

## 4.3 BIOLOGICAL RESOURCES

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### INTRODUCTION

This section analyzes the Project's potential impacts on biological resources. Relevant regulations and existing conditions are described, as well as, the potential for the Project to impact sensitive plant, animal and natural habitat communities, as well as, wildlife corridors. Information in this section is largely based on information and findings obtained in the *Cielo Vista Biological Resource Assessment (BRA)* (herein referred to as the "BRA"), prepared by PCR Services Corporation (PCR), March 2013 and other referenced data indicated at the end of this section. The BRA is contained in Appendix C of this EIR. In addition, an *Investigation of Jurisdictional Waters and Wetlands, Cielo Vista Project Site, Orange County, California*, prepared by PCR in July 2012, is also included in Appendix C. The results of the Jurisdictional Waters and Wetlands analysis are incorporated into the BRA. Other Orange County EIR and CEQA related biological studies were consulted to provide context for the CEQA impact and mitigation approaches for similar habitats and species found in the project study area. For purposes of the this section, the "project study area" is defined to include 84.60-acres (83.90 acres on-site and 0.70 acre off-site) in unincorporated Orange County, California.<sup>1</sup>

### 1. ENVIRONMENTAL SETTING

#### a. Regulatory Framework

##### (1) Federal

##### (a) Sensitive Resource Classification – Endangered Species Act-Federal Protection and Classification

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. Of legal note, the FESA does not protect or regulate Federal threatened or endangered listed plant species on private property unless a federal action, such as regulatory permit approval or federal funding, is involved.

All references to Federally-protected species in this section include the most current published status or candidate category to which each species has been assigned by USFWS.

For purposes of this section, the following acronyms are used for Federal status species:

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<sup>1</sup> The area owned by the Project Applicant is 83.90 acres, which is the acreage indicated in the Area Plan prepared for the Project. Since Project implementation could potentially require modest off-site improvements in the form of minor grading activities, the "project site" in this analysis also includes those areas subject to off-site improvements.

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

#### **(b) Federal Clean Water Act (CWA), Section 404**

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

#### **(c) Federal Clean Water Act (CWA), Section 401**

The mission of the California Regional Water Quality Control Board (RWQCB) is to develop and enforce water quality objectives and implement plans that will best protect the beneficial uses of the State’s waters, recognizing local differences in climate, topography, geology, and hydrology. Section 401 of the CWA requires that:

“any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.”

Before the USACE will issue a Section 404 permit, the Project Applicant must apply for and receive a Section 401 water quality certification from the RWQCB. A complete application for 401 Certification will include a detailed Water Quality Management Plan (WQMP) that addresses the key water quality features of the Project to ensure the integrity of water quality in the area during and post-construction.

Under separate authorities granted by State law (i.e., the Porter-Cologne Water Quality Control Act), a RWQCB may choose to regulate discharges of dredge or fill materials by issuing or waiving (with or without conditions) Waste Discharge Requirements (WDRs), a type of State discharge permit, instead of taking a water quality certification action. Processing of a WDR is similar to that of a Section 401 certification; however, the RWQCB has slightly more discretion to add conditions to a project under the than under the Federal CWA.

#### **(d) Migratory Bird Treaty Act**

The Migratory Bird Treaty Act (MBTA) protects native bird species from destruction or harm. This protection extends to individuals as well as any part, nest, or eggs of any bird listed as migratory.

In practice, Federal permits potentially impacting migratory birds typically have conditions that require pre-disturbance surveys for nesting birds, and, 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.

## **(2) State**

### **(a) State of California Fish and Game Code, Section 1602**

Section 1602 of the California Fish and Game Code requires any entity (e.g., person, state or local government agency, or public utility) which 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, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, must first notify the California Department of Fish and Wildlife (CDFW) of the project. In the course of this notification process, the CDFW will review the project as it affects streambed habitats within the project area. The CDFW may then place conditions on the Section 1602 clearance to avoid, minimize, and mitigate the potentially significant adverse effects within CDFW jurisdictional limits.

### **(b) Sensitive Resource Classification – California Endangered Species Act-State of California Protection and Classifications**

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

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

The State defines a threatened species as:

*"a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species."*

Candidate species are defined as:

*"...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list."*

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species by stating:

*“no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.”*

Under the CESA, “take” is defined as, “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

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

California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed species are not protected per se, but warrant consideration in the preparation of CEQA biological assessments. However, consideration should be in the context of efforts afforded the species in other areas surrounding a particular project site such, in the case of the subject Project, the NCCP and Chino Hills State Park. For some species, the California Natural Diversity Database (CNDDDB), a CDFW species account database, which provides information on the localities of known observations of sensitive species and habitats, is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites. The CNDDDB records represent both specific and generalized information and mapping of observed species; thus, it is more often than not used as an indicator of the potential presence of special status species on a particular project site and is without regulatory authority.

For the purposes of this section, the following acronyms are used for State status species:

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

The NCCP/HCP provides permits for the take of all covered and conditionally covered species so long as the conditions imposed are satisfied.

### **(c) California Native Plant Society**

The California Native Plant Society (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. The CNPS has developed five California Rare Plant Rank (CRPR) categories:

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

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

- 0.1 – Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- 0.2 – Fairly endangered in California (20-80% occurrences threatened);
- 0.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

The California Native Plant Society listings serve as the candidate list for listing as Threatened and Endangered by CDFW. The CNPS listing is without CEQA or FESA standing. However, under CEQA the CDFW considers plants listed in CNPS Lists 1B and 2 to be “rare” and subject to consideration in a CEQA biological assessment.

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

### **(3) Local**

#### **(a) Open Space Conservation Reserves in the Surrounding Area**

The County of Orange has adopted a nearby Natural Communities Conservation Plan (NCCP) and Habitat Conservation Plan (HCP) forming a Planning Area of 209,000 acres with 37,378 acres conserved in Orange County for a wide variety of habitat and species of wildlife. Within the NCCP areas over 18,000 acres of coastal sage scrub are protected. In addition to the coastal sage scrub habitat, the NCCP also contains approximately 7,300 acres of chaparral, 6,100 acres of grasslands, 1,800 acres of riparian, 950 acres of woodland, 200 acres of forest habitat and significant portions of 16 other habitat types which exist in the sub-region and on the project study area. The final NCCP reserve design is protecting about 36 % of the habitat lands within the planning sub-region. The project study area is not a part of the NCCP but is located near the NCCP area and the project study area contains plant communities and wildlife all preserved within the Orange County NCCP with similar habitat and wildlife.

The Chino Hills State Park is located to the north and east of the project study area and occupies 12,452 acres. The Chino Hills State Park is a broad swath of open space that provides the same variety of habitat and wildlife found on the project study area but in less disturbed conditions due to the effect of the 2008 Freeway Complex fire that affected the property and the protected nature of the park.

### **(b) County of Orange General Plan**

The Resources Element of the County's General Plan includes goals and policies on the conservation and management of biological resources. The Resources Element sets forth a comprehensive strategy for the development, management, preservation, and conservation of resources that are necessary to meet the County of Orange's existing and future demands. The Land Use Element also contains a policy relevant to protection of biological resources. The Project's consistency with the applicable goals and policies is discussed in the impact analysis below.

### **(c) City of Yorba Linda General Plan**

The City's General Plan Recreation and Resources Element contains a policy relevant to the protection of sensitive biological resources. The Project's consistency with the Recreation and Resources Element is discussed in the impact analysis below.

## **b. Existing Conditions**

The existing biological resources within the project study area were determined through a review of relevant literature, field reconnaissance surveys, focused biological studies, and jurisdictional delineations/evaluations. A general biological survey and vegetation mapping was conducted by PCR biologists on May 23, 2012 to document natural communities and existing conditions. During the course of this survey, an inventory of all plant and wildlife species observed was compiled. Survey coverage of the project study area, with special attention to sensitive habitats or those areas potentially supporting sensitive flora or fauna, was ensured using aerial photographs. PCR biologists conducted sensitive plant surveys on April 26, 2012 and July 6, 2012. Coastal California gnatcatcher surveys were conducted between April 14 and June 1, 2012; least Bell's vireo surveys were conducted between April 18 and July 9, 2012; and southwestern willow flycatcher surveys were conducted between May 19 and July 9, 2012.<sup>2</sup> On June 5 and June 11, 2012, PCR conducted a jurisdictional delineation.

Biological resources evaluated included general plant and wildlife inventories, as well as sensitive habitats, special-status plant and animal species, and wildlife movement corridors. Please refer to Appendix A, *Floral and Faunal Compendium*, in the BRA (refer to Appendix C in this EIR) for a listing of the general plant and wildlife species in the project study area. The potential for special-status species to occur within the project study area was based on the presence of suitable habitat, the results of biological assessments and focused surveys conducted within the project study area, and the proximity of the site to previously recorded occurrences in the CNDDDB, CDFW, and USFWS data. Other sources of information used to determine habitat suitability and potential for presence of sensitive biological resources include aerial photographs, topographic maps, soil survey maps, geological maps, previous biological studies, and project plans. Please

<sup>2</sup> In addition, PCR biologists conducted surveys for Coastal California gnatcatcher, least Bell's vireo and southwestern willow flycatcher in 2006 within the project study area.

refer to the BRA for further details on the literature review, field investigations, natural community mapping, and sensitive plant surveys conducted for the biological resources analysis. The results of the biological resources analyses are summarized below.

### **(1) General Characterization of the Project Study Area**

The project study area can be characterized as a highly used “remnant” portion of an open space area near Chino Hill State Park, north of the project study area and separated by other open space parcels. The project study area is bordered on the north, west and south by urban residential development, equestrian corrals and active oil drilling. The site is currently accessible by a network of historic oil production and access roads and occupied by abandoned and active drilling sites and related environmental disturbances. Historically, the project study area was grazed range land resulting in the introduction and persistence of non-native, invasive plant species that pervade native plant communities observed on the project study area. The project study area was burned by the Freeway Complex 2008 wildfire which further promoted ruderal or non-native invasive plant associations to develop and dominate the site area. Ruderal vegetation associations occupy nearly half (42%) of the 84.60-acre site and are dominate in seven of the 17 Natural Communities observed on the project study area. Over 4% of the site is barren. These areas are the remnants of energy resources development, such as drilling pads and operational roads.

Historical aerial photos and on-site review reveal the only perennial flow element to be on the easterly portion of the site associated with Drainage A1 and a portion of Drainage A (see Figure 4.3-4). The aerial photos suggest that these streambeds were formerly ephemeral, non-riparian vegetated drainages that now support a much wetter hydrologic regime that has been formed in the recent past (approximately 20 years) resulting directly and indirectly<sup>3</sup> from urban runoff possibly stemming from the bounding residential sub-drains (placed in the residential subdivisions for geological stability) and urban nuisance runoff returning a persistent source of surface water into the formerly ephemeral water courses. With the exception of Drainage A1 and the perennial portion of Drainage A, drainage of the site is afforded by “natural” ephemeral flow elements, which terminate approximately 25 feet off site into storm drains eventually connecting to the Santa Ana River, approximately 2 miles to the south/southwest. Other on site water courses which occur on the site are noted as ephemeral, flow elements, characterized by upland vegetation and disturbed habitat within the final 100 feet of Drainage A1.1. The only wetland habitat found on site is an artificial scenario created by residential off-site urban runoff and containment effects of historic and current residential development, access roads, the Metropolitan Water District improvements, and storm drains. These factors have a maximum effect at the southern portion of the project study area where they work together to produce an artificial, biologically isolated, and uncharacteristic habitat parcel. It is also noted that the Yorba Linda, California 7.5-minute Topographic Quadrangle USGS Map does not identify any springs on the project site, nor was there any evidence in the field reconnaissance conducted as part of the BRA that springs are located within the project boundaries.

The least Bell’s vireo occupies localized areas of habitat on site that have been influenced by residential runoff to form or create pockets of riparian vegetation resulting in habitat that has attracted the least Bell’s

<sup>3</sup> *Only a portion of Drainage A supports perennial flow that appears to be associated with groundwater seepage generated by groundwater sub-drainage and discharge of surface flow from adjacent urban developments. The majority of Drainage A upstream of this area is completely ephemeral in nature, further supporting the type-conversion of habitat from ephemeral to perennial flow regimes.*

vireo. The least Bell's vireo populations in southern California are increasing due to control of the nest parasitizing cowbird. The project study area was observed or is expected to support several other special status wildlife species as well.

## (2) Natural Communities

A description of each natural community occurring within the project study area is provided below based on the Orange County Habitat Classification System (OCHCS) and PCR findings. Locations of each of the natural communities are shown in **Figure 4.3-1, Natural Communities**. **Table 4.3-1, Natural Communities**, compiles each of the natural communities observed and their respective acreage within the project study area. Representative photographs of these vegetation communities observed on the project study area are included in Figure 5, *Site Photographs*, of the BRA; refer to Appendix C. As mentioned above, ruderal vegetation associations occupy nearly half (42%) of the 84.60-acre site and are dominate in seven of the 18 Natural Communities observed on the project study area.

**Table 4.3-1**

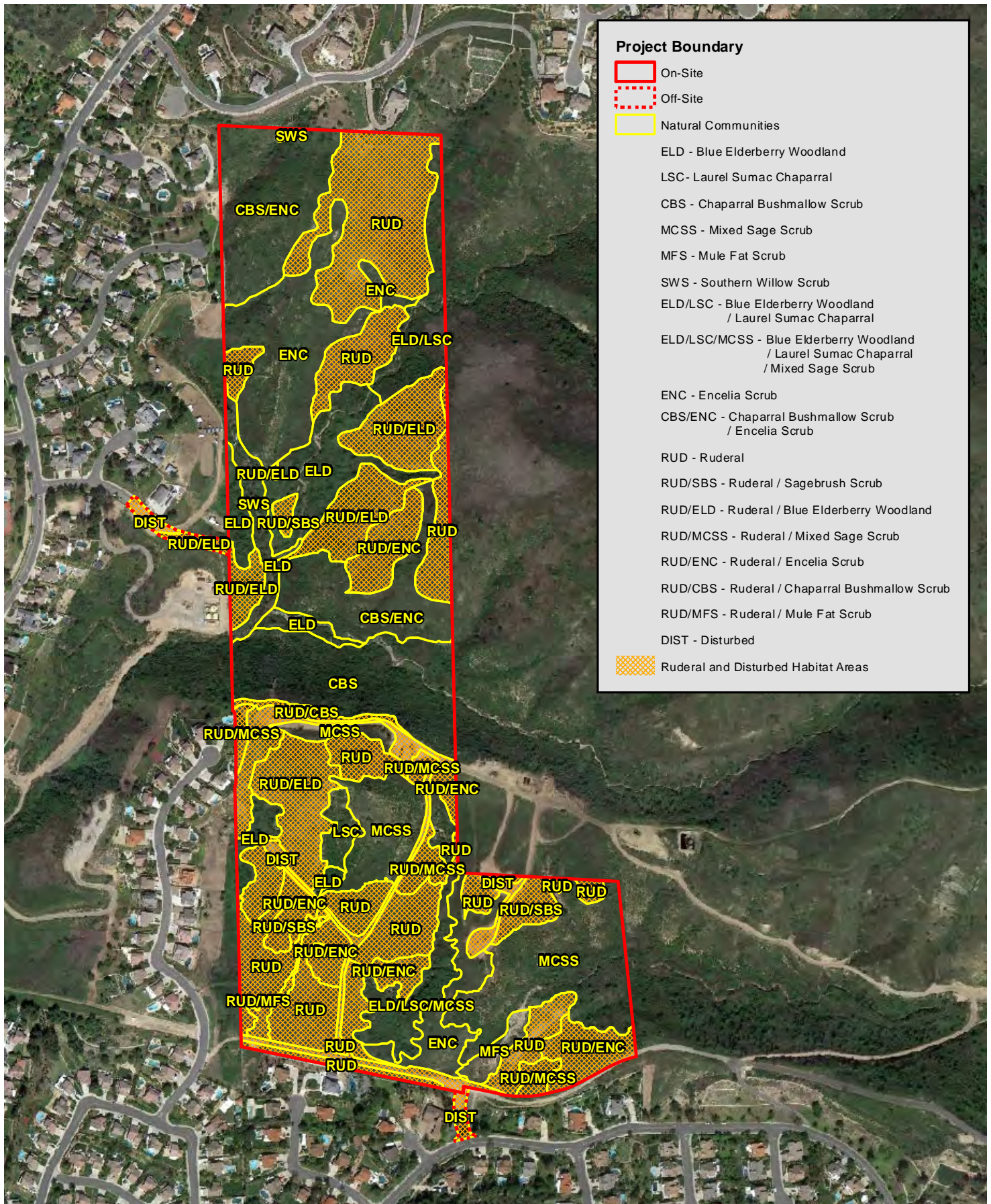
### Natural Communities

Natural Community	OCHCS <sup>a</sup> Code	On-Site (acres)	Off-Site (acres)	Total (acres)
Blue Elderberry Woodland	8.4	5.21		5.21
Laurel Sumac Chaparral	3.0	0.70		0.70
Chaparral Bushmallow Scrub	2.3.11	6.20		6.20
Mixed Coastal Sage Scrub	2.3.10	9.05		9.05
Mule Fat Scrub	7.3	0.60		0.60
Southern Willow Scrub	7.2	1.50		1.50
Blue Elderberry Woodland/Laurel Sumac Chaparral	8.4/3.0	2.28		2.28
Blue Elderberry Woodland/Laurel Sumac Chaparral/Mixed Coastal Sage Scrub	8.4/3.0/ 2.3.10	2.57		2.57
Encelia Scrub	2.5	8.12		8.12
Chaparral Bushmallow/Encelia Scrub	2.3.11/2.5	9.14		9.14
Ruderal	4.6	18.17		18.17
Ruderal/Sagebrush Scrub	4.6/2.3.6	1.48		1.48
Ruderal/Blue Elderberry Woodland	4.6/8.4	8.27	0.26	8.53
Ruderal/Mixed Coastal Sage Scrub	4.6/2.3.10	1.43		1.43
Ruderal/Encelia Scrub	4.6/2.5	5.17		5.17
Ruderal/Chaparral Bushmallow Scrub	4.6/2.3.11	0.40		0.40
Ruderal/Mule Fat Scrub	4.6/7.3	0.39		0.39
Disturbed	16.1	3.22	0.44	3.66
<b>Total</b>		<b>83.90</b>	<b>0.70</b>	<b>84.60</b>

<sup>a</sup> Orange County Habitat Classification System.

Source: PCR Services Corporation, 2013.





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**(a) Blue Elderberry Woodland (OCHCS – 8.4)**

Blue elderberry woodland is dominated by blue elderberry (*Sambucus nigra* ssp. *caerulea*). Associated species include poison hemlock (*Conium maculatum*), giant wild rye (*Leymus condensatus*), California bush sunflower (*Encelia californica*), chaparral bushmallow (*Malacothamnus fasciculatus*), Southern California black walnut (*Juglans californica* var. *californica*), California sagebrush (*Artemisia californica*), western ragweed (*Ambrosia psilostachya*), fuchsia-flowered gooseberry (*Ribes speciosum*), western bindweed (*Calystegia macrostegia*), golden yarrow (*Eriophyllum confertiflorum*), fennel (*Foeniculum vulgare*), short-podded mustard (*Hirshfeldia incana*), and sweetclover (*Melilotus* sp.). Blue elderberry woodland comprises 5.21 acres within the central and southern portions of the project study area.

**(b) Laurel Sumac Chaparral (OCHCS – 3.0)**

Laurel sumac chaparral is dominated by laurel sumac (*Malosma laurina*). Associated species include blue elderberry, California sagebrush, fennel, and short-podded mustard. Laurel sumac chaparral comprises 0.70 acre within the southern portion of the project study area.

**(c) Chaparral Bushmallow Scrub (OCHCS – 2.3.11)**

Chaparral bushmallow scrub is dominated by dense stands of chaparral bushmallow. This community is characterized by monocultures of chaparral bushmallow with sparse open areas containing Pomona locoweed (*Astragalus pomonensis*), laurel sumac, California bush sunflower, short-podded mustard. Chaparral bushmallow scrub comprises 6.20 acres within the central and southeastern portions of the project study area.

**(d) Mixed Coastal Sage Scrub (OCHCS – 2.3.10)**

Mixed coastal sage scrub is dominated by a mixed community of California sagebrush, California bush sunflower, and black sage (*Salvia mellifera*). Associated species observed within this community include chaparral bushmallow, tocalote (*Centaurea melitensis*), laurel sumac, blue elderberry, California buckwheat (*Eriogonum fasciculatum*), purple sage (*Salvia leucophylla*), white sage (*Salvia apiana*), giant wild rye, California aster (*Corethrogyne filaginifolia*), needlegrass (*Nassella* sp.), purple nightshade (*Solanum xanti*), and blue-eyed-grass (*Sisyrinchium bellum*). Mixed coastal sage scrub comprises 9.05 acres within the southern portion of the project study area.

**(e) Mule Fat Scrub (OCHCS – 7.3)**

Mule fat scrub is dominated by mule fat (*Baccharis salicifolia*) and is typically found in association with drainage features and riparian areas. Associated species include native Southern California black walnut, California sagebrush, cliff malacothrix (*Malacothrix saxatilis*), western verbena (*Verbena lasiostachys*), Pomona locoweed and mugwort (*Artemisia douglasiana*), as well as the non-native and invasive tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), short-podded mustard, poison hemlock, , tocalote, , and cheeseweed (*Malva parviflora*). Mule fat scrub comprises 0.60 acre within the southern portion of the project study area.



**(f) Southern Willow Scrub (OCHCS – 7.2)**

Southern willow scrub is a community comprised of several species of willows. Dominant species within this community include black willow (*Salix gooddingii*) and red willow (*Salix laevigata*), with a subdominance of poison oak (*Toxicodendron diversilobum*). Associated species include arroyo willow (*Salix lasiolepis*), cattail (*Typha* sp.), mugwort, blue elderberry, southern California black walnut, poison hemlock, Douglas' nightshade (*Solanum douglasii*), wild cucumber (*Marah macrocarpus*), coyote brush (*Baccharis pilularis*), water-cress (*Rorippa nasturtium-aquaticum*), giant wild rye, and cliff malacothrix. Southern willow scrub comprises 1.50 acres within the western portion of the project study area. This vegetation also includes the non-native and invasive castor bean, tree tobacco, fennel, Mexican fan palm (*Washingtonia robusta*), gum tree (*Eucalyptus* sp.), annual beard grass (*Polypogon monspeliensis*), and smilo grass (*Piptatherum miliaceum*).

**(g) Blue Elderberry Woodland/Laurel Sumac Chaparral (OCHCS – 8.4/3.0)**

Blue elderberry woodland/laurel sumac chaparral is dominated by blue elderberry with a subdominance of laurel sumac. Associated species include California sagebrush, black sage, fennel, and short-podded mustard. Blue elderberry woodland/laurel sumac chaparral comprises 2.28 acres within the northern portion of the project study area.

**(h) Blue Elderberry Woodland/Laurel Sumac Chaparral/Mixed Coastal Sage Scrub (OCHCS – 8.4/3.0/2.3.10)**

Blue elderberry woodland/laurel sumac chaparral/mixed coastal sage scrub is dominated by blue elderberry with a subdominance of laurel sumac and an understory of mixed coastal sage scrub species. Associated species include California sagebrush, California bush sunflower, black sage, fennel, and short-podded mustard. Blue elderberry woodland/laurel sumac chaparral/mixed coastal sage scrub comprises 2.57 acres within the southern portion of the project study area.

**(i) Encelia Scrub (OCHCS – 2.5)**

Encelia scrub is dominated by California bush sunflower. Associated species include chaparral bushmallow, laurel sumac, short-podded mustard, black sage, blue elderberry, sugar bush (*Rhus ovata*), totalote, saw-toothed goldenbush (*Hazardia squarrosa*), toyon (*Heteromeles arbutifolia*), California sagebrush, horehound (*Marrubium vulgare*), rattlesnake weed (*Chamaesyce albomarginata*), narrow-leaf milkweed (*Asclepias fascicularis*), tree tobacco, cliff malacothrix, sow thistle (*Sonchus* sp.), Italian thistle (*Carduus pycnocephalus*), Palmer's goldenbush (*Ericameria palmeri*), red-stemmed filaree (*Erodium cicutarium*), milk thistle (*Silybum marianum*), deerweed (*Lotus scoparius*), coastal goldenbush (*Isocoma menziesii*), fountain grass (*Pennisetum setaceum*), lemonadeberry (*Rhus integrifolia*), fascicled tarweed (*Hemizonia fasciculata*), needlegrass, rattlesnake spurge (*Euphorbia serpens*), and Douglas' nightshade. Encelia scrub comprises 8.12 acres within the northern and southern portions of the project study area.

**(j) Chaparral Bushmallow/Encelia Scrub (OCHCS – 2.3.11/2.5)**

Chaparral bushmallow/encelia scrub is dominated by chaparral bushmallow. Associated species include laurel sumac, purple sage, horseweed (*Conyza canadensis*), tree tobacco, milk thistle, California sagebrush, totalote, and blue elderberry. Chaparral bushmallow/encelia scrub comprises 9.14 acres within the central portion of the project study area.

**(k) Ruderal (OCHCS – 4.6)**

Ruderal areas are dominated by weedy non-native species and exhibit signs of previous disturbance. Species observed within this community include Mexican fan palm, short-podded mustard, fennel, black mustard (*Brassica nigra*), blue elderberry, California bush sunflower, Palmer's goldenbush, milk thistle, western verbena, tocalote, curly dock (*Rumex* sp.), western sycamore (*Platanus racemosa*), Peruvian pepper tree (*Schinus molle*), and prickly pear (*Opuntia littoralis*). Ruderal areas comprise 18.17 acres within the northern and southern portions of the project study area. As described below, ruderal species also pervade several native plant assemblages on-site.

**(l) Ruderal/Sagebrush Scrub (OCHCS – 4.6/2.3.6)**

Ruderal/sagebrush scrub is dominated by weedy non-native species and California sagebrush. Species observed within this community include short-podded mustard and western ragweed. Ruderal/sagebrush scrub comprises 1.48 acres within the central and southeastern portions of the project study area.

**(m) Ruderal/Blue Elderberry Woodland (OCHCS – 4.6/8.4)**

Within the central portion of the project study area, ruderal/blue elderberry woodland comprises 8.53 acres (8.27 acres on-site and 0.26 acre off-site) and is characterized by a dominance of weedy, ruderal species and those species found within blue elderberry woodland.

**(n) Ruderal/Mixed Coastal Sage Scrub (OCHCS – 4.6/2.3.10)**

Within the southern portion of the project study area, ruderal/mixed coastal sage scrub comprises 1.43 acres and is characterized by a dominance of weedy, ruderal species and those species found within mixed coastal sage scrub. California figwort (*Scrophularia californica*) was also observed within this community.

**(o) Ruderal/Encelia Scrub (OCHCS – 4.6/2.5)**

Within the central and southern portions of the project study area, ruderal/encelia scrub comprises 5.17 acres and is characterized by a dominance of weedy, ruderal species and those species found within encelia scrub.

**(p) Ruderal/Chaparral Bushmallow Scrub (OCHCS – 4.6/2.3.11)**

Within the central portion of the project study area, ruderal/chaparral bushmallow scrub comprises 0.40 acre and is characterized by a dominance of weedy, ruderal species and those species found within chaparral bushmallow scrub.

**(q) Ruderal/Mule Fat Scrub (OCHCS – 4.6/7.3)**

Within the southwestern portion of the project study area, ruderal/mule fat scrub comprises 0.39 acre and is characterized by a dominance of weedy, ruderal species and those species found within Mule Fat Scrub. Other species observed within this community include chaparral bushmallow, fennel, blue elderberry, and Peruvian pepper tree.

### (r) Disturbed (OCHCS – 16.1)

Disturbed areas within the project study area include areas of little to no vegetation and are comprised of dirt roads, fuel modification areas, and cleared pads supporting oil rigs. Disturbed areas comprise 3.66 acres (3.22 acres on-site and 0.44 acre off-site) within the southern portion of the project study area. Associated species are comprised predominantly of weedy species and include Russian thistle (*Salsola tragus*), tree tobacco, bristly ox-tongue (*Picris echioides*), fennel, short-podded mustard, tocalote, calabazilla (*Cucurbita foetidissima*), fascicled tarweed, foxtail chess (*Bromus madritensis*), wild oat (*Avena* sp.), telegraph weed (*Heterotheca grandiflora*), barley (*Hordeum* sp.), cheeseweed, Italian thistle, horseweed, castor bean, and sweetclover.

### (3) Sensitive Biological Resources

The following discussion describes the natural communities/habitats within the project study area and plant and wildlife species present, or potentially present that have been afforded special recognition by Federal, State, or local resource conservation agencies and organizations.

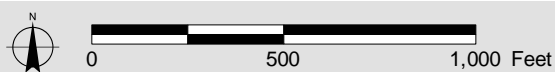
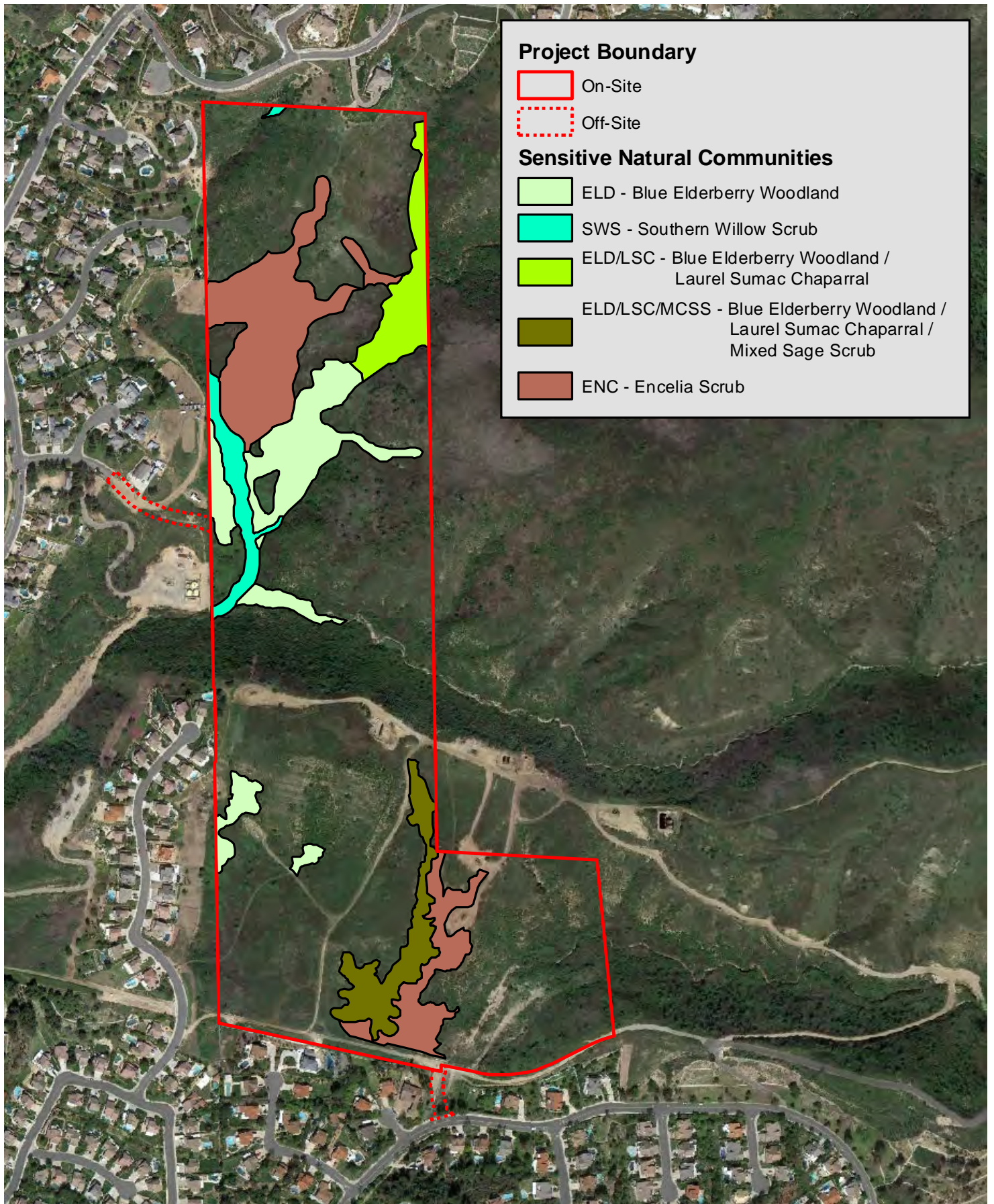
#### (a) Sensitive Natural Communities/Habitat

As shown in **Figure 4.3-2, Sensitive Natural Communities**, the project study area supports five natural communities that are CNDDDB high inventory priority communities and are considered sensitive due to their decline in the region and/or their ability to support sensitive species: blue elderberry woodland (CNDDDB Code 63.410.00), southern willow scrub (CNDDDB Code 61.211.05), blue elderberry woodland/laurel sumac chaparral (CNDDDB Code 63.410.00), blue elderberry woodland/laurel sumac chaparral/mixed coastal sage scrub (CNDDDB Code 63.410.00), and encelia scrub (CNDDDB Code 32.050.00). The project study area supports 5.21 acres of blue elderberry woodland in the central and southern portion of the study area, 2.28 acres of blue elderberry woodland/laurel sumac chaparral and 2.57 acres of blue elderberry woodland/laurel sumac chaparral/mixed coastal sage scrub within the northern and southern portions of the project study area respectively. The project study area also supports 1.50 acres of southern willow scrub and 8.12 acres of encelia scrub within the western and central portions of the site, respectively. For purposes of clarification, Southern California black walnut woodland is also considered to be a sensitive natural community. However, this species does not constitute its own distinct woodland structure on the project study area as is seen elsewhere in the region where entire hillsides exhibit extensive canopies of walnuts. Rather, it is present as individual and small groups of trees scattered among the other on-site upland and riparian natural communities.

#### (b) 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 CRPR Lists 1A, 1B, and 2). The following plant species have been documented to occur within the region, but are not expected to occur due to lack of suitable habitat or because the project study area is outside of the known range or elevation for these species: Tecate cypress (*Cupressus forbesii*), Malibu baccharis (*Baccharis malibuensis*), southern tarplant (*Centromadia parryi* ssp. *australis*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), rigid fringepod (*Thysanocarpus rigidus*), Coulter's saltbush (*Atriplex coulteri*), Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex sernana* var. *davidsonii*), Santa Barbara morning glory (*Calystegia sepium* ssp. *binghamiae*), California saw-grass (*Cladium californicum*), heart-leaved pitcher sage (*Lepechinia cardiophylla*), Jokerst's monardella (*Monardella australis* ssp. *jokersti*), California beardtongue





**Sensitive Natural Communities**

FIGURE

**4.3-2**

Cielo Vista  
Source: Google Earth, 2011; PCR Services Corporation, 2013.

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(*Penstemon californicus*), prostrate vernal pool navarretia (*Navarretia prostrata*), vernal barley (*Hordeum intercedens*), and chaparral nolina (*Nolina cismontana*). Sensitive plant species that have potential to occur on-site but not identified during site surveys are identified below.

- chaparral sand verbena (*Abronia villosa* var. *aurita*)
- Braunton's milk-vetch (*Astragalus brautonii*)
- round-leaved filaree (*California macrophylla*)
- Plummer's mariposa lily (*Calochortus plummerae*)
- foothill mariposa lily (*Calochortus weedii* var. *intermedius*)
- San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*)
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*)
- long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)
- slender-horned spineflower (*Dodecahema leptoceras*)
- many-stemmed dudleya (*Dudleya multicaulis*)
- Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*)
- mesa horkelia (*Horkelia cuneata* ssp. *puberula*)
- Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)
- Allen's pentachaeta (*Pentachaeta aurea* ssp. *allenii*)
- south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*)
- Brand's star phacelia (*Phacelia stellaris*)
- white rabbit-tobacco (*Pseudognaphalium leucocephalum*)
- chaparral ragwort (*Senecio aphanactis*)
- salt spring checkerbloom (*Sidalcea neomexicana*)
- San Bernardino aster (*Symphotrichum defoliatum*)

Focused sensitive plant surveys were conducted in April and July 2012 for the above listed species with the potential to occur within the project study area. None of the species listed above were observed on-site.

### (c) Sensitive Wildlife Species

Sensitive wildlife include those species listed as Endangered or Threatened under the FESA or CESA, candidates for listing under FESA and/or CESA by the USFWS or CDFW, and species of special concern to the CDFW. A number of sensitive wildlife species reported as being observed in the region surrounding the project study area.

The following wildlife species have been reported within the region, but due to a lack of suitable habitat(s) or because the project study area is outside of the known range, these species they were not observed on the project study area: San Diego fairy shrimp (*Branchinecta sandiegonensis*), Santa Ana sucker (*Catostomus*

*santaanae*), western spadefoot (*Spea hammondi*), northern leopard frog (*Lithobates pipiens*), western pond turtle (*Actinemys marmorata*), bank swallow (*Riparia riparia*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), grasshopper sparrow (*Ammodramus savannarum*), tri-colored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), big free-tailed bat (*Nyctinomops macrotis*), Mexican long-tongued bat (*Choeronycteris mexicana*), and American badger (*Taxidea taxus*).

Four special status wildlife species were observed on-site: the yellow-breasted chat (*Icteria virens*), the least Bell's vireo, yellow warbler (*Setophaga petechia*), and the red-diamond rattlesnake (*Crotalus ruber*). The least Bell's vireo is listed as Endangered under CESA and FESA. The yellow-breasted chat, yellow warbler and the red-diamond rattlesnake are CDFW Species of Special Concern. In addition to the special status wildlife species identified on the project study area, special status wildlife species with potential to occur on-site, but were not identified during site surveys, include: Coast Range newt (*Taricha torosa torosa*), Coast patch-nosed snake (*Salvadora hexalepis virgulata*), two-striped garter snake (*Thamnophis hammondi*), Coast horned lizard (*Phrynosoma coronatum*), orange-throated whiptail (*Cnemidophorus hyperythrus*), Western mastiff bat (*Eumops perotis californicus*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), golden eagle (*Aquila chrysaetos*), white-tailed kite (*Elanus leucurus*), long-eared owl (*Asio otus*), coastal California gnatcatcher, Southwestern willow flycatcher (*Empidonax traillii extimus*), pallid bat (*Antrozous pallidus*), Western yellow bat (*Lasiurus xanthinus*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), and San Diego desert woodrat (*Neotoma lepida intermedia*).

Due to the presence of suitable habitat, focused surveys were conducted for coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher. These species, as well as the golden eagle, are discussed below.

#### **Coastal California Gnatcatcher**

The coastal California gnatcatcher is a Federal Threatened (FT) and California SSC species. Protocol focused surveys were conducted for this species by PCR in 2006 and 2012. No Coastal California gnatcatchers were observed on-site during either focused survey.

#### **Least Bell's Vireo**

The least Bell's vireo is a Federal Endangered (FE) and State Endangered (SE) species. Focused protocol surveys were conducted for this species by PCR in 2006 and 2012. No least Bell's vireo was observed within the project study area during the 2006 focused surveys; however, this species was observed in 2012. During the 2012 surveys conducted by PCR, one pair and a fledgling were observed in the southern willow scrub in the eastern portion of the project study area and pair of nesting least Bell's vireo and their two (2) fledglings were observed within the canopy of the mule fat scrub in the southern portion of the project study area. Least Bell's vireo is not characteristically associated with mule fat scrub, rather preferring vegetation typically dominated by willows (*Salix* spp.) in southern California. However, with the increase in population numbers in Southern California in recent years the species may be recolonizing historically used habitats other than willow scrub and willow woodland.

Prior to the vireo's listing in 1986, it had become extirpated from most of its historic range, numbering 300 pairs statewide (Kus 2002). Populations were confined to eight counties south of Santa Barbara, with the majority of birds occurring in San Diego County. In the decade since its listing, the least Bell's vireo

population increased ten-fold since its listing under federal ESA in 1986 (51 FR 16474). Population growth has been greatest in San Diego County (621 percent increase) and Riverside County (2,997 percent increase) (USFWS 2006). However, the vireo has not yet recolonized historical breeding range in the San Joaquin and Sacramento valleys (USFWS 2006). The northernmost sighting in recent years was a nesting pair of vireos near Gilroy (Santa Clara County) in 1997 (Roberson et al., 1997). However, more than half of the extant vireo population occurs on drainages within Marine Corps Base Camp Pendleton in San Diego County and Prado Basin in Riverside County (USFWS 1998). The project study area is not located within the Federal Critical Habitat boundaries for the least Bell's vireo. The location of least Bell's vireo observations on-site are shown in **Figure 4.3-3, Sensitive Wildlife Species**.

### ***Southwestern Willow Flycatcher***

The southwestern willow flycatcher is a FE and SE species. Focused surveys were conducted for this species by PCR in 2006 and 2012. No southwestern willow flycatchers were observed on-site during focused surveys.

### ***Golden Eagle***

The golden eagle is a State Fully Protected (SFP) species that nests in cliffs and large trees in open areas. The golden eagle requires open terrain such as grasslands, deserts, savannahs, and shrub habitats for hunting (Carnie 1954). The project study area does provide suitable foraging habitat for this species. However, no suitable nesting habitat occurs on-site nor were golden eagles identified on or near the project study area during site surveys.

## **(4) Jurisdictional Delineation**

A jurisdictional delineation of all existing ephemeral and artificially supported perennial flow features was conducted by PCR in June 2012 to assess the extent of "waters of the U.S., waters of the State" and/or wetlands under the jurisdiction of the USACE/RWQCB, and/or streambed and associated riparian habitat under the jurisdiction of the CDFW.<sup>4</sup> Detailed methodology and results of the jurisdictional delineation are included in *Investigation of Jurisdictional Waters and Wetlands* report prepared for the Project (refer to Appendix C of this EIR).

The methodology and process used to evaluate the stream courses, record data, and draw conclusions on the existing drainages is described as follows:

1. Literature and map review prior to site visits.
2. Soil survey review prior to site visits.
3. Field observations of USACE and CDFW jurisdictional field indicators such as the "ordinary high water mark," limits of wetlands based on USACE guidelines and publications, and presence of a defined bed and bank and/or streambed associated riparian vegetation.<sup>5</sup>

<sup>4</sup> The extent of RWQCB jurisdiction is presumed to be consistent with the extent USACE jurisdiction.

<sup>5</sup> USACE's *Field Guide to the Identification of the OHWM in the Arid West Region of the United States* (USACE 2008), *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Environmental Laboratory 2008)

4. Recordation of field observations and vegetation types utilizing hard maps, USACE approved wetland data sheets, and GPS equipment (i.e. Trimble GeoExplorer unit).
5. Preparation of final jurisdictional features maps based on review of topography, aerial imagery, field maps, and collected data.

The project study area contains two main stem flow features (referred to in this section as Drainage A on the northwest portion of the site and Drainage B located on the southern portion of the site) five tributary ephemeral flow features (referred to in this section as Tributaries A1.1 A2, A3, B1, and B2), and one perennial feature (referred to in this section as Drainage A1). Both mainstream drainage features are conveyed into storm drains at the periphery of the project study area within bordering developed communities. The storm drains ultimately convey flow directly to the Santa Ana River, approximately 2 miles south/southwest of the project study area. There is approximately 6,836 linear feet of streambed and 0.87 acres of USACE/RWQCB jurisdiction (“waters of the U.S.”) and 2.07 acres of CDFW jurisdiction. Precisely 0.29 acres of the project study area are wetlands as shown in **Figure 4.3-4, Jurisdictional Features**, and **Table 4.3-2, Jurisdictional Features**.

Table 4.3-2

## Jurisdictional Features

Drainage Name	Length (feet)	USACE Jurisdiction (acres) <sup>a,b</sup>	CDFW Jurisdiction (acres) <sup>a,b</sup>	Flow Classification
Drainage A	1,827	0.31 (0.14)	0.89 (0.14)	Intermittent
Drainage A1	640	0.00 (0.15)	0.18 (0.15)	Perennial
Drainage A1.1	444	0.01	0.03	Ephemeral
Drainage A2	469	0.04	0.10	Ephemeral
Drainage A3	978	0.07	0.18	Ephemeral
Drainage B	923	0.11	0.29	Ephemeral
Drainage B1	1,160	0.03	0.08	Ephemeral
Drainage B2	395	0.01	0.03	Ephemeral
<b>Total</b>	<b>6,836</b>	<b>0.58 (0.29)</b>	<b>1.78 (0.29)</b>	
<b>Grand Total</b>	<b>6,836</b>	<b>0.87</b>	<b>2.07</b>	

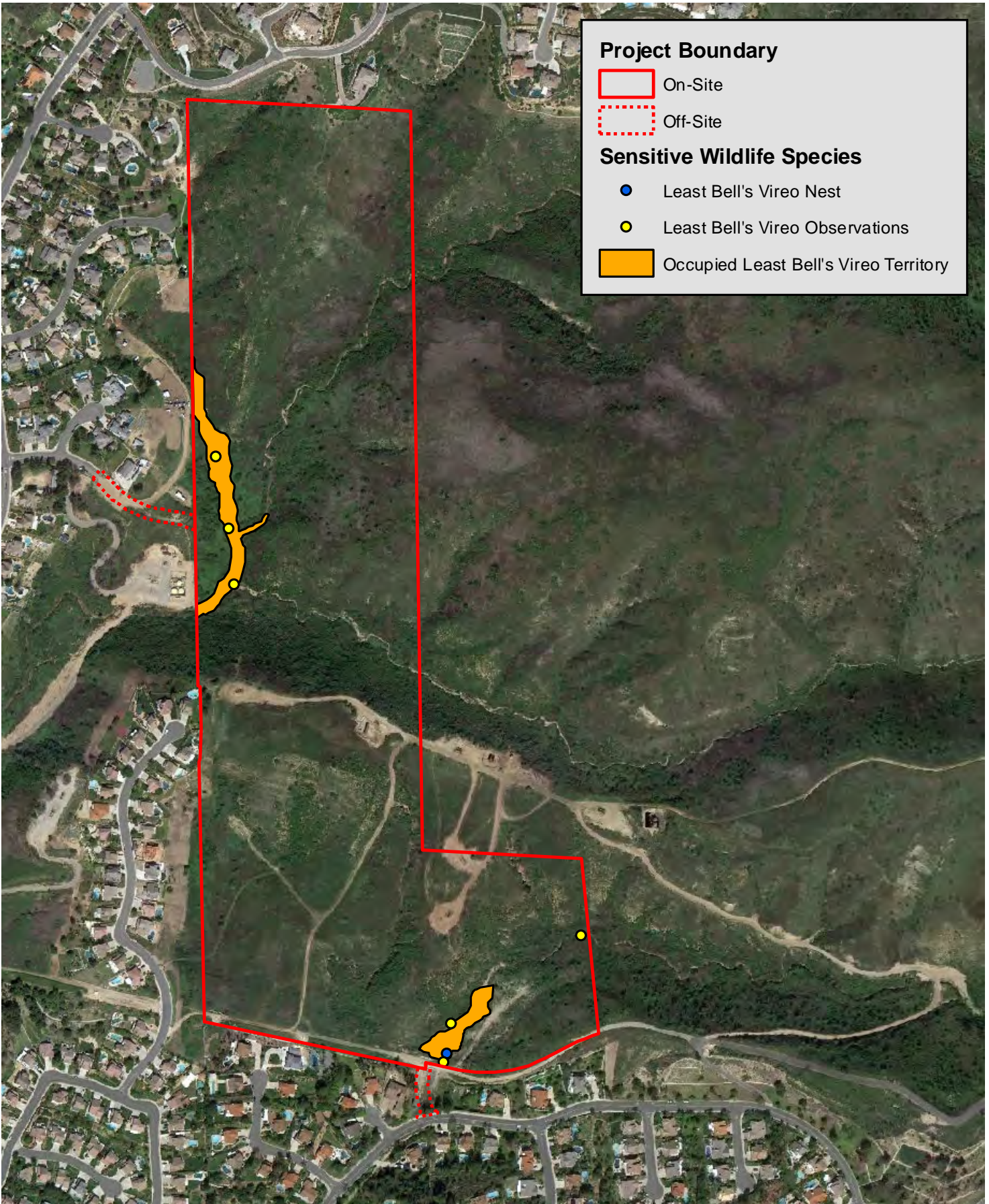
<sup>a</sup> Jurisdictional acreages often overlap and are therefore not additive (e.g., USACE acreages are included in the total CDFW jurisdictional acreages).

<sup>b</sup> Acreages in parentheses indicate wetlands.

Source: PCR Services Corporation, 2013.

Drainage A is an unnamed USGS blue line tributary to the Santa Ana River with canyon headwaters initiating off-site approximately 1-mile east of the project study area. Drainage A is consistent with the classification of an ephemeral stream for approximately 1,244 linear feet prior to supporting an intermittent stream for the remaining 583 linear feet of on-site drainage. Groundwater observed within Drainage A and surface water observed within Drainage A1 supports the jurisdictional wetlands. There are 4 tributaries associated with Drainage A; Drainage A1, A1.1, A2, and A3. The observed groundwater appears to be seepage associated with persistent nuisance flows conveyed by Drainage A1, from off-site “created” neighborhoods



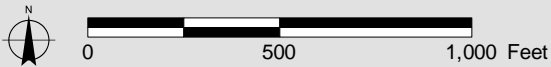


**Project Boundary**

- On-Site
- Off-Site

**Sensitive Wildlife Species**

- Least Bell's Vireo Nest
- Least Bell's Vireo Observations
- Occupied Least Bell's Vireo Territory

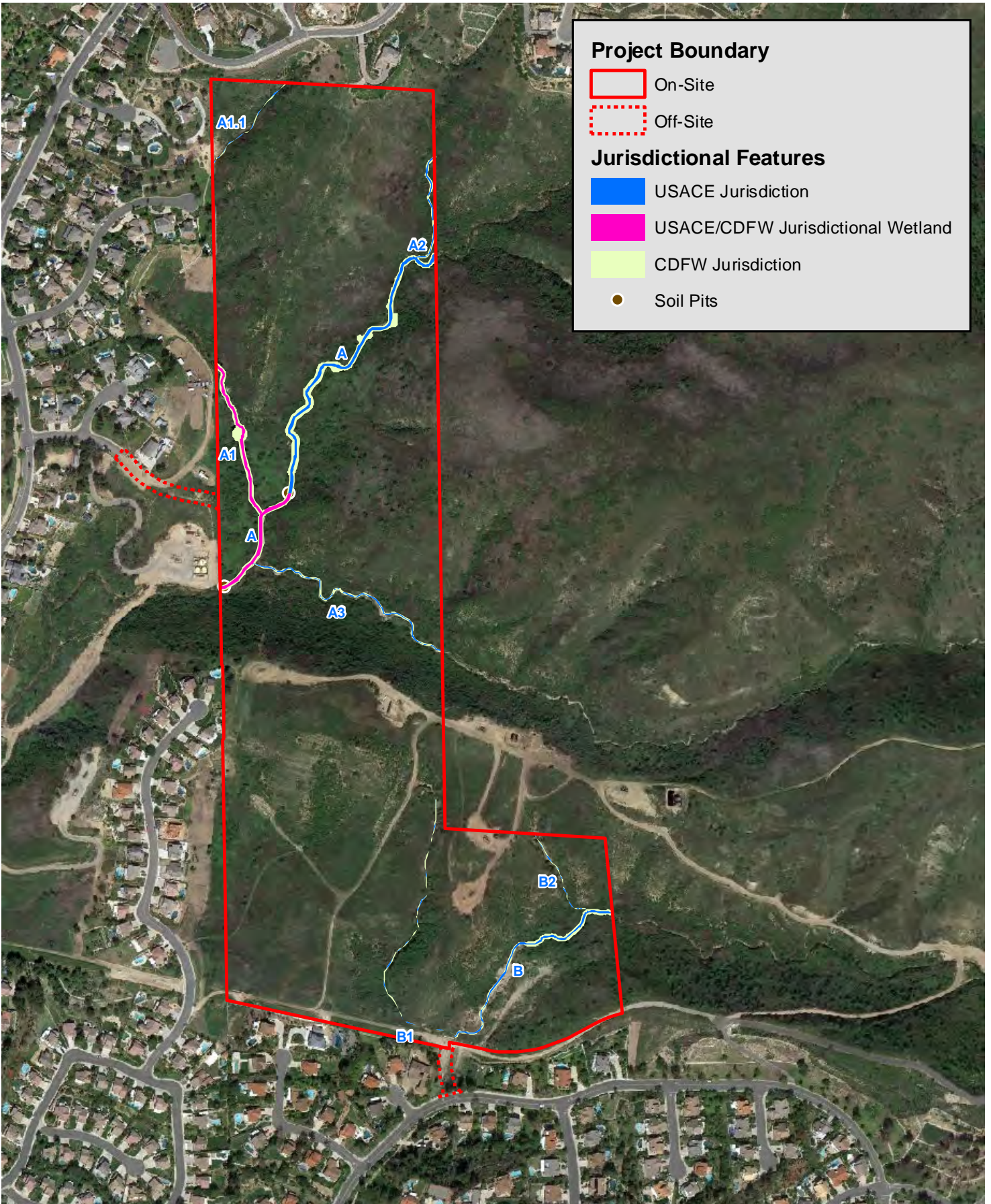


**Sensitive Wildlife Species**

Cielo Vista  
 Source: Google Earth, 2011; PCR Services Corporation, 2013.

FIGURE  
**4.3-3**



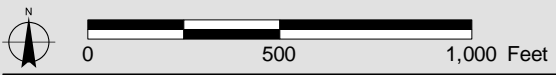


**Project Boundary**

- On-Site
- Off-Site

**Jurisdictional Features**

- USACE Jurisdiction
- USACE/CDFW Jurisdictional Wetland
- CDFW Jurisdiction
- Soil Pits



**Jurisdictional Features**

Cielo Vista  
Source: Google Earth, 2011; PCR Services Corporation, 2013.

FIGURE  
**4.3-4**

that have saturated the surrounding area. Most of the Drainage A features appear to be anthropogenic in origin based on review of historic aerial imagery. Vegetation within this drainage is dominated by native hydrophytes and native trees such as willows.

Drainage B is an ephemeral drainage that initiates within steep canyon topography associated with Blue Mud Canyon, with headwaters located approximately 2.5 miles east of the project study area. The drainage feature enters the site along the eastern project boundary approximately 350 feet north of the southeast corner of the property and extends for approximately 923 linear feet in a southwest trending orientation. The downstream 300-400 linear feet of Drainage B and downstream 100-200 linear feet of Drainage B1 are highly disturbed likely due to fire and subsequent mud/debris flow, as well as suppression of mud/debris associated with the protection of adjacent neighboring development. There are 2 tributaries associated with Drainage B; Drainage B1, and B2.

## **(5) Wildlife Movement**

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

The project study area is bounded by residential development to the north, south, and west. Thus, the development surrounding the project study area would deter the movement of larger mammals (that typically have larger home ranges and longer dispersal distances or require dense vegetative cover) through the project study area. That is, the project site is not conducive to the movement of larger mammals. However, species that are less restricted in movement pathway requirements or are adapted to urban areas (e.g., raccoon, skunk, coyote, birds) likely move through the project study area. Although the project study area provides live-in habitat for wildlife and may support movement on a local scale, it does not function as a regional wildlife movement corridor since it does not connect two or more habitat patches due to the surrounding development.

## **2. ENVIRONMENTAL IMPACTS**

### **a. Methodology**

For the purpose of this section, Project-related impacts on biological resources take two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of natural habitats (i.e., vegetation or natural communities), which in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts also include the destruction of individual plants or wildlife, which is typically the case in species of low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals in these manners may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and, hence, population stability. Indirect impacts are considered to be those that involve the effects of increases in ambient levels of sensory stimuli (e.g., noise, light), unnatural predators (e.g., domestic cats and other non-

native animals), and competitors (e.g., exotic plants, non-native animals). Indirect impacts may be associated with the construction and/or eventual habitation/operation of a project; therefore, these impacts may be both short-term and long-term in their duration. These impacts are commonly referred to as “edge effects” and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites. The CEQA evaluation of indirect impacts will consider the quality and quantity of loss relative to the wildlife and habitat found on the project study area compared to that which is preserved in the surrounding areas (i.e., Orange County NCCP, Chino Hills State Park and Prado Basin).

The determination of impacts in this analysis is based on both the features of the Project and the biological functions and values of the occupied habitat and/or sensitivity of plant and wildlife species to be affected. Based on the Project development footprint, impacts on sensitive plant species and habitats, as well as federally protected wetlands, were delineated using GIS technology in order to maximize the accuracy of the analysis.

The biological values and functions of wildlife resources within, adjacent to, and outside the immediate project area and into the regional area to be affected directly and indirectly by the Project were determined by consideration of multiple factors. These factors included the overall size of habitats to be affected, the quality of the affected habitats, the project study area’s historic land uses, disturbance history, the project study area’s surrounding environment and impacts of the surrounding areas on the project study area, regional relation to existing preservation areas and programs, the quality of on-site floral and faunal abundance and species diversity, the presence of sensitive and special-status plant and wildlife species, the project study area’s importance or lack of importance to regional preserved populations of those species found on the project study area, and the extent to which on-site habitats and species are unique, limited, or restricted in distribution on a regional basis. The CEQA analysis is comprehensive in its biological assessment and therefore has as its essential focus the on-site sensitive natural communities and occupied habitats found on site in the context of their surroundings. That is, the analysis recognizes and considers on-site biological resources and their inter-relationships with area-wide and regional biological systems. The CEQA analysis evaluates the role of the on-site biological resources, that is, whether they contribute a significant or *de minimis* role in the regional biological systems and the relative impacts on special-status species and their long term survival throughout the region.

The analysis of wildlife movement on and near the project study area is based on information compiled from the literature, analysis of aerial photographs and topographic maps, direct observations and recordings made in the field during survey work, and an analysis of existing wildlife movement functions and values. Relative to corridor issues, the focus of the analysis was to determine if the change of the existing land use within the project study area would have significant impacts on the regional wildlife movement associated with the project study area and the immediate vicinity.

## **b. Thresholds of Significance**

Appendix G of the *CEQA Guidelines* and the County of Orange Environmental Analysis Checklist provide thresholds of significance to determine whether a project would have a significant environmental impact regarding biological services. Based on the size and scope of the Project and the potential for biological resource impacts, the thresholds identified below are included for evaluation in this EIR. Please refer to Section 6.0, *Mandatory Findings of Significance*, for a discussion of other issues associated with the evaluation



of biological resources where the characteristics of the Project made it clear that effects would not be significant and further evaluation in this section was not warranted.

*Would the Project:*

- Threshold 1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Wildlife Service (refer to Impact Statement 4.3-1);
- Threshold 2: 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 (refer to Impact Statement 4.3-2);
- Threshold 3: 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 (refer to Impact Statement 4.3-3); and
- Threshold 4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (refer to Impact Statement 4.3-4).

For the purposes of this impact analysis, and as can be interpreted from the CEQA Guidelines, Sections 15064 and 15065, the following definitions will 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 natural community/habitat type; or (3) eliminate or substantially impair the functions and values of a biological resource (e.g., streams, wetlands, or woodlands) compared and contrasted to the interrelated biological components and systems of the Chino Hills State Park, the Orange County NCCP area, and the Prado Dam Basin. “Conflict” relates to contradictions of a magnitude quantified and qualified in biological science, which based on foreseeable circumstances, would preclude or prevent substantial compliance with such things as multiple species recovery plans identified throughout Southern California, (MSHCP, NCCP, etc.).
- “Rare” means: (1) that the species exists in such small numbers throughout all, or a significant portion of, its range or region 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. This would be especially true if the Project contributed in a measurable “significant way” to the demise of a rare threaten or endangered species.

### c. Project Design Features

No Project Design Features (PDFs) have been identified for the Project specifically related to biological resources. However, as indicated in PDF 1-4 presented in Section 4.1, *Aesthetics*, of this EIR, the Project would preserve 36.3 acres of the site as permanent open space, a portion of which supports sensitive habitat communities.

### d. Analysis of Project Impacts

#### CANDIDATE, SENSITIVE, AND SPECIAL STATUS SPECIES

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

*4.3-1 Implementation of the Project could result in a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species, threatened or endangered in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Wildlife Service. Compliance with applicable regulatory requirements and implementation of the prescribed mitigation measure would reduce potentially significant impacts to a less than significant level.*

#### (1) Sensitive Plant Species

Implementation of the Project would result in the direct removal of numerous common plant species, native and non-native, within the project study area. A list of plant species observed within the project study area is included in Appendix A of the BRA (refer to Appendix C in this EIR). Common plant species present within the project study area occur in large numbers throughout the region and their removal does not meet the significance thresholds defined above. Therefore, impacts to common plant species would be considered a less than significant impact.

Most, if not all, of the sensitive plant species discussed in this EIR occur within the region described above, but do not occur within the project study area due to the lack of suitable habitat, their absence during focused surveys, or because the project study area is outside of the known range (e.g., elevation range). These species include Tecate cypress, Malibu baccharis, southern tarplant, smooth tarplant, Coulter's goldfields, rigid fringepod, Coulter's saltbush, Parish's brittlescale, Davidson's saltscale, Santa Barbara morning glory, California saw-grass, heart-leaved pitcher sage, Jokerst's monardella, California beardtongue, prostrate vernal pool navarretia, vernal barley, and chaparral nolina. Therefore, no impacts would occur to these sensitive plant species with the Project development.

Focused sensitive plant surveys were conducted in April and July 2012 to determine the presence/absence of sensitive plant species with potential to occur on-site. No sensitive plant species were observed on-site during focused surveys, thus these species are not expected to occur on-site. Therefore, no impacts would occur to these sensitive plant species and no mitigation measures would be required.

## **(2) Common Wildlife Species**

Although not required to be studied per the CEQA Guidelines, this analysis includes a qualitative assessment of impacts to common wildlife species. The Project would affect a small amount of wildlife resources through the removal and disruption of on-site habitat. Displacement of wildlife will reduce both abundance and diversity in the local faunal population. A list of observed wildlife species within the project study area is included in Appendix C of the BRA (refer to Appendix C in this EIR). It is reasonable to assume population losses of common wildlife species would be correlated with the loss of the habitats they use. Adverse impacts on wildlife are generally associated with the extent of habitat loss from the standpoint of physical character, quality, diversity, and abundance of vegetation. Project implementation in the short and long term would result in direct removal of wildlife habitat and the limited potential mortality of common wildlife species existing on-site as well as the displacement of more mobile species to suitable habitat areas nearby. However, these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the greater region due to the already compromised wildlife carrying capacity of mostly disturbed habitats on-site and the limited extent of impacts to these habitats in comparison to extent of these habitats throughout the region. Impacts on common wildlife species are considered less than significant.

Potential adverse indirect impacts on vegetation and wildlife would be related to an increase in vehicular traffic and the corresponding increase in noise, as well as, the threat of road kill by traffic; an increase in human intrusion, including hikers and bicyclists; 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 wildlife diversity in habitats adjacent to the development envelope. These indirect impacts would not be expected to reduce general wildlife populations below self-sustaining levels within the region due to the already compromised wildlife carrying capacity of mostly disturbed habitats on-site associated with past destructive fires and the limited extent of impacts to these habitats in comparison to extent of these habitats throughout the region, and are considered less than significant.

## **(3) Sensitive Wildlife Species**

Several of the sensitive wildlife species referenced in the Existing Conditions section above are not expected to occur within the project study area due to the lack of suitable habitat or because the project area is outside of the known range for these species. These species include San Diego fairy shrimp, Santa Ana sucker, western spadefoot, northern leopard frog, western pond turtle, bank swallow, western yellow-billed cuckoo, grasshopper sparrow, tri-colored blackbird, burrowing owl, coastal cactus wren, pocketed free-tailed bat, big free-tailed bat, Mexican long-tongued bat, and American badger. Therefore, no impacts on these sensitive wildlife species would occur.

Several additional sensitive wildlife species were observed on site or have at least a moderate potential to occur within the project study area. Sensitive wildlife species which were observed on-site, but are not threatened or endangered, include yellow-breasted chat, yellow warbler, and red-diamond rattlesnake. Additional sensitive wildlife species with moderate potential to occur on-site but not observed during field surveys include coast patch-nosed snake, two-striped garter snake, coast horned lizard, orange-throated whiptail, western mastiff bat, white-tailed kite, long-eared owl, pallid bat, western yellow bat, northwestern San Diego pocket mouse, and San Diego desert woodrat. Focused surveys were conducted for coastal California gnatcatcher, least Bell’s vireo, and southwestern willow flycatcher in 2012, and are discussed in

further detail below. Coast patch-nosed snake, red-diamond rattlesnake, coast range newt, coast horned lizard, orange-throated whiptail, yellow warbler, yellow-breasted chat, long-eared owl, western yellow bat, western mastiff bat, pallid bat, San Diego black-tailed jackrabbit, and northwestern San Diego pocket mouse are considered SSC by the CDFW, and do not carry a Federal or State listing as threatened or endangered. Due to the small amount of acreage that would be impacted by the Project in relation to the regional habitat available in the immediately adjacent open space, any loss of individuals or habitat, if it were to occur, as a result of the Project would not be expected to reduce regional population numbers. Therefore, impacts to these sensitive wildlife species are considered adverse but less than significant.

#### **(a) Coastal California Gnatcatcher**

No coastal California gnatcatchers were observed on-site during focused surveys conducted by PCR in 2006 and 2012. Therefore, this species is not expected to occur on-site, and impacts to the coastal California gnatcatcher would be considered less than significant.

#### **(b) Southwestern Willow Flycatcher**

No southwestern willow flycatchers were observed on-site during focused surveys conducted by PCR in 2006 and 2012. Therefore, this species is not expected to occur on-site, and no impacts to the southwestern willow flycatcher would occur.

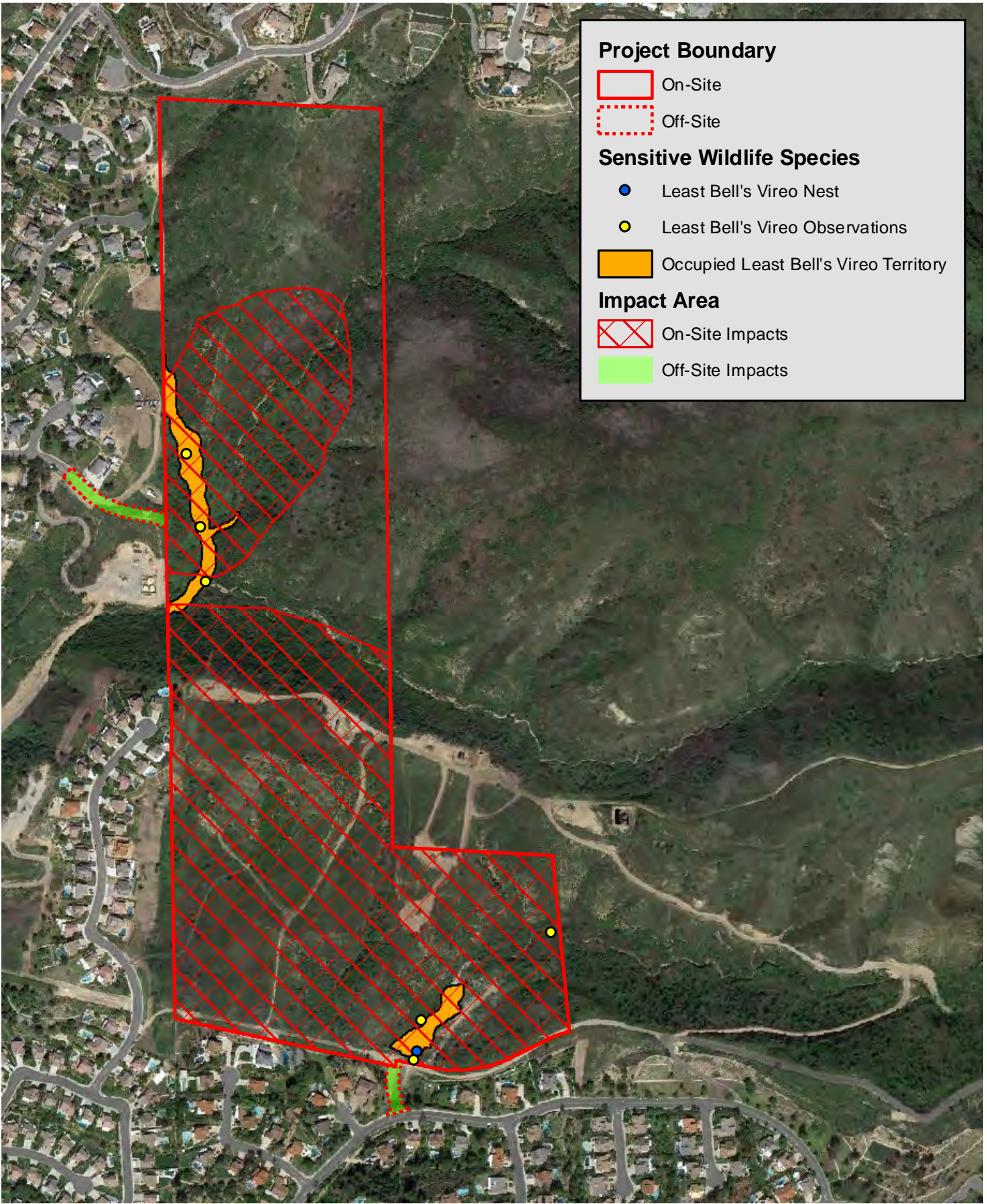
#### **(c) Least Bell's Vireo**

No least Bell's vireo was observed on-site by PCR in 2006; however, this species was observed on-site in 2012. The Project would impact habitat supporting the least Bell's vireo. The least Bell's vireo is classified as Endangered under CESA and FESA and afforded a degree of protection. The U.S. Fish and Wildlife Service 5-year Review and Summary and Evaluation on the least Bell's vireo listing recommends down-listing from 'Endangered' to 'Threatened' (USFWS 2006). The reclassification was given a priority '4' which indicates an unpetitioned action with a moderate management impact. The recommendation for reclassification is prompted by a 10 fold increase in vireo population since its listing accompanied by brood parasitism reduction at Camp Pendleton and Prado Basin of the Santa Ana River, which supports the two largest concentrations of vireo (Griffith Wildlife Biology 2001, Hoffman and Zembal 2006, USMC 2001, Zembal et al. 2003), .

The least Bell's vireo critical habitat occupies 38,000 acres at 10 locations in six counties of Southern California. A total of 1.64 acres of permanent impacts would occur to least Bell's vireo territory (refer to **Figure 4.3-5, *Impacts on Sensitive Wildlife Species***). The on-site impacts to the least Bell's vireo are considered potentially significant.

Prior to impacting least Bell's vireo occupied habitat (i.e., southern willow scrub and mule fat scrub), shown in Figure 4.3-5, the Project Applicant would be required to obtain regulatory permits by way of an authorization pursuant to the FESA and CESA. In the event that Federal and/or State regulatory permits are required by the USACE and/or CDFW, consultation between those agencies and the USFWS would likely be required in compliance with Section 7 of the FESA and/or Section 2080.1 of the California Fish and Game Code. In the absence of Federal and/or State regulatory permits for permanent impacts to jurisdictional features, compliance with FESA and/or CESA may be obtained through Section 10(a) and/or Section 2080.1, respectively. Section 7 of the Federal Endangered Species Act (FESA) charges federal agencies to aid in the





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conservation of listed species (section 7(a)(1)) and requires federal agencies to ensure that their activities will not jeopardize the continued existence of listed species or adversely modify critical habitats for federally-listed species (section 7 (a)(2)). Article 3, Sections 2080 through 2085, of the CESA addresses the taking of Threatened or Endangered species by stating: “No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.” Under the CESA, “take” is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Exceptions authorized by the state to allow “take” require permits or memoranda of understanding and can be authorized for “Endangered species, Threatened species, or candidate species for scientific, educational, or management purposes.” Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance. Section 10 of the FESA provides guidelines that allow federal agencies to issue permits for the incidental take (section 10 (a)(1)(b)) of an endangered species as a result of lawful activities.

This statute imposes the obligation on federal agencies to ensure that their actions (such as issuing federal CWA permits for this Project) are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. This obligation is enforced through the procedural requirement that agencies, such as the USACE, initiate consultation with USFWS on any actions that may affect a threatened or endangered species. During the FESA Section 7 consultation anticipated for this Project, USFWS would gather all relevant information concerning the Project and the potential Project-related impacts on the least Bell’s vireo (i.e., the Project Applicant would submit a species-specific Biological Assessment), prepare its opinion with respect to whether the Project is likely to jeopardize the continued existence of the species (i.e., the USFWS would issue a Biological Opinion), and recommend mitigation/conservation measures where appropriate. The mitigation is anticipated to be similar to Mitigation Measure 4.3-1, prescribed below. Implementation of Mitigation Measure 4.3-1 would reduce the Project’s potentially significant impacts on the least Bell’s vireo to a less than significant level. With the potential loss of 1.64 acres of least Bell’s vireo habitat as a result of project implementation, this mitigation measure requires habitat replacement or enhancement at up to twice the acreage lost in order to support the survival of this endangered species under the federal and state endangered species acts.

### **Mitigation Measures**

**Mitigation Measure 4.3-1** Prior to impacts in least Bell’s vireo occupied habitat (i.e., southern willow scrub and mule fat scrub), the Project Applicant/developer shall obtain regulatory permits by way of an authorization pursuant to FESA and CESA. On- and/or off-site replacement and/or enhancement of least Bell’s vireo habitat shall be provided by the Project Applicant at a ratio no less than 2:1, in coordination with the regulatory permitting processes of the USFWS and CDFW. Off-site replacement may include, but is not limited to, the purchase of mitigation credits in an agency-approved off-site mitigation bank supporting least Bell’s vireo. A Mitigation Plan approved by the USFWS and/or CDFW, as appropriate, shall be provided to the Manager, OC Planning prior to issuance of a grading permit.

#### **(d) Golden Eagle**

As previously stated, the golden eagle is a State Fully Protected species. Although the project study area supports foraging habitat for the golden eagle, there is not suitable nesting habitat on-site. Therefore, this



species is not expected to nest on-site and the Project would not result in direct impacts to nest sites. Additionally, the Project would not indirectly impact nest sites, as the known nests within the area are located over 3 miles away within Chino Hills State Park, and ridgelines of San Juan Hill provide a visual and acoustic barrier between the project study area and the known nests.

The project study area does provide suitable foraging habitat for this species. The Project would result in impacts to potential foraging habitat; however, the habitat is of moderate to low quality due to disturbances associated with human activities and fire (e.g., introduction of non-native vegetation, on-going oil /gas production activities, passive recreation) on-site and immediately adjacent to the project study area. Additionally, the project study area shares three borders with suburban development; thus, there is constant human activity in the immediately surrounding vicinity. Farther to the north and northeast of the project study area, there is ample higher quality open space within Chino Hills State Park that would provide more attractive foraging habitat, should golden eagles utilize this area for foraging. Thus, while impacts to foraging habitat are adverse, the Project would result in a less than significant impact to this species.

### RIPARIAN HABITAT AND SENSITIVE NATURAL COMMUNITIES

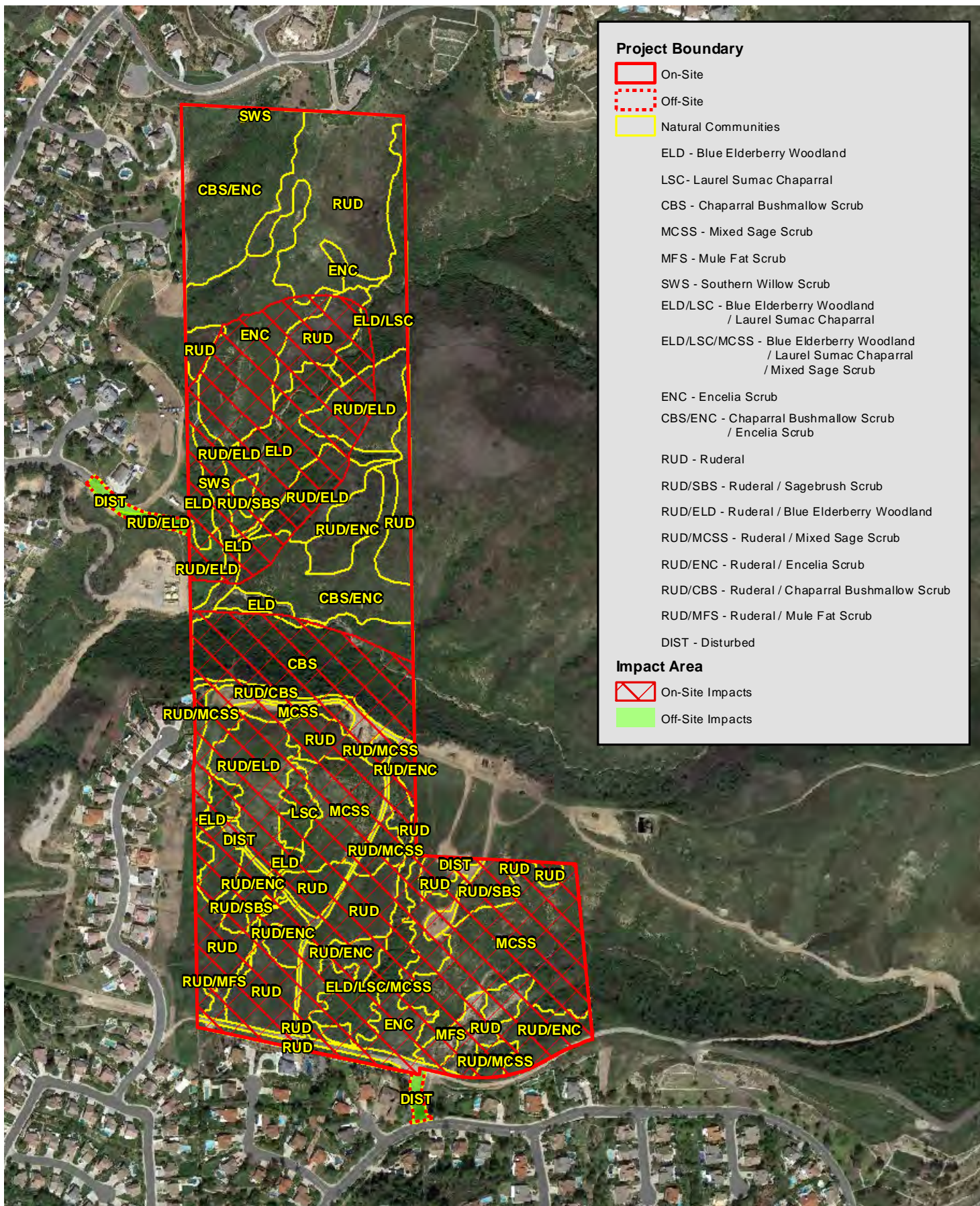
Threshold	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?
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*4.3-2 Impacts on sensitive natural communities are considered less than significant given their diminished functions and values as habitat and the relative abundance of these vegetation communities throughout the region, much of which is protected in government preserves. Therefore, mitigation measures for impacts to sensitive communities in and of themselves are not warranted.*

Implementation of the Project would result in the removal of 0.70 acre of laurel sumac chaparral, 5.42 acres of chaparral bushmallow scrub, 9.05 acres of mixed coastal sage scrub, 0.60 acre of mule fat scrub, 0.50 acre of chaparral bushmallow/encelia scrub, 10.33 acres of ruderal, 1.48 acres of ruderal/sagebrush scrub, 6.58 acres (6.32 acres on-site and 0.26 acre off-site) of ruderal/blue elderberry woodland, 1.43 acres of ruderal/mixed coastal sage scrub, 3.79 acres of ruderal/encelia scrub, 0.40 acre (all on-site) of ruderal/chaparral bushmallow scrub, 0.39 acre of ruderal/mule fat scrub, and 3.65 acres (3.21 acres on-site and 0.44 acre off-site) of disturbed (refer to **Table 4.3-3, Impacts on Natural Communities**, below, and **Figure 4.3-6, Impacts on Natural Communities**). None of these natural communities represent sensitive natural communities and their removal does not meet the significance thresholds defined above. Therefore, impacts to these natural communities would be considered a less than significant impact.

The project study area supports several natural communities that are considered to be sensitive by the CDFW Natural Heritage Division. The Project would impact 4.60 acres of Blue elderberry woodland, 1.25 acres of southern willow scrub, 0.51 acre of blue elderberry woodland/laurel sumac chaparral, 2.57 acres of blue elderberry woodland/laurel sumac chaparral/mixed coastal sage scrub, and 5.63 acres of encelia scrub which are all considered sensitive natural communities by CDFW. For purposes of clarification, however, the CDFW has no legal regulatory authority or legally authorized permit requirements for these plant communities (refer to Table 4.3-3 and **Figure 4.3-7, Impacts on Sensitive Natural Communities**).





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Table 4.3-3

## Impacts on Natural Communities

Natural Community	OCHCS <sup>a</sup> Code	On-Site Impacts (acres)	Off-Site Impacts (acres)	Total Impacts (acres)	Avoided (acres)
Blue Elderberry Woodland	8.4	4.60		4.60	0.61
Laurel Sumac Chaparral	3.0	0.70		0.70	0.00
Chaparral Bushmallow Scrub	2.3.11	5.42		5.42	0.78
Mixed Coastal Sage Scrub	2.3.10	9.05		9.05	0.00
Mule Fat Scrub	7.3	0.60		0.60	0.00
Southern Willow Scrub	7.2	1.25		1.25	0.25
Blue Elderberry Woodland/Laurel Sumac Chaparral	8.4/3.0	0.51		0.51	1.77
Blue Elderberry Woodland/Laurel Sumac Chaparral/Mixed Coastal Sage Scrub	8.4/3.0/ 2.3.10	2.57		2.57	0.00
Encelia Scrub	2.5	5.63		5.63	2.49
Chaparral Bushmallow/Encelia Scrub	2.3.11/2.5	0.50		0.50	8.64
Ruderal	4.6	10.33		10.33	7.84
Ruderal/Sagebrush Scrub	4.6/2.3.6	1.48		1.48	0.00
Ruderal/Blue Elderberry Woodland	4.6/8.4	6.32	0.26	6.58	1.95
Ruderal/Mixed Coastal Sage Scrub	4.6/2.3.10	1.43		1.43	0.00
Ruderal/Encelia Scrub	4.6/2.5	3.79		3.79	1.38
Ruderal/Chaparral Bushmallow Scrub	4.6/2.3.11	0.40		0.40	0.00
Ruderal/Mule Fat Scrub	4.6/7.3	0.39		0.39	0.00
Disturbed	16.1	3.21	0.44	3.65	0.01
<b>Total</b>		<b>58.18</b>	<b>0.70</b>	<b>58.88</b>	<b>25.72</b>

<sup>a</sup> Orange County Habitat Classification System.

Source: PCR Services Corporation, 2013.

It should be noted that due to the 2008 wildfire that burned the project study area, most of the natural vegetation communities within the project study area continue to exhibit signs of the fire and subsequent encroachment by invasive species. Although some of these communities have markedly recovered from the fire, all of the sensitive natural communities found within the project study have a component of non-native invasive exotic species as well. These natural communities are considered to be of low to moderate quality (rather than high quality) due to their ability to still provide cover and resources for limited wildlife species. Specifically blue elderberry-dominated communities (blue elderberry woodland, blue elderberry woodland/laurel sumac chaparral, and blue elderberry woodland/laurel sumac chaparral/mixed coastal sage scrub) that occur adjacent to least Bell's vireo territories may provide cover and foraging habitat for the least Bell's vireo, yellow breasted chat, and yellow warbler. In contrast, the encelia scrub offers moderate to low quality habitat as the current state of the community is due to the natural (i.e., fire) and human disturbances that have occurred on-site, and the higher density of pioneer species that still persist in this community. Impacts on sensitive natural communities are considered less than significant given their diminished functions and values as habitat and the relative abundance of these vegetation communities throughout the region, much of which is protected in government preserves. Therefore, mitigation measures for impacts to sensitive communities are not warranted.

## WETLANDS

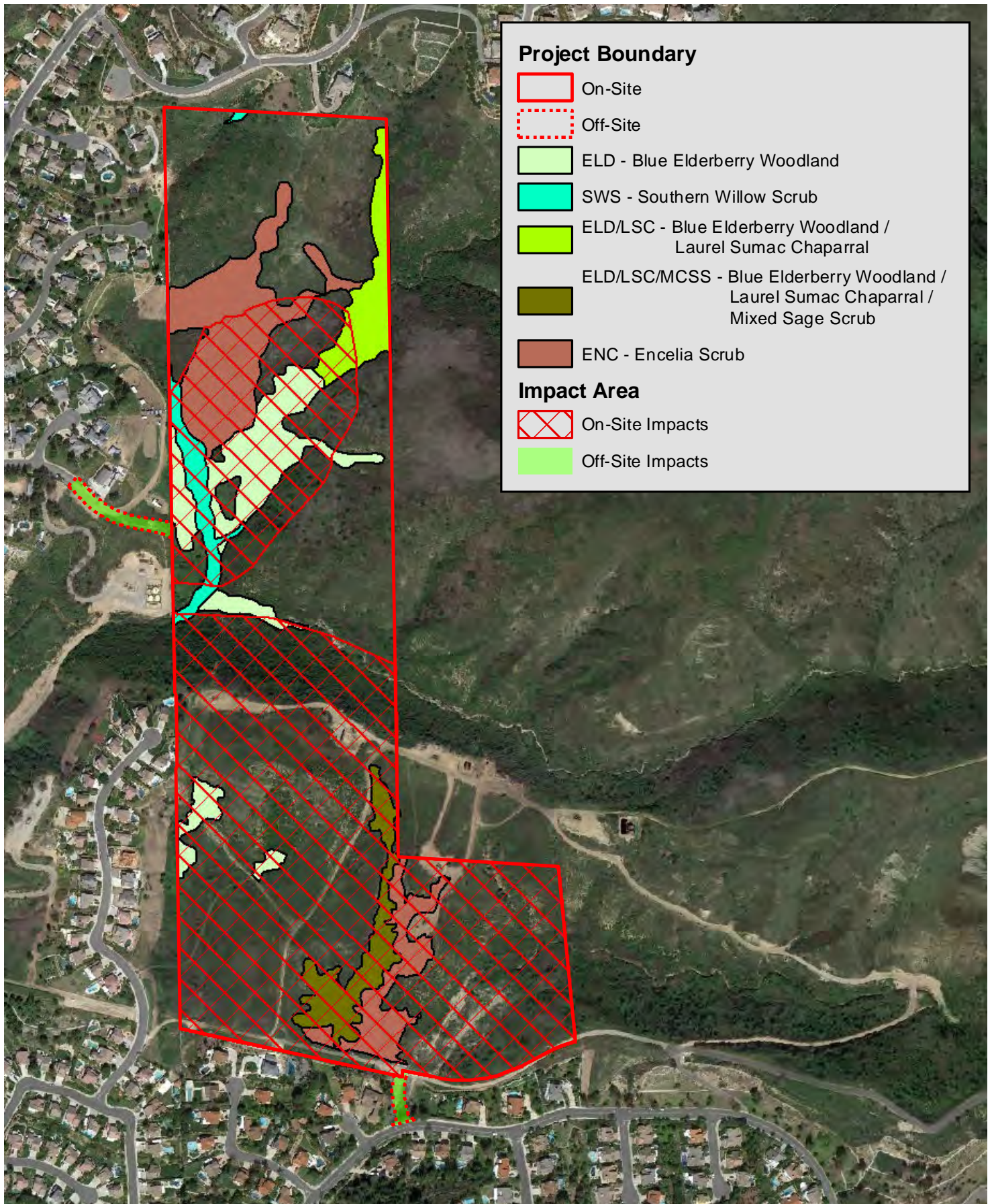
Threshold	Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
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*4.3-3 Implementation of the Project could result in substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. However, compliance with applicable regulatory requirements and implementation of the prescribed mitigation measure would reduce potentially significant impacts in these regards to a less than significant level.*

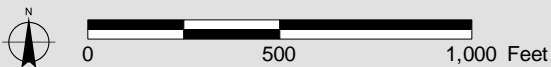
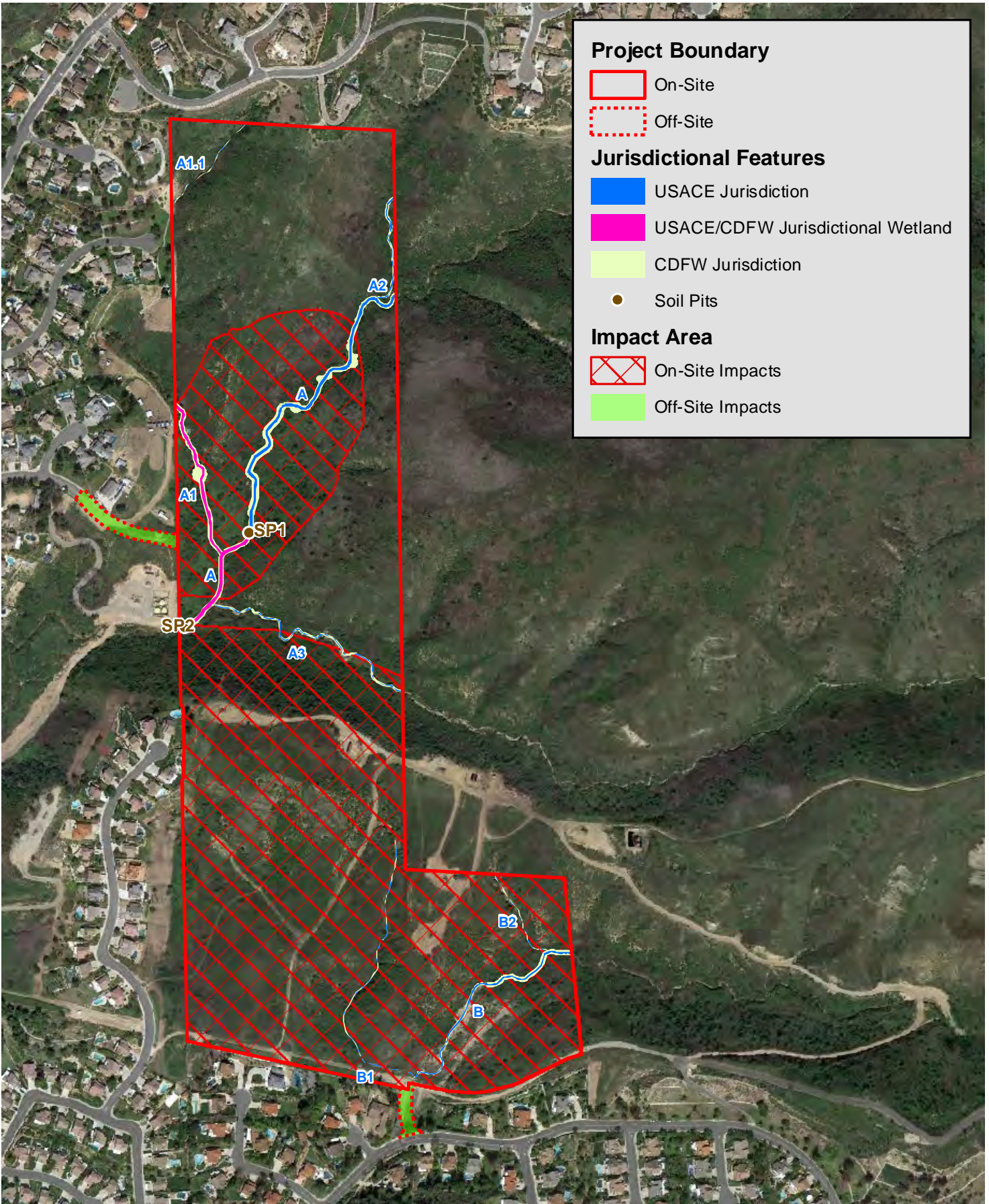
The Project would result in impacts to 0.42 acre of USACE/RWQCB "waters of the U.S.", 1.38 acres of CDFW jurisdictional streambed and associated riparian habitat, and 0.24 acre of USACE/RWQCB and CDFW jurisdictional wetland areas (refer to **Table 4.3-4, Impacts on Jurisdictional Features**, and **Figure 4.3-8, Impacts on Jurisdictional Features**). Impacts to jurisdictional waters are considered potentially significant.

Prior to the issuance of a grading permit, the Project Applicant would be required to obtain regulatory permits including a CWA Section 404 permit, a CWA Section 401 Water Quality Certification, and/or a California Fish and Game Code Section 1602 Streambed Alteration Agreement for impacts to jurisdictional features regulated by the USACE, RWQCB, and/or CDFW. The Agencies may require off-site replacement of USACE/RWQCB jurisdictional "waters of the U.S.,"/ "waters of the State," as well as CDFW jurisdictional streambed and associated riparian habitat. Mitigation Measure 4.3-2 has been prescribed for the Project which includes the anticipated on- and/or off-site replacement requirements to be imposed on the Project by the Agencies. Implementation of Mitigation Measure 4.3-2 would reduce the Project's potentially significant impacts to jurisdictional features to a less than significant level. With implementation of this mitigation measure, the loss of 0.66 acres of jurisdictional streambed and associated riparian habitat under federal law and 1.62 acres of jurisdictional streambed and associated riparian habitat under state law would be replaced off-site at up to twice the acreage lost as a result of Project grading and construction.









**Impacts on Jurisdictional Features**

FIGURE

**4.3-8**

Cielo Vista  
Source: Google Earth, 2011; PCR Services Corporation, 2013.

Table 4.3-4

## Impacts on Jurisdictional Features

Drainage Name	Length (feet)	USACE Jurisdiction (acres) <sup>a,b</sup>	CDFW Jurisdiction (acres) <sup>a,b</sup>	Flow Classification
Drainage A	1,409	0.25 (0.10)	0.74 (0.10)	Intermittent
Drainage A1	640	0.00(0.14)	0.18 (0.14)	Perennial
Drainage A1.1	0	0.00	0.00	Ephemeral
Drainage A2	0	0.00	0.00	Ephemeral
Drainage A3	316	0.02	0.06	Ephemeral
Drainage B	923	0.11	0.29	Ephemeral
Drainage B1	1,160	0.03	0.08	Ephemeral
Drainage B2	395	0.01	0.03	Ephemeral
<b>Total</b>	<b>4,842</b>	<b>0.42 (0.24)</b>	<b>1.38 (0.24)</b>	
<b>Grand Total</b>	<b>4,842</b>	<b>0.66</b>	<b>1.62</b>	

<sup>a</sup> Jurisdictional acreages often overlap and are therefore not additive (e.g., USACE acreages are included in the total CDFW jurisdictional acreages).

<sup>b</sup> Acreages in parentheses indicate wetlands.

Source: PCR Services Corporation, 2013.

## Mitigation Measures

**Mitigation Measure 4.3-2** Prior to the issuance of a grading permit, the Project Applicant shall be required to obtain regulatory permits by way of a CWA Section 404 permit, a CWA Section 401 Water Quality Certification, and/or a California Fish and Game Code Section 1602 Streambed Alteration Agreement for impacts to jurisdictional features regulated by the USACE, RWQCB, and/or CDFW and provide documentation of same to the OC Planning Manager. The following measures may be required by the Agencies, unless required otherwise by the Agencies:

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

## WILDLIFE MOVEMENT

Threshold	Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
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*4.3-4 Implementation of the Project would potentially interfere with the regional movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. However, compliance with applicable regulatory requirements and implementation of the prescribed mitigation measure would reduce potentially significant impacts in these regards to a less than significant level.*

### (1) Wildlife Movement

The habitat associated with the project study area provides live-in habitat for wildlife and may support some movement on a local scale; however, it does not function as a regional wildlife movement corridor since it does not connect two or more habitat patches due to the surrounding development. Therefore, this habitat does not function to facilitate regional wildlife movement due to the extensive urbanization that has occurred on north, south, and west sides of the project study area. As such, impacts are considered less than significant.

### (2) Migratory Species

The project study area has the potential to support both raptor and songbird nests due to the presence of trees, shrubs, and ground cover. Nesting activity typically occurs from February 15 to August 31. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact of the Project as defined by the thresholds above. Impacts to raptor and songbird nests are considered potentially significant. Implementation of Mitigation Measure 4.3-3 would reduce these potentially significant impacts to a less than significant level. This mitigation measure reduces impacts to a less than significant level by preventing vegetation removal during raptor and songbird nesting season and by requiring the creation of a construction buffer area when nests are present until completion of the nesting cycle.

### Mitigation Measures

**Mitigation Measure 4.3-3** Prior to issuance of a grading permit, the Project Applicant shall demonstrate to the satisfaction of the Manager, OC Planning that the following requirements have been Included in the Project construction plan:

1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.
2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) shall require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are



detected, a buffer of at least 300 feet (500 feet for raptors), or as determined appropriate by the biological monitor, shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor to minimize impacts.

**CONSISTENCY WITH COUNTY OF ORANGE AND CITY OF YORBA LINDA PLANS AND POLICIES**

**(1) County of Orange General Plan**

The County’s General Plan contains goals and policies that are relevant to biological resources, which are presented in the General Plan Resources and Land Use Elements. As discussed below in **Table 4.3-5, Project Consistency with Orange County General Plan**, the Project would be consistent with the applicable goals and policies of the County of Orange General Plan pertaining to biological resources.

**Table 4.3-5**

**Project Consistency with Orange County General Plan**

Goals, Objectives and Policies	Project Consistency
<b>Resources Element</b>	
<b>Natural Resources</b>	
<p><b>Goal 1</b> Protect wildlife and vegetation resources and promote development that preserves these resources.</p>	<p><b>Consistent.</b> As part of the Project, 36.3 acres of open space would be preserved that would support wildlife and vegetation resources. Further, potentially significant impacts to sensitive wildlife and vegetation resulting from Project implementation would be reduced to a less than significant level with implementation of the prescribed mitigation measures, including the revegetation and/or enhancement of sensitive habitat.</p>
<p><b>Policy 1 Wildlife and Vegetation.</b> To identify and preserve the significant wildlife and vegetation habitats of the County.</p>	<p><b>Consistent.</b> Please refer to response above.</p>
<b>Land Use Element</b>	
<p><b>Policy 8 Enhancement of Environment.</b> To guide development so that the quality of the physical environment is enhanced.</p>	<p><b>Consistent.</b> The purpose of this policy is to ensure that all land use activities seek to enhance the physical environment, including the air, water, sound levels, landscape, and plant and animal life. This policy does not mean that environmental enhancement precludes development. It recognizes the need to improve both the manmade and natural environments. Where aspects of the natural environment are deemed to be truly significant, this policy requires measures be taken to preserve these aspects. Consistent with this policy, natural features would be preserved to the extent feasible within the permanent open space land use areas of the project site, which include a main westerly draining course and canyon bisecting the project site. The Project would include 36.3 acres of permanent open space which would serve to preserve the natural, physical environment. In addition, the consolidation of oil production-related uses</p>

**Table 4.3-5(Continued)**

**Project Consistency with Orange County General Plan**

Goals, Objectives and Policies	Project Consistency
	<p>within the project site outside of available public views would further improve compatibility with adjacent residential areas.</p> <p>The Project’s consistency with this policy is also addressed in Sections 4.1, <i>Aesthetics</i>, 4.2, <i>Air Quality</i>, and Section 4.8, <i>Hydrology and Water Quality</i>.</p>
<p><i>Source PCR Services Corporation, 2013.</i></p>	

**(2) City of Yorba Linda General Plan**

The City’s General Plan Recreation and Resources Element contains a policy relevant to the protection of sensitive biological resources. As discussed below in **Table 4.3-6, *Project Consistency with Yorba Linda General Plan***, the Project would be potentially consistent with the applicable policy in the City of Yorba Linda General Plan pertaining to biological resources. The notation of “Potentially Consistent” is in deference to the City’s authority for making such determinations for projects located within the city limits.

**Table 4.3-6**

**Project Consistency with Yorba Linda General Plan**

Goals, Objectives and Policies	Project Consistency
<p><b><i>Recreation and Resources Element</i></b></p>	
<p><b>Policy 7.6:</b> Require development proposals in areas expected to contain important plant communities and wildlife habitat to provide detailed biological assessments.</p>	<p><b>Potentially Consistent.</b> As discussed in Section 4.3, <i>Biological Resources</i>, a biological resources assessment was completed for the project site. No sensitive plant species were noted as occurring on the project site. No sensitive wildlife species would be significantly impacted by project development with the exception of the least Bell’s Vireo habitat with disturbed habitat to be replaced off site at a ratio of no less than 2:1 (refer to Mitigation Measure 4.3-1). Additionally, impacted jurisdictional waters, streambeds, and riparian habitats are to be replaced on or off site at a ratio of no less than 2:1 for permanent impacts (refer to Mitigation Measure 4.3-2). Also, because the project site can be used for nesting by migratory species, vegetation removed during construction would be required to occur outside of the nesting season (refer to Mitigation Measure 4.3-3).</p>
<p><i>Source PCR Services Corporation, 2013.</i></p>	

### 3. CUMULATIVE IMPACTS

4.3-5 *The Project combined with cumulative projects would not result in substantial adverse effects related to biological resources in the project study area. Thus, cumulative biological resources impacts would be less than significant.*

The analysis of the cumulative impacts of the Project involved several criteria to establish the scope of the assessment. First, for impacts related to sensitive wildlife species, sensitive natural communities, jurisdictional features, and migratory or nesting birds, the geographic extent was established to encompass the region from the City of Yorba Linda to the west, north to Chino Hills State Park, south to the Santa Ana River, and east beyond California State Route 71 into Prado Basin. This region is developed to the west and south, with undeveloped open space areas to the north and east. Because this area is in close proximity to Chino Hills State Park and is a part of contiguous undeveloped land adjacent to the Park, this region may provide a meaningful, regional ecological and biological unit upon which to base the cumulative impact analysis for impacts on a wide range of wildlife species.

Second, the biological CEQA assessment of the Project impacts considered past, present and reasonably foreseeable projects within the vicinity of the project study area. Third, potentially affected resources were categorized and addressed in accordance with their status and sensitivity (i.e., scarcity), significance (i.e., importance to habitat functions and values), and role in ecosystem sustainability (i.e., contribution to biological diversity within the region). All resources potentially affected are therefore considered. Major focus is placed on those resources upon which cumulative impacts potentially have the greatest cause-and-effect implications with Project development. Finally, the analysis considers cumulative impacts to be additive, as well as potentially synergistic in their effects. Thus, the concept of thresholds of significance for impacts, beyond which resource functions and values are lost despite the persistence of resources in limited amounts, is taken into consideration the same as they were above under the analysis of project-specific impacts.

Eighteen related projects have been identified within the cumulative impacts study area and are listed in Section 3.0 of this EIR. Seventeen of the 18 related projects are proposed within currently developed suburban areas. Related Project No. 1 is the only related project that would result in development along the wildland urban interface and is proposed to be located immediately to the east of the Cielo Vista Project. Combined, the Cielo Vista Project and Related Project No. 1 comprise the total cumulative impacts as discussed below.

Implementation of the projects comprising the potential cumulative impacts would result in the direct removal of numerous common native and non-native plant species within the project study area. Common plant species present within the project study area occur in large numbers throughout the region, particularly within the preserved open space areas of Chino Hills State Park, and their removal, in addition to their removal as a result of related projects would not be cumulatively considerable due to the abundance and wide spread distribution of such species in the region. Many of the sensitive plant species discussed may occur within the region, but are not expected to occur within the cumulative impact study area due to the lack of suitable habitat, the project study area being outside of the known geographical range or elevation range for these species, or due to the negative results of focused sensitive plant surveys within the project area. Therefore, as no sensitive plants occur in the project area, the Project would make no contribution to cumulative impacts in this regard. As stated in section 1.b.3.a Southern California black walnut woodland is

considered to be a sensitive natural community. However, this species does not constitute its own monotypic woodland structure on the project study area as is seen elsewhere in the region where entire hillsides exhibit extensive canopies of walnuts. Rather, it is present as individual and small groups of trees scattered among the other on-site upland and riparian natural communities. This species also occurs on mesic, north-facing slopes of Telegraph Canyon near Yorba Linda, throughout Chino Hills near the Prado Basin, and in Carbon Canyon near Brea Canyon Road. Furthermore, impacts to 44 Southern California black walnuts, (non-woodland), are not expected to result in contributing to cumulatively considerable impacts to this CRPR List 4.2 species due to its wide spread distribution within the cumulative impacts study area.

Several special status wildlife species are known to occur within the cumulative impacts study area but are not expected to occur on-site due to lack of suitable habitat or because the project study area is outside of the known elevation range or geographical range for the species. Sensitive fish and wildlife species that may have some potential to occur due to the presence of suitable habitat on-site include coast range newt, coast patch-nosed snake, red-diamond rattlesnake, two-striped garter snake, coast horned lizard, orange-throated whiptail, western mastiff bat, San Diego black-tailed jackrabbit, white-tailed kite, long-eared owl, coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, yellow warbler, yellow-breasted chat, pallid bat, western yellow bat, northwestern San Diego pocket mouse, and San Diego desert woodrat.

Coast patch-nosed snake, red-diamond rattlesnake, coast range newt, coast horned lizard, orange-throated whiptail, yellow warbler, yellow-breasted chat, long-eared owl, western yellow bat, western mastiff bat, pallid bat, San Diego black-tailed jackrabbit, and northwestern San Diego pocket mouse are California Species of Special Concern (SSC), but are not Federal or State listed species. Implementation of the Project would impact habitat which may potentially be used by these species; however, if these SSC species are present within the cumulative impacts study area, any loss of individuals from implementation of the Project in a cumulative impact context would not threaten regional populations due to the large areas of habitat in the surrounding area that would be available for these species to utilize (e.g., particularly within the preserved open space areas of Chino Hills State Park) where the preservation of native habitats and plant and wildlife populations is part of the mission of the park.<sup>6</sup>

Least Bell's vireo, yellow breasted chat, and yellow warbler were observed on-site. Impacts on least Bell's vireo are considered to be potentially significant. With implementation of Mitigation Measure 4.3-1 to replace habitat for the least Bell's vireo that is to be impacted by the Project at a minimum 2:1 ratio due to the isolated nature of the occupied habitat, which would increase the amount of suitable habitat for this species in the cumulative impacts study area over that which exists today, the Project's contribution to cumulative loss of least Bell's vireo in the project study area would not be cumulatively considerable in the context of baseline conditions due to the limited extent of habitat suitable to support these species on the project site and the availability of such habitats in the region.

Impacts on yellow breasted chat and yellow warbler are considered less than significant due to the small amount of acreage that would be impacted by the cumulative projects in relation to the regional habitat available in the immediately adjacent open space as determined by examination of aerial photography. As a result, habitat loss would not contribute measurably to a cumulative impact. Within the context of the cumulative study area, impacts to habitat supporting these two species (i.e., 1.25 acres of southern willow

<sup>6</sup> Chino Hills State Park website. [http://www.parks.ca.gov/?page\\_id=648](http://www.parks.ca.gov/?page_id=648). Accessed August 6, 2013.

scrub and 0.60 acre of mule fat scrub) would not be cumulatively considerable. That is, this loss would not be cumulatively considerable given the extent of these habitats along the Santa Ana River and its tributaries within the study area. Furthermore, mitigation for least Bell's vireo would increase the amount of suitable habitat for these species in the cumulative impacts study area over that which exists today.

A total of 19.69 acres of blue elderberry woodland, southern willow scrub, blue elderberry woodland/laurel sumac chaparral, blue elderberry woodland/laurel sumac chaparral/mixed coastal sage scrub, and encelia scrub occurs on-site, of which 14.56 acres would be impacted by the Project. This loss is not considered cumulatively significant and does not warrant mitigation due to the wide spread distribution of these natural communities within the cumulative impacts study area.

Implementation of Mitigation Measure 4.3-2 at a minimum 2:1 ratio would replace more than the jurisdictional acreage present on-site proposed to be impacted by the Project. Thus, this impact would not contribute to cumulatively considerable impacts to jurisdictional resources within the region and would increase the acreage of jurisdictional resources in the cumulative impacts study area over that which exists today.

Two corridors described in the Missing Linkages report occur within the cumulative impacts study area. The first is the north-south Coal Canyon Linkage which connects the Chino Hills to the Santa Ana Mountains; and the second is the east-west Puente Chino Hills Linkage which connects the Puente Hills to the Chino Hills. However the Project would not impact either of the linkages, as it is located on the eastern boundary of the Chino Hills habitat block and is bounded by residential development to the north, south, and west, which affects the ability of wildlife to use the area as a passageway to Puente Hills or the Santa Ana Mountains. Thus, the Project would not have a cumulatively considerable contribution to impacts on corridors in the project study area.

The loss of 58.88 acres of foraging and nesting habitat is not expected to substantially affect migratory species to a point where their survival in the region is threatened. This is due to the wide spread distribution of foraging and nesting habitats throughout the region, and in the case of the Chino Hills State Park, which provides for the permanent preservation of these habitats. These species are relatively mobile and are expected to locate additional foraging and nesting habitat remaining in the region. Furthermore, Mitigation Measure 4.3-3 has been prescribed for the Project to avoid potential impacts to nesting songbirds and raptors. As such, impacts would not be considered cumulatively significant.

Based on the above, cumulative impacts are concluded to be less than significant.

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