4 West of the San Luis Rey, CA U.S Geological Survey (USGS) 7.5-Minute Topographic Map Quadrangle (Figure 3).

Figure 1. Regional Map (Google Maps 2018)

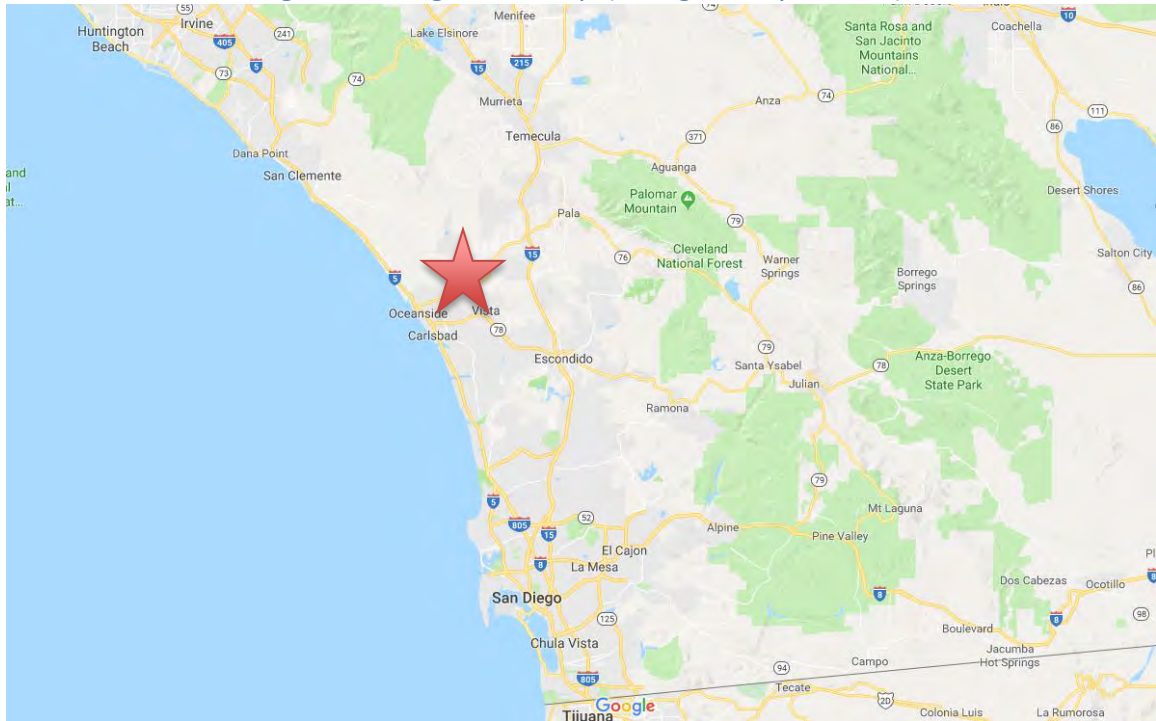
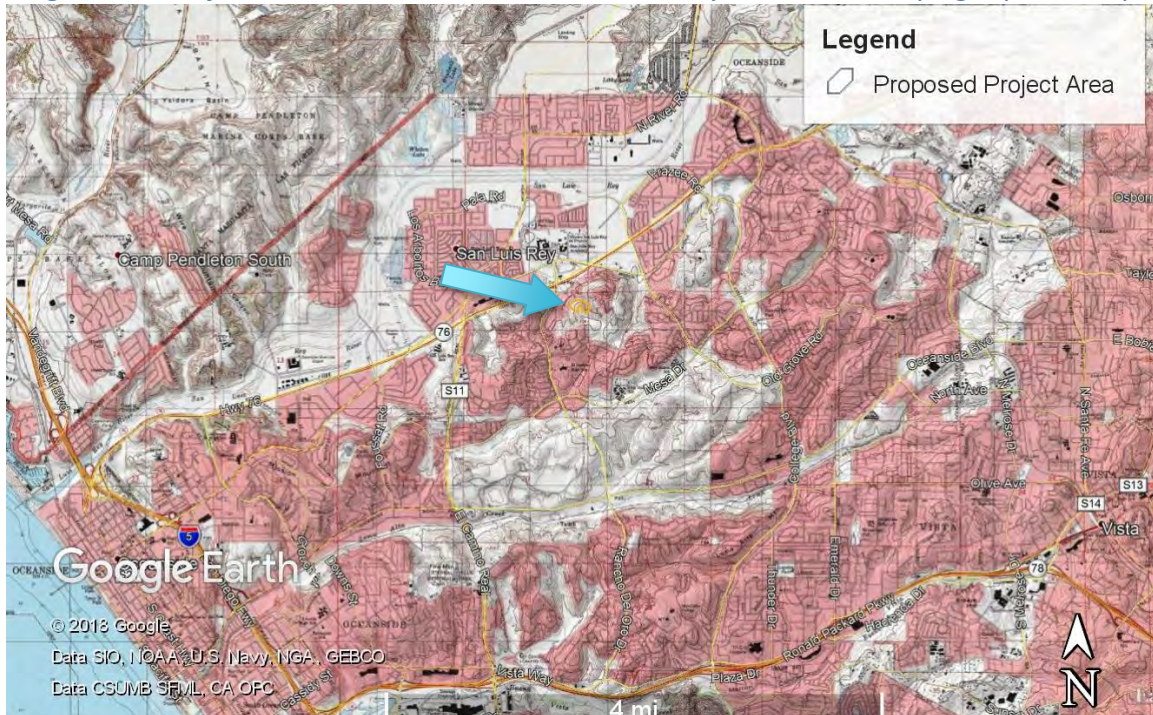


Figure 2. Survey Area (Shown in Yellow)



Figure 3. Project site shown on the San Luis Rey, CA USGS Topographic Map



Natural History of the California Gnatcatcher

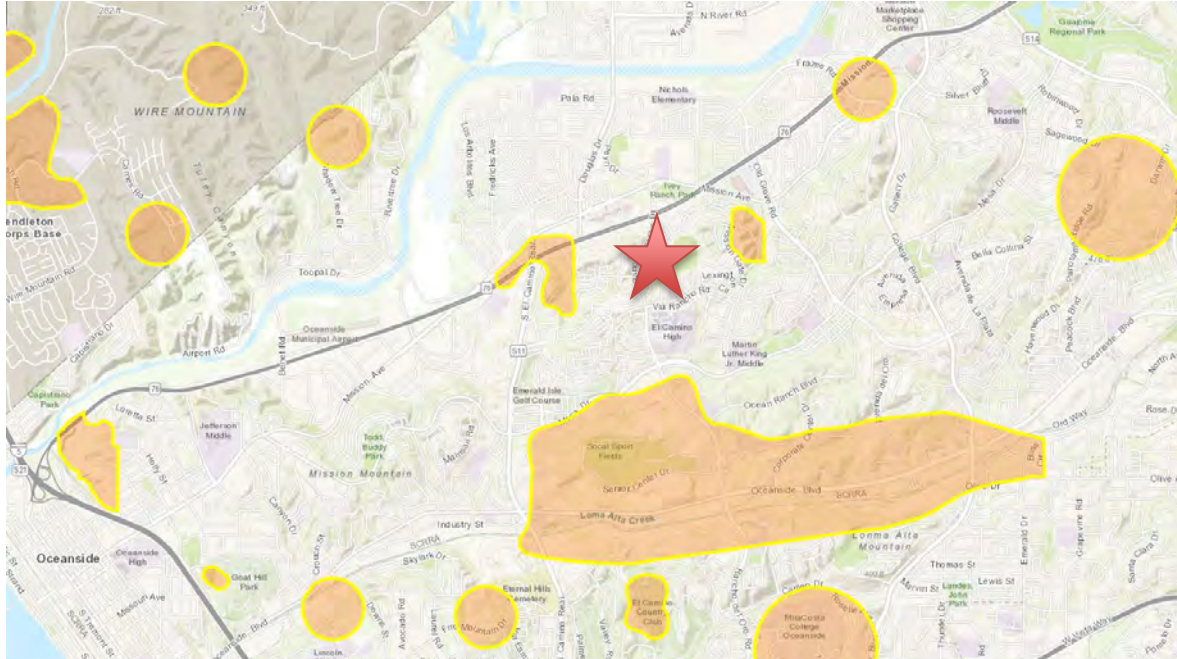
The CAGN is a federally-threatened species. It is most commonly found in the sage scrub communities of coastal southern California. According to J. Atwood and J. Bolsinger (1992), 99% of all CAGN observations are in areas with elevations below 950 feet. CAGN are ground and shrub-foraging insectivores. They feed on small insects and other arthropods. A CAGN's territory is highly variable in size and seems to be correlated with distance from the coast, ranging from less than 1 ha to over 9 ha (Mock, 2004). In a 1998 study, biologist Patrick Mock concluded that CAGN in the inland region require a larger territory than those on the coast in order to meet the nutritional requirements needed for survival and breeding.

The main threat to the CAGN is habitat loss, fragmentation, and degradation of habitat from invasive plant species and drought. Urban and agricultural development, livestock grazing, invasion of exotic grasses, off-road vehicles, pesticides, and military training activities all contribute to the destruction of CAGN habitat. Once locally common, CAGN have experienced widespread habitat loss and have lost most of their former range. By 1997, no more than 2,900 pairs remained in the United States. Only small patches of coastal sage scrub remain, and the majority is privately owned, making species recovery a difficult task.

The regional observations of CAGN are shown in Figure 4: *CNDDDB Documented Gnatcatcher Observances in relation to the site*. These locations were obtained from the California Department of Wildlife's (CDFW) Natural Diversity Data Base (CNDDDB) (2018). Approximately half of all of the reported occurrences of CAGN are found in San Diego County. There are two known populations

within the immediate vicinity of the site (2002 & 2007) however there are no previously reported occurrences of CAGN on the actual site. The site is not located in USFWS designated critical habitat for the CAGN.

Figure 4. CNDDDB Documented CAGN Observances in relation to the Site



Existing Conditions

The approximate 6-acre project site is characterized as an open space vegetated with coastal sage scrub and non-native grassland vegetation types. Topography of the project site is described as a canyon area with a relatively flat base and surrounding slopes. Elevation of the survey area ranges from approximately 175 feet above mean sea level (AMSL) to approximately 280 feet AMSL. Surrounding land uses include residential developments in all directions, with adjacent open space to the southeast and southwest. The habitat within the open space is classified as coastal sage scrub (CSS) and non-native grassland. Dominant plants in the CSS include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis*), California brittlebush (*Encelia californica*), poison oak (*Toxicodendron diversilobum*), and white sage (*Salvia apiana*). Portions of the CSS contain shrubs such as Laurel sumac (*Malosma laurina*), toyon (*Heteromeles arbutifolia*), and coastal prickly pear (*Opuntia littoralis*). Dominant plants in the non-native grassland habitat include rattail fescue (*Vulpia myuros*), summer mustard* (*Hershfeldia incana*), tocalote (*Centaurea melitensis*), Italian thistle (*Carduus pycnocephalus*), red brome (*Bromus madritensis subsp. rubens*), tree tobacco (*Nicotiana glauca*), and ripgut brome (*Bromus diandrus*). Areas of non-native grasslands appear to have been maintained through disking or mowing activities. Approximately half of the habitat in the project area is considered suitable for CAGN.

Methodology

Methods employed were in conformance with USFWS CAGN presence/absence survey guidelines for conducting breeding season surveys within an NCCP area (USFWS 1997). Accordingly, three (3) diurnal surveys were conducted during the breeding season, at least one (1) week apart. Surveys were conducted between the hours of 7:30 A.M. and 10:30 A.M. within all portions of the site supporting potentially suitable habitat. The permitted biologist slowly walked through the site while visually examining the area for CAGN and stopping at appropriate intervals to observe bird activity. If no CAGN were detected within 20-30 minutes at each interval, uttering pishing sounds, and/or playing a digital recording of CAGN vocalizations was conducted at each spot. The audio was played for several seconds at each interval, followed by a 5 minute pause to listen for a response. Intervals were not pre-determined, but were instead determined organically by the surveyor based on topography, suitability/quality of habitat and bird activity. The location(s) of CAGN observations (if any) were mapped with the use of a Garmin GPS unit.

Results

Breeding season surveys were conducted by the USFWS permitted biologist Miki A. Kern (Permit number TE56726A-1) in accordance with USFWS guidelines. Table 2, below, summarizes the results of each survey.

Table 1. Survey Data

Date	Time	Wind (MPH) (start/end)	Temperature (F) (start/end)	Weather (start/end)	Results	Number times Callback played
06/11/18	0730-1030	1-3/1-4	60°/71°	100% Cloud Cover/20% Cloud Cover	Pair CAGN observed and one CAGN heard	4
06/18/18	0730-1000	1-4/1-5	62°/72°	100% Cloud Cover/15% Cloud Cover	Pair of CAGN observed	4
06/27/18	0730-0900	1-2/1-3	63°/68°	100% Cloud Cover/40% Cloud Cover	Pair of CAGN observed	2
Source: Kidd Biological, Inc., 2018						

One pair of CAGN (same male and female pair) were detected during each survey conducted at the site. In addition, during the first survey only, one CAGN was detected by call only on the edge of the survey site, which was adjacent to suitable coastal sage scrub habitat. No brown-headed cowbirds (*Malothus ater*) were observed on the project site during surveys. All avian species detected during the surveys are listed in the *Avian Compendium* (Appendix B).

Other Sensitive Species Observed

This survey was focused on a single species, the CAGN; however, incidental observation(s) of all sensitive species were documented if observed. During the three surveys conducted, no other sensitive species were detected.

Conclusion

The site supports critical habitat for the CAGN. CAGN were detected during breeding season surveys conducted on the site during the 2018 breeding season. The site supports a large patch of suitable CAGN habitat that is mostly dominated by coastal sage scrub and is adjacent to additional suitable CAGN habitat. Presence of CAGN indicates that the area supports habitat essential for the species' conservation. Designating this area as a preserve area in the Subarea Habitat Conservation Plan/Natural Community Conservation Plan would be encouraged in providing essential habitat for CAGN populations and aid in conserving the region's biodiversity.

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



Miki Kern

July 5, 2018

Date

References

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- Bernard, B. 2017. *Preliminary Biological Site Assessment for the Rancho Del Oro Project located in San Diego County, California*. Prepared by Carlson Strategic Land Solutions, Inc October 2017.

Appendix A. USFWS Correspondence

June 29, 2018

Ms. Stacey Love
U.S. Fish and Wildlife Service
Carlsbad Field Office
2177 Salk Ave #250
Carlsbad, California 93003

Subject: 15-Day Notice to perform California Gnatcatcher presence/absence surveys (breeding season) within an NCCP area for the Rancho Del Oro Conservation Site, Oceanside, California.

Dear Stacey,

In order to determine if the proposed conservation area supports Coastal California gnatcatchers (*Poliophtila californica californica*, CAGN), we propose 3 surveys to be conducted over the course of the three weeks during the breeding season. Methods will follow the most current survey protocol (USFWS 1997).

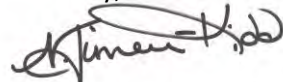
LOCATION

The Rancho Del Oro Project Site (site) is located in the City of Oceanside, San Diego County California in Section 17 of Township 11 South, Range 4 West of the San Luis Rey, CA U.S Geological Survey (USGS) 7.5-Minute Topographic Map Quadrangle (Figure 1). The approximately 6-acre Project site is located west of Rancho Del Oro Drive and south of Highway 76 (Figure 2). The Project site is located on the north eastern portion of Assessor's Parcel Number (APN) 160-020-49. It is our understanding the Project site may be used as a conservation area and potentially be included within a hardline preserve area in the Subarea Habitat Conservation Plan/Natural Community Conservation Plan.

Surveys are to be performed per U.S. Fish and Wildlife (USFWS) California gnatcatcher protocol guidelines by permitted biologists Miki Kern (TE56726A-1). Biologist Scott Thomas (Sub-permittee TE036550-5) may be used as a back-up biologist should Miki be unavailable.

If you have any questions or comments regarding this letter, please contact me directly at (949)632-2756.

Sincerely,



Nina Jimerson-Kidd

Appendix B. Avian Compendium

Scientific Name	Common Name	Observation Type
Accipitridae	Hawks	
<i>Buteo jamaicensis</i>	red-tailed hawk	OB
Odontophoridae	New World Quails	
<i>Callipepla californica</i>	California quail	A
Columbidae	Pigeons and Doves	
<i>Zenaidura macroura</i>	mourning dove	OB
Trochilidae	Hummingbirds	
<i>Calypte anna</i>	Anna's hummingbird	OB
Tyrannidae	Tyrant Flycatchers	
<i>Sayornis nigricans</i>	black phoebe	OB
Corvidae	Jays and Crows	
<i>Aphelocoma californica</i>	Western scrub jay	OB
<i>Corvus corax</i>	common raven	OB
Aegithalidae	Bushtits	
<i>Psaltirparus minimus</i>	bushtit	OB
Troglodytidae	Wrens	
<i>Thryomanes bewickii</i>	Bewick's wren	OB
Poliopitilidae	Gnatcatchers	
<i>Poliopitila californica, californica</i>	Coastal California gnatcatcher	OB, A
Sylviidae	Sylvid Warblers	
<i>Chamaea fasciata</i>	wrentit	OB
Mimidae	Thrashers	
<i>Mimus polyglottos</i>	northern mockingbird	OB
<i>Toxostoma redivivum</i>	California thrasher	OB
Emberizidae	Towhees and Sparrows	
<i>Pipilo crissalis</i>	California towhee	OB
<i>Pipilo maculatus</i>	spotted towhee	OB
Fringillidae	Finches	
<i>Haemorphous mexicanus</i>	house finch	OB
<i>Spinus psaltria</i>	lesser goldfinch	A
* Indicates non-native species Observation Type: FO=Fly over, A= Auditory only, OS= Off site only, OB= Observed within study area		