Biological Resources Project Report
for the Lone Oak Road Project
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1 SUMMARY

This letter report provides the existing biological resources and an analysis of potential biological resource impacts associated with the proposed Lone Oak Road Project (project) in an unincorporated area of Vista, San Diego County, California. In accordance with the County of San Diego Report Format and Content Requirements: Biological Resources (County of San Diego 2010a) and the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources (County of San Diego 2010b), the purposes of this report are to describe the general biological character of the project in terms of vegetation, jurisdictional aquatic resources, flora, fauna, and wildlife habitats and to analyze the significance of the biological resources within the study area in terms of federal, state, and local laws and policies. In addition, this report provides an analysis of direct, indirect, and cumulative impacts of the proposed work and a discussion of avoidance, minimization, and mitigation measures that would reduce impacts to biological resources to below a level of significance.

The proposed project is approximately 14.2 acres, located in Vista in northern San Diego County. The project site is located south of Buena Creek Road between Lone Oak Road and Cleveland Trail, approximately 4 miles west of Interstate 15 (I-15). State Route 78 (SR 78) stretches from east to west approximately 1.5 miles to the north of the project site. Biological resources present within the area are limited to Buena Creek, with one patch of herbaceous wetlands, coast live oak woodland, and disturbed southern coast live oak riparian forest as well as waters and wetlands under the jurisdiction of U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), and the County of San Diego (County). There are impacts to non-native vegetation, including 0.17 acres of non-native grassland, 0.77 acre of non-native woodland, 0.29 acre of extensive agriculture, 4.77 acres of disturbed habitat, 2.90 acres of developed land, of which 0.2 acres is oak root zone. There is 0.1 acre impact to coast live oak woodland and 0.02 acre impact to disturbed southern coast live oak riparian forest for the widening of the existing Lone Oak Road and Buena Creek Road. There are no direct impacts to jurisdictional waters and wetlands. Direct impacts to the non-native vegetation communities and oak root zone will require approximately 1.41 acres of grassland and oak woodland mitigation of which the mitigation for grassland is accommodated onsite. There are significant impacts associated with potential indirect impacts to vegetation communities, special-status plants, special-status wildlife, and jurisdictional wetlands and waterways. Avoidance and minimization measures are required to reduce these impacts to less than significant.

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2 INTRODUCTION

The proposed 14.15-acre Lone Oak Road Project is located in Vista in northern San Diego County, California (Figure 1 and Figure 2). The purpose of this biological resources report is to document the biological resources that are present or have potential to occur in the project area and are recognized by local, state, or federal resource agencies as special status through the following: a literature review, a formal jurisdictional of waters and wetlands, and vegetation community mapping. This report was prepared in accordance with the County's Report Format and Content Requirements: Biological Resources (County of San Diego 2010a) and analyzes the potential direct and indirect impacts to special-status biological resources resulting from the proposed project, explores the biological significance of the site with respect to regional biological resource planning documents and policies, and discusses avoidance and minimization measures.

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3 PROJECT DESCRIPTION

The project site consists of two individual legal parcels with a total acreage of 14.15 acres. The northerly parcel (APN 181-162-06-00) is currently vacant. This parcel abuts Buena Creek Road and contains Buena Creek, which extends across the entire site from Lone Oak Road to Cleveland Trail. The southerly parcel (APN 184-080-01-00) forms the southern half of the project site and currently has two structures on it. One structure is a single-family residence and the other structure is a large garage/storage building. Both structures will be removed as part of the proposed project.

The entire property is located within the North County Metropolitan Subregional Planning Area of the County's General Plan. The project site is located within the Village Regional Category of the General Plan Land Use Element and is designated VR-2 (Village Residential 2), allowing a density of two dwelling units per gross acre. The northerly parcel (APN 181-162-06-00) is currently zoned A70 (Limited Agriculture) and the southerly parcel (APN 184-080-01-00) is zoned RR (Rural Residential).

The project proposes a Vesting Tentative Map and Major Use Permit (PRD Site Plan) with the development of a total 26 residential lots (approximate average lot size of 10,500 square feet). The project is further divided into one private drive lot, one Cleveland Trail lot, two water quality / detention basin lots, one homeowners' association (HOA) open space lot that includes an easement for a trail, and one HOA open space wetland/woodland lot. The open space wetland/woodland lot includes an undisturbed 50-foot buffer from the oak woodland. Residential structures will be required to be set back an additional 50 feet from this buffer and 100 feet from the wetlands. All grading for the project will occur outside the existing 100-year floodway.

The primary project access is off of Lone Oak Road through a proposed gated entrance. Secondary emergency access is provided through connection to the existing Cleveland Trail Drive, which connects to Buena Creek Road. Additional asphalt concrete pavement will be added to the existing pavement to provide a 24-foot-wide emergency access drive. The existing creek crossing (dip section) will remain unchanged.

All storm drain runoff impacting the developed portion of the project will be directed to the proposed split "water quality and hydromodification" basin, which will be located at the entry to the project. Discharge from the basin will flow through a proposed storm drain pipe within Lone Oak Road and connect to the existing 72-inch concrete culvert at the intersection of Lone Oak Road and Buena Creek Road.

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4 PROJECT LOCATION

The project is located in northwestern San Diego County, immediately south of Buena Creek Road between Lone Oak Road and Cleveland Trail in Vista (Figure 3). The approximate center of the project is 33°10′59.12″ north latitude, 117°11′56.22″ west longitude on the U.S. Geological Survey 7.5-minute series topographic San Marcos quadrangle map Section 28, Range 3 West, Township 11 South (Figure 2). The project is located within Assessor's Parcel Numbers (APNs) 184-080-01-00 and 181-162-06-00.

Between September 2013 and May 2014, Dudek conducted vegetation mapping, a formal jurisdictional delineation and a rare plant survey. On the January 2014 visit, Hunsaker surveyed the edge of the off-site road and the limits of Buena Creek next to Cleveland Trail with some assistance from Dudek. Review of mapping was conducted in January 2015. Table 1 lists the dates, conditions, and survey focus for each survey.

Table 1
Schedule of Surveys

Date	Hours	Personnel	Focus	Conditions
09/20/2013	1100–1635	CJF, SCG	Jurisdictional delineation and vegetation mapping	70°F–80°F, 60%–100% cc, 0 mph winds
01/31/2014	0800–1000	CJF, Hunsaker Staff	Off-site road and vegetation mapping	56°F–70°F, 60% cc, 0 mph winds
5/29/2014	0746-1020	KCD	Rare Plant Survey	64°F–68°F, 100-0% cc, 0 mph winds
1/21/2015	0730-0930	AMH	Review of vegetation conditions	64°F,50% cc, 0 mph winds

CJF = Callie J. Ford; SCG = Scott C. Gressard; KCD = Katie Dayton; AMH = Anita Hayworth; cc = cloud cover; mph = miles per hour

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5 PROJECT SETTING

5.1 Topography and Land Uses

Topography on site is generally flat with elevations gently sloping downward from the west, ranging from 520 feet above mean sea level (amsl) along Buena Creek to 540 feet amsl at the northwest end. The highest location occurs along the western portion of the project just south of Cleveland Trail. Existing uses on these parcels include a rural residence and associated building and a small agriculture area. Surrounding land uses include residences located to the north, northeast, south, and west. There is some undeveloped land east and southeast of the project site.

The project parcels are approximately 14.15 acres and the entire area is fenced. Much of the site is disturbed through regular mowing/disking or previous grading as well as activity by a landscaping company, and much of the vegetation is non-native or is actively groomed as ornamental or for function as a play area. Buena Creek flows through the project site along the northern edge, adjacent to Buena Creek Road. The perennial creek consists of an unvegetated channel that is surrounded by coast (or California) live oaks (*Quercus agrifolia*) and is heavily disturbed, with non-native trees and understory plants along its banks.

5.2 Soils

According to the U.S. Department of Agriculture (USDA) and Natural Resources Conservation Services (NRCS) (USDA and NRCS 2014a), two soil types are mapped within the project area: Greenfield sandy loam 2% to 5% slopes (GrB) and Huerhuero loam 5% to 9% slopes eroded (HrC2). Greenfield soils contain deep, well-drained soils formed in alluvium from granitic and mixed rock sources. Soils within the Greenfield series are associated with alluvial fans and terraces and are composed of coarse sandy loam. Huerhuero soils contain deep, well-drained soils formed in alluvium from sedimentary rock. Soils within the Huerhuero series are associated with terraces and are composed of loam (USDA and NRCS 2013b).

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6 REGIONAL CONTEXT

The project is located in Vista within an unincorporated area of northern San Diego County. In San Diego County, several resource conservation planning efforts have been completed or are currently in progress, with the long-term goal of establishing a regional reserve system that will protect native habitat lands and their associated biota. The ultimate goals of these plans are to establish biological reserve areas in conformance with the state Natural Communities Conservation Plan Act and contribute to the preserve system already established by the approved Multiple Species Conservation Program (MSCP). The project site is located within the Draft North County MSCP (County of San Diego 2009), but is not located within the proposed pre-approved mitigation area (PAMA) (Figure 3).

Buena Creek is located within the northern portion of the project site along the southern side of Buena Creek Road. Buena Creek contains riparian habitat, but it is disturbed, with many non-native trees along the banks as well as non-native understory in some areas.

The County Resource Protection Ordinance (RPO) identifies environmental resources present within the County and provides measures to preserve these resources (County of San Diego 2007). Generally, the ordinance stipulates that no impacts may occur to wetlands except for scientific research, removal of diseased or invasive exotic plant species, wetland creation and habitat restoration, revegetation and management projects, and crossings of wetlands for roads, driveways, or trails/pathways when certain conditions are met. The same restrictions and exemptions apply to impacts to wetland buffer areas. RPO resources occurring on site include Buena Creek and associated riparian habitat and the RPO wetland buffers.

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7 HABITATS/VEGETATION COMMUNITIES

Vegetation communities and land uses were mapped in the field using a Trimble GeoXT Global Positioning System (GPS) and mapping directly onto a 100-foot-scale (1 inch = 100 feet) aerial photograph-based field map of the project site. Following completion of the fieldwork, all vegetation polygons were transferred to a topographic base and digitized using ArcGIS and a geographic information system (GIS) coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover present on site was determined. Vegetation communities were mapped per the Draft Vegetation Communities of San Diego County (Oberbauer et al. 2008), in accordance with the County's Guidelines for Determining Significance and Report Format and Content (County of San Diego 2010b).

A total of eight vegetation communities/land cover types were identified within the project boundary, including coast live oak woodland, freshwater marsh, disturbed southern coast live oak riparian forest, developed, disturbed habitat, extensive agriculture, non-native grassland, and non-native woodland. The vegetation mapping was revised in January 2015 to better reflect the onsite conditions. The vegetation communities and land cover types on site are described in detail below, their acreages are presented in Table 2, and their spatial distributions are presented on Figure 4.

Table 2
Vegetation Communities and Land Cover Types within Project Area

Vegetation Community or Land Cover Type	County Code	Acres
Coast live oak woodland	71160	0.28
Freshwater marsh	52400	0.11
Disturbed southern coast live oak riparian forest	61310	2.37
Developed	12000	4.27
Disturbed habitat	11300	5.51
Extensive agriculture	18200	0.35
Non-native grassland	42200	0.37
Non-native woodlands	79000	0.89
	Total	**14.15**

Coast Live Oak Woodland

According to Holland (1986), coast live oak woodland is dominated by a single evergreen species: coast live oak. On site, this community is dominated by mature coast live oak and the understory contains various grass species. This community occurs immediately north of Lone Oak Road.

Freshwater Marsh

According to Holland (1986), freshwater marsh is a wetland habitat type that develops where the water table is at or just above the ground surface, such as around the margins of lakes, ponds, slow-moving streams, ditches, and seepages. On site, there is a small freshwater marsh dominated by hardstem bulrush (*Schoenoplectus acutus*). Other species associated with freshwater marsh on site include one arroyo willow (*Salix lasiolepis*) and scattered castorbean (*Ricinus communis*) adjacent to the marsh. This vegetation community is considered an RPO sensitive habitat.

Disturbed Southern Coast Live Oak Riparian Forest

Southern coast live oak riparian forest is a closed canopy community dominated by evergreen sclerophyllous trees such as coast live oak and typically contains a low cover of shrubs within the understory (Oberbauer et al. 2008). On site, this community is found along Buena Creek and is dominated by continuous canopy cover of mature coast live oak and also by non-native tree species. Due to the high cover of non-native species present within this community (50%), it is mapped as disturbed. The understory of this community is dominated by English ivy (*Hedera helix*) and pacific poison oak. The creek flows through this community and is considered a Resource Protection Ordinance (RPO) sensitive habitat as discussed below in the descriptions of the jurisdictional resources.

Developed

Developed land refers to areas that have been constructed upon or disturbed so severely that native vegetation is no longer supported (Oberbauer et al. 2008). Developed areas in the project are associated with private residences and roads.

Disturbed Habitat

Disturbed habitat is a land cover type characterized by a predominance of non-native species, often introduced and established through human action (Oberbauer et al. (2008). On site, disturbed habitat pertains to a graded/disked area located within the southern portion of the project and immediately east of development. It also includes areas that have a substantial cover of chipped vegetation or mulch from the work conducted by the landscaping company. This area was originally mapped as non-native grassland until reviewed more closely at which time it was determined that a substantial layer of mulch is present and that little vegetation is present. In addition, an area adjacent to the existing house has a patch of *Erodium* dominated vegetation that is mowed and maintained as a play area for children.

Extensive Agriculture

Extensive agriculture is described by Oberbauer et al. (2008) as field/pasture or row crops. On site, extensive agriculture includes the production and storing of palm trees, which is similar in land cover to a row crop.

Non-Native Grassland

According to Oberbauer et al. (2008), non-native grasslands are commonly dominated by *Avena*, *Bromus*, *Erodium*, and *Brassica* at a sparse to dense cover approximately 0.7–1.64 feet (0.2–0.5 meter) in height. On site, this community occurs within a small section of the central portion of the project and is dominated by various bromes (*Bromus* ssp.) and also includes a low cover of prickly Russian thistle (*Salsola tragus*), tree tobacco (*Nicotiana glauca*), Peruvian peppertree (*Schinus molle*), and Washington fan palm (*Washingtonia robusta*).

Non-Native Woodland

According to Oberbauer et al. (2008), non-native woodlands contain planted, exotic, or maintained trees. On site, this community is dominated by eucalyptus. Other species that are present at a lower cover include Peruvian peppertree and Brazilian peppertree (*Schinus terebinthifolius*). Coast live oak trees are present in this community at less than 50% absolute cover and less than 25% relative cover, which does not meet the requirements to be mapped as coast live oak woodland.

Diversity

A total of 19 vascular plant species, consisting of 8 native species (42%) and 11 non-native species (58%), were recorded on site (Appendix A). The diversity of native plant species is low due to the extent of existing development and the urban character of the study area. It is important to note that this list does not include a comprehensive list of all the ornamental species and cultivars.

A list of the wildlife species observed within the project area during vegetation mapping and the formal jurisdictional delineation is provided in Appendix B. There were 15 wildlife species observed on the project site.

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8 SPECIAL-STATUS SPECIES

Special-status plant species known to occur in San Diego County (County of San Diego 2010b, Table 2) and their potential to occur on the project site are presented in Appendices C and D. Plant species' status is based on their CRPR (CDFW 2014b, 2014c) and County Biology Guidelines (County of San Diego 2010b). Their potential to occur on site is based on the presence of special-status plant species recorded in the G7–G9, H7–H9, and I7–I9 grids of the San Diego Plant Atlas (SDNHM 2014); plant species recorded in the San Marcos quadrangle and the surrounding eight quadrangles (CDFW 2014a; USFWS 2014; CNPS 2014); the elevation, habitat, and soils present on site; and Dudek's knowledge of biological resources in the area and regional distribution of each species.

No special-status plant species considered endangered, rare, or threatened under the CEQA Guidelines (14 CCR 15380) were identified during surveys. Five special-status plant species have a moderate potential to occur within the project site and after conducting surveys, were concluded to not be present on site (Appendix C).

Special-status wildlife species known to occur in San Diego County (County of San Diego 2010b, Table 3) and their potential to occur on the project site are presented in Appendices E and F. Their potential to occur on site is based on the presence of special-status bird species recorded in the G7–G9, H7–H9, and I7–I9 grids of the San Diego Bird Atlas (Unitt 2004) and wildlife species recorded in the San Marcos quadrangle and the surrounding eight quadrangles (CDFW 2014a; USFWS 2014).

Considering the limited native habitat on site and the disturbed nature of the habitat, there are few special-status wildlife species that have the potential to occur within the project area (Appendix E). One special-status wildlife species was detected during surveys: a red-shouldered hawk (*Buteo lineatus*) was observed calling in the project area. There is a moderate potential for 21 wildlife species to occur on site during some stage of their life cycle (e.g., foraging, migration, or breeding), and a high potential for two wildlife species to occur on site during some stage of their life cycle (Appendix E). California gnatcatcher is not expected to occur on site. There is no coastal sage scrub on site or immediately adjacent to the project site. The nearest CNDDB occurrence is approximately 1/4 mile east of the project area where coastal sage scrub is present.

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9 JURISDICTIONAL WETLANDS OR WATERWAYS

A jurisdictional delineation of waters of the United States, including wetlands, under the jurisdiction of the ACOE, CDFW, RWQCB, and County was conducted concurrently with vegetation mapping within the project site. The ACOE jurisdictional wetlands delineation was conducted in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual (TR Y-87-1) (ACOE Manual; ACOE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (Regional Supplement; ACOE 2008) and guidance provided by the ACOE and U.S. Environmental Protection Agency (EPA) on the geographic extent of jurisdiction based on the U.S. Supreme Court's interpretation of the Clean Water Act (CWA) (ACOE and EPA 2008).

Jurisdiction of the RWQCB is coincident with ACOE in accordance with the federal CWA except in cases where a resource is determined to be isolated from navigable waters of the United States and the RWQCB may take jurisdiction under the state Porter-Cologne Act.

The County RPO (County of San Diego 2007) identifies environmental resources, including wetlands, present within the County and provides measures to preserve these resources. The County RPO identifies wetlands as lands that have one or more of the following attributes:

- Lands that periodically support a predominance of hydrophytes (plants whose habit is water or very wet places)
- Lands in which the substratum is predominantly undrained hydric soil
- Lands where an ephemeral or perennial stream is present and whose substratum is predominantly non-soil and where such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

Hydrology, vegetation, and soils were examined at six geographically distinct sampling locations and results were recorded on wetland determination data forms to determine the presence or absence of wetland field indicators. The overall area was assessed for evidence of an ordinary high water mark, hydrology indicators, wetland vegetation, and nexus to traditional navigable waters of the United States. The extent of wetland features were determined in the field by collecting data using a GPS unit; these shapes were transferred to topographic base, and a GIS coverage was created.

RPO resources occurring on site include Buena Creek and associated freshwater marsh community. On site, there is 0.20 acre of unvegetated stream channel in Buena Creek, a non-wetland waters, under the jurisdiction of the ACOE, RWQCB, CDFW, and the County. Additionally, there is 0.11 acre of freshwater marsh, a wetland under the jurisdiction of the ACOE, RWQCB, CDFW, and the County. The extent of the freshwater marsh was determined

based on the presence of all three wetland indicators from the ACOE Manual—hydrology, hydrophytic vegetation, and hydric soils. Figure 4 shows the data station locations and Appendix G includes the data station forms.

Based on the County RPO guidelines, an RPO wetland buffer was established to avoid indirect impacts to the RPO resources. The RPO wetland buffer includes the adjacent disturbed southern coast live oak riparian forest, as well as a 50-foot buffer from the freshwater marsh (Figure 4). The 50-foot buffer was selected because this resource is relatively small, is dominated generally by monotypic stands of hydrophytic vegetation, is unlikely to be occupied by threatened or endangered species, and does not substantially contribute to wetland hydrology and downstream functioning. The freshwater marsh is also located above the creek and the adjacent topography is less than 25% slopes, which minimizes potential erosion and runoff impacts associated with development.

10 SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

Direct Impacts

Direct impacts to coast live oak woodland, disturbed southern coast live oak riparian forest, oak root zone within various vegetation communities, non-native grassland, extensive agriculture, non-native woodland, disturbed habitat, and developed land will occur. Table 3 summarizes the acreage of the existing vegetation communities on site and off site and the direct impacts to each vegetation community. Direct impacts to coast live oak woodland, disturbed southern coast live oak riparian forest, non-native grassland, and the oak root zone are considered significant. Impacts to vegetation are shown on Figure 5, proposed fencing and signs are shown on Figure 6, the existing easements within the property are shown on Figure 7, and the proposed Open Space Map also showing fuel modification zones and the limited build zone are shown on Figure 8. The proposed trail easement is outside of the proposed open space lot and within the impact area for the project. Fencing will preclude pedestrian access into the open space area. All impacts are addressed including offsite and brush management zones. Offsite impacts have been recently revised to preclude the need for offsite drainage facilities.

Impacts are proposed to the RPO buffer area including coast live oak woodland and disturbed southern coast live oak riparian forest along Lone Oak Road. The impacts have been minimized and designed in accordance with requirements of the County. No impacts to RPO or the RPO buffer are proposed from the development; only from the road improvements required by the County.

Table 3
Direct Impacts to Vegetation Communities

Habitat/Vegetation Community	Existing On Site (acres)	On Site Grading Impacts (acres)	Fuel Modification Zone A (acres)	Total Impact (acres)	Fuel Modification Zone B – Impact Neutral (acres)	Off Site Impacts (acres)
Coast live oak woodland	0.28	0.10 (road right of way)		0.10		
Disturbed southern live oak riparian forest	2.37	0.02 (road right of way)		0.02		0.01
Freshwater marsh	0.11	0.00		0.00		
Extensive agriculture	0.35*	0.29		0.29		
Non-native grassland	0.37*	0.17		0.17		
Non-native woodland	0.89	0.77		0.77		
Disturbed habitat	5.51*	4.74		4.74		

Table 3
Direct Impacts to Vegetation Communities

Habitat/Vegetation Community	Existing On Site (acres)	On Site Grading Impacts (acres)	Fuel Modification Zone A (acres)	Total Impact (acres)	Fuel Modification Zone B – Impact Neutral (acres)	Off Site Impacts (acres)
Disturbed habitat oak root zone		0.03	0.12	0.15		
Developed	4.27*	2.82		2.82	0.03	0.01
Developed oak root zone		0.08	0.08	0.16	0.15	
Total	**14.15**	**9.02**	**0.20**	**9.22**	**0.18**	**0.02**

*Existing conditions acreage combines oak root zone with the appropriate vegetation community. The analysis specifies impacts to oak root zone where it is appropriate.

Indirect Impacts

Short-term indirect impacts that could result from project construction include dust and pollutant runoff, which could adversely affect the vegetation communities adjacent to the impact footprint. Long-term indirect impacts to vegetation communities include increased runoff and pollutants into the freshwater marsh and riparian vegetation along Buena Creek, and introduction of more invasive plant species. Potential indirect impacts to vegetation communities would be considered a significant impact. Indirect impacts to vegetation communities will be mitigated through avoidance measures, as discussed in the Avoidance and Mitigation Measures section.

Special-Status Plant Species

Appendix C includes five special-status plant species that have potential to occur on site. These species were confirmed to not be present during the 2014 rare plant survey.

Indirect impacts to special-status plants would be similar to those described for vegetation communities. Short-term indirect impacts that could result from project construction include dust and pollutant runoff, which could adversely affect special-status plants adjacent to the development footprint. Long-term indirect impacts to special-status plants include increased runoff and pollutants into the areas along Buena Creek and introduction of more invasive plant species. Potential indirect impacts to special-status plants would be considered a significant impact. Indirect impacts to special-status plants will be mitigated through avoidance measures, as discussed in the Avoidance and Mitigation Measures section.

Direct Impacts

Special-Status Wildlife Species

Birds: Raptors (birds of prey), migratory birds, and numerous other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Some bird species present or potentially present on the project site may nest within the assortment of ornamental trees and riparian areas along Buena Creek. These potential nesting species would be limited to a variety of songbirds or more urban-adapted raptors, such as red-shouldered hawks or barn owls (*Tyto alba*). Active nests of native bird species are protected under the MBTA. Direct loss to active nests protected under the MBTA would be considered a significant impact. Avoidance measures consistent with MBTA requirements are described in the Avoidance and Mitigation Measures section.

The special-status birds with moderate or high potential to occur on site are associated with the riparian woodland or freshwater marsh outside the proposed project area (Figure 5). No other direct impacts to special-status bird species are anticipated.

Invertebrates: No special-status invertebrates have moderate or high potential to occur on site.

Mammals: There is a potential for the project site to provide foraging habitat for special-status bats (see Appendix E). Due to the small size of the project site and surrounding urban land uses, loss of suitable foraging habitat for bats would not be considered a significant impact. There is some potential for bats to roost in the woodland habitat along Buena Creek outside the proposed project area (Figure 5).

Based on the undeveloped land to the east and southeast of the project site, there is some potential for mule deer (*Odocoileus hemionus*) to occur on site within the Buena Creek area where there is cover. This is a highly mobile species, and no direct impacts to this species are anticipated.

Reptiles: The understory along Buena Creek has moderate potential to support silvery legless lizard (*Anniella pulchra pulchra*), Coronado skink (*Plestiodon skiltonianus interparietalis*), two-striped gartersnake (*Thamnophis hammondii*), and south coast gartersnake (*Thamnophis sirtalis* spp.). These species are associated with riparian areas, which are outside the proposed project area (Figure 5). No direct impacts to these species are anticipated.

The project site has the potential to support rosy boa (*Lichanura trivirgata*) and Blainville's horned lizard (*Phrynosoma blainvillii*), which can occur in the disturbed habitat or non-native grassland areas. While the project site does not have high-quality habitat, there is some potential for these species to occur here, and there is potential for direct impacts to these species. Based on the project site's location and surrounding land uses, this site would not support large populations of these species. The proposed project would not result in significant impacts to the long-term survival of these County Group 2 species; therefore, potential direct impacts would not be considered significant.

Amphibians: No special-status amphibians have a moderate or high potential to occur on site.

Fish: No special-status fish have a moderate or high potential to occur on site.

Indirect Impacts

Potential short-term indirect impacts to biological resources as a result of the proposed project are related to overall project construction activities and may include dust, noise, general human presence, and construction-related soil erosion and runoff. Potential long-term indirect impacts to biological resources may also occur as a result of the proposed project through introduction of non-native species, lighting, increased human presence, pets, and traffic.

Special-Status Wildlife Species

Birds. Several special-status birds have the potential to nest in the riparian habitat along Buena Creek (Appendix E). Potential short-term indirect impacts to nesting special-status birds associated with noise and increased human activity during construction would be considered significant. Potential long-term indirect impacts to nesting special-status birds associated with noise, lighting, increased human presence, and pets would be considered significant. Impacts to nesting birds will be mitigated through avoidance measures, as discussed in the Avoidance and Mitigation Measures section.

Mammals. As described above, there is some potential for bats and mule deer to occur on site. Based on the existing surrounding land use and the mobility of these species, the proposed project is not anticipated to result in indirect impacts to special-status mammals.

Reptiles. As described above, there is a potential for several special-status reptiles to occur on site. Short-term indirect impacts associated with increased human presence, noise, dust, and runoff during construction activities could result in decreased habitat functions for these species. Open trenches or holes could trap reptiles. Long-term indirect impacts associated with lighting, increased human presence, pets, and urban runoff could result in direct loss of individuals of these species and/or decreased habitat functions for these species. Short-term and long-term indirect impacts to special-

status reptiles would be significant. Impacts to special-status reptiles will be mitigated through avoidance measures, as discussed in the Avoidance and Mitigation Measures section.

10.1 Jurisdictional Wetlands or Waterways

Direct Impacts

There would be no direct impacts to jurisdictional wetlands or waterways.

Indirect Impacts

Indirect impacts to wetlands or waters would be similar to those described for vegetation communities. Short-term indirect impacts that could result from project construction include dust and pollutant runoff. Long-term indirect impacts to wetlands and waters include increased runoff and pollutants into the freshwater marsh and Buena Creek, and the introduction of more invasive plant species. Potential indirect impacts to wetlands and waters would be considered significant. Indirect impacts to wetlands and waters will be mitigated through avoidance measures, as discussed in the Avoidance and Mitigation Measures section.

10.2 Mitigation Measures

10.2.1 Vegetation Communities / Land Covers

Table 4 summarizes the direct impacts and required mitigation for vegetation communities in the project area.

Table 4
Direct Impacts to Vegetation Communities

Habitat / Vegetation Community	Existing (acres)	On-Site Impacts (acres)	Road Right of Way Impacts (acres)	Off-Site Impacts for Right of Way (acres)	Mitigation Ratio	Mitigation Required (acres)	Preserved On Site in Open Space Preserve (acres)**	Off-site Mitigation Required (Acres)
Coast live oak woodland	0.28	0.0	0.10 (RPO)	-	3:1	0.30	0.18	0.30
Disturbed southern live oak riparian forest (SLORF)	2.37	0.0	0.02 (RPO)	0.01	3:1	0.09	1.77	0.09
Freshwater Marsh	0.11	0.0	-	-	3:1	0	0.11	0
Extensive agriculture	0.35*	0.29			None	0	0.01	0

Table 4
Direct Impacts to Vegetation Communities

Habitat / Vegetation Community	Existing (acres)	On-Site Impacts (acres)	Road Right of Way Impacts (acres)	Off-Site Impacts for Right of Way (acres)	Mitigation Ratio	Mitigation Required (acres)	Preserved On Site in Open Space Preserve (acres)**	Off-site Mitigation Required (Acres)
Extensive Agriculture - oak root Zone		0.0			3:1	0	0.05	0
Non-native grassland	0.37*	0.17			0.5:1	0.09	0.01	Total onsite grassland habitat preserved is 0.20 acre so 0 is required offsite.
Non-native grassland oak root zone		0.0			3:1	0	0.19	0
Non-native woodland	0.89	0.77			None	0	0.0	0
Disturbed habitat	5.51*	4.74			None	0	0.07	0
Disturbed habitat – oak root zone		0.15			3:1	0.45	0.54	0.45
Developed	4.27*	2.82		0.01	None	0	0.0	0
Developed – oak root zone		0.16			3:1	0.48	0.17	0.48
Total	**14.15**	**9.10**	**0.12**	**0.02**		**1.32 acres for oak habitat 0.09 acre for grassland**	**3.10**	**1.32**

* Existing conditions acreage combines oak root zone with the appropriate vegetation community. The analysis specifies impacts to oak root zone where appropriate.

** While oak habitat is preserved onsite, it is within RPO or RPO buffer and thus cannot be used for mitigation.

No mitigation for direct impacts to developed lands, disturbed habitat, or extensive agriculture is required pursuant to the County or CEQA.

Direct impacts to non-native grassland require a 0.5:1 mitigation ratio, for a total of 0.09 acre of mitigation. A total of 0.20 acre of non-native grassland is preserved within the open space lot, therefore no additional mitigation is required.

Direct impacts to the oak habitat including coast live oak woodland, disturbed southern live oak riparian forest, and oak root zone requires a 3:1 ratio. The total mitigation required for impacts to oak habitat and oak root zone is 1.32 acres of oak habitat.

The following provides the justification for the impacts to the oak habitat and the explanation for the mitigation requirement. The coast live oak woodland (0.1 acre) and disturbed southern coast live oak riparian forest (0.02 acre) impacts result from the right-of-way for Lone Oak Road and Buena Creek Road which the County is requiring to be widened. There is no feasible alternative to avoid the RPO buffer; the impact is designed to be minimal; there are no wetland impacts; construction will be the least-damaging methods; and the widening will serve multiple properties. The coast live oak woodland and disturbed southern coast live oak riparian forest that is not impacted and that are not within the Buena Creek Road easement are also included in the RPO wetland buffer which is considered impact neutral, and therefore cannot be counted toward mitigation (County of San Diego 2010b). A total of 1.32 acres of oak woodland is required for mitigation for the impacts.

Thus the total mitigation needed for oak woodland, southern coast live oak riparian forest, and oak root zone is 1.32 acres.

Mitigation measures BIO-1 through BIO-5 will mitigate for direct and indirect impacts to vegetation communities.

BIO-1 The applicant will preserve 0.20 acre of non-native grassland within the onsite open space lot.

a. The applicant must identify the entity responsible for the long-term management and monitoring of the preserved land.

b. To ensure the land will be protected in perpetuity, evidence must be provided that a dedicated conservation easement or similar land constraint has been placed over the mitigation land.

BIO-2 The applicant will purchase a total of 1.32 acres of oak woodland habitat within the Daley Ranch Conservation Bank (mitigation bank). The evidence of purchase shall include the following information to be provided by the mitigation bank:

a. A copy of the purchase contract referencing the project name and numbers for which the habitat credits were purchased will be provided.

b. If not stated explicitly in the purchase contract, a separate letter must be provided identifying the entity responsible for the long-term management and monitoring of the preserved land.

c. To ensure the land will be protected in perpetuity, evidence must be provided that a dedicated conservation easement or similar land constraint has been placed over the mitigation land.

d. An accounting of the status of the mitigation bank will be provided that shall include the total amount of credits available at the bank, the amount required by this project, and the amount remaining after utilization by this project.

BIO-2 To prevent inadvertent disturbance to areas outside the limits of grading, a County-approved biologist ("Project Biologist") shall be contracted to perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities to ensure that there are no impacts outside the approved limits of grading and disturbance areas.

BIO-3 Fencing will be constructed along the edge of the open space lot and the limits of development. This will prevent impacts to sensitive resources within Buena Creek but allow for wildlife movement through the creek. Signs will be placed every 200 feet along the fence line to prevent entry.

BIO-4 A limited building zone has been applied along the open space lot to protect sensitive resources. The building of structures that would require vegetation clearing for fuel management purposes would be prohibited within this zone.

BIO-5 Prior to installation of any landscaping, plant palettes shall be reviewed by the Project Biologist to minimize the effects that proposed landscape plants could have on biological resources outside the impact footprint due to potential naturalization of landscape plants in the open space. Landscape plants will not include invasive plant species listed on the most recent version of the Cal-IPC California Invasive Plant Inventory for the project region. All plant stock shall be fumigated for pests, including Argentine ants, just prior to bringing the plants to the site for installation. Landscape plans will include a plant palette composed of native or non-native, non-invasive species that do not require high irrigation rates.

10.2.2 Special-Status Plant Species

Mitigation Measures **BIO-1** through **BIO-5** will mitigate for potential indirect impacts to potentially occurring special-status plant species.

10.2.3 Special-Status Wildlife Species

As described above, there would be no significant direct impacts to special-status wildlife species, but potential indirect impacts to special-status wildlife species would be considered significant. Mitigation Measures **BIO-6** and **BIO-7,** as well as Mitigation Measures **BIO-1** through **BIO-5** (described above), would mitigate these impacts to a level below significant.

BIO-6 If construction work must occur during the avian breeding season (February 1 to August 31, and as early as January 1 for some raptors), the applicant shall satisfy the following requirements:

1. Preconstruction nesting bird surveys will be conducted within 72 hours of construction-related activities and appropriate avoidance measures will be implemented for identified nesting birds. If construction activities are halted for 10 consecutive days, the surveys will be repeated.
2. To determine presence of nesting birds that the project activities may affect, surveys should be conducted beyond the project area to a distance of 300 feet for passerine birds and 500 feet for raptors. The protocols should include, but are not limited to, the size of the project area being surveyed, method of search, and behavior that indicates active nests.
3. The applicant(s) will rely on its avian biologists to determine the appropriate standard buffer widths for nests within the project corridor/footprint, based on the sensitivity levels of specific species or guilds of avian species. The determination of the standard buffer widths should be site- and species- or guild-specific and data-driven and not based on generalized assumptions regarding all nesting birds. The determination of the buffer widths should consider the following factors:
    a. Nesting chronologies
    b. Geographic location
    c. Existing ambient conditions (human activity within line of sight—cars, bikes, pedestrians, dogs, noise)
    d. Type and extent of disturbance (e.g., noise levels and quality—punctuated, continual, ground vibrations—blasting-related vibrations proximate to tern colonies are known to make the ground-nesting birds flush the nests)
    e. Visibility of disturbance
    f. Duration and timing of disturbance

g. Influence of other environmental factors

h. Species' site-specific level of habituation to the disturbance.

4. Application of the standard buffer widths should avoid the potential for project-related nest abandonment and failure of fledging, and minimize any disturbance to the nesting behavior. If project activities cause or contribute to a bird being flushed from a nest, the buffer must be widened.

BIO-7 As a condition on the grading plans, the Project Biologist shall cover excavated areas and/or provide escape routes for wildlife from these areas and monitor the areas daily. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and the edges shall be covered with soils and plastic sheeting such that small wildlife cannot access these areas. Soil piles will be covered at night to prevent wildlife from burrowing into them. The edges of the sheeting will be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected daily (i.e., every morning) by a qualified biologist to monitor for and release wildlife, if it has become trapped. Excavations shall provide an earthen ramp to allow for a wildlife escape route.

10.2.4 Jurisdictional Wetlands and Waterways

No direct impacts to jurisdictional wetlands or waterways are anticipated. Potential indirect impacts would be mitigated through Mitigation Measures **BIO-1** through **BIO-5**.

11 CUMULATIVE IMPACTS

A reasonable list of cumulative projects was compiled based on past, present, and future projects that could also cumulatively contribute to the Lone Oak project's significant biological impacts. Based on discussions with the County, the cumulative projects study area was selected that identified a total of 39 projects within the vicinity that could potentially result in cumulative impacts. These projects and their impacts are outlined in Table 5. Of the 39 projects analyzed, only one project, Sugarbush, was identified by the County to result in impacts to species and habitat that are similar to Lone Oak. Because no special-status species impacts are anticipated for the Lone Oak project, they are not included in the cumulative impacts analysis. Only impacts to sensitive habitat types, namely impacts to coast live oak woodland and non-native grassland habitats, were analyzed for cumulative impacts.

The two cumulative projects (Lone Oak and Sugarbush) will impact a total of 1.04 acres of coast live oak woodland, and 11.27 acres of non-native grassland. Because the impacts for these two projects are relatively small in acreage and will be fully mitigated, these impacts combined are not significant. Cumulative mitigation for these impacts total 2.62 acres of coast live oak woodland and 5.8 acres of non-native grassland. Because these habitat types will be preserved within the cumulative projects study area, no significant impacts are expected. Additionally, the mitigation for the impacts is located within the North County MSCP. The Lone Oak project is not a covered project under the North County MSCP. Furthermore, neither of these projects is located within habitat proposed for the North County MSCP Preserve Area and therefore no impacts to the North County MSCP would result.

Therefore, the Lone Oak project does not contribute to cumulative impacts within the region. The impacts that will result from project implementation are not considerable because there are only two relatively small and isolated projects that could contribute to cumulative impacts. There are no impacts to proposed Preserve Areas for the North County MSCP, and all impacts are fully mitigated.

Table 5
Cumulative Impacts to Biological Resources

Map Reference No.	Project Number	Project Name	Resource			
			Coast live oak woodland		*Non-Native Grassland*	
			Impacts (acres)	*Mitigation (acres)*	*Impacts (acres)*	*Mitigation (acres)*
1	PDS2004-3300-04-008	Spitzfaden /Cingular Mup	--		--	
2	PDS2001-3100-5111	Vista Grove Estates Tm	--		--	
3	PDS2011-3100-4850	Waldenmayer Prd Tm4850	--		--	
4	PDS2002-3100-5165	Hannalei Homes Tm5165	--		--	
5	PDS2011-3100-4557	Madison Square Industrial Park Tm	--		--	

Table 5
Cumulative Impacts to Biological Resources

Map Reference No.	Project Number	Project Name	Resource			
			Coast live oak woodland		*Non-Native Grassland*	
			Impacts (acres)	*Mitigation (acres)*	*Impacts (acres)*	*Mitigation (acres)*
6	PDS2004-3100-5358	Marker Investments	--		--	
7	PDS2001-3100-4665	Lundberg	--		--	
8	PDS1999-3100-4950	Norcross	--		--	
9	PDS2011-3100-4805	Vista Robin Place	--		--	
10	PDS2010-3100-4353	Citracado Estates	--		--	
11	PDS2011-3100-4881	Fukuda Subdivision	--		--	
12	PDS2010-3100-4330	Buena Vista Industrial Park	--		--	
13	PDS2010-3100-4369	Jaoudi Industrial & Trading Corp	--		--	
14	PDS2001-3100-5121	Lone Oak Subdivision Tm	--		--	
15	PDS2011-3100-4659	Vista Petric Residence	--		--	
16	PDS2011-3100-4620	Lundberg Subdivision	--		--	
17	PDS2008-3200-19818	Tpm - Riegert Minor Subdivision	--		--	
18	PDS2008-3200-18058	Northwoods-West Covina I.A.	--		--	
19	PDS2008-3200-19674	Hopkins Tpm	--		--	
20	PDS1998-3200-20346	Alkazin Tpm	--		--	
21	PDS2004-3200-20293	Liegghio Tpm	--		--	
22	PDS2006-3299-20847	Snow Residence	--		--	
23	PDS2008-3200-17574	Tpm - Hammond	--		--	
24	PDS2008-3200-19586	P. Dolid	--		--	
25	PDS2008-3200-19724	Tpm - Jansen Family Trust	--		--	
26	PDS2009-3200-20100	Hedwig Erdmann	--		--	
27	PDS2008-3200-19580	Masson & Assoc.	--		--	
28	PDS2008-3200-19598	E. Gibbs	--		--	
29	PDS2009-3200-20098	C.R. And Dorothy Newbern	--		--	
30	PDS2000-3200-20417	Rancho Buena Vista Tpm	--		--	
31	PDS2008-3200-19495	Tpm - Norman Property	--		--	
32	PDS2009-3200-20078	Pagakis	--		--	
33	PDS2008-3200-19733	Tpm - Estrella Dr	--		--	
34	PDS2008-3299-20995	Richards Condition Of Satisfaction Tpm;	--		--	
35	PDS2001-3200-20469	Plamondon Tpm	--		--	
36	PDS2002-3200-20380	Morales Tpm	--		--	
37	PDS1999-3200-20429	Pruitt Tpm	--		--	
38	PDS1999-3200-20400	Blount Tpm	--		--	
39	PDS2003-3810-03-003	Sugarbush	0.6	1.3	11.1	5.6
40	PDS2014-TM-5585	Lone Oak	0.44	1.32	0.17	0.20

12 REFERENCES

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

AOU (American Ornithologists' Union). 2013. "Check-List of North American Birds: List of the 2,090 Bird Species Known From the AOU Check-List Area." Updated September 13, 2013. http://www.aou.org/checklist/north/full.php.

ACOE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetlands Delineation Manual*. ACOE, Waterways Experiment Station, Wetlands Research Program Technical Report Y-87-1.

ACOE. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: ACOE Research and Development Center. September 2008. Accessed September 1, 2010. http://el.erdc.usace.army.mil/elpubs/pdf/trel08-28.pdf.

ACOE and EPA (U.S. Environmental Protection Agency). 2008. Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States* & *Carabell v. United States*. Washington, DC: EPA. December 2, 2008.

CDFG (California Department of Fish and Game). 2011. "Special Animals (898 taxa)." California Natural Diversity Database, Biogeographic Data Branch. January 2011. Accessed January 2, 2014. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CDFW (California Department of Fish and Wildlife). 2014a. California Natural Diversity Database RareFind, Version 3.1.0. Accessed February 2014.

CDFW. 2014b. "State and Federally Listed Endangered, Threatened, and Rare Plants of California." California Natural Diversity Database. CDFW, Biogeographic Data Branch. January 2014. Accessed February 2014. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CDFW. 2014c. "Special Vascular Plants, Bryophytes, and Lichens List." California Natural Diversity Database. January 2014. Accessed February 2014. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CNPS (California Native Plant Society). 2014. Online Inventory of Rare and Endangered Plants. Version 8-01a. Sacramento, California: CNPS. Accessed February 2014. http://www.rareplants.cnps.org/detail/1599.html.

County of San Diego. 2007. An Ordinance Codifying and Amending the Resource Protection Ordinance, Relating to Wetlands, Prehistoric and Historic Sites, Agricultural Operations, Enforcement, and Other Matters. Ordinance No 9842. March 21, 2007.

County of San Diego. 2009. Draft North County Multiple Species Conservation Program.

County of San Diego. 2010a. County of San Diego Report Format and Content Requirements: Biological Resources. Fourth revision. September 15, 2010.

County of San Diego. 2010b. County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources. Fourth revision. September 15, 2010.

Crother, B.I., ed. 2008. *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding*. 6th ed. Society for the Study of Amphibians and Reptiles (SSAR), Herpetological Circular no. 37, edited by J.J. Moriarty. January 2008. Accessed December 14, 2010. http://ssarherps.org/pdf/HC_37_6thEd.pdf.

Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California Department of Fish and Game. October 1986.

Jepson Flora Project. 2014. *Jepson eFlora*. Berkeley, California: University of California. Accessed September 18, 2013 and February 2014. http://ucjeps.berkeley.edu/cgi-bin/get_JM_name_data.pl.

Moyle, P.B. 2002. *Inland Fishes of California*. Berkeley, California: University of California Press.

NABA (North American Butterfly Association). 2001. "Checklist of North American Butterflies Occurring North of Mexico." In *North American Butterfly Association (NABA) Checklist & English Names of North American Butterflies*, edited by B. Cassie, J. Glassberg, A. Swengel, and G. Tudor. 2001. Accessed March 2014. http://www.naba.org/pubs/enames2.html.

Oberbauer, T.M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California," by Robert F. Holland, PhD, October 1986. March 2008.

SDNHM (San Diego Natural History Museum). 2002. "Butterflies of San Diego County." Revised September 2002. Accessed May 2012. http://www.sdnhm.org/archive/research/entomology/sdbutterflies.html.

SDNHM. 2014. Data retrieved from Herbarium and Plant Atlas databases for grid squares G7–G9, H7–H9, and I7–I9. *San Diego County Plant Atlas Project*. Online ed. Accessed February 2014. http://www.sdplantatlas.org/publicsearch.aspx.

Unitt, P. 2004. *San Diego County Bird Atlas*. Proceedings of the San Diego Society of Natural History, no. 39. San Diego, California: Ibis Publishing Company.

USDA (U.S. Department of Agriculture). 2014. "California." State PLANTS Checklist. Accessed September 18, 2013, and February 2014. http://plants.usda.gov/dl_state.html.

USDA and NRCS (U.S. Department of Agriculture and Natural Resources Conservation Services). 2014a. Web Soil Survey [web application]. Accessed February 2014. http://websoilsurvey.nrcs.usda.gov/ app/HomePage.htm.

USDA and NRCS. 2014b. Official Soil Series Descriptions. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions. Accessed online February 2014 at: http://soils.usda.gov/technical/classification/osd/index.html.

USFWS (U.S. Fish and Wildlife Service). 2008. *Birds of Conservation Concern 2008*. December 2008.

USFWS. 2014. "Critical Habitat and Occurrence Data" [map]. Accessed March 21, 2014. http://www.fws.gov/data.

Wilson, D.E., and D.M. Reeder, eds. 2005. *Mammal Species of the World: A Taxonomic and Geographic Reference.* 3rd ed. Online version. Baltimore, Maryland: Johns Hopkins University Press. Accessed March, 24, 2014. http://www.bucknell.edu/msw3/.

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FIGURE 1

Regional Map

Lone Oak Road Project - Biological Resources Letter Report

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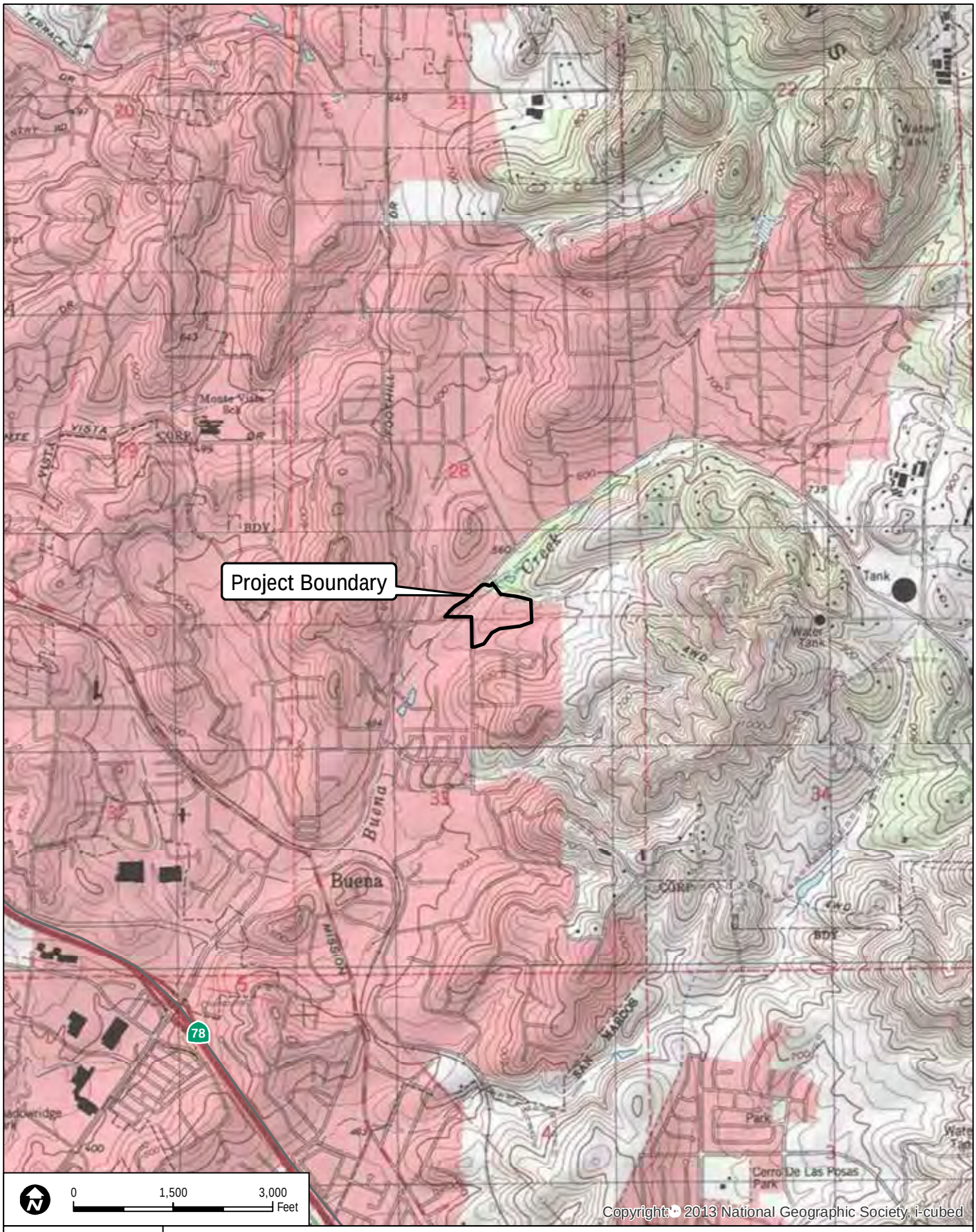

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SOURCE: USGS 7.5-Minute Series San Marcos Quadrangle.

FIGURE 2
Vicinity Map

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Lone Oak Road Project - Biological Resources Letter Report

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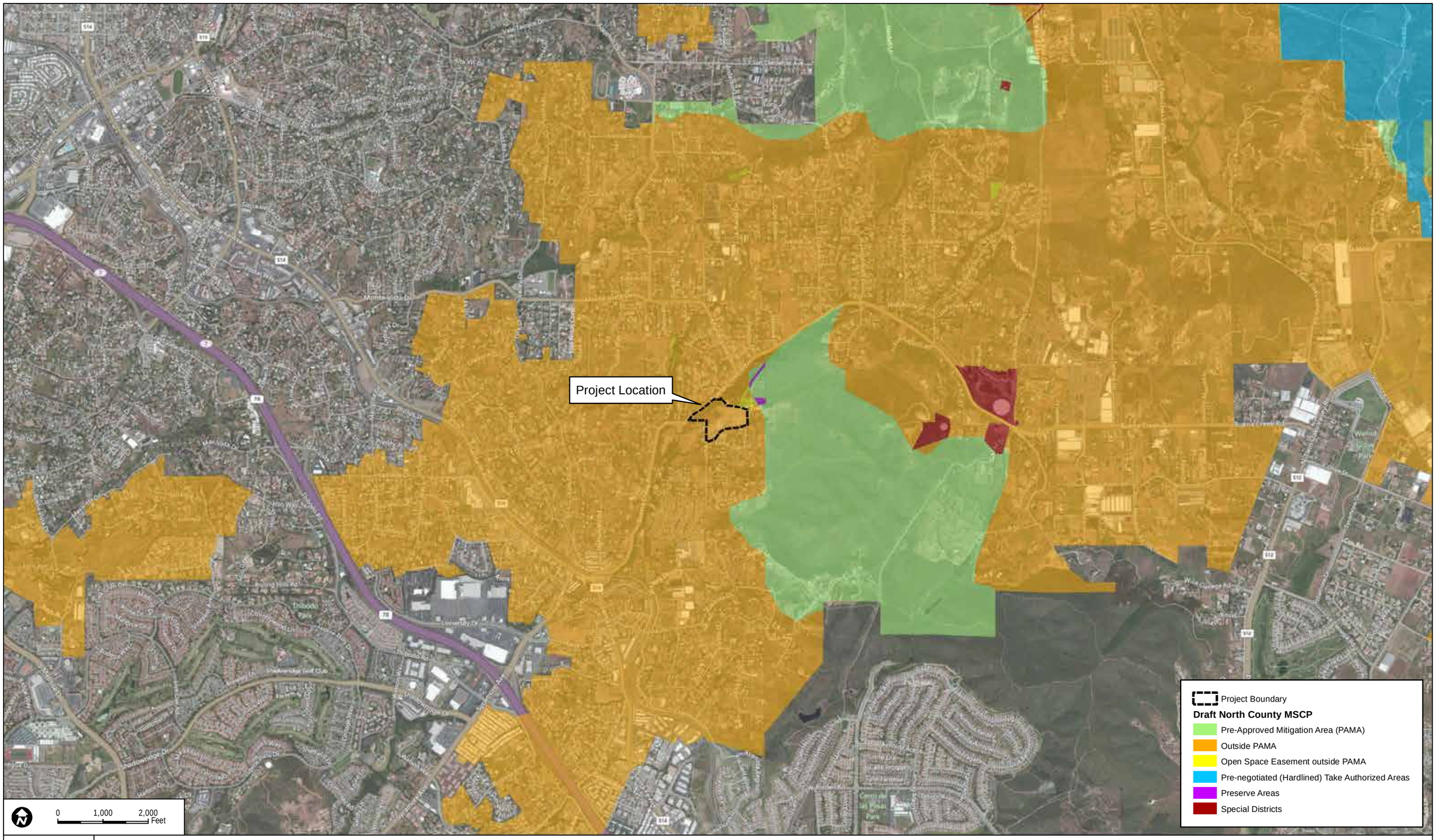

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SOURCE: BING 2015; SANGIS 2009

FIGURE 3

Regional Context

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Lone Oak Road Project - Biological Resources Letter Report

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SOURCE: BING 2015, Hunsaker & Associates 2015

FIGURE 4

Biological Resources

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Lone Oak Road Project - Biological Resources Letter Report

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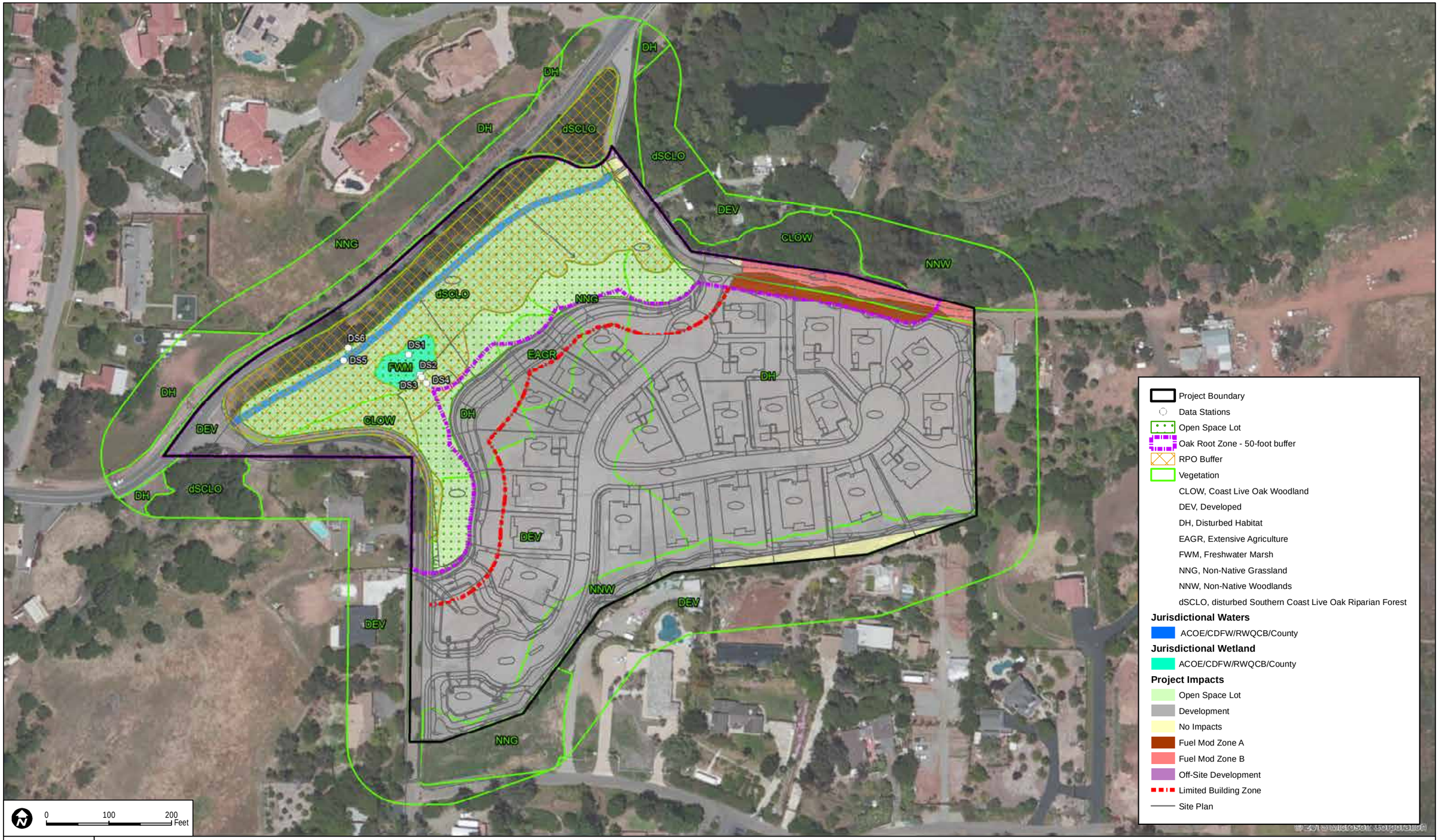

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SOURCE: BING 2015, Hunsaker & Associates 2015

FIGURE 5

Impacts to Biological Resources

Lone Oak Road Project - Biological Resources Letter Report

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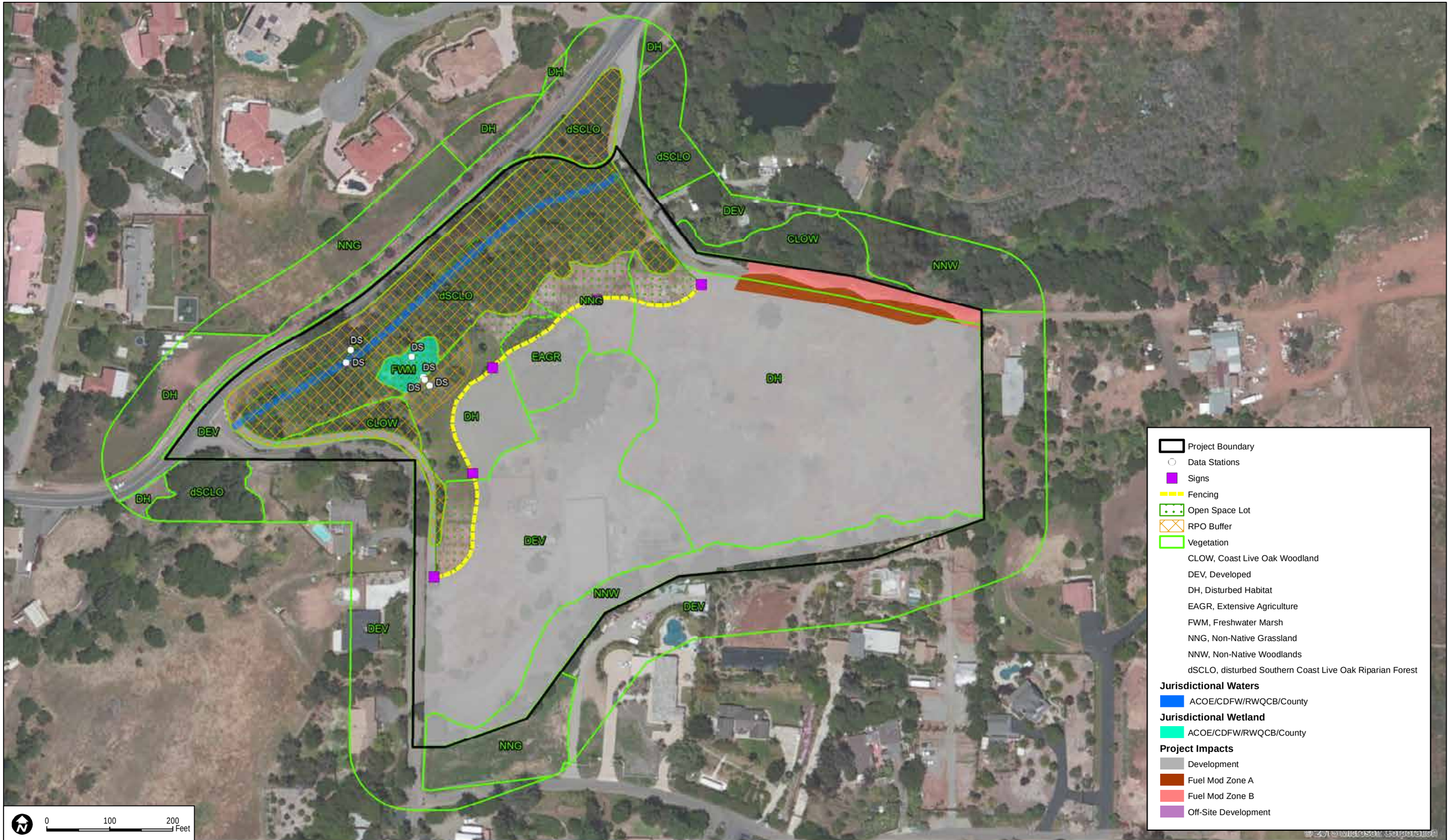

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SOURCE: BING 2015, Hunsaker & Associates 2015

FIGURE 6

Biological Resources Onsite Mitigation Area

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County Of San Diego Tract TM # 5585

TITLE REPORT:

BASED ON A PRELIMINARY REPORT PREPARED BY CHICAGO TITLE COMPANY AS ORDER NO. 00013489-996-U50 DATED AUGUST 21, 2014.

LEGAL DESCRIPTION:

PARCEL A:

THE PROPERTY DESCRIBED IN CERTIFICATE OF COMPLIANCE RECORDED MAY 14, 1974 AS FILE NO. 74-125388, BEING THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 28, AND SOUTHEAST QUARTER OF SOUTHWEST QUARTER OF SECTION 28, AND THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 11 SOUTH, RANGE 3 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:

BEGINNING AT THE TRUE QUARTER CORNER COMMON TO SAID SECTIONS 28 AND 33 AS SAME IS SHOWN ON LICENSED SURVEYOR'S MAP NO. 371 ON FILE IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY; THENCE SOUTH 0°09' EAST ALONG THE NORTH AND SOUTH CENTER LINE OF SAID SECTION 33, A DISTANCE OF 456.40 FEET; THENCE NORTH 89°50'20" EAST 50 FEET; THENCE NORTH 70°02'30" EAST 138.33 FEET; THENCE NORTH 36°00' EAST 208.00 FEET; THENCE NORTH 62°59' EAST 130.12 FEET; THENCE NORTH 84°00' EAST 312.09 FEET; THENCE NORTH 70°02'30" EAST 185.99 FEET TO THE SOUTHWEST CORNER OF THAT PARCEL OF LAND CONVEYED BY BENJAMIN E. NEEDHAM, ET UX, TO DANIEL D. MACK, ET UX, BY DEED RECORDED FEBRUARY 21, 1941, IN BOOK 1146, PAGE 147 OF OFFICIAL RECORDS IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY; THENCE NORTH 1°18'50" WEST ALONG THE WEST LINE OF LAND SO CONVEYED 332.12 FEET; THENCE NORTH 75°57'10" WEST 212.49 FEET; THENCE NORTH 81°29' WEST 249.67 FEET; THENCE NORTH 37°27'30" WEST 214.12 FEET TO A POINT IN THE SOUTHEASTERLY LINE OF LAND CONVEYED TO HUGH EVANS AND COMPANY, A CORPORATION, TO LEE S. TWOMEY, ET UX, DATED OCTOBER 8, 1930 AND RECORDED IN BOOK 1801, PAGE 394 OF DEEDS, SAID POINT BEING DESIGNATED HEREIN AS POINT "B" AND BEING THE BEGINNING OF A CURVE CONCAVE TO THE NORTHWEST WHOSE RADIUS THROUGH SAID POINT OF BEGINNING BEARS NORTH 83°01'50" WEST; THENCE FOLLOWING THE SOUTHEASTERLY LINE OF SAID TWOMEY LAND SOUTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 1°11'27" AND A RADIUS OF 40.89 FEET TO AN ARC DISTANCE OF 79.54 FEET TO THE BEGINNING OF A TANGENT REVERSE CURVE CONCAVE TO THE SOUTH; THENCE WESTERLY ALONG SAID CURVE, CENTRAL ANGLE 70°20' AND RADIUS 106.43 FEET; AN ARC DISTANCE OF 130.67 FEET; THENCE TANGENT TO SAID CURVE SOUTH 48°58'10" WEST 220.50 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE TO THE NORTHWEST; THENCE WESTERLY ALONG SAID CURVE, CENTRAL ANGLE 12°20' AND RADIUS 925.53 FEET, AN ARC DISTANCE OF 199.23 FEET; THENCE TANGENT TO SAID CURVE SOUTH 60°37'10" WEST 25.80 FEET TO THE BEGINNING OF A TANGENT CURVE, CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 458.93 FEET AND A CENTRAL ANGLE OF 24°35'10"; THENCE SOUTHWESTERLY ALONG SAID CURVE 197.02 FEET TO THE END THEREOF; THENCE SOUTH 35°50' WEST TO INTERSECT WITH THE TRUE SOUTH LINE OF SAID SECTION 28, AS SHOWN ON SAID LICENSED SURVEYOR'S MAP NO. 371; THENCE LEAVING THE SOUTHEASTERLY LINE OF SAID TOWMEYS LAND AND RUNNING ALONG SAID TRUE SOUTH LINE OF SAID SECTION 28, NORTH 89°50'20" EAST TO THE TRUE SOUTH QUARTER CORNER OF SAID SECTION 28 AS SHOWN ON LICENSED SURVEYOR'S MAP NO. 371 AND THE TRUE POINT OF BEGINNING.

APN: 184-080-01 & 181-162-06

PARCEL B:

AN EASEMENT AND RIGHT OF WAY FOR ROAD PURPOSES AS GRANTED IN THAT CERTAIN GRANT DEED RECORDED FEBRUARY 28, 1942 IN BOOK 1315, PAGE 134 OFFICIAL RECORDS, TO BE USED IN COMMON WITH OTHERS, OVER AND ACROSS THAT PORTION OF THE SOUTHWEST QUARTER OF SOUTHEAST QUARTER OF SAN DIEGO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

A STRIP OF LAND OF THE UNIFORM WIDTH OF THIRTY FEET, LYING EASTERLY FROM AND ADJOINING THE FOLLOWING DESCRIBED LINE:

BEGINNING AT THE SOUTH QUARTER CORNER OF SAID SECTION 28, AS SHOWN ON LICENSED SURVEYORS MAP NO. 371, ON FILE IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY;

RUNNING THENCE NORTH 89°50'20" EAST ALONG THE TRUE SECTION LINE 902.45 FEET; THENCE NORTH 1°17'50" WEST 244.31 FEET; THENCE NORTH 75°59'10" WEST 212.49 FEET; THENCE NORTH 81°29' WEST 249.67 FEET; THENCE NORTH 37°27'30" WEST 214.12 FEET TO A POINT IN THE SOUTHEASTERLY LINE OF LAND DESCRIBED IN DEED TO LEE S. TWOMEY ET UX RECORDED IN BOOK 1801, PAGE 394 OF DEEDS, AND THE TRUE POINT OF BEGINNING; THENCE NORTH 6°58'10" EAST 40 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE TO THE SOUTHEAST; THENCE NORTHEASTERLY ALONG SAID CURVE, CENTRAL ANGLE 20°46'30" RADIUS 545.53 FEET, AN ARC DISTANCE OF 197.80 FEET TO A POINT IN THE COUNTY ROAD (ROAD SURVEY 404).

SAID THIRTY FOOT STRIP TO HAVE THE EASTERLY SIDE EXTENDED ON THE NORTH END TO AN INTERSECTION WITH THE EASTERLY RIGHT-OF-WAY LINE OF THE COUNTY ROAD AND EXTENDED ON THE SOUTH AND TO AN INTERSECTION WITH A COURSE BEARING SOUTH 37°27'30" EAST FROM THE TRUE POINT OF BEGINNING.

ENCUMBRANCES:

THE FOLLOWING IS A LIST OF EXCEPTIONS PER A PRELIMINARY TITLE REPORT ISSUED BY CHICAGO TITLE COMPANY PER ORDER NUMBER 00013489-996-U50 DATED AUGUST 21, 2014.

1. PROPERTY TAXES, INCLUDING ANY ASSESSMENTS COLLECTED WITH TAXES, FOR THE FISCAL YEAR 2014 – 2015 THAT ARE A LIEN NOT YET DUE.
2. THE LIEN OF SUPPLEMENTAL OR ESCAPED ASSESSMENTS OF PROPERTY TAXES, IF ANY, MADE PURSUANT TO THE PROVISIONS OF PART 0.5, CHAPTER 3.5 OR PART 2, CHAPTER 3, ARTICLES 3 AND 4 RESPECTIVELY (COMMENCING WITH SECTION 75) OF THE REVENUE AND TAXATION CODE OF THE STATE OF CALIFORNIA AS A RESULT OF THE TRANSFER OF TITLE TO THE VESTEE NAMED IN SCHEDULE A; OR AS A RESULT OF CHANGES IN OWNERSHIP OR NEW CONSTRUCTION OCCURRING PRIOR TO DATE OF POLICY.
3. THE RIGHTS OF THE PUBLIC IN AND TO THAT PORTION OF THE HEREIN DESCRIBED LAND LYING WITHIN ROAD SURVEY 404.
4. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

   GRANTED TO: THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY
   PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS
   RECORDED: MARCH 9, 1916 IN BOOK 701, PAGE 478 OF DEEDS
   AFFECTS: THE EXACT LOCATION AND EXTENT OF SAID EASEMENT IS NOT DISCLOSED OF RECORD

5. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

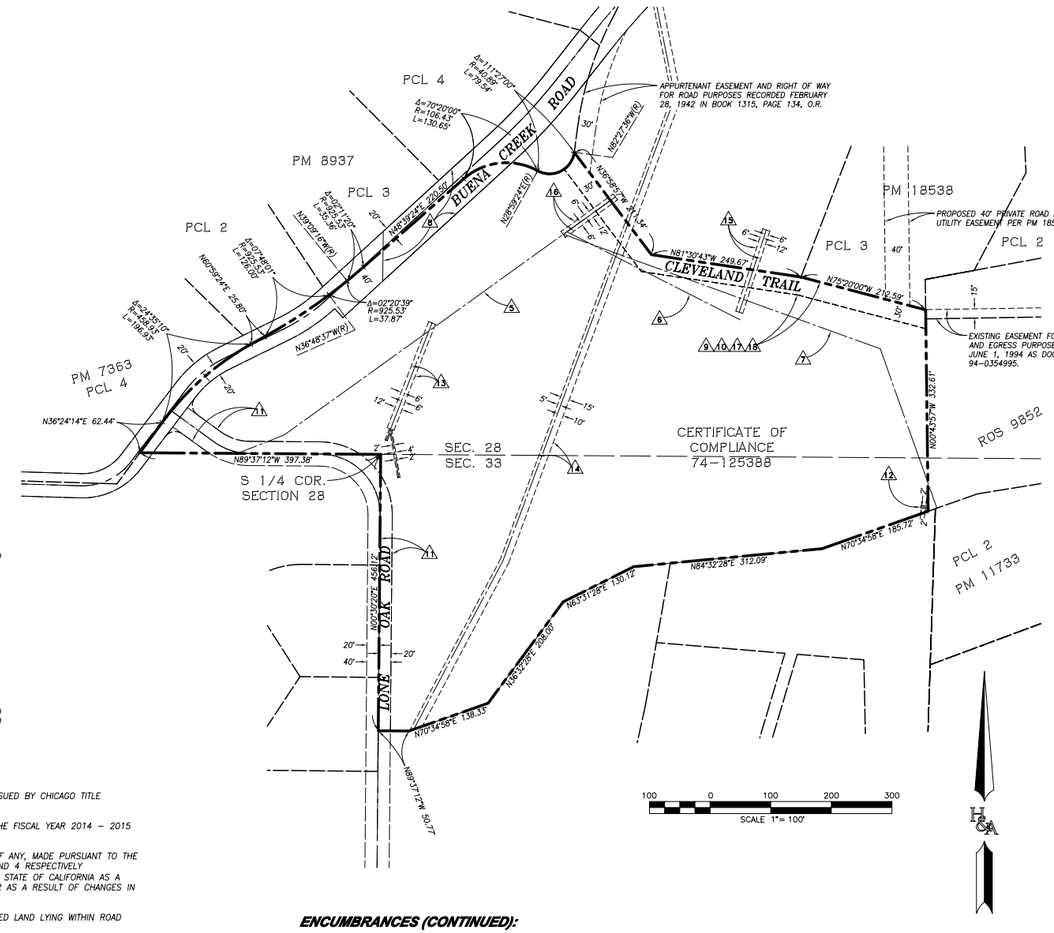
   GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY
   PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS
   RECORDED: FEBRUARY 5, 1936 IN BOOK 466, PAGE 322 OF OFFICIAL RECORDS
   AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

6. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

   GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY
   PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS
   RECORDED: JULY 6, 1937 IN BOOK 664, PAGE 216 OF OFFICIAL RECORDS
   AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

7. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

   GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY
   PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS
   RECORDED: MAY 11, 1938 IN BOOK 774, PAGE 310 OF OFFICIAL RECORDS
   AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.



ENCUMBRANCES (CONTINUED):

8. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

   GRANTED TO: COUNTY OF SAN DIEGO
   PURPOSE: PUBLIC HIGHWAY
   RECORDED: MAY 2, 1940 IN BOOK 1021, PAGE 309 OF OFFICIAL RECORDS
   AFFECTS: ROAD SURVEY 404

   SAID INSTRUMENT ADDITIONALLY CONTAINS THE PRIVILEGE AND RIGHT TO EXTEND DRAINAGE STRUCTURES AND EXCAVATION AND EMBANKMENT SLOPES BEYOND THE LIMITS WHERE REQUIRED FOR THE CONSTRUCTION AND MAINTENANCE THEREOF

9. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

   GRANTED TO: D. D. MACK AND EDITH M. MACK
   PURPOSE: ROAD AND PIPE LINE PURPOSES
   RECORDED: FEBRUARY 28, 1942 IN BOOK 1312, PAGE 245 OF OFFICIAL RECORDS
   AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

10. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

    GRANTED TO: VISTA IRRIGATION DISTRICT
    PURPOSE: ROAD
    RECORDED: FEBRUARY 28, 1942 IN BOOK 1305, PAGE 428 OF OFFICIAL RECORDS
    AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

11. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

    GRANTED TO: COUNTY OF SAN DIEGO
    PURPOSE: PUBLIC HIGHWAY
    RECORDED: JUNE 30, 1947 IN BOOK 2436, PAGE 211 AS INSTRUMENT NO. 67504 OF OFFICIAL RECORDS
    AFFECTS: ROAD SURVEY NO. 1090

    SAID INSTRUMENT ADDITIONALLY CONTAINS THE PRIVILEGE AND RIGHT TO EXTEND DRAINAGE STRUCTURES AND EXCAVATION AND EMBANKMENT SLOPES BEYOND THE LIMITS WHERE REQUIRED FOR THE CONSTRUCTION AND MAINTENANCE THEREOF

ENCUMBRANCES (CONTINUED):

12. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

    GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY
    PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS
    RECORDED: MAY 31, 1955 IN BOOK 5661, PAGE 368 OF OFFICIAL RECORDS
    AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

13. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

    GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY, A CORPORATION
    PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS
    RECORDED: NOVEMBER 5, 1974 AS INSTRUMENT NO. 74-293412 OF OFFICIAL RECORDS
    AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

14. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

    GRANTED TO: VISTA IRRIGATION DISTRICT
    PURPOSE: WATERLINE
    RECORDED: MARCH 4, 1982 AS INSTRUMENT NO. 82-59631 OF OFFICIAL RECORDS
    AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

15. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

    GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY, A CORPORATION
    PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS
    RECORDED: JUNE 30, 1982 AS INSTRUMENT NO. 82-203079 OF OFFICIAL RECORDS
    AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

16. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

    GRANTED TO: SAN DIEGO GAS AND ELECTRIC COMPANY, A CORPORATION
    PURPOSE: PUBLIC UTILITIES, INGRESS, EGRESS
    RECORDED: SEPTEMBER 5, 1990 AS INSTRUMENT NO. 90-484676 OF OFFICIAL RECORDS
    AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

17. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

    GRANTED TO: REX E. CHRISTENSEN, SR., ET AL
    PURPOSE: INGRESS AND EGRESS FOR ROAD AND WATER PIPELINE, ROAD AND PIPELINE
    RECORDED: JUNE 1, 1994 AS INSTRUMENT NO. 94-0354995 OF OFFICIAL RECORDS
    AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

18. AN EASEMENT FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT.

    GRANTED TO: DAVID G. LEESE AND ROSEMARY LEESE, HUSBAND AND WIFE, AS JOINT TENANTS
    PURPOSE: ROAD PURPOSES AND PUBLIC UTILITIES
    RECORDED: FEBRUARY 5, 1998 AS INSTRUMENT NO. 98-0060319 OF OFFICIAL RECORDS
    AFFECTS: THE ROUTE THEREOF AFFECTS A PORTION OF SAID LAND AND IS MORE FULLY DESCRIBED IN SAID DOCUMENT.

19. A DEED OF TRUST TO SECURE AN INDEBTEDNESS IN THE ORIGINAL AMOUNT SHOWN BELOW.

    AMOUNT: $430,000.00
    DATED: JUNE 18, 1999
    TRUSTOR: DANIEL PAUL AND ILEANA D. PAUL, HUSBAND AND WIFE
    TRUSTEE: CHICAGO TITLE COMPANY, A CALIFORNIA CORPORATION
    BENEFICIARY: DOROTHY JEAN LANGLEY AND DOROTHY V. TAYLOR, CO-TRUSTEES OF THE PAUL S. TAYLOR AND DOROTHY V. TAYLOR TRUST, DATED APRIL 7, 1976, AS RESTATED ON APRIL 30, 1997
    LOAN NUMBER NOT SHOWN
    RECORDED: SEPTEMBER 9, 1999 AS INSTRUMENT NO. 99-0619300 OF OFFICIAL RECORDS

20. A DEED OF TRUST TO SECURE AN INDEBTEDNESS IN THE ORIGINAL AMOUNT SHOWN BELOW.

    AMOUNT: $543,000.00
    DATED: JANUARY 28, 2002
    TRUSTOR: DANIEL PAUL, AND ILEANA D. PAUL, HUSBAND AND WIFE AS JOINT TENANTS
    TRUSTEE: RANCHO SANTA FE NATIONAL BANK, A NATIONAL BANKING ASSOCIATION
    BENEFICIARY: RANCHO SANTA FE NATIONAL BANK
    LOAN NUMBER: 04600789-60
    RECORDED: FEBRUARY 5, 2002 AS INSTRUMENT NO. 2002-0097237 OF OFFICIAL RECORDS

    AN AGREEMENT TO MODIFY THE TERMS AND PROVISIONS OF SAID DEED OF TRUST AS THEREIN PROVIDED.

    EXECUTED BY: GH 2, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY AND PACIFIC WESTERN BANK
    RECORDED: MARCH 26, 2013 AS INSTRUMENT NO. 2013-0190074 OF OFFICIAL RECORDS

21. INTENTIONALLY OMITTED.
22. A DEED OF TRUST TO SECURE AN INDEBTEDNESS IN THE ORIGINAL AMOUNT SHOWN BELOW.

    AMOUNT: $306,359.43
    DATED: AUGUST 27, 2013
    TRUSTOR: GH 2, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY
    TRUSTEE: REGENTS BANK, N. A.
    BENEFICIARY: REGENTS BANK, N. A.
    LOAN NUMBER: NOT SHOWN
    RECORDED: AUGUST 29, 2013 AS INSTRUMENT NO. 2013-0538963 OF OFFICIAL RECORDS

    AN AGREEMENT TO MODIFY THE TERMS AND PROVISIONS OF SAID DEED OF TRUST AS THEREIN PROVIDED.

    RECORDED: MARCH 28, 2014 AS INSTRUMENT NO. 2014-0122643 OFFICIAL RECORDS

23. AN ASSIGNMENT OF ALL THE MONIES DUE, OR TO BECOME DUE AS RENT, AS ADDITIONAL SECURITY FOR THE OBLIGATIONS SECURED BY DEED OF TRUST.

    ASSIGNED TO: REGENTS BANK N.A.
    BY ASSIGNMENT RECORDED: AUGUST 29, 2013 AS INSTRUMENT NO. 2013-0538964 OF OFFICIAL RECORDS

24. THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "HAZARDOUS SUBSTANCES CERTIFICATE AND INDEMNITY AGREEMENT" RECORDED AUGUST 29, 2013 AS INSTRUMENT NO. 2013-0538965 OF OFFICIAL RECORDS.
25. WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT SHOWN BY THE PUBLIC RECORDS.
26. MATTERS WHICH MAY BE DISCLOSED BY AN INSPECTION AND/OR BY A CORRECT ALTA/ACSM LAND TITLE SURVEY OF SAID LAND THAT IS SATISFACTORY TO THIS COMPANY, AND/OR BY INQUIRY OF THE PARTIES IN POSSESSION THEREOF.

    THIS OFFICE MUST BE NOTIFIED AT LEAST 7 BUSINESS DAYS PRIOR TO THE SCHEDULED CLOSING IN ORDER TO ARRANGE FOR AN INSPECTION OF THE LAND; UPON COMPLETION OF THIS INSPECTION YOU WILL BE NOTIFIED OF THE REMOVAL OF SPECIFIC COVERAGE EXCEPTIONS AND/OR ADDITIONAL EXCEPTIONS TO COVERAGE.

    ANY RIGHTS OF PARTIES IN POSSESSION OF SAID LAND, BASED ON ANY UNRECORDED LEASE, OR LEASES.

    THIS COMPANY WILL REQUIRE A FULL COPY OF ANY UNRECORDED LEASE, TOGETHER WITH ALL SUPPLEMENTS, ASSIGNMENTS, AND AMENDMENTS FOR REVIEW.

EXISTING BOUNDARY AND ENCUMBRANCES

TENTATIVE MAP

COUNTY OF SAN DIEGO TRACT TM # 5585

LONE OAK RANCH

COUNTY OF SAN DIEGO, CALIFORNIA

PREPARED BY:

HUNSAKER & ASSOCIATES SAN DIEGO, INC

PLANNING 9707 Waples Street
ENGINEERING San Diego, Ca 92121
SURVEYING P:(858)558-4500 F:(858)558-1414

DUDEK

7997

FIGURE 7
Existing Encumbrances

Lone Oak Road Project - Biological Resources Letter Report

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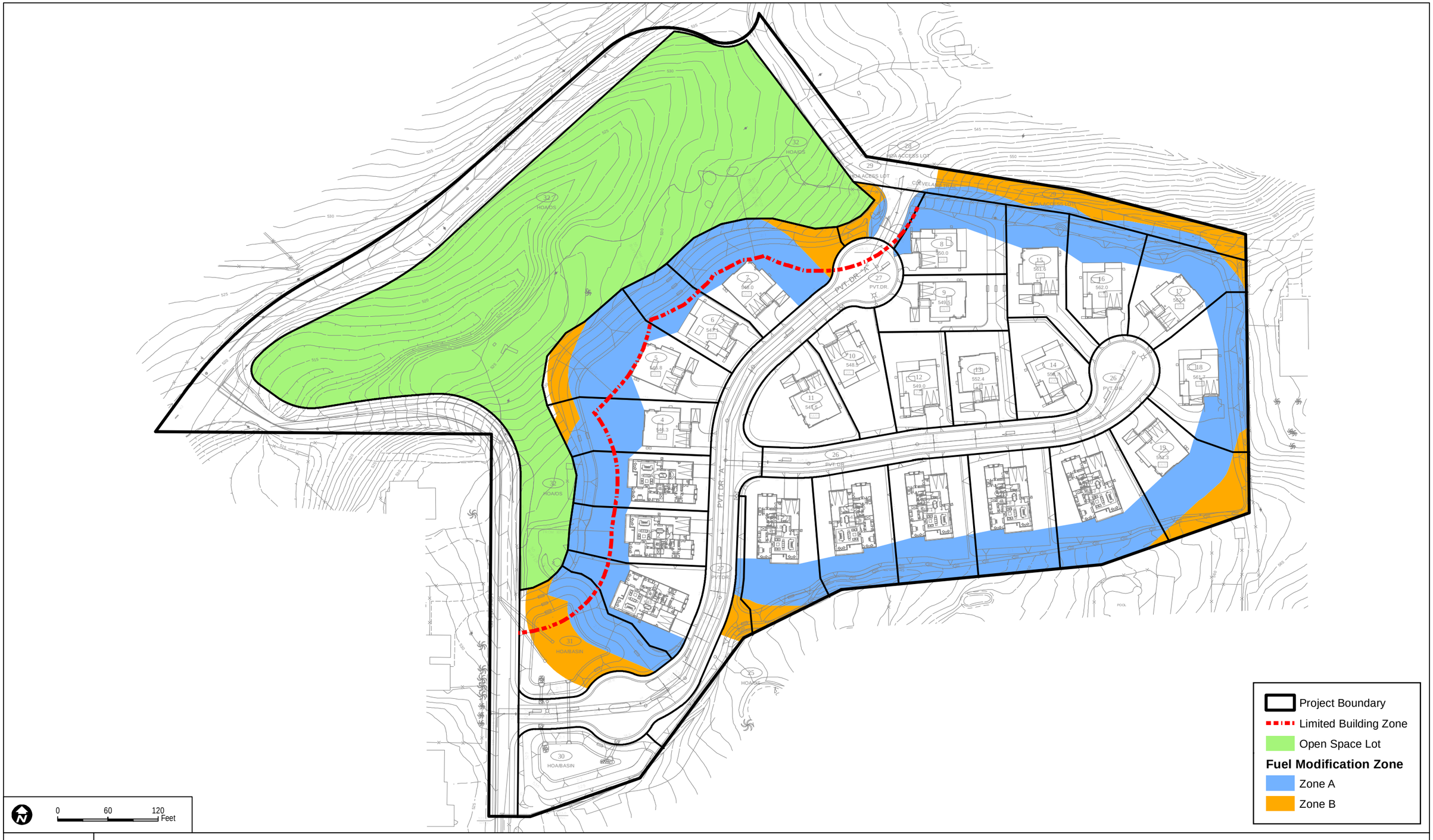

DUDEK

7997

SOURCE: Hunsaker 2014

FIGURE 8

Open Space Map and Fuel Modification Zones

Lone Oak Road Project - Biological Resources Letter Report

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APPENDIX A

Plant Compendium

Appendix A
Plant Compendium

VASCULAR SPECIES

DICOTS

***ANACARDIACEAE*—SUMAC OR CASHEW FAMILY**

* *Schinus molle*—Peruvian peppertree

* *Schinus terebinthifolius*—Brazilian peppertree

Malosma laurina—laurel sumac

Toxicodendron diversilobum—Pacific poison oak

***ARALIACEAE*—GINSENG FAMILY**

* *Hedera helix*—English ivy

***ASTERACEAE*—SUNFLOWER FAMILY**

Ambrosia psilostachya—Cuman ragweed

***BRASSICACEAE*—MUSTARD FAMILY**

* *Hirschfeldia incana*—shortpod mustard

***CHENOPODIACEAE*—GOOSEFOOT FAMILY**

* *Salsola tragus*—prickly Russian thistle

***EUPHORBIACEAE*—SPURGE FAMILY**

* *Ricinus communis*—castorbean

***FAGACEAE*—OAK FAMILY**

Quercus agrifolia—California live oak

***GERANIACEAE*—GERANIUM FAMILY**

* *Erodium cicutarium*—redstem stork's bill

***LAMIACEAE*—MINT FAMILY**

* *Marrubium vulgare*—horehound

***POLYGONACEAE*—BUCKWHEAT FAMILY**

Eriogonum fasciculatum—Eastern Mojave buckwheat

***SOLANACEAE*—NIGHTSHADE FAMILY**

* *Nicotiana glauca*—tree tobacco

GYMNOSPERMS AND GNETOPHYTES

***CUPRESSACEAE*—CYPRESS FAMILY**

Juniperus californica—California juniper

MONOCOTS

***AGAVACEAE*—AGAVE FAMILY**

Yucca schidigera—Mojave yucca

***ARECACEAE*—PALM FAMILY**

* *Washingtonia robusta*—Washington fan palm

***CYPERACEAE*—SEDGE FAMILY**

Schoenoplectus acutus—hardstem bulrush

***POACEAE*—GRASS FAMILY**

* *Bromus diandrus*—ripgut brome

* signifies introduced (non-native) species

APPENDIX B

Wildlife Compendium

Appendix B
Wildlife Compendium

AMPHIBIAN

FROGS

***RANIDAE*—TONGUELESS FROGS**

* *Lithobates catesbeianus*—American bullfrog

BIRD

EMBERIZINES

***EMBERIZIDAE*—EMBERIZIDS**

Melozone crissalis—California towhee

FLYCATCHERS

***TYRANNIDAE*—TYRANT FLYCATCHERS**

Sayornis nigricans—Black phoebe

Tyrannus verticalis—Western kingbird

HAWKS

***ACCIPITRIDAE*—HAWKS, KITES, EAGLES, AND ALLIES**

Buteo lineatus—Red-shouldered hawk

HUMMINGBIRDS

***TROCHILIDAE*—HUMMINGBIRDS**

Calypte anna—Anna's hummingbird

JAYS, MAGPIES AND CROWS

***CORVIDAE*—CROWS AND JAYS**

Aphelocoma californica—Western scrub-jay

Corvus brachyrhynchos—American crow

MOCKINGBIRDS AND THRASHERS

***MIMIDAE*—MOCKINGBIRDS AND THRASHERS**

Mimus polyglottos—Northern mockingbird

WOODPECKERS

***PICIDAE*—WOODPECKERS AND ALLIES**

Picoides nuttallii—Nuttall's woodpecker
Picoides pubescens—Downy woodpecker

WRENTITS

***TIMALIIDAE*—BABBLERS**

Chamaea fasciata—Wrentit

INVERTEBRATE

BUTTERFLIES

***NYMPHALIDAE*—BRUSH-FOOTED BUTTERFLIES**

Limenitis lorquini—Lorquin's admiral

***PAPILIONIDAE*—SWALLOWTAILS**

Papilio rutulus—Western tiger swallowtail

MAMMAL

SQUIRRELS

***SCIURIDAE*—SQUIRRELS**

Spermophilus (Otospermophilus) *beecheyi*—California ground squirrel

* signifies introduced (non-native) species

APPENDIX C

Special-Status Plant Species Potentially Occurring on Project Site

Appendix C
Special-Status Plant Species Potentially Occurring on the Project Site

Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ County/CRPR)[1]	Habitat Requirements/Life Form/Blooming Period/ Elevation Range	Verified on Site (Direct/Indirect Evidence)	Potential to Occur on Site and Factual Basis for Determination[2]
Artemisia palmeri San Diego sagewort	None/None/List D/4.2	Chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland; sandy, mesic / perennial deciduous shrub / (Feb) May–Sep / 49–3,002 ft amsl	No	Moderate potential. The site is located within the species' known elevation range, suitable habitat is present, and this species is known to occur within the vicinity.[2] Surveys conducted in May 2014 confirmed the absence of this species within the project site.
Centromadia parryi ssp. *australis* Southern tarplant	None/None/List A/1B.1	Marshes and swamps (margins), valley and foothill grassland (vernally mesic), vernal pools / annual herb / May–Nov / 0–1,394 ft amsl	No	Moderate potential. The site lacks suitable vernal pools; however, this species is known to occur in disturbed areas/non-native grasslands and there is suitable habitat present, the site is located within the species' known elevation range, and this species is known to occur within the vicinity.[2] No evidence of this species was observed during the surveys. The nearest occurrence is located approximately 5 miles south of the project. Surveys conducted in May 2014 confirmed the absence of this species within the project site.
Dichondra occidentalis Western dichondra	None/None/List D/4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland / perennial rhizomatous herb / (Jan) Mar–Jul / 164–1,640 ft amsl	No	Moderate potential. There is suitable habitat present, the site is located within the species' known elevation range, and this species is known to occur within the vicinity.[2] Surveys conducted in May 2014 confirmed the absence of this species within the project site.
Holocarpha virgata ssp. *elongata* Graceful tarplant	None/None/List D/4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland / annual herb / May–Nov / 197–3,609 ft amsl	No	Moderate potential. The site is located within the species' known elevation range, there is suitable habitat present, and this species is known to occur within the vicinity.[2] Surveys conducted in May 2014 confirmed the absence of this species within the project site.
Juncus acutus ssp. *leopoldii*	None/None/List D/4.2	Coastal dunes(mesic), meadows	No	Moderate potential. The site is located within the

Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ County/CRPR)[1]	Habitat Requirements/Life Form/Blooming Period/ Elevation Range	Verified on Site (Direct/Indirect Evidence)	Potential to Occur on Site and Factual Basis for Determination[2]
Southwestern spiny rush		and seeps (alkaline seeps), marshes and swamps (coastal salt) / perennial rhizomatous herb / (Mar) May–Jun / 10–2,953 ft amsl		species' known elevation range, suitable habitat is present, and this species is known to occur within the vicinity.[2] Surveys conducted in May 2014 confirmed the absence of this species within the project site.

[1] Regulatory status (CDFW 2014a; CNPS 2014).

[2] "Vicinity" refers to species recorded in the USGS 7.5-minute San Marcos quadrangle or the H-8 San Diego Plant Atlas Square (CDFW 2014b; CNPS 2014; SDNHM 2014).

Federal Designations

FE: Species listed as endangered by the USFWS
FT: Species listed as threatened by the USFWS
FC: Species listed as candidate by the USFWS

State Designations

ST: State threatened
SE: State endangered
SR: State rare

CRPR

CRPR

1A: Plants presumed extinct in California
1B: Plants rare, threatened, or endangered in California and elsewhere
2: Plants rare, threatened, or endangered in California, but more common elsewhere
3: Plants about which we need more information—a review list
4: Plants of limited distribution—a watch list

Threat Rank

0.1: Seriously threatened in California (high degree/immediacy of threat)
0.2: Fairly threatened in California (moderate degree/immediacy of threat)
0.3: Not very threatened in California (low degree/immediacy of threats or no current threats known)

County

List A: Plants rare, threatened, or endangered in California and elsewhere
List B: Plants rare, threatened, or endangered in California but more common elsewhere
List C: Plants that may be rare but need more information to determine their true rarity status
List D: Plants of limited distribution and are uncommon but not presently rare or endangered.

CRPR = California Rare Plant Rank; ft amsl = feet above mean sea level; USGS = U.S. Geological Survey; SDNHM = San Diego Natural History Museum; USFWS = U.S. Fish and Wildlife Service

REFERENCES

CDFW (California Department of Fish and Wildlife). 2014a. "Special Vascular Plants, Bryophytes, and Lichens List." California Natural Diversity Database. January 2014. Accessed February 2014. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CDFW. 2014b. California Natural Diversity Database (CNDDB) RareFind, Version 3.1.0. Accessed February 2014.

CNPS (California Native Plant Society). 2014. Inventory of Rare and Endangered Plants. Online ed. Version 8-01a. Sacramento, California: CNPS. Accessed February 2014. http://www.rareplants.cnps.org/detail/1599.html.

SDNHM (San Diego Natural History Museum). 2014. Data retrieved from Herbarium and Plant Atlas databases for grid squares G7–G9, H7–H9, and I7–I9. *San Diego County Plant Atlas Project*. Online ed. Accessed February 2014. http://www.sdplantatlas.org/publicsearch.aspx.

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APPENDIX D

Special-Status Plant Species Not Expected to Occur or Rarely Occur in the Project Area

Appendix D
Special-Status Plant Species Not Expected to Occur or Rarely Occur in the Project Area

Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ County/CRPR)[1]	Habitat Requirements/Life Form/Blooming Period/ Elevation Range	Verified on Site (Direct/Indirect Evidence)	Potential to Occur on Site and Factual Basis for Determination[2]
Abronia maritima Red sand-verbena	None/None/List D/4.2	Coastal dunes / perennial herb / Feb–Nov / 0–328 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Abronia villosa var. *aurita* Chaparral sand-verbena	None/None/List A/1B.1	Chaparral, coastal scrub, desert dunes; sandy / annual herb / Jan–Sep / 246–5,249 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present and the species is not known to occur within the vicnity[2].
Acanthomintha ilicifolia San Diego thorn-mint	FT/SE/List A, MSCP NE/ 1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay, openings / annual herb / Apr–Jun / 33–3,150	No	Low potential to occur. The site is located within the species' known elevation range and this species is known to occur within the vicinity[2]; however, the site lacks suitable vernal pools and suitable habitat with clay soils has been subject to substantial past disturbance, including grading.
Acmispon haydonii Pygmy lotus	None/None/List A/1B.3	Pinyon and juniper woodland, Sonoran desert scrub; rocky / perennial herb / Jan–Jun / 1,706–3,937 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Acmispon prostratus Nuttall's acmispon	None/None/List A/1B.1	Coastal dunes, coastal scrub(sandy) / annual herb / Mar–Jun (Jul) / 0–33 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Adolphia californica California adolphia	None/None/List B/2B.1	Chaparral, coastal scrub, valley and foothill grassland; clay / perennial deciduous shrub / Dec–May / 148–2,428 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and this species is known to occur within the vicinity[2]; however, suitable habitat with clay soils has been subject to substantial past disturbance, including grading.
Agave shawii var. *shawii* Coastal agave	None/None/List B, MSCP NE/2B.1	Coastal bluff scrub, coastal scrub / perennial leaf succulent / Sep–May / 33–394 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.

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Ambrosia chenopodiifolia San Diego bur-sage	None/None/List B/2B.1	Coastal scrub / perennial shrub / Apr–Jun / 180–509 ft amsl	No	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Ambrosia pumila San Diego ambrosia	FE/None/List A, MSCP NE/1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; sandy loam or clay, often in disturbed areas, sometimes alkaline / perennial rhizomatous herb / Apr–Oct / 66–1,362 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range, suitable vegetation is present, and this species is known to occur within the vicinity[2]; however, this species is found primarily on Placentia, Diablo, and Ramona soil series (75 FR 74546–74604), which are not present on site.
Androsace elongata ssp. *acuta* California androsace	None/None/List D/4.2	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, valley and foothill grassland / annual herb / Mar–Jun / 492–3,937 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and there is limited suitable vegetation present; however, species is not known to occur within the region[2].
Aphanisma blitoides Aphanisma	None/None/List A/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub; sandy / annual herb / Mar–Jun / 3–1001 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Arctostaphylos glandulosa ssp. *crassifolia* Del Mar manzanita	FE/None/List A/1B.1	Chaparral (maritime, sandy) / perennial evergreen shrub / Dec–Jun / 0–1,198 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and this species is known to occur within the vicinity[2]; however, there is no suitable vegetation present.
Arctostaphylos otayensis Otay manzanita	None/None/List A/1B.2	Chaparral, cismontane woodland; metavolcanic / perennial evergreen shrub / Jan–Apr / 902–5,577 ft amsl	No	Not expected to occur. There is a limited amount of cismontane woodland present; however, the site is located outside the species' known elevation range.

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Arctostaphylos rainbowensis Rainbow manzanita	None/None/List A/1B.1	Chaparral / perennial evergreen shrub / Dec–Mar / 673–2,198 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Asplenium vespertinum Western spleenwort	None/None/List D/4.2	Chaparral, cismontane woodland, coastal scrub; rocky / perennial rhizomatous herb / Feb–Jun / 591–3,281 ft amsl	No	Low potential to occur. There are suitable soils present and this species is known to occur within the vicinity[2]; however, the site is located slightly outside the species' known elevation range and there is a limited amount of suitable cismontane woodland present.
Astragalus crotalariae Salton milk-vetch	None/None/List D/4.3	Sonoran desert scrub (sandy or gravelly) / perennial herb / Jan–Apr / −197–820 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there are suitable sandy soils present; however, there is no suitable vegetation present.
Astragalus deanei Dean's milk-vetch	None/None/List A/1B.1	Chaparral, cismontane woodland, coastal scrub, riparian forest / perennial herb / Feb–May / 246–2,280 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and there is limited suitable vegetation present; however, the species is not known to occur within the reigon[2].
Astragalus douglasii var. *perstrictus* Jacumba milk-vetch	None/None/List A/1B.2	Chaparral, cismontane woodland, pinyon and juniper woodland, riparian scrub, valley and foothill grassland; rocky / perennial herb / Apr–Jun / 2,953-4,495 ft amsl	No	Not expected to occur. There is suitable vegetation present; however, the site is located outside the species' known elevation range.
Astragalus insularis var. *harwoodii* Harwood's milk-vetch	None/None/List B/2B.2	Desert dunes, Mojavean desert scrub; sandy or gravelly / annual herb / Jan–May / 0–2,329 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there are suitable sandy soils present; however, there is no suitable vegetation present.
Astragalus lentiginosus var. *borreganus* Borrego milk-vetch	None/None/List D/4.3	Mojavean desert scrub, Sonoran desert scrub; sandy / annual herb / Feb–May / 98–1,050 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there are suitable sandy soils present; however, there is no suitable vegetation present.

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Astragalus magdalenae var. *peirsonii* Peirson's milk-vetch	FT/SE/List A/1B.2	Desert dunes / perennial herb / Dec–Apr / 197–738 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Astragalus oocarpus San Diego milk-vetch	None/None/List A/1B.2	Chaparral (openings), cismontane woodland / perennial herb / May–Aug / 1,001–5,000 ft amsl	No	Not expected to occur. There is suitable vegetation present; however, the site is located outside the species' known elevation range.
Astragalus pachypus var. *jaegeri* Jaeger's bush milk-vetch	None/None/List A/1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; sandy or rocky / perennial shrub / Dec–Jun / 1,198–3,002 ft amsl	No	Not expected to occur. There is suitable vegetation present; however, the site is located outside the species' known elevation range.
Astragalus tener var. *titi* Coastal dunes milk-vetch	FE/SE/List A/1B.1	Coastal bluff scrub (sandy), coastal dunes, coastal prairie (mesic); often vernally mesic areas / annual herb/Mar–May / 3–164 ft amsl	No	Not expected to occur. There is no suitable vegetation present and the site is located outside the species' known elevation range.
Atriplex coulteri Coulter's saltbush	None/None/List A/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland; alkaline or clay / perennial herb / Mar–Oct / 10–1,509 ft amsl	No	Low potential to occur. There is suitable grassland present and the site is located within the species' known elevation range; however, suitable habitat with clay soils has been subject to substantial past disturbance, including grading.
Atriplex pacifica South Coast saltscale	None/None/List A/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, playas / annual herb / Mar–Oct / 0–459 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Atriplex parishii Parish's brittlescale	None/None/List A/1B.1	Chenopod scrub, playas, vernal pools; alkaline / annual herb / Jun–Oct / 82–6,234 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present and this species is not known to occur within the vicninity[2].

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Atriplex serenana var. *davidsonii* Davidson's saltscale	None/None/List A/1B.2	Coastal bluff scrub, coastal scrub; alkaline / annual herb / Apr–Oct / 33–656 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present.
Ayenia compacta California ayenia	None/None/List B/2B.3	Mojavean desert scrub, Sonoran desert scrub; rocky / perennial herb / Mar–Apr / 492–3,593 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present.
Azolla microphylla Mexican mosquito fern	None/None/List D/4.2	Marshes and swamps; ponds, slow water / annual–perennial herb / Aug / 98–328 ft amsl	No	Low potential to occur. There is a limited amount of freshwater marsh present and water within Buena Vista Creek; however, the site is located outside the species' known elevation range.
Baccharis vanessae Encinitas baccharis	FT/SE/List A, MSCP NE/ 1B.1	Chaparral (maritime), cismontane woodland; sandstone / perennial deciduous shrub / Aug–Nov / 197–2,362 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range; however, there is a limited amount of suitable cismontane woodland present and the species is not known to occur within the vicinity[2].
Berberis fremontii Fremont barberry	None/None/List C/3	Chaparral, Joshua tree woodland, pinyon and juniper woodland; rocky / evergreen shrub / Apr–Jun / 2,755–6,069 ft amsl	No	The site is located outside the species' known elevation range and there is no suitable habitat present.
Berberis nevinii Nevin's barberry	FE/SE/List A, MSCP NE/ 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub; sandy or gravelly / perennial evergreen shrub / Mar–Jun / 899–2,707 ft amsl	No	Not expected to occur. There is a limited amount of suitable vegetation present; however, the site is located outside the species' known elevation range.
Bergerocactus emoryi Golden-spined cereus	None/None/List B/2B.2	Closed-cone coniferous forest, chaparral, coastal scrub; sandy / perennial stem succulent / May–Jun / 10–1,296 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present.

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Bloomeria clevelandii San Diego goldenstar	None/None/List A/1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay / perennial bulbiferous herb / Apr–May / 164–1,526 ft amsl	No	Low potential to occur. There is suitable vegetation present and the site is located within the species' known elevation range; however, suitable habitat with clay soils has been subject to substantial past disturbance, including grading.
Boechera johnstonii Johnston's rock cress	None/None/List A/1B.2	Chaparral, lower montane coniferous forest; often on eroded clay / perennial herb / Feb–Jun / 4,429–7,054 ft amsl	No	Not expected to occur. There is no suitable vegetation present, the site is located outside the species' known elevation range, and there are no suitable soils present.
Brodiaea filifolia Thread-leaved brodiaea	FT/SE/List A, MSCP NE/ 1B.1	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools; often clay / perennial bulbiferous herb / Mar–Jun / 82–3,675 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range, suitable vegetation is present, and this species is known to occur within the vicinity[2].This species is known to occur on Huerhuero soils (76 FR 6848–6925), which are present; however, due to the disturbed nature of the site (previous grading, etc.) and lack of suitable vernal pools, this species has a low potential to occur.
Brodiaea orcuttii Orcutt's brodiaea	None/None/List A/1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools; mesic, clay, sometimes serpentinite / perennial bulbiferous herb / May–Jul / 98–5,551 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range, suitable vegetation is present, and this species is known to occur within the vicinity[2]; however, suitable habitat with clay soils has been subject to substantial past disturbance, including grading.
Bursera microphylla Little-leaf elephant tree	None/None/List B/2B.3	Sonoran desert scrub (rocky) / perennial deciduous tree / Jun–Jul / 656–2,297 ft amsl	No	Not expected to occur. There is no suitable vegetation present and the site is located within the species' known elevation range; however, there are no suitable soils present.

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Calandrinia breweri Brewer's calandrinia	None/None/List D/4.2	Chaparral, coastal scrub; sandy or loamy, disturbed project areas and burns / annual herb / Mar–Jun / 33–4,003 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
California macrophylla Round-leaved filaree	None/None/List B/1B.1	Cismontane woodland, valley and foothill grassland; clay / annual herb / Mar–May / 49–3,937 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there is limited suitable vegetation present; however, the species is not known to occur within the region[2].
Calliandra eriophylla Pink fairy-duster	None/None/List B/2B.3	Sonoran desert scrub (sandy or rocky) / perennial deciduous shrub / Jan–Mar / 394–4921 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Calochortus catalinae Catalina mariposa lily	None/None/List D/4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland / perennial bulbiferous herb / (Feb) Mar–Jun / 49–2,297 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and limited suitable habitat is present; however, this species is not known to occur within the region[2].
Calochortus dunnii Dunn's mariposa lily	None/SR/List A, MSCP NE/1B.2	Closed-cone coniferous forest, chaparral, valley and foothill grassland; gabbroic or metavolcanic, rocky / perennial bulbiferous herb / (Feb) Apr–Jun / 607–6,004 ft amsl	No	Not expected to occur. There is suitable grassland present; however, the site is located slightly outside this species' known elevation range and there are no suitable soils present.
Camissoniopsis lewisii Lewis' evening-primrose	None/None/List C/3	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland; sandy or clay / annual herb / Mar–May (Jun) / 0–984 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and suitable habitat is present; however, this species is not known to occur within the vicinity[2].

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Carlowrightia arizonica Arizona carlowrightia	None/None/List B/2B.2	Sonoran desert scrub (sandy, granitic alluvium) / perennial deciduous shrub / Mar–May / 935–1,411 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and, there is no suitable vegetation present.
Caulanthus simulans Payson's jewel-flower	None/None/List D/4.2	Chaparral, coastal scrub; sandy, granitic / annual herb / (Feb) Mar–May (Jun) / 295–7,218 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Ceanothus cyaneus Lakeside ceanothus	None/None/List A, MSCP NE/1B.2	Closed-cone coniferous forest, chaparral / perennial evergreen shrub / Apr–Jun / 771–2,477 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation present.
Ceanothus verrucosus Wart-stemmed ceanothus	None/None/List B/2B.2	Chaparral / perennial evergreen shrub / Dec–May / 3–1,247 ft amsl	No	Not expected to occur. This species is known to occur within the vicinity[2] and the site is located within the species' known elevation range; however, there is no suitable vegetation present.
Centromadia pungens ssp. *laevis* Smooth tarplant	None/None/List A/1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline / annual herb / Apr–Sep / 0–2,100 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and suitable habitat is present; however, the species is not known to occur within the vicniity[2].
Chaenactis carphoclinia var. *peirsonii* Peirson's pincushion	None/None/List A/1B.3	Sonoran desert scrub; sandy / annual herb / Mar–Apr / 10–1,640 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	None/None/List A/1B.1	Coastal bluff scrub (sandy), coastal dunes / annual herb / Jan–Aug / 0–328 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Chaenactis parishii Parish's chaenactis	None/None/List A/1B.3	Chaparral (rocky) / perennial herb / May–Jul / 4,265–8,202 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable habitat present.

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Chamaebatia australis Southern mountain misery	None/None/List D/4.2	Chaparral (gabbroic or metavolcanic) / perennial evergreen shrub / Nov–May / 984–3,346 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and no suitable habitat is present.
Chamaesyce arizonica Arizona spurge	None/None/List B/2B.3	Sonoran desert scrub (sandy) / perennial herb / Mar–Apr / 164–984 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Chamaesyce platysperma Flat-seeded spurge	None/None/List A/1B.2	Desert dunes, Sonoran desert scrub (sandy) / annual herb / Feb–Sep / 213–328 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and no suitable habitat is present.
Chamaesyce revoluta Revolute spurge	None/None/List D/4.3	Mojavean desert scrub (rocky) / annual herb / Aug–Sep / 3,593–10,171 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and no suitable habitat is present.
Chloropyron maritimum ssp. *maritimum* Salt marsh bird's-beak	FE/SE/List D/1B.2	Chaparral, coastal scrub, lower montane coniferous forest; alluvial fan, granitic / annual herb / May–Aug / 984–6,234 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and no suitable habitat is present.
Chorizanthe leptotheca Peninsular spineflower	FE/SE/List A/4.2	Closed-cone coniferous forest, chaparral (maritime), coastal scrub; sandy openings / annual herb / Mar–May / 10–984 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Chorizanthe orcuttiana Orcutt's spineflower	FE/SE/List A/1B.1	Closed-cone coniferous forest, chaparral (maritime), coastal scrub; sandy openings / annual herb / Mar–May / 10–410 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	FC/SE/List A/1B.1	Coastal scrub; sandy; valley and foothill grassland / annual herb / Apr–Jun / 492–4,002 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.

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Chorizanthe polygonoides var. *longispina* Long-spined spineflower	None/None/List A/1B.2	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools; often clay / annual herb / Apr–Jul / 98–5,020 ft amsl	No	Not expected to occur. There is suitable vegetation present and the site is located within the species' known elevation range; however, there are no suitable soils present and this species is not known to occur within the vicnity[2].
Cistanthe maritima Seaside cistanthe	None/None/List D/4.2	Coastal bluff scrub, coastal scrub, valley and foothill grassland; sandy / annual herb / (Feb) Mar–Jun (Aug) / 16–984 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and suitable habitat is present; however, this species is not known to occur within the vicnity[2].
Clarkia delicata Delicate clarkia	None/None/List A/1B.2	Chaparral, cismontane woodland; often gabbroic / annual herb / Apr–Jun / 771–3,281 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and lacks suitable soils.
Clinopodium chandleri San Miguel savory	None/None/List A/1B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland; rocky, gabbroic, or metavolcanic / shrub / Mar–Jul / 393–3,526 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range; however, there is limited suitable habitat is present and this species is not known to occur within the region[2].
Colubrina californica Las Animas colubrina	None/None/List B/2B.3	Mojavean desert scrub, Sonoran desert scrub / perennial deciduous shrub / Apr–Jun / 33–3,281 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present.
Comarostaphylis diversifolia ssp. *diversifolia* Summer holly	None/None/List A/1B.2	Chaparral, cismontane woodland / perennial evergreen shrub / Apr–Jun / 98–2,592 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and this species is known to occur within the vicinity[2]; however, there is a limited amount of suitable cismontane woodland present.

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Convolvulus simulans Small-flowered morning-glory	None/None/List D/4.2	Chaparral (openings), coastal scrub, valley and foothill grassland; clay, serpentinite seeps / annual herb / Mar–Jul / 98–2,297 ft amsl	No	Low potential to occur. There is suitable vegetation present and this species is known to occur within the vicinity[2]; however, suitable habitat with clay soils has been subject to substantial past disturbance, including grading.
Corethrogyne filaginifolia var. *incana* San Diego sand aster	None/None/List A/1B.1	Coastal bluff scrub, chaparral, coastal scrub / perennial herb / Jun–Sep / 10–377 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Corethrogyne filaginifolia var. *linifolia* Del Mar Mesa sand aster	None/None/List A/1B.1	Coastal bluff scrub, chaparral (maritime, openings), coastal scrub; sandy / perennial herb / May–Sep / 49–492 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there are suitable soils present; however, there is no suitable vegetation and the species is not known to occur within the vicinity[2].
Cryptantha costata Ribbed cryptantha	None/None/List D/4.3	Desert dunes, Mojavean desert scrub, Sonoran desert scrub; sandy / annual herb / Feb–May / −197–1,640 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Cryptantha ganderi Gander's cryptantha	None/None/List A/1B.1	Desert dunes, Sonoran desert scrub (sandy) / annual herb / Feb–May / 525–1,312 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Cryptantha holoptera Winged cryptantha	None/None/List D/4.3	Mojavean desert scrub, Sonoran desert scrub / annual herb / Mar–Apr / 328–5,545 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Cryptantha wigginsii Wiggins' cryptantha	None/None/None/1B.2	Coastal scrub; often clay / annual herb / Feb–Jun / 66–902 ft amsl	No	Not expected to occur. No suitable vegetation or soils are present.
Cylindropuntia californica var. *californica* Snake cholla	None/None/List A/1B.1	Chaparral, coastal scrub / stem succulent / Apr–May / 98–492 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.

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Cylindropuntia wolfii Wolf's cholla	None/None/List D/4.3	Sonoran desert scrub / perennial stem succulent / Mar–May / 328–3,937 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Deinandra conjugens Otay tarplant	FT/SE/List A, MSCP NE/ 1B.1	Coastal scrub, valley and foothill grassland; clay / annual herb / May–Jun / 82–984 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there is a limited amount of suitable vegetation present; however, there are no suitable clay soils present and the site is outside the geographic range of the species.
Deinandra floribunda Tecate tarplant	None/None/List A/1B.2	Chaparral, coastal scrub / annual herb / Aug–Oct / 229–4,002 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present and the site is outside the geographic range of the species.
Deinandra mohavensis Mojave tarplant	None/SE/List A/1B.3	Chaparral, coastal scrub, riparian scrub; mesic / annual herb / (May) Jun–Oct (Jan) / 2,100–5,249 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range, there is no suitable vegetation present, and the site is outside the geographic range of the species.
Deinandra paniculata Paniculate tarplant	None/None/List D/4.2	Coastal scrub, valley and foothill grassland, vernal pools; usually vernally mesic, sometimes sandy / annual herb / Apr–Nov / 82–3,084 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range, there is grassland present, and this species is known to occur within the vicinity[2]; however, the site lacks suitable vernal pools and the grassland does not occur in a mesic condition.
Delphinium hesperium ssp. *cuyamacae* Cuyamaca larkspur	None/SR/List A/1B.2	Lower montane coniferous forest, meadows and seeps, vernal pools; mesic / perennial herb / May–Jul / 4,003–5,351 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is a limited amount of freshwater marsh present; however, there are no suitable vernal pools present and this species is not known to occur within the region[2].

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Delphinium parishii ssp. *subglobosum* Colorado Desert larkspur	None/None/List D/4.3	Chaparral, cismontane woodland, pinyon and juniper woodland, Sonoran desert scrub / perennial herb / Mar–Jun / 1,969–5,906 ft amsl	No	Not expected to occur. There is a limited amount of cismontane woodland present; however, the site is located outside the species' known elevation range.
Dicranostegia orcuttiana Orcutt's birds-beak	None/None/List B/2B.1	Coastal scrub / annual herb hemiparasitic / (Mar) Apr–Jul (Sep) / 33–1,148 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Dieteria asteroides var. *lagunensis* Mount Laguna aster	None/SR/List B/2B.1	Cismontane woodland, lower montane coniferous forest / perennial herb / Jul–Aug / 2,625–7,874 ft amsl	No	Not expected to occur. There is a limited amount of cismontane woodland present; however, the site is located outside the species' known elevation range.
Ditaxis serrata var. *californica* California ditaxis	None/None/List C/3.2	Sonoran desert scrub / perennial herb / Mar–Dec / 98–3,281 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Downingia concolor var. *brevior* Cuyamaca Lake downingia	None/SE/List A/1B.1	Meadows and seeps (vernally mesic), vernal pools / annual herb / May–Jul / 4,527–4,921 ft amsl	No	Not expected to occur. There is a limited amount of freshwater marsh present; however, the site is located outside the species' known elevation range and lacks vernal pools.
Dudleya alainae Banner dudleya	None/None/None/3.2	Chaparral, lower montane coniferous forest, Sonoran desert scrub; rocky / perennial herb / May–Jul / 2,428–3,937 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and no suitable vegetation is present.
Dudleya attenuata ssp. *attenuata* Orcutt's dudleya	None/None/List B/2B.1	Coastal bluff scrub, chaparral, coastal scrub; rocky or gravelly / perennial herb / May–Jul / 10–164 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation present.

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Dudleya blochmaniae ssp. *blochmaniae* Blochman's dudleya	None/None/List A, MSCP NE/1B.1	Coastal bluff scrub, chaparral, coastal scrub, valley and foothill grassland; rocky, often clay or serpentinite / perennial herb / Apr–Jun / 16–1,476 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there is suitable vegetation present; however, the site lacks suitable soils and the species is not known to occur within the vicinity[2].
Dudleya brevifolia Short-leaved dudleya	None/SE /List A/1B.1	Chaparral (maritime, openings), coastal scrub; Torrey sandstone / perennial herb / Apr–May / 98–820 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present.
Dudleya multicaulis Many-stemmed dudleya	None/None/List A/1B.2	Chaparral, coastal scrub, valley and foothill grassland; often clay / perennial herb / Apr–Jul / 49–2,592 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there is suitable vegetation present; however, the site lacks suitable soils and the species is not known to occur within the vicinity[2].
Dudleya saxosa ssp. *saxosa* Panamint liveforever	None/None/List C/1B.3	Chaparral, lower montane coniferous forest, Sonoran desert scrub; rocky / perennial herb / Apr–Jul / 2,427–3,937 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation present.
Dudleya variegata Variegated dudleya	None/None/List A, MSCP NE/1B.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools; clay / perennial herb / Apr–Jun / 10–1,903 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there is suitable vegetation present; however, the site lacks suitable vernal pools and soils and the species is not known to occur within the vicinity[2].
Dudleya viscida Sticky dudleya	None/None/List A/1B.2	Coastal bluff scrub, chaparral, cismontane woodland, coastal scrub; rocky / perennial herb / May–Jun / 33–1,804 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and there is suitable habitat present; however, this species is not known to occur within the vicinity[2].
Ericameria cuneata var. *macrocephala* Laguna Mountains goldenbush	None/None/List A/1B.3	Chaparral (granitic) / perennial shrub / Sep–Dec / 3,921–6,070 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable habitat present.

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Ericameria palmeri var. *palmeri* Palmer's goldenbush	None/None/List B, MSCP NE/1B.1	Chaparral, coastal scrub; mesic / perennial evergreen shrub / (Jul) Sep–Nov / 98–1,969 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, the site lacks suitable vegetation.
Eriogonum evanidum Vanishing wild buckwheat	None/None/List A/1B.1	Chaparral, cismontane woodland, lower montane coniferous forest, pinyon and juniper woodland; sandy / annual herb / Jul–Oct / 3,608–7,299 ft amsl	No	Not expected to occur. There is a limited amount of suitable vegetation present; however, the site is located outside the species' known elevation range.
Eryngium aristulatum var. *parishii* San Diego button-celery	FE/SE/List A/1B.1	Coastal scrub, valley and foothill grassland, vernal pools; mesic / annual–perennial herb / Apr–Jun / 66–2,034 ft amsl	No	Not expected to occur. There is suitable vegetation present, the site is within the species' known elevation range, and this species is known to occur within the vicinity[2]; however, there are no suitable vernal pools present.
Eryngium pendletonense Pendleton button-celery	None/None/List A/1B.1	Coastal bluff scrub, valley and foothill grassland, vernal pools; clay, vernally mesic / perennial herb / Apr–Jun (Jul) / 49–361 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range.
Erysimum ammophilum Sand-loving wallflower	None/None/None/1B.2	Chaparral (maritime), coastal dunes, coastal scrub; sandy, openings / perennial herb / Feb–Jun / 0–197 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range.
Eucnide rupestris Annual rock-nettle	None/None/List B/2B.2	Sonoran desert scrub / annual herb / Dec–Apr / 1,640–1,969 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Euphorbia misera Cliff spurge	None/None/List B/2B.2	Coastal bluff scrub, coastal scrub, Mojavean desert scrub; rocky / perennial shrub / Dec–Aug (Oct) / 33–1,640 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present and the species is not known to occur within the vicinity[2].

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Ferocactus viridescens San Diego barrel cactus	None/None/List B/2B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools / perennial stem succulent / May–Jun / 10–1,476 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and there is suitable grassland present; however, there are no vernal pools present and the species is not known to occur within the vicnity[2].
Frankenia palmeri Palmer's frankenia	None/None/List B/2B.1	Coastal dunes, coastal saltwater marsh and swamps (coastal salt), playas / perennial herb / May–Jul / 0–32 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Fremontodendron mexicanum Mexican flannelbush	FE/SR/List A/1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland; gabbroic, metavolcanic, or serpentintite / evergreen shrub / Mar–Jun / 32–2,349 ft amsl	No	Low potential to occur. There is a limited amount of suitable habitat present and the site is within the species' known elevation range; however, this species is not known to occur within the region[2].
Fritillaria biflora Chocolate lily	None/None/List D/None	Valley grassland, foothill woodland / perennial herb / 0–937 ft amsl	No	Low potential to occur. There is a limited amount of suitable habitat present and the site is within the species' known elevation range; however, this species is not known to occur within the region[2].
Funastrum utahense Utah vine milkweed	None/None/List D/4.2	Mojavean desert scrub, Sonoran desert scrub; sandy or gravelly / perennial herb / (Mar) Apr–Jun (Sep) (Oct) / 328–4,708 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Galium angustifolium ssp. *borregoense* Borrego bedstraw	None/SR/List A/1B.3	Sonoran desert scrub (rocky) / perennial herb / Mar / 1,148–4,101 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Galium angustifolium ssp. *jacinticum* San Jacinto Mountains bedstraw	None/None/List A/1B.3	Lower montane coniferous forest / perennial herb / Jun–Aug / 4,429–6,890 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.

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Galium johnstonii Johnston's bedstraw	None/None/List D/4.3	Chaparral, lower montane coniferous forest, pinyon–juniper woodland, riparian woodland / perennial herb / Jun–Jul / 4,002–7,545 ft amsl	No	Not expected to occur. There is a limited amount of suitable habitat present; however, the site is outside the species' known elevation range.
Geraea viscida Sticky geraea	None/None/List B/2B.3	Chaparral (often disturbed) / perennial herb / May–Jun / 1,476–5,577 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Githopsis diffusa ssp. *filicaulis* Mission Canyon bluecup	None/None/List C/3.1	Chaparral (mesic, disturbed areas) / annual herb / Apr–Jun / 1,476–2,296 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Grindelia hallii San Diego gumplant	None/None/List A/1B.2	Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill grassland / perennial herb / Jul–Oct / 606–5,725 ft amsl	No	Not expected to occur. There is a limited amount of suitable habitat present; however, the site is slightly outside the species' known elevation range and species is not known to occur within the region[2].
Harpagonella palmeri Palmer's grapplinghook	None/None/List D/4.2	Chaparral, coastal scrub, valley and foothill grassland; clay / annual herb / Mar–May / 66–3,133 ft amsl	No	Low potential to occur. There is suitable grassland present, the site is located within the species' known elevation range, and this species is known to occur within the vicinity[2]; however, suitable habitat with clay soils has been subject to substantial past disturbance, including grading.
Hazardia orcuttii Orcutt's hazardia	None/ST/List A/1B.1	Chaparral (maritime), coastal scrub; often clay / perennial evergreen shrub / Aug–Oct / 262–279 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range.
Helianthemum suffrutescens Bisbee Peak rush-rose	None/None/None/3.2	Chaparral (often serpentinite, gabbroic, or lone soil) / perennial evergreen shrub / Apr–Jun / 148–2,756 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present and the species is not known to occur within the vicinity[2].

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Herissantia crispa Curly herissantia	None/None/List B/2B.3	Sonoran desert scrub / annual–perennial herb / (Apr) Aug–Sep / 2,297–2,379 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Hesperocyparis forbesii Tecate cypress	None/None/List A/1B.1	Closed-cone coniferous forest, chaparral; clay, gabbroic or metavolcanic / evergreen tree / NA / 262–4,921 ft amsl	No	Absent. The site is located within the species' known elevation range; however, there is no suitable vegetation or soils present. This conspicuous tree would have been detected during on-site surveys.
Hesperocyparis stephensonii Cuyamaca cypress	None/None/List A/1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland, riparian forest; gabbroic / evergreen tree / NA / 3,395–5,593 ft amsl	No	Absent. There is a limited amount of suitable habitat present; however, the site is outside the species' known elevation range. This conspicuous tree would have been detected during on-site surveys.
Heterotheca sessiliflora var. *sanjacintensis*[3] San Jacinto golden-aster	None/None/List D/None	Woodlands / perennial herb / July–Oct / 1,200–4,560 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range.
Heterotheca sessiliflora ssp. *sessiliflora* Beach goldenaster	None/None/None/1B.1	Chaparral (coastal), coastal dunes, coastal scrub / perennial herb / Mar-Dec / 0–4,019 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present and the species is not known to occur within the vicinity[2].
Heuchera brevistaminea Laguna Mountains alumroot	None/None/List A/1B.3	Broadleafed upland forest, chaparral, cismontane woodland, riparian forest; rocky / perennial rhizomatous herb / Apr–Jul (Sep) / 4,495–6,562 ft amsl	No	Not expected to occur. There is a limited amount of suitable vegetation present; however, the site is outside the species' known elevation range.
Heuchera rubescens var. *versicolor* San Diego County alumroot	None/None/List B/3.3	Chaparral, lower montane coniferous forest; rocky / perennial rhizomatous herb / May–Jun / 4,921–13,123 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.

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Hordeum intercedens Vernal barley	None/None/List C/3.2	Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), vernal pools / annual herb / Mar–Jun / 16–3,280 ft amsl	No	Not expected to occur. The site is within the species' known elevation range; however, there are no saline flats or depressions present.
Horkelia cuneata var. *puberula* Mesa horkelia	None/None/List A/1B.1	Chaparral (maritime), cismontane woodland, coastal scrub; sandy or gravelly / perennial herb / Feb–Jul (Sep) / 230–2,657 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range; however, there is a limited amount of suitable habitat present and the species is not known to occur within the vicinity[2].
Horkelia truncata Ramona horkelia	None/None/List A/1B.3	Chaparral, cismontane woodland; clay, gabbroic / perennial herb / May–Jun / 1,312–4,265 ft amsl	No	Not expected to occur. There is a limited amount of cismontane woodland present; however, the site is outside the species' known elevation range and lacks suitable soils.
Horsfordia newberryi Newberry's velvet-mallow	None/None/List D/4.3	Sonoran desert scrub (rocky) / perennial shrub / Feb–Dec / 10–2,625 ft amsl	No	Not expected to occur. The site is within the species' known elevation range; however, there is no suitable vegetation present.
Hosackia crassifolius var. *otayensis* Otay Mountain lotus	None/None/List A/None	Chaparral (metavolcanic, often in disturbed areas) / perennial herb / May–Aug / 3,001–3,330 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Hulsea californica San Diego sunflower	None/None/List A/1B.3	Chaparral, lower montane coniferous forest, upper montane coniferous forest; openings and burned areas / perennial herb / Apr–Jun / 3,002–9,564 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Hulsea mexicana Mexican hulsea	None/None/List B/2B.3	Chaparral (volcanic, often on burns or disturbed areas) / annual–perennial herb / Apr–Jun / 3,937–3,937 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.

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Hulsea vestita ssp. *callicarpha* Beautiful hulsea	None/None/List D/4.2	Chaparral, lower montane coniferous forest; rocky or gravelly, granitic / perennial herb / May–Oct / 3,001–10,006 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Hymenothrix wrightii Wright's hymenothrix	None/None/List D/4.3	Cismontane woodland, lower montane coniferous forest, valley and foothill grassland / perennial herb / Jun–Oct / 4,593–5,085 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Ipomopsis tenuifolia Slender-leaved ipomopsis	None/None/List B/2B.3	Chaparral, pinyon and juniper woodland, Sonoran desert scrub; gravelly or rocky / perennial herb / Mar–May / 328–3,937 ft amsl	No	Not expected to occur. The site is within the species' known elevation range; however, there is no suitable vegetation present.
Isocoma menziesii var. *decumbens* Decumbent goldenbush	None/None/List A/1B.2	Chaparral, coastal scrub (sandy, often in disturbed areas) / perennial shrub / Apr–Nov / 33–443 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Iva hayesiana San Diego marsh-elder	None/None/List B/2B.2	Marshes and swamps, playas / perennial herb / Apr–Oct / 33–1,640 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and suitable vegetation is present; however, this species is not known to occur within the vicinity[2].
Juglans californica Southern California black walnut	None/None/List D/4.2	Chaparral, cismontane woodland, coastal scrub; alluvial / deciduous tree / Mar–Aug / 164–2,952 ft amsl	No	Absent. There is a limited amount of cismontane woodland present and the site is located within the species' known elevation range; however, this conspicuous tree would have been detected during on-site surveys.
Juncus cooperi Cooper's rush	None/None/List D/4.3	Meadows and seeps (mesic, alkaline or saline) / perennial herb / Apr–May (Aug) / −853–5,807 ft amsl	No	Not expected to occur. There is a limited amount of freshwater marsh present; however, the site is located outside the species' known elevation range.

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Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	None/None/List A/1B.1	Marshes and swamps (coastal salt) playas, vernal pools / annual herb / Feb–Jun / 3–4,003 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, coastal salt marsh is absent, the site lacks suitable vernal pools, and the species is not known to occur within the vicnity[2].
Lathyrus splendens Pride-of-California	None/None/List D/4.3	Chaparral / perennial herb / Mar–Jun / 656–5,003 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Lepechinia cardiophylla Heart-leaved pitcher sage	None/None/List A, MSCP NE/1B.2	Closed-cone coniferous forest, chaparral, cismontane woodland / perennial shrub / Apr–Jul / 1,706–4,495 ft amsl	No	Not expected to occur. There is a limited amount of cismontane woodland present; however, the site is outside the species' known elevation range.
Lepechinia ganderi Gander's pitcher sage	None/None/List A, MSCP NE/1B.3	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland; gabbroic or metavolcanic / perennial shrub / Jun–Jul / 1,001–3,297 ft amsl	No	Not expected to occur. There is a limited amount of grassland present; however, the site is outside the species' known elevation range.
Lepidium flavum var. *felipense* Borrego Valley pepper-grass	None/None/List A/1B.2	Pinyon and juniper woodland, Sonoran desert scrub; sandy / annual herb / Mar–May / 1,493–2756 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	None/None/List A/4.3	Chaparral, coastal scrub / annual herb / Jan–Jul / 3–2,904 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Leptosiphon floribundus ssp. *hallii* Santa Rosa Mountains leptosiphon	None/None/List A/1B.3	Pinyon and juniper woodland, Sonoran desert scrub / perennial herb / May–Jul / 3,281–6,562 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Leptosyne maritima Sea dahlia	None/None/List B/2**B**.2	Coastal bluff scrub, coastal scrub / perennial herb / Mar–May / 16–492 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.

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Lessingia glandulifera var. *tomentosa* Warner Springs lessingia	None/None/List A/1B.3	Chaparral (sandy) / annual herb / Aug–Oct / 2,854–4,003 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Lewisia brachycalyx Short-sepaled lewisia	None/None/List B/2B.2	Lower montane coniferous forest, meadows and seeps; mesic / perennial herb / Feb–Jun (Jul) / 4,495–7,546 ft amsl	No	Not expected to occur. There is a limited amount of freshwater marsh present; however, the site is outside the species' known elevation range.
Lilium humboldtii ssp. *ocellatum* Ocellated Humboldt lily	None/None/List D/4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland; openings / perennial bulbiferous herb / Mar–Jul (Aug) / 98–5,906 ft amsl	No	Low potential to occur. There is a limited amount of suitable vegetation present; however, the site is outside the species' known elevation range and the species is not known to occur within the region[2].
Lilium parryi Lemon lily	None/None/List A/1B.2	Lower montane coniferous forest, meadows and seeps, riparian forest, ipper montane coniferous forest; mesic / perennial bulbiferous herb / Jul–Aug / 4,003–9,006 ft amsl	No	Not expected to occur. There is a limited amount of suitable vegetation present; however, the site is outside the species' known elevation range.
Limnanthes alba ssp. *parishii* Parish's meadowfoam	None/SE/List A/1B.2	Lower montane coniferous forest, meadows and seeps, vernal pools; vernally mesic / annual herb / Apr–Jun / 1,968–6,561 ft amsl	No	Not expected to occur. There is a limited amount of suitable vegetation present; however, the site is outside the species' known elevation range.
Linanthus bellus Desert beauty	None/None/List B/2B.1	Chaparral (sandy) / annual herb / Apr–May / 3,281–4,593 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Linanthus orcuttii Orcutt's linanthus	None/None/List A/1B.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland; openings / annual herb / May–Jun / 3,002–7,037 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.

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Lupinus excubitus var. *medius* Mountain Springs bush lupine	None/None/List A/1B.3	Pinyon and juniper woodland, Sonoran desert scrub / perennial shrub / Mar–May / 1,394–4,495 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Lycium californicum California box-thorn	None/None/List D/4.2	Coastal bluff scrub, coastal scrub / perennial shrub / (Dec) Mar–Aug / 16–492 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Lycium parishii Parish's desert-thorn	None/None/List B/2B.3	Coastal scrub, Sonoran desert scrub / perennial shrub / Mar–Apr / 1,001–3,281 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Lyrocarpa coulteri Palmer's lyrepod	None/None/List D/4.3	Sonoran desert scrub (gravelly or rocky) / perennial herb / Dec–Apr / 394–2,608 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Malacothamnus aboriginum Indian Valley bush mallow	None/None/List A/1B.2	Chaparral, cismontane woodland; rocky, granitic, often in burned areas / perennial deciduous shrub / Apr–Oct / 492–5,577 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Malperia tenuis Brown turbans	None/None/List B/2B.3	Sonoran desert scrub (sandy, gravelly) / annual herb / (Feb) Mar–Apr / 49–1,099 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Matelea parvifolia Spearleaf	None/None/List B/2B.3	Mojavean desert scrub, Sonoran desert scrub; rocky / perennial herb / Mar–May / 1,444–3,593 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Mentzelia hirsutissima Hairy stickleaf	None/None/List B/2B.3	Sonoran desert scrub (rocky) / annual herb / Mar–May / 0–2,297 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.

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Microseris douglasii ssp. *platycarpha* Small-flowered microseris	None/None/List D/4.2	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools; clay / annual herb / Mar–May / 49–3,510 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Mimulus aurantiacus var. *aridus* Low bush monkeyflower	None/None/List D/4.3	Chaparral (rocky), Sonoran desert scrub / evergreen shrub / Apr–Jul / 2,460–3,937 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Mimulus clevelandii Cleveland's bush monkeyflower	None/None/List D/4.2	Chaparral, cismontane woodland, lower montane coniferous forest; gabbroic, often in disturbed areas, openings, rocky / perennial rhizomatous herb / Apr–Jul / 1,476–6,562 ft amsl	No	Not expected to occur. There is a limited amount of cismontane woodland present; however, the site is located outside the species' known elevation range.
Mimulus diffusus Palomar monkeyflower	None/None/4.3/None	Chaparral, lower montane coniferous forest; sandy or gravelly / annual herb / Apr–Jun / 4,003–6,004 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Mimulus latidens Broadtooth monkeyflower	None/None/List A/ considered but rejected	Valley grassland, foothill woodland, wetland–riparian / annual herb / 0–8,202 ft amsl	No	Low potential to occur. There is a limited amount of grassland present and the site is located within the species' known elevation range; however, the species is not known to occur within the region[2].
Mimulus palmeri Palmer's monkeyflower	None/None/List D/None	Chaparral, lower montane coniferous forest; sandy or gravelly / annual herb / Apr–Jun / 4,002–6,003 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Mirabilis tenuiloba Slender-lobed four o'clock	None/None/List D/4.3	Sonoran desert scrub / perennial herb / (Feb) Mar–May / 984–3,593 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.

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Monardella hypoleuca ssp. *intermedia* Intermediate monardella	None/None/None/1B.3	Chaparral, cismontane woodland, lower montane coniferous forest (sometimes); usually understory / perennial rhizomatous herb / Apr–Sep / 1,312–4,101 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range.
Monardella hypoleuca ssp. *lanata* Felt-leaved monardella	None/None/List A/1B.2	Chaparral, cismontane woodland / perennial rhizomatous herb / Jun–Aug / 984–5,167 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range.
Monardella macrantha ssp. *hallii* Hall's monardella	None/None/List A/1B.3	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland / perennial rhizomatous herb / Jun–Oct / 2,395–7,201 ft amsl	No	Not expected to occur. There is a limited amount of suitable vegetation present; however, the site is outside the species' known elevation range.
Monardella nana ssp. *leptosiphon* San Felipe monardella	None/None/List A/1B.2	Chaparral, lower montane coniferous forest / perennial rhizomatous herb / Jun–Jul / 3,937–6,086 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Monardella stoneana Jennifer's monardella	None/None/List A/1B.2	Closed-cone coniferous forest, chaparral, coastal scrub, riparian scrub; usually rocky intermittent streambeds / perennial herb / Jun–Sep / 32–2,591 ft amsl	No	Not expected to occur. The site is within the species' known elevation range; however, there is no suitable vegetation present.

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Monardella viminea Willowy monardella	FE/SE/List A/1B.1	Chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland; alluvial ephemeral washes / perennial herb / Jun–Aug / 164–738 ft amsl	No	Low potential to occur. The site is within the species' known elevation range and there is a limited amount of suitable vegetation present; however, the species is not known to occur within the region[2].
Mucronea californica California spineflower	None/None/List D/4.2	Chaparral, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland; sandy / annual herb / Mar–Jul (Aug) / 0–4,593 ft amsl	No	Low potential to occur. The site is within the species' known elevation range and there is a limited amount of suitable vegetation present; however, the species is not known to occur within the region[2].
Myosurus minimus ssp. *apus* Little mousetail	None/None/List C/3.1	Valley and foothill grassland, vernal pools (alkaline) / annual herb / Mar–Jun / 66–2,100 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there is suitable vegetation present; however, the site lacks suitable vernal pools and soils.
Nama stenocarpum Mud nama	None/None/List B/2B.2	Marshes and swamps (lake margins, riverbanks) / annual–perennial herb / Jan–Jul / 16–1,640 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and there is limited suitable vegetation; however, this species is not known to occur within the vicnity[2] and typically occurs along lake margins and riverbanks.
Nasturtium gambelii Gambel's water cress	FE/ST/List A/1B.1	Marshes and swamps, freshwater or brackish / rhizomatous herb / Apr–Oct / 16–1,082 ft amsl	No	Low potential to occur. There is limited suitable vegetation present and the site is located within the species' known elevation range; however, the species is not known to occur within the region[2].
Navarretia fossalis Spreading navarretia	FT/None/List A/1B.1	Chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, vernal pools / annual herb / Apr–Jun / 98–2,149 ft amsl	No	Not expected to occur. There is suitable vegetation present, the site is located within the species' known elevation range, and this species is known to occur within the vicinity[2]; however, the site lacks suitable vernal pools.

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Navarretia peninsularis Baja navarretia	None/None/List A/1B.2	Chaparral (openings), lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland; mesic / annual herb / Jun–Aug / 4,921–7,546 ft amsl	No	Not expected to occur. There is limited suitable vegetation present; however, the site is outside the species' known elevation range.
Navarretia prostrata Prostrate vernal pool navarretia	None/None/List A/1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools; mesic / annual herb / Apr–Jul / 49–3,970 ft amsl	No	Not expected to occur. There is limited suitable vegetation present and the site is located within the species' known elevation range; however, the site lacks vernal pools and the species is not known to occur within the region[2].
Nemacaulis denudata var. *denudata* Coast woolly-heads	None/None/List A/1B.2	Coastal dunes / annual herb / Apr–Sep / 0–328 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Nemacaulis denudata var. *gracilis* Slender cottonheads	None/None/List B/2B.2	Coastal dunes, desert dunes, Sonoran desert scrub / annual herb / (Mar) Apr–May / −164–1,312 ft amsl	No	Not expected to occur. No suitable vegetation is present.
Nolina cismontana Chaparral nolina	None/None/List A/1B.2	Chaparral, coastal scrub; sandstone or gabbro / perennial evergreen shrub / (Mar) May–Jul / 459–4,183 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present and the species is not known to occur within the vincity[2].
Nolina interrata Dehesa nolina	None/SE/List A, MSCP NE/1B.1	Chaparral (gabbroic, metavolcanic, or serpentinite) / perennial herb / Jun–Jul / 607–2,805 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation or soils present.
Ophioglossum californicum California adder's-tongue	None/None/List D/4.2	Chaparral, valley and foothill grassland, vernal pools (margins); mesic / rhizomatous herb / (Dec) Jan–Jun / 196–1,722 ft amsl	No	Low potential to occur. There is limited suitable vegetation present and the site is located within the species' known elevation range; however, the species is not known to occur within the region[2].

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Opuntia wigginsii Wiggins' cholla	None/None/List C/3.3	Sonoran desert scrub (sandy) / perennial stem succulent / Mar / 98–2,904 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present.
Orcuttia californica California Orcutt grass	FE/SE/List A/1B.1	Vernal pools / annual herb / Apr–Aug / 49–2,165 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present and the species is not known to occur within the vicnity[2].
*Ornithostaphylos oppositifolia*Baja California birdbush	None/SE/List B/2B.1	Chaparral / perennial evergreen shrub / Jan–Apr / 180–2,625 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present.
Orobanche parishii ssp. *brachyloba* Short-lobed broomrape	None/None/List D/4.2	Coastal bluff scrub, coastal dunes, coastal scrub; sandy / perennial herb parasitic / Apr–Oct / 10–1,001 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present and the species is not known to occur within the vicinity[2].
Packera ganderi Gander's ragwort	None/SR/List A/1B.2	Chaparral (burns, gabbroic outcrops) / perennial herb / Apr–Jun / 1,312–3,937 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation or soils present.
Pectocarya peninsularis Peninsular pectocarya	None/None/List D/Not listed	Sonoran desert; washes, roadsides, clearings / annual herb / 98–984 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present.
Penstemon clevelandii var. *connatus* San Jacinto beardtongue	None/None/List D/4.3	Chaparral, pinyon and juniper woodland, Sonoran desert scrub; rocky / perennial herb / Mar–May / 1,312–4,921 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation or soils present.
Penstemon thurberi Thurber's beardtongue	None/None/List D/4.2	Chaparral, Joshua tree woodland, pinyon and juniper woodland, Sonoran desert scrub / perennial herb / May–Jul / 1,640–4,003 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation or soils present.

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Pentachaeta aurea ssp. *aurea* Golden-rayed pentachaeta	None/None/List D/4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley and foothill grassland / annual herb / Mar–Jul / 262–6,070 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and there is suitable habitat present; however, this species is not known to occur within the vicinity[2].
Perideridia gairdneri ssp. *gairdneri* Gairdner's yampah	None/None/List D/4.2	Broadleafed upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools; vernally mesic / perennial herb / Jun–Oct / 0–2,001 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and there is limited suitable vegetation present; however, there are no vernal pools present and the species is not known to occur within the region[2].
Phacelia ramosissima var. *austrolitoralis* South coast branching phacelia	None/None/None/3.2	Chaparral, coastal dunes, coastal scrub, marshes and swamps (coastal salt); sandy, sometimes rocky / perennial herb / Mar–Aug / 16–984 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no coastal saltwater marsh present and the species is not known to occur within the vicnity[2].
Phacelia stellaris Brand's star phacelia	None/None/List A/1B.1	Coastal dunes, coastal scrub / annual herb / Mar–Jun / 3–1,312 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Pilostyles thurberi Thurber's pilostyles	None/None/List D/4.3	Sonoran desert scrub / perennial herb parasitic / Jan / 0–1,198 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Pinus torreyana ssp. *torreyana* Torrey pine	None/None/None/1B.2	Closed-cone coniferous forest, chaparral; sandstone / perennial evergreen tree / NA / 246–525 ft amsl	No	Absent. The site is located within the species' known elevation range; however, there is no suitable habitat and the species is not known to occur within the vicinity[2]. This tree would have been detected during on-site surveys.

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Piperia cooperi Chaparral rein orchid	None/None/List D/4.2	Chaparral, cismontane woodland, valley and foothill grassland / perennial herb / Mar–Jun / 49–5,200 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and there is limited suitable vegetation present; however, species is not known to occur within the region[2].
Piperia leptopetala Narrow-petaled rein orchid	None/None/List D/4.3	Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest / perennial herb / May–Jul / 1,247–7,300 ft amsl	No	Not expected to occur. There is limited suitable vegetation present; however, the site is located outside the species' known elevation range.
Poa atropurpurea San Bernardino blue grass	FE/None/List A/1B.2	Meadows and seeps (mesic) / perennial rhizomatous herb / (Apr) May–Jul (Aug) / 4,462–8,054 ft amsl	No	Not expected to occur. There is limited suitable vegetation present; however, the site is located outside the species' known elevation range.
Pogogyne abramsii San Diego mesa mint	FE/SE/List A/1B.1	Vernal pools / annual herb / Mar–Jul / 295–656 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there are no vernal pools present.
Pogogyne nudiuscula Otay Mesa mint	FE/SE/List A/1B.1	Vernal pools / annual herb / May–Jul / 295–820 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there are no vernal pools present.
Polygala cornuta var. *fishiae* Fish's milkwort	None/None/List D/4.3	Chaparral, cismontane woodland, riparian woodland / perennial deciduous shrub / May–Aug / 328–3281 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and there is limited suitable vegetation present; however, the species is not known to occur within the region[2].
Proboscidea althaeifolia Desert unicorn-plant	None/None/List D/4.3	Sonoran desert scrub (sandy) / perennial herb / May–Aug (Sep) (Oct) / 279–3,281 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present and the species is not known to occur within the vicinity[2].
Psilocarphus brevissimus var. *multiflorus* Delta woolly-marbles	None/None/None/4.2	Vernal pools / annual herb / May–Jun / 33–1,640 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable habitat present and the species is not known to occur within the vicinity[2].

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Quercus cedrosensis Cedros Island oak	None/None/List B/2B.2	Closed-cone coniferous forest, chaparral, coastal scrub / evergreen tree / Apr–May / 836–3,149 ft amsl	No	Absent. The site is located outside the species' known elevation range and there is no suitable vegetation present. This conspicuous tree would have been detected during on-site surveys.
Quercus dumosa Nuttall's scrub oak	None/None/List A/1B.1	Closed-cone coniferous forest, chaparral, coastal scrub; sandy, clay loam / perennial evergreen shrub / Feb–Apr (Aug) / 49–1,312 ft amsl	No	Absent. The site is located within the species' known elevation range and this species is known to occur within the vicinity[2]; however, there is no suitable vegetation present. This conspicuous shrub would have been detected during on-site surveys.
Quercus engelmannii Engelmann oak	None/None/List D/4.2	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland / perennial deciduous tree / Mar–Jun/164–4,265 ft amsl	No	Absent. The site is located within the species' known elevation range, there is suitable habitat present, and this species is known to occur within the vicinity[2]; however, this species would have been observed if present.
Rhus aromatica var. *simplicifolia* Single-leaf skunkbrush	None/None/List B/2B.3	Pinyon and juniper woodland / deciduous shrub / Mar–Apr / 4,002–4,497 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation present.
Ribes canthariforme Moreno currant	None/None/List A/1B.3	Chaparral, riparian scrub / perennial deciduous shrub / Feb–Apr / 1,115-3,937 ft amsl	No	Not expected to occur. There is limited suitable vegetation present; however, the site is located outside the species' known elevation range.
Ribes viburnifolium Santa Catalina Island currant	None/None/List A/1B.2	Chaparral, cismontane woodland / perennial evergreen shrub / Feb–Apr / 98–1,148 ft amsl	No	Absent. The site is located within the species' known elevation range and there is limited suitable vegetation present; however, the species is not known to occur within the region[2] and the conspicuous shrub would have been detected during on-site surveys.
Romneya coulteri Coulter's matilija poppy	None/None/List D/4.2	Chaparral, coastal scrub; often in burns / perennial rhizomatous herb / Mar–Jul / 66–3,937 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.

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Rosa minutifolia Small-leaved rose	None/SE/List B/2B.1	Chaparral, coastal scrub / perennial deciduous shrub / Jan–Jun / 492–525 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Rubus glaucifolius var. *ganderi* Cuyamaca raspberry	None/None/List A/3.1	Lower montane coniferous forest (gabbroic) / perennial evergreen shrub / May–Jun / 3,937–5,495 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation present.
Rupertia rigida Parish's rupertia	None/None/List D/4.3	Chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, pebble plain, valley and foothill grassland / perennial herb / Jun–Aug / 2,297–8,202 ft amsl	No	Not expected to occur. There is limited suitable vegetation present; however, the site is located outside the species' known elevation range.
Saltugilia caruifolia Caraway-leaved woodland-gilia	None/None/List D/4.3	Chaparral, lower montane coniferous forest; sandy, openings / annual herb / May–Aug / 2,756–7,546 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation present.
Salvia eremostachya Desert sage	None/None/List D/4.3	Sonoran desert scrub (rocky or gravelly) / perennial evergreen shrub / Mar–May / 2,297–4,593 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation present.
Salvia munzii Munz's sage	None/None/List B/2B.2	Chaparral, coastal scrub / perennial evergreen shrub / Feb–Apr / 394–3,494 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Scutellaria bolanderi ssp. *austromontana* Southern mountains skullcap	None/None/List A/1B.2	Chaparral, cismontane woodland, lower montane coniferous forest; mesic / perennial rhizomatous herb / Jun–Aug / 1,394–6,562 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation present.

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Selaginella asprella Bluish spike-moss	None/None/List D/4.3	Cismontane woodland, lower montane coniferous forest, pinyon and juniper woodland, subalpine coniferous forest, upper montane coniferous forest; granitic, rocky / perennial rhizomatous herb / Jul / 5,249–8,858 ft amsl	No	Not expected to occur. There is limited suitable vegetation present; however, the site is located outside the species' known elevation range.
Selaginella cinerascens Ashy spike-moss	None/None/List D/4.1	Chaparral, coastal scrub / perennial rhizomatous herb / NA / 66–2,100 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present and the species is not known to occur within the vicnity[2].
Selaginella eremophila Desert spike-moss	None/None/List B/2B.2	Chaparral, Sonoran desert scrub (gravelly or rocky) / perennial rhizomatous herb / (May) Jun (Jul) / 656–2,953 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Senecio aphanactis Chaparral ragwort	None/None/List B/2B.2	Chaparral, cismontane woodland, coastal scrub; sometimes alkaline / annual herb / Jan–Apr / 49–2,625 ft amsl	No	Low potential to occur. The site is located within the species' known elevation range and there is limited suitable vegetation present; however, the species is not known to occur within the region[2].
Senna covesii Coves' cassia	None/None/List B/2B.2	Sonoran desert scrub (sandy) / perennial herb / Mar–Jun / 935–3,510 ft amsl	No	Not expected to occur. The site is located outside the species' known elevation range and there is no suitable vegetation present.
Sibaropsis hammittii Hammitt's clay-cress	None/None/List A/1B.2	Chaparral (openings), valley and foothill grassland; clay / annual herb / Mar–Apr / 2,362–3,494 ft amsl	No	Not expected to occur. There is limited suitable vegetation present; however, the site is located outside the species' known elevation range.
Spermolepis echinata Bristly scaleseed	None/None/List B/2B.3	Sonoran desert scrub (sandy or rocky) / annual herb / Mar–Apr / 197–4,921 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.

Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ County/CRPR)[1]	Habitat Requirements/Life Form/Blooming Period/ Elevation Range	Verified on Site (Direct/Indirect Evidence)	Potential to Occur on Site and Factual Basis for Determination[2]
Stemodia durantifolia Purple stemodia	None/None/List B/2B.1	Sonoran desert scrub (often mesic, sandy) / perennial herb / Jan–Dec / 591–984 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present and the species is not known to occur within the vicnity[2].
Stipa diegoensis San Diego County needle grass	None/None/List D/4.2	Chaparral, coastal scrub; rocky, often mesic / perennial herb / Feb–Jun / 33–2,625 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present and the species is not known to occur within the vicnity[2].
Streptanthus bernardinus Laguna Mountains jewel-flower	None/None/List D/4.3	Chaparral, lower montane coniferous forest / perennial herb / May–Aug / 2,198–8,202 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Streptanthus campestris Southern jewel-flower	None/None/List A/1B.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland; rocky / perennial herb / (Apr) May–Jul / 2,953–7,546 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Stylocline citroleum Oil neststraw	None/None/List A/1B.1	Chenopod scrub, coastal scrub, valley and foothill grassland; clay / annual herb / Mar–Apr / 164–1,312	No	Not expected to occur. The site is within the species' known elevation range and there is limited suitable vegetation present; however, the species is not known to occur within the region[2].
Suaeda esteroa Estuary seablite	None/None/List A/1B.2	Marshes and swamps (coastal salt) / perennial herb / May–Oct (Jan) / 0–16 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range.
Suaeda taxifolia Woolly seablite	None/None/List D/4.2	Coastal bluff scrub, coastal dunes, marshes and swamps (margins of coastal salt) / perennial evergreen shrub / Jan–Dec / 0–164 ft amsl	No	Not expected to occur. The site is within the species' known elevation range; however, the site lacks coastal saltmarshes and swamps and the species is not known to occur within the region[2].

Scientific Name Common Name	Sensitivity Code and Status (Federal/State/ County/CRPR)[1]	Habitat Requirements/Life Form/Blooming Period/ Elevation Range	Verified on Site (Direct/Indirect Evidence)	Potential to Occur on Site and Factual Basis for Determination[2]
Tetracoccus dioicus Parry's tetracoccus	None/None/List A/1B.2	Chaparral, coastal scrub / perennial deciduous shrub / Apr–May / 541–3,281 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range and this species is known to occur within the vicinity[2]; however, there is no suitable vegetation present.
Thermopsis californica var. *semota* Velvety false lupine	None/None/List A/1B.2	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland / perennial rhizomatous herb / Mar–Jun / 3,281–6,135 ft amsl	No	Not expected to occur. There is limited suitable vegetation present; however, the site is outside the species' known elevation range.
Viguiera laciniata San Diego County viguiera	None/None/List D/4.2	Chaparral, coastal scrub / perennial shrub / Feb–Jun (Aug) / 197–2,461 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present and the species is not known to occur within the vicnity[2].
Viguiera purisimae La Purisima viguiera	None/None/List A/2B.3	Coastal bluff scrub, chaparral / shrub / Apr–Sep / 1,197–1,394 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Viola purpurea ssp. *aurea* Golden violet	None/None/List B/2B.2	Great Basin scrub, pinyon and juniper woodland; sandy / perennial herb / Apr–Jun / 3,281–8,202 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Xanthisma junceum Rush-like bristleweed	None/None/List D/4.3	Chaparral, coastal scrub / perennial herb / Jun–Jan / 787–3,281 ft amsl	No	Not expected to occur. The site is outside the species' known elevation range and there is no suitable vegetation present.
Xylorhiza orcuttii Orcutt's woody-aster	None/None/List A/1B.2	Sonoran desert scrub / perennial herb / Mar–Apr / 0–1,198 ft amsl	No	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.

[1] Regulatory Status (CDFW 2014a; CNPS 2014).

[2] "Vicinity" refers to species recorded in the USGS 7.5-minute San Marcos quadrangle or the H-8 San Diego Plant Atlas Square (CDFW 2014b; CNPS 2014; SDNHM 2014). "Region" refers to species recorded in the USGS 7.5-minute San Marcos quadrangle and eight surrounding quads.

[3] Current name of *Heterotheca sessiliflora* var. *sanjacintensis* is unresolved in Jepson Flora Project (2014).

Federal Designations
FE: Species listed as endangered by the USFWS
FT: Species listed as threatened by the USFWS
FC: Species listed as candidate by the USFWS

State Designations
ST: State threatened
SE: State endangered
SR: State rare

CRPR
CRPR
1A: Plants presumed extinct in California
1B: Plants rare, threatened, or endangered in California and elsewhere
2: Plants rare, threatened, or endangered in California, but more common elsewhere
3: Plants about which we need more information–a review list
4: Plants of limited distribution–a watch list
Threat Rank
0.1: Seriously threatened in California (high degree/immediacy of threat)
0.2: Fairly threatened in California (moderate degree/immediacy of threat)
0.3: Not very threatened in California (low degree/immediacy of threats or no current threats known)

County
List A: Plants rare, threatened, or endangered in California and elsewhere
List B: Plants rare, threatened, or endangered in California but more common elsewhere
List C: Plants that may be rare but need more information to determine their true rarity status
List D: Plants of limited distribution and are uncommon but not presently rare or endangered.

CRPR = California Rare Plant Rank; ft amsl = feet above mean sea level; NA = not applicable; USGS = U.S. Geological Survey; SDNHM = San Diego Natural History Museum; USFWS = U.S. Fish and Wildlife Service

REFERENCES

75 FR 74546–74604. Final rule: "Designating Critical Habitat for *Ambrosia pumila* (San Diego Ambrosia)." November 30, 2010.

76 FR 6848–6925. Final rule: "Final Revised Critical Habitat for *Brodiaea filifolia* (Thread-Leaved Brodiaea)." February 8, 2011.

CDFW (California Department of Fish and Wildlife). 2014a. "Special Vascular Plants, Bryophytes, and Lichens List." California Natural Diversity Database. January 2014. Accessed February 2014. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CDFW. 2014b. California Natural Diversity Database (CNDDB) RareFind, Version 3.1.0. Accessed February 2014.

CNPS (California Native Plant Society). 2014. Inventory of Rare and Endangered Plants. Online ed. Version 8-01a. Sacramento, California: CNPS. Accessed February 2014. http://www.rareplants.cnps.org/detail/1599.html.

Jepson Flora Project. 2014. *Jepson eFlora*. Berkeley, California: University of California. Accessed September 18, 2013 and February 2014. http://ucjeps.berkeley.edu/cgi-bin/get_JM_name_data.pl.

SDNHM (San Diego Natural History Museum). 2014. Data retrieved from Herbarium and Plant Atlas databases for grid squares G7–G9, H7–H9, and I7–I9. *San Diego County Plant Atlas Project*. Online ed. Accessed February 2014. http://www.sdplantatlas.org/publicsearch.aspx.

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APPENDIX E

Special-Status Wildlife Species Potentially Occurring on Project Site

Appendix E
Special-Status Wildlife Species Potentially Occurring on the Project Site

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
		Amphibians			
Spea hammondii Western spadefoot	None/SSC/Group 2	Sandy/gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeds in rain pools that do not have bullfrogs, fish, or crayfish. Found throughout Great Valley and foothills south of Redding, throughout South Coast Ranges in Southern California south of Transverse Mountains and west of Peninsular Mountains; elev. 0–1,365 m amsl.[1]	No	Moderate	Limited suitable habitat on site; understory vegetation adjacent to the creek is thick, and grassland areas outside of that are disturbed with rural residential use. There may be moderate potential for this species to occur in the freshwater marsh habitat on site.
		Birds			
Accipiter cooperii (nesting) Cooper's hawk	None/WL/Group 1	Dense stands of live oak, riparian deciduous forest habitats near water frequently used. Breeds in southern Sierra Nevada foothills, New York Mountains, Owens Valley, other local areas in Southern California; elev. 0–2,700 m amsl.[2]	No	Moderate	Moderate potential to nest in the dSCLO on site.
Accipiter striatus (nesting) Sharp-shinned hawk	BCC/SSC/Group 1	Nests in coniferous forests, ponderosa pine, black oak, riparian deciduous, mixed conifer, Jeffrey pine; winters in lowland woodlands and other habitats. Common migrant and winter resident throughout California. Probably breeds south in Coast Ranges and at scattered locations in Transverse and Peninsular Ranges.[2]	No	Moderate (forage or winter)	Moderate potential to occur on site during the winter in the dSCLO on site, but this species does not nest in the project region. No CNDDB records within the site's surrounding USGS nine-quad search area.[4]
Ardea herodias (nesting colony) Great blue heron	None/None/ Group 2	Variety of habitats, but primarily shallow estuaries and fresh and saline emergent wetlands; lakes, rivers, marshes, mudflats, estuaries, saltmarsh, and riparian habitats. Found throughout most of California. Few rookeries in Southern California; more numerous in Northern California.[2]	No	Low (nest) Moderate (forage)	This species has moderate potential to forage in the freshwater marsh on site, but low potential to nest due to the small size of the freshwater marsh and lack of similar habitat in the area. No CNDDB records within the site's surrounding USGS nine-quad search area.[4]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Buteo lineatus Red-shouldered hawk	None/None/ Group 1	Riparian and woodland habitats interspersed with swamps and wetlands found along coast, southern deserts, and in Central Valley; elev. 0–1,500 m amsl.[2]	Indirect	Observed	Suitable nesting habitat within the dSCLO for this species. Open grassland offers opportunity for foraging. Heard calling during survey. No CNDDB records within the site's surrounding USGS nine-quad search area.[4]
Butorides virescens Green heron	None/None/ Group 2	Nests and roosts in valley foothill and desert riparian habitats; feeds in fresh emergent wetland, lacustrine, and slow-moving riverine habitats. Resident in foothills and lowlands throughout California; common August to March in southern coastal ranges and in summer along the Colorado River, and found all year at the Salton Sea.[2]	No	Low (nest) Moderate (forage)	This species has moderate potential to forage in the freshwater marsh on site, but low potential to nest due to the small size of the freshwater marsh and lack of similar habitat in the area. No CNDDB records within the site's surrounding USGS nine-quad search area.[4]
Cathartes aura Turkey vulture	None/None/ Group 1	Rangeland, agriculture, and grassland; uses cliffs and large trees for roosting, nesting, and resting throughout most of California during the breeding season.[2]	No	High (forage)	There is suitable habitat for foraging, but no nesting habitat. No CNDDB records within the site's surrounding USGS nine-quad search area.[4]
Elanus leucurus (nesting) White-tailed kite	None/FP/Group 1	Open grasslands, savanna-like habitats, agriculture, wetlands, oak woodlands, riparian, herbaceous, and open stages of most habitats in cismontane California, near agricultural areas. Found in coastal and valley lowlands of California.[2]	No	Moderate	Suitable foraging habitat occurs in the disturbed grassland on site and there is potential for this species to nest in the dSCLO. Nearest CNDDB occurrence is approximately 4.25 miles northwest of the project area.[4]
Icteria virens (nesting) Yellow-breasted chat	None/SSC/Group 1	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush. Coastal California and foothills of Sierra Nevada. Breeds locally on coast in Southern California and very locally inland, at elevations up to 1,450 m amsl in valley foothill riparian, and up to 2,050 m amsl east of the Sierra Nevada in desert riparian habitats.[2]	No	Moderate	Moderate potential to forage and/or nest in the dSCLO on site. The species has been known to occur in the vicinity of the project site.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Ixobrychus exilis (nesting) Least bittern	BCC/SSC/Group 2	Dense emergent wetland vegetation, sometimes interspersed with woody vegetation and open water. Nests in emergent wetlands. Common summer resident at Salton Sea and Colorado River. Breeds locally in Owens Valley and Mojave Desert and uncommon in emergent wetlands of cattails and tules in San Diego Co., and Sacramento and San Joaquin Valleys.[2]	No	Low (nest) Moderate (forage)	A relatively rare species, the least bittern has moderate potential to forage in the freshwater marsh on site, but low potential to nest due to small size of the freshwater marsh and lack of similar habitat in the area. There are no records of this species within project site, but there are a couple records in the west of the site.[5]
Setophaga petechia brewsteri [*Aestiva* group] (nesting) Yellow warbler	BCC/SSC/Group 2	Nests in lowland and foothill riparian woodlands; montane chaparral, open ponderosa pine, and mixed conifer habitats up to 2,500 m amsl; winters in a variety of habitats. Breeds from coast range in Del Norte County, east to Modoc Plateau, south to Santa Barbara and Ventura Counties, western slope of Sierra Nevada south to Kern County; also breeds in ranges in San Diego County.[2]	No	High	There is suitable nesting and foraging habitat within the dSCLO for this species.
Sialia mexicana Western bluebird	None/None/ Group 2	Open forests of deciduous, coniferous, or mixed trees; savanna; and edges of riparian woodland. Common throughout California excluding higher mountains and eastern deserts.[2]	No	Moderate	There is nesting and foraging suitable habitat within the dSCLO for this species. This species is known to nest in the project vicinity.[5]
Tyto alba Barn owl	None/None/ Group 2	Open habitats including grassland, chaparral, riparian, and other wetlands throughout the state; elev. 0–1,680 m amsl.[2]	No	Moderate	There is moderate potential for this species to occur in the dSCLO on site and in surrounding areas.

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
		Mammals			
Antrozous pallidus Pallid bat	None/SSC/ Group 2/WBWG:H	Grasslands, shrublands, woodlands, and forests; most common in open dry habitats with rocky outcrops for roosting. Found throughout low elevations of California, except for high Sierra Nevada and northwestern corner of the state south to Mendocino County.[2]	No	Moderate	Moderate potential to forage on site. Project site has woodland and disturbed grassland habitat, but there are no rocky outcrops for roosting located on site. Known to occur in the project vicinity.[4]
Corynorhinus townsendii Townsend's big-eared bat	None/SSC/ Group 2/WBWG:H	Mesic habitats; gleans from brush or trees or feeds along habitat edges. Found in all habitats but subalpine and alpine throughout California.[2]	No	Moderate	Moderate potential to forage on site, but no roosting habitat. No CNDDB records within the site's surrounding USGS nine-quad search area.[4]
Eumops perotis californicus Western mastiff bat	None/SSC/ Group 2/WBWG:H	Occurs in many open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, and more. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.[6]	No	Moderate	Moderate potential to forage on site. Some suitable areas in open grassland as well as potential day roosting sites in riparian woodland on site and tunnel culverts nearby.
Lasiurus blossevillii Western red bat	None/SSC/ Group 2/WBWG:H	Prefers edges with trees for roosting and open areas for foraging. Roosts in woodlands and forests. Forages over grasslands, shrublands, woodlands, forests, and croplands. Found south of Shasta County to the Mexican border, and west of the Sierra Nevada/Cascade crest. In winter, occupies coastal regions and lowlands south of San Francisco Bay.[2]	No	Moderate	Some suitable foraging areas in open grassland section on site as well as potential roosting sites in the dSCLO.
Odocoileus hemionus Mule deer	None/None/ Group 2	Coastal sage scrub, chaparral, riparian, woodlands, and forest; often browses in open areas adjacent to cover throughout California, except deserts and intensely farmed areas.[2]	No	Moderate	Some suitable habitat on site and the species might move through the area, but the site is likely in too residential an area to support this species.

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
		Reptiles			
Anniella pulchra (pulchra) California (silvery) legless lizard	None/SSC/Group 2	Moist habitats. Loose soils with plant cover, beach dunes, chaparral, pine–oak woodlands, desert scrub, sandy washes, stream terraces with sycamores, cottonwoods, or oaks. Found under surface objects such as rocks, boards, driftwood, logs, leaf litter; elev. 0–1,799 m amsl.[1]	No	Moderate	The dSCLO understory has some potential to support this species.
Lichanura trivirgata Rosy boa	None/None/ Group 2 (for subspecies *L. t. roseofusca*)	Arid scrublands, semiarid shrublands, rocky shrublands, rocky deserts, canyons, other rocky areas, riparian areas, desert, and chaparral areas. Occurs throughout Southern California from the coast to the Mojave and Colorado Deserts. Prefers areas with moderate to dense vegetation and rocky cover.[1,2]	No	Moderate	Suitable woodland and rocky grassland habitat does not occur on site; however, there is suitable riparian habitat. The amount of habitat in the vicinity is limited due to surrounding land use.
Phrynosoma blainvillii Blainville's horned lizard	None/SSC/Group 2	Areas of sandy soil and low vegetation in valleys, foothills, semiarid mountains, grasslands, chaparral, woodland, coniferous forest, and sandy areas. Often found near anthills and in lowlands along sandy washes with scattered shrubs and along dirt roads. Occurs along the Pacific Coast from the Baja California border west of the deserts and the Sierra Nevada, north to the Bay Area, and inland to Shasta Reservoir; elev. 0–2,483 m amsl.[1]	No	Moderate	Some suitable habitat occurs in open areas and in the disturbed grassland area, but site is likely too disturbed for this species. Nearest CNDDB occurrence is approximately 4.75 miles east of the project area.[4]
Plestiodon skiltonianus interparietalis Coronado skink	None/SSC/Group 2	Grassland, woodlands, pine forests, chaparral, especially open sunny areas (e.g., clearings, edges of creeks) and rocky areas near streams with lots of vegetation. Also found in areas away from water. Occurs in inland Southern California south through the North Pacific Coast region of northern Baja California.[1]	No	Moderate	Some suitable habitat around Buena Creek. Nearest CNDDB occurrence is approximately 1.75 miles southwest of the project area.[4]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Thamnophis hammondii Two-striped gartersnake	None/SSC/Group 1	Associated with permanent or semipermanent bodies of water in a variety of habitats: rocky areas, oak woodland, chaparral, brushland, and coniferous forest. Found on Diablo Range, South Coast and Transverse Ranges, and Santa Catalina Island; elev. 0–2,400 m amsl.[1, 2]	No	Moderate	There is some potential for this species to occur in Buena Creek or the freshwater marsh. This species was recorded within the site's surrounding USGS nine-quad search area.[4]
Thamnophis sirtalis ssp. *novum (Thamnophis sirtalis* spp.*)* South coast gartersnake (Common gartersnake)	None/SSC/Group 2	Permanent or semipermanent bodies of water in a variety of habitats. Streams, creeks, pools, streams with rocky beds, ponds, lakes, and vernal pools. Coastal plain from Ventura to San Diego County; elev. 0–850 m amsl.[2, 3]	No	Moderate	There is some potential for this species to occur in Buena Creek or the freshwater marsh. This species was recorded within the site's surrounding USGS nine-quad search area.

Federal Designations:

BCC U.S. Fish and Wildlife Service: Birds of Conservation Concern

State Designations:

SSC California Species of Special Concern
FP California Department of Fish and Wildlife Fully Protected Species
WL California Department of Fish and Wildlife Watch List Species

Other Designations:

WBWG:H Western Bat Working Group: High Priority

elev. = elevation range; m = meters; amsl = above mean sea level; dSCLO = disturbed southern coast live oak riparian forest; CNDDB = California Natural Diversity Database; USGS = U.S. Geological Survey

Sources:

1. CaliforniaHerps.com. 2014. California Herps: A Guide to the Amphibians and Reptiles of California. Accessed online February 10, 2014. http://californiaherps.com.
2. CWHR (California Wildlife Habitat Relationships System). 2014. Accessed online February 10, 2014. http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx.
3. CDFW (California Department of Fish and Wildlife). 2011. Special Animals (898 Taxa). July 2011. Accessed online February 10, 2014. http://www.dfg.ca.gov/wildlife/nongame/list.html.
4. CDFW. 2014. California Natural Diversity Database RareFind, Version 3.1.0. Accessed online February 10, 2014.
5. Unitt, P. 2004. "San Diego County Bird Atlas." Proceedings of the San Diego Society of Natural History, no. 39. San Diego, California: Ibis Publishing Company.

APPENDIX F

Special-Status Wildlife Species Not Expected to Occur or Rarely Occur in the Project Area

Appendix F
Special-Status Wildlife Species Not Expected to Occur or Rarely Occur on the Project Site

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
		Amphibians			
Anaxyrus californicus Arroyo toad	FE/SSC/Group 1	Washes, arroyos, sandy riverbanks, riparian areas with willows, sycamores, oaks, and cottonwoods. Requires exposed sandy stream sides with stable terraces to burrow in, with scattered vegetation and calm pools with sandy/gravel bottoms for breeding. Found west of desert in coastal areas from the Upper Salinas River in San Luis Obispo County to northwestern Baja California; elev. 0–900 m amsl.[1]	No	Low	The streambed is incised and lacks sandbars. It is surrounded by dSCLO with a thick understory of native and non-native vegetation. The closest USFWS records are in the San Luis Rey River located approximately 6 miles north of the project site.
Batrachoseps major aridus Desert slender salamander	FE/SE/Group 1	Limited geographic distribution: known only from Hidden Palm Canyon and Guadalupe Canyon on east slopes of the Santa Rosa Mountains, Riverside County. Occurs under limestone sheets, rocks, and talus at the base of damp, shaded locations (e.g., spring oasis, moist cliffs) without direct sunlight.[1]	No	Not expected to occur	No suitable habitat on site and the project site is outside the known range of the species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Ensatina ensatina klauberi Large-blotched salamander	None/SSC/ Group 1	Moist shaded evergreen and deciduous forests, oak woodlands, under rocks, logs, and debris, especially peeled-off bark. Found in peninsular ranges of Southern California and eastern San Bernardino Mountains.[1]	No	Not expected to occur	The project site is outside this species' known range, which is limited to the Peninsular Ranges and eastern San Bernardino Mountains. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Rana draytonii California red-legged frog	FT/SSC/Group 1	Humid forests, woodlands, grasslands, coastal scrub, and stream sides with plant cover. Most common in lowland and foothills. Frequently found in woods adjacent to streams. Breeds in permanent or ephemeral water sources. Ephemeral habitats require burrows or other refuges for estivation when wetlands are dry. Occurs along coast ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades Range; elev. 0–1,525 m amsl.[1, 2]	No	Not expected to occur	This species' current range is outside San Diego County; there are no recent records of this species in San Diego County. No CNDDB or USFWS records within a 5-mile radius of the project site or within the site's surrounding USGS nine-quad search area.[5, 13]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Rana muscosa Southern mountain yellow-legged frog	FE (Population in San Gabriel, San Jacinto, and San Bernardino Mountains only)/ SSC/Group 1	Lakes, ponds, meadow streams, isolated pools, sunny riverbanks, montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats. Occurs in the Sierra Nevada from Fresno County to Kern County In Southern California isolated populations exist in the San Gabriel, San Bernardino, and San Jacinto Mountains; Sierra Nevada elevations range from 370 to over 3,650 m amsl.[1, 2]	No	Not expected to occur	No suitable habitat on site. Project area is below known elevation range of the species and is outside the species' known range. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Birds					
Aechmophorus occidentalis Western grebe	None/None/ Group 1	Along the coast in marine subtidal and estuary waters. Uncommon to fairly common on large lakes near the coast and inland at low elevations. Breeds on large, marshy lakes, normally deeper than required by eared grebe. Nests on Modoc Plateau and south locally to Inyo County; also Sacramento National Wildlife Refuge, Salton Sea, Colorado River, and Sweetwater Reservoir.[2]	No	Not expected to occur	No suitable habitat in project site vicinity; the freshwater marsh is too small to support this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Agelaius tricolor (colony) Tricolored black bird	BCC/SSC/Group1	Breeds in emergent wetland with tall, dense cattails or tules; willow, blackberry, and tall herb thickets. Feeds in grassland and cropland habitats. Found throughout Central Valley and coastal areas south of Sonoma County.[2]	No	Low	The freshwater marsh area on site is very small and no tricolored blackbirds were observed during surveys. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	None/WL/ Group 1	Sparse mixed chaparral and coastal scrub habitats (especially coastal sage) in Southern California on slopes of Transverse and Coastal Ranges, north to Los Angeles County, and northwestern Baja California. Found on steep, rocky hillsides with grass and forb patches, and grassy slopes with low shrub cover, if rock outcrops are present.[2, 3]	No	Not expected to occur	No scrub habitat occurs on the project area. Nearest CNDDB occurrence is approximately 1.3 miles south of the project area.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Ammodramus savannarum (nesting) Grasshopper sparrow	None/SSC/ Group 1	Dry, dense grasslands, especially with a variety of grasses and tall forbs, and scattered shrubs for singing perches. Summer resident and breeder in foothills and lowlands west of the Cascade–Sierra Nevada crest from Mendocino and Trinity Counties south to San Diego County. In Southern California, occurs on hillsides and mesas in coastal areas; breeds up to 1,500 m amsl.[2]	No	Low	The non-native grassland on site is subject to regular disturbance from rural residential activities. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Anas strepera Gadwall	None/None/ Group 2	Interior valleys, wetlands, ponds, and streams. Feeds and rests in freshwater lacustrine and emergent habitats, and to a lesser extent, estuarine and saline emergent habitats, and nests in nearby herbaceous and cropland habitats. Common in Central Valley and less common in Coast Range foothills of Central and Southern California. Locally common in Imperial Valley and along Colorado River, October to March. Breeds on northeastern plateau and east of Sierra Nevada.[2]	No	Low	There is a small amount of freshwater marsh on site, but there are no adjacent suitable nesting areas. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Aquila chrysaetos (nesting and wintering) Golden eagle	BCC/FP, WL/ Group 1	Open country, especially hilly and mountainous regions; grassland, coastal sage scrub, chaparral, oak savannas, and open coniferous forest. Rolling foothills, mountain areas, sage–juniper flats, and desert throughout California.[2]	No	Not expected to occur	Due to the rural residential land use in this area, there is no suitable open country or rolling hill habitat on site for foraging, and no suitable nesting habitat in the area.
Artemisiospiza belli Bell's sparrow	BCC/WL/ Group 1	Occurs in low, dense stands of shrubs; chaparral dominated by chamise, and coastal scrub dominated by sage. Coast Ranges from Northern California to northwestern Baja California, western slopes of Sierra Nevada.[2] Nominate form of species designated as special status.	No	Not expected to occur	No suitable scrub or chaparral habitat on site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Asio flammeus (nesting) Short-eared owl	None/SSC/ Group 2	Open areas with few trees, such as grasslands, prairies, dunes, meadows, irrigated lands, and saline and freshwater emergent wetlands. Breeds in coastal areas in Del Norte and Humboldt Counties, San Francisco Bay Delta, northeastern Modoc Plateau, east side of Sierra Nevada from Lake Tahoe south to Inyo County, and San Joaquin Valley. Uncommon winter migrant in Southern California, and widespread during winter in the Central Valley and on the coastline.[2]	No	Not expected to occur	No suitable habitat on site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Asio otus (nesting) Long-eared owl	None/SSC/ Group 1	Riparian, live oak thickets, and other dense stands of trees. Uncommon winter visitor in Southern California deserts and the Central Valley; uncommon resident throughout the rest of the state.[2]	No	Not expected to occur	Limited suitable habitat in dSCLO and adjacent residences provide limited breeding and foraging habitat for this species. In general, this species has not been recorded in this area since 1997, with the exception of one record northwest of the site.[12] Uncommon visitor to Southern California No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Athene cunicularia (burrow sites and some wintering sites) Burrowing owl	BCC /SSC/ Group 1	Open, dry grassland and desert habitats; grass, forb, and open shrub stages of pinyon–juniper and ponderosa pine habitats throughout the state; elev. 0–1,600 m amsl.[2]	No	Not expected to occur	While there is some suitable open disturbed grassland habitat on site, this site is regularly disturbed and the residence on site has goats, dogs, and a horse, which would preclude burrowing owls from using the open areas.
Aythya americana (nesting) Redhead	None/SSC/ Group 2	Lacustrine waters, foothills and coastal lowlands, and along the coast and Colorado River. Nests in fresh emergent wetland bordering open water. Found south of Modoc County to Mono County, Central Valley, and Monterey County south to Ventura County; breeds in the Central Valley, eastern Kern County, coastal Southern California, and the Salton Sea.[2]	No	Not expected to occur	In San Diego, this species usually nests in dense marshes in estuaries and lagoons. The project site is outside the known nesting areas of this species, which are primarily in San Diego during the winter. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Branta canadensis Canada goose	None/None/ Group 2	Lakes, fresh emergent wetlands, moist grasslands, croplands, pastures, and meadows. Winter migrant throughout the Central Valley, the Salton Sea, and northeastern California; also along the Colorado River.[2]	No	Low	Canada geese have not historically nested in San Diego, but released captives have begun nesting in some areas.[12] The freshwater marsh on site is very small and unlikely to provide any suitable habitat for this species, which is typically found in flocks and requires larger areas for foraging and nesting. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Bucephala islandica (nesting) Barrow's goldeneye	None/SSC/ Group 2	Estuarine (lagoons and bays) and brackish lacustrine waters. Found along the Central California coast, San Francisco Bay, Marin and Sonoma Counties, and the Colorado River.[2]	No	Not expected to occur	This species occurs very rarely in San Diego and is only known in the winter.[12] No suitable habitat located on the project site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Buteo regalis (wintering) Ferruginous hawk	BCC/WL/ Group 1	Open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon–juniper habitats. Uncommon winter resident at low elevations and open grasslands of the Modoc Plateau, Central Valley, and Coast Ranges. Common winter resident in southwestern California.[2]	No	Low	The habitat within the open disturbed grassland area of the site is small and the project site is located in a rural residential area, without the large expanses of foraging habitat this species prefers. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Buteo swainsoni (nesting) Swainson's hawk	BCC/ST/Group 1	Forages in grasslands or suitable grain or alfalfa fields or livestock pastures; breeds in stands with few trees in juniper–sage flats, riparian areas, and in oak savanna in the Central Valley.[2]	No	Not expected to occur	The project site is located outside the species' known breeding range in California and it is not expected to occur on site.
Campylorhynchus brunneicapillus sandiegensis Coastal cactus wren	BCC/SSC/ Group 1	Southern cactus scrub, maritime succulent scrub, and cactus thickets in coastal sage scrub. In arid parts of westward-draining slopes of Southern California.[2]	No	Not expected to occur	No cactus habitat found on site and no preferred foraging habitat on site.

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Cerorhinca monocerata (nesting colony) Rhinoceros auklet	None/WL/ Group 2 (for oceanic – winter)	Marine pelagic waters. Nests in a burrow on undisturbed, forested or unforested islands, and probably in cliff caves. Found off Northern and Central California, and south of the northern Channel Islands. Breeds off Del Norte and Humboldt Counties, and Farallon Islands.[2]	No	Not expected to occur	No suitable habitat occurs on site; not within the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Charadrius montanus (wintering) Mountain plover	FPT, BCC/SSC/ Group 2	Nests in open, shortgrass prairies or grasslands; winters in shortgrass plains, plowed fields, open sagebrush, and sandy deserts. Winters in short grasslands and plowed fields of Central Valley below 1,000 m amsl.[2]	No	Not expected to occur	Does not nest within the region. Project site is located outside the known wintering range of the species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Charadrius nivosus nivosus (nesting) Western snowy plover	FT (Pacific coastal population), BCC (non-listed subspecies)/SSC (coastal and interior populations)/ Group 1	Sandy marine and estuarine shores. Nests on these habitats and salt pond levees. Nesting areas in the Salton Sea, Mono Lake, shores of alkali lakes of northeastern California, the Central Valley, and southeastern deserts.[2]	No	Not expected to occur	No suitable habitat occurs on site; not within the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Chen caerulescens (winter) Snow goose	None/None/ Group 2	Fresh emergent wetlands, adjacent lacustrine waters, and nearby wet croplands, pastures, meadows, and grasslands. Occasionally found in saline (brackish) emergent wetlands and adjacent estuarine waters. Found primarily in the Central Valley; less common southward in the interior but abundant in Imperial Valley and locally common along the Colorado River. Found regularly only in Southern California along the Coast Ranges and the immediate coast from mid-November to February.[2]	No	Not expected to occur	The freshwater marsh on site is very small and unlikely to provide any suitable habitat for this species, which is typically found in flocks and requires larger areas for foraging and nesting. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Chlidonias niger (nesting colony) Black tern	None/SSC/| Group 2 (Non-breeder)	Freshwater lakes, marshes, ponds, and coastal lagoons. Breeds in freshwater habitats but common on bays, salt ponds, river mouths, and pelagic waters during spring and fall migration. Found throughout fresh emergent wetlands of California.[2]	No	Not expected to occur	The freshwater marsh on site is very small and unlikely to provide any suitable habitat for this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Circus cyaneus (nesting) Northern harrier	None/SSC/| Group 1	Open wetlands (nesting), pasture, old fields, dry uplands, grasslands, rangelands, and coastal sage scrub. Resident of northeastern plateau and coastal areas; less common resident in the Central Valley. Breeds at marsh edge in shrubby vegetation in the Central Valley and Sierra Nevada (0–1,700 m amsl) and northeastern California (up to 800 m amsl).[2]	No	Not expected to occur	The freshwater marsh on site is very small and there are no adjacent suitable habitat areas for this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Coccyzus americanus occidentalis (nesting) Western yellow-billed cuckoo	FC, BCC/|SE/| Group 1	Dense, wide riparian woodlands and forest with well-developed understories. Valley foothill and desert riparian habitats scattered throughout California—Colorado River, Sacramento and Owens Valleys, South Fork of the Kern River, Santa Ana River, and Amargosa River.[2]	No	Not expected to occur	This species is very rare and there are no recent (>1932) nesting records of this species in San Diego County.[12] The dSCLO on site is not large enough to support this species and contains non-native species. This species requires large stands of riparian woodland.[12] No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Contopus cooperi (nesting) Olive-sided flycatcher	BCC/|SSC/| Group 2	Summer resident in a wide variety of forest and woodland habitats. Preferred nesting habitats include mixed conifer, montane hardwood–conifer, Douglas-fir, redwood, red fir, and lodgepole pine. Found throughout California excluding deserts, Central Valley, and other lowland valleys and basins; below 2,800 m amsl.[2]	No	Not expected to occur	This species occurs in coniferous woodlands of the San Diego County mountains and the project site is outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

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Cypseloides niger (nesting) Black swift	BCC/SSC/ Group 2 (non-breeder)	Nests in moist crevices or caves on sea cliffs or near waterfalls in deep canyons; forages over many habitats. Nests in Sierra Nevada, Cascade Range, San Gabriel, San Bernardino, San Jacinto Mountains, and coastal bluffs and mountains from San Mateo County south to San Luis Obispo County.[2]	No	Not expected to occur	There is no suitable habitat on site for this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Dendrocygna bicolor (nesting) Fulvous whistling-duck	None/SSC/ Group 2	Fresh emergent wetlands, shallow lacustrine and quiet riverine waters; feeds in wet croplands and pastures. Nests in dense wetlands of cattails in the Imperial Valley along the south end of the Salton Sea.[2]	No	Not expected to occur	The freshwater marsh on site is very small and unlikely to provide any suitable habitat for this species, which typically requires larger areas for foraging and nesting. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Egretta rufescens Reddish egret	None/None/ Group 2	Forages in saltmarsh, mudflats, coastal lagoons, barren sand, and salt ponds; nests on natural islands or man-made dredge spoil islands, occasionally on coastal mainland. Found in southwestern and central coastal California.[3]	No	Not expected to occur	There is no suitable habitat for this species on site or in the vicinity of the project. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Empidonax traillii extimus (nesting) Southwestern willow flycatcher	FE/SE/Group 1	Riparian obligate. Riparian woodlands along streams and rivers with mature, dense tree or shrub cover where surface water or soil moisture is present; may nest in habitats variable in dominant plant species (both native and exotic). In California, breeding range includes Southern California; from near sea level in California to more than 2,600 m amsl in Arizona / SW Colorado.[4]	No	Low	The dSCLO on site is relatively disturbed, and closest USFWS records are located in the San Luis Rey River approximately 6 miles north of the project site.[13] There is critical habitat for this species downstream approximately 2.2 miles at its confluence with Agua Hedionda Creek.[13] Based on the site conditions and lack of records in the immediate vicinity,[5, 4] this species has low potential to occur on site.
Eremophila alpestris actia California horned lark	None/WL/ Group 2	Open habitats, grassland, rangeland, shortgrass prairie, montane meadows, coastal plains, and fallow grain fields south of Humboldt County in the Coast Ranges; in San Joaquin Valley except extreme southern end.[2, 3]	No	Low	Some suitable open areas occur in the disturbed grassland area, but this species has low potential to nest due to presence of farm animals on site. Nearest CNDDB occurrence is approximately 4.25 miles southwest of the project site.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Falco columbarius (wintering) Merlin	None/WL/ Group 2	Coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, montane hardwood–conifer habitats, and ponderosa pine. Found throughout western half of state below 1,500 m amsl.[2]	No	Low	Merlin is a rare winter visitor to San Diego and has been recorded in the vicinity of the project site.[12] There is some suitable foraging within the open disturbed and grassland portions of the site; however, there are no CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Falco mexicanus (nesting) Prairie falcon	BCC/WL/ Group 1	Grassland, savannas, rangeland, agriculture, desert scrub, and alpine meadows; nests on cliffs or bluffs. Southeastern deserts northwest through the Central Valley and along the inner Coast Ranges and Sierra Nevada.[2]	No	Not expected to occur	Prairie falcons are not known to occur near the project site, but are found in eastern San Diego County.[12, 5] No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Falco peregrinus anatum (nesting) American peregrine falcon	(FD), BCC/(SD), FP/Group 1	Nests in woodland, forest, coastal habitats along the coast north of Santa Barbara, and in the Sierra Nevada and other mountains of northern California. Winters in the Central Valley and is found in other riparian areas and coastal/inland wetlands.[2]	No	Not expected to occur	Peregrine falcons are known to occur along coastal San Diego. There is no suitable nesting habitat on site and this species is unlikely to occur in the project vicinity. There are also no CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Fratercula cirrhata (nesting colony) Tufted puffin	None/SSC/ Group 2 (Oceanic)	Rocky outcroppings on islands, not necessarily near the nest, and on the ocean. Common at nesting colonies and on nearby marine pelagic and subtidal waters. Nests on islands and, less commonly, on coastal cliffs. Found along the coast from Prince Island in Del Norte County to Point Conception.[2]	No	Not expected to occur	No suitable habitat occurs on site; project site is not within the known range of this species. There are no CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Gavia immer (nesting) Common loon	None/SSC/ Group 2 (winter)	Estuarine and subtidal marine habitats along the entire coast (September–May). Uncommon on large, deep lakes in valleys and foothills; common migrant along the coast, including offshore, in November and May.[2]	No	Not expected to occur	No suitable habitat occurs on site; project site is not within the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

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Grus canadensis canadensis (wintering) Lesser sandhill crane	None/SSC/ Group 2 (full species)	Wet meadow, shallow lacustrine, and fresh emergent wetland habitats during summer; annual and perennial grassland habitats, moist croplands, and open, emergent wetlands during winter. Winters in San Joaquin and Imperial Valleys, Carrizo Plain, Brawley, and Blythe.[2]	No	Not expected to occur	No suitable habitat occurs on site; the freshwater marsh is too small and the grasslands are frequently disturbed by human and farm animal presence. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Grus canadensis tabida (nesting and wintering) Greater sandhill crane	None/ST, FP/ Group 2 (full species)	Wet meadow, shallow lacustrine, and fresh emergent wetland habitats during summer; annual and perennial grassland habitats, moist croplands, and open, emergent wetlands during winter. Breeds in Siskiyou, Modoc, and Lassen Counties and Sierra Valley. Winters in the Sacramento and San Joaquin Valleys. Was formerly more common in Southern California.[2]	No	Not expected to occur	No suitable habitat occurs on site; the freshwater marsh is too small and the grasslands are frequently disturbed by human and farm animal presence. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Haliaeetus leucocephalus (nesting and wintering) Bald eagle	(FD), BCC, FSS/ SE, CDF-S, FP/ Group 1 (winter)	Large bodies of water and flowing rivers with abundant fish, with adjacent snags or other perches; breeds in Northern California and is found during winter at few locations throughout Southern California.[2]	No	Not expected to occur	No suitable roosting habitat or large bodies of water with fish. There are no CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Junco hyemalis caniceps (nesting) Gray-headed junco	None/WL/ Group 2 (winter–rare)	Found in forests and woodlands from montane hardwood–conifer forests up through alpine dwarf-shrub habitats. Breeds locally in White and Grapevine Mountains, and on Clark Mountain in southeastern California. Species is more common east of the Sierra Nevada during winter.[2]	No	Not expected to occur	No suitable woodland habitat on site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Lanius ludovicianus (nesting) Loggerhead shrike	BCC/SSC/ Group 1	Open habitats with scattered shrubs, trees, or other perches; highest density in open-canopied valley foothill hardwood, valley foothill hardwood–conifer, valley foothill riparian, pinyon–juniper, juniper, desert riparian, and Joshua tree habitats. Found in foothills and lowlands throughout California.[2]	No	Low	This is an uncommon species in most of western San Diego County with significantly higher numbers occurring in the Anza Borrego Desert area.[12] Some potential to occur in the open habitat on site. There are fences for perching, and some ornamental trees scattered on site.[5]

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Larus californicus (nesting colony) California gull	None/WL/| Group 2 (non-breeding)	Along the coast: sandy beaches, mudflats, rocky intertidal and pelagic areas of marine and estuarine habitats, and freshwater and saline emergent wetlands. Inland: lacustrine, riverine, and cropland habitats, landfill dumps, and open lawns in cities. Nests in alkali and freshwater lacustrine habitats; adults roost along shorelines, landfills, and pastures, and on islands. Nests along northeastern plateau region and at Mono Lake.[2]	No	Not expected to occur	No suitable habitat for this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Laterallus jamaicensis coturniculus California black rail	None/FP/| Group 2	Saltmarshes, freshwater marshes, and wet meadows. In tidal areas, the rail also requires dense cover of upland vegetation to provide protection from predators when it must leave marsh habitats during high tides. The species has also been positively associated with sites that have very shallow standing water (less than 3 cm (1.18 in.) deep) and very low daily water level fluctuations.	No	Not expected to occur	Rare in San Diego County. The freshwater marsh on site is too small and lacks connectivity to other similar habitat types. Species prefers pickleweed (*Salicornia virginica*) for nesting substrate, which does not occur on site.[12]
Leucophaeus atricilla (nesting colony) Laughing gull	None/WL/| Group 2 (non-breeding)	Flocks rest on salt-pond dikes and sandpits. Breeds along seacoasts, bays, salt marshes, dunes, beaches, and estuaries, and rarely on large inland bodies of water. Formerly nested at the southern end of the Salton Sea.[3]	No	Not expected to occur	No suitable habitat for this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Melanerpes lewis (winter) Lewis' woodpecker	BCC/None/| Group 1	Open oak savannas and broken deciduous and coniferous habitats. Eastern slopes of the Coast Ranges south to San Luis Obispo County; winters in Central Valley, Modoc Plateau, and Transverse and other Ranges in Southern California. Breeds on eastern slopes of the Coast Ranges, Sierra Nevada, and Cascade Range.[2]	No	Not expected to occur	No suitable habitat for this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Mycteria americana (Non-breeding) Wood stork	None/SSC/| Group 2	Shallow, relatively warm waters with fish for prey. Nests colonially. Found at the south end of the Salton Sea and the San Diego Wild Animal Park.[2]	No	Not expected to occur	No suitable habitat for this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

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Numenius americanus (nesting) Long-billed curlew	BCC/WL/ Group 2 (non-breeding)	Nests in upland shortgrass prairies and wet meadows in northeast California; winters in coastal estuaries, open grasslands, and croplands along California coast, and in the Central and Imperial Valleys.[2]	No	Not expected to occur	No suitable habitat for this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Oceanodroma furcata (nesting colony) Fork-tailed storm petrel	None/SSC/ Group 2 (Ocean)	Visitor on open ocean along the entire coast; found in bays and harbors particularly after storms. Breeds on islets in Del Norte and Humboldt Counties.[2]	No	Not expected to occur	No suitable habitat occurs on site; not within the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Oceanodroma homochroa (nesting colony) Ashy storm petrel	BCC/SSC/ Group 2 (Ocean)	Open sea. Nests in natural cavities and sea caves, mainly talus but also larger rock. Resident of offshore waters from Cape Mendocino to northern Baja California, Mexico. Breeds on offshore islands from Southeast Farallon Island to Los Coronados.[2]	No	Not expected to occur	No suitable habitat occurs on site; not within the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Oceanodroma melania (nesting colony) Black storm petrel	None/SSC/ Group 2 (Ocean)	Open sea from Monterey Bay south during April to October. Nests in burrows and rock cavities on Santa Barbara Island and Sutil Island.[2]	No	Not expected to occur	No suitable habitat occurs on site; not within the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Oreortyx pictus eremophilus Mountain quail	None/None/ Group 2	Dense montane chaparral and brushy areas within coniferous forest, pinyon–juniper–yucca associations; uses shrubs, brush stands and trees on steep slopes for cover in most major montane habitats of the state.[2]	No	Not expected to occur	No suitable habitat for this species; outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Oreothlypis luciae (nesting) Lucy's warbler	BCC/SSC/ Group 1	Desert wash and desert riparian habitats, especially dominated by mesquite; saltcedar and other thickets. Breeds along the Colorado River, common locally in a few other desert areas, and rare near the Salton Sea. Rare transient in other southern interior locations and rare fall transient along the coast, mainly in San Diego County.[2]	No	Not expected to occur	No suitable habitat for this species; outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

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Pandion haliaetus (nesting; rarely breeds in San Diego) Osprey	None/ WL/ Group 1	Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats (primarily ponderosa pine through mixed conifer), but widely observed along the coast. Breeds from the Cascade Ranges south to Lake Tahoe and along the northwest coast. Uncommon breeder along southern Colorado River. Uncommon along the coast of Southern California.[2]	No	Not expected to occur	No suitable roosting or nesting habitat, or large bodies of water with fish. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Passerculus guttatus [sandwichensis] beldingi Belding's savannah sparrow	None/SE/ Group 1	Scattered southern coastal wetlands in southwestern California.[2]	No	Not expected to occur	No suitable habitat for this species; this species is typically found in coastal wetlands, which do not occur on site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Passerculus rostratus [sandwichensis] rostratus (wintering) Large-billed savannah sparrow	None/SSC/ Group 2	Grassland, saline emergent wetlands from central coastal and Southern California; Santa Cruz, Morro Bay, San Miguel Island, San Clemente Island, and San Diego.[2, 3]	No	Not expected to occur	No suitable habitat for this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Pelecanus erythrorhynchos (nesting colony) American white pelican	None/SSC/ Group 2 (winter)	Open water, coastal bays, and large inland lakes. Nests at large lakes in Klamath Basin. Common migrant at the Salton Sea and Colorado River and rare during winter at Salton Sea, Morro Bay, and San Diego Bay.[2]	No	Not expected to occur	No suitable habitat for this species; outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Pelecanus occidentalis californicus (nesting colony and communal roosts) Brown pelican	(FD)/(SD), FP/ Group 2	Open sea, large water bodies, coastal bays and harbors, estuarine, marine subtidal, and marine pelagic waters along the coast; breeds on the Channel Islands.[2]	No	Not expected to occur	No suitable habitat for this species; outside the known range of this species No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Phalacrocorax auritus (nesting colony) Double-crested cormorant	None/WL/ Group 2 (non-breeding)	Lakes, rivers, reservoirs, estuaries, and ocean; nests in tall trees, rock ledges on cliffs, and rugged slopes. Resident along the coast and inland waters. Common August to May at the Salton Sea and Colorado River reservoirs; also found south of San Luis Obispo County and the Central Valley.[2]	No	Not expected to occur	No suitable habitat for this species; outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Piranga rubra (nesting) Summer tanager	None/SSC/ Group 2	Nests in desert riparian woodland dominated by cottonwoods and willows; winter habitats include parks and residential areas. Found along lower Colorado River and locally in Southern California deserts.[2]	No	Not expected to occur	No suitable habitat for this species; outside the known range of this species. No CNDDB occurrences within the surrounding USGS nine-quad search area.[5] Known to winter along the coastline west of the project site and breed in east San Diego County.[12]
Plegadis chihi (nesting colony) White-faced ibis	None/WL/ Group 1	Nests in marsh; winter foraging in shallow lacustrine waters, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields, and estuaries. Uncommon summer resident in areas of Southern California (esp. Salton Sea area) and rare visitor to Central Valley.[2]	No	Low	No suitable habitat for this species; outside the known range of this species. No CNDDB occurrences within the surrounding USGS nine-quad search area.[5] Known to breed in north San Diego County,[12] but records within the project site grid are assumed to be migrants.
Polioptila californica californica Coastal California gnatcatcher	FT/SSC/Group 1	Coastal sage scrub, coastal sage scrub–chaparral mix, coastal sage scrub–grassland ecotone, and riparian in late summer. Found from eastern Orange and southwestern Riverside Counties south through the coastal foothills of San Diego County.[2]	No	Not expected to occur	There is no coastal sage scrub on site or adjacent to the project site. The nearest CNDDB occurrence is approximately 1/4 mile east of the project area.[5]
Progne subis (nesting) Purple martin	None/SSC/ County 1	Nests in tall sycamores, pines, oak woodlands, and coniferous forest; forages over riparian forest and woodland. Found throughout the state in wooded, low-elevation habitats. Rare and local breeder in the south in mountain ranges and along the coast.[2]	No	Not expected to occur	No suitable habitat for this species; project site is outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Pyrocephalus rubinus (nesting) Vermilion flycatcher	None/SSC/ Group 1 (for *P. r. flammeus*)	Nesters inhabit cottonwood, willow, mesquite, and other vegetation in desert riparian habitat adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas in isolated patches. Found along the Colorado River, especially near Blythe, Riverside County.[2]	No	Not expected to occur	No suitable habitat for this species; outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Rallus longirostris levipes Light-footed clapper rail	FE/SE, FP/ Group 1	Coastal saline emergent wetlands along Southern California from Santa Barbara County to San Diego County.[2]	No	Not expected to occur	The freshwater marsh on site is too small and lacks connectivity to other similar habitat types. The species is known to typically remain in its nesting territory year-round and there are no nesting records within the project vicinity.[12] No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Riparia riparia (nesting) Bank swallow	None/ST/ Group 1	Riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils, into which it digs nesting holes; most breeding occurs along the banks of the Sacramento and Feather Rivers.[2]	No	Not expected to occur	No suitable habitat on site and the project site is outside the known range of this species. Uncommon in San Diego County; nearly all records are from wintering season as most eroded bank nesting sites have been lost to channelized rivers.[12]
Rynchops niger (nesting colony) Black skimmer	BCC/SSC/ Group 1	Roosting takes place on sandy beaches or gravel bars. Rarely alights on water. Visitor to coastal estuaries and river mouths. Summer resident at the Salton Sea. Yearlong resident at San Diego Bay. Known infrequently from additional interior locations on the Colorado River and Lakeview, Riverside County.[2]	No	Not expected to occur	No suitable habitat for this species on site and the project site is outside the known range of this species. Very few occurrences outside of the San Diego Bay and no occurrences in the project vicinity.[12] There have been no CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Sterna antillarum browni (nesting colony) California least tern	FE/SE, FP/ Group 1	Breeding colonies located in marine and estuarine shores in Southern California, and in San Francisco Bay in abandoned salt ponds and estuarine shores. Feeds in nearby waters. Migratory to California.[2]	No	Not expected to occur	Species is a ground-nesting bird that requires sandy substrate for nesting.[12] No marine or estuarine shores are located on the project site.

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Strix occidentalis occidentalis California spotted owl	BCC/SSC/ Group 1	Dense, old-growth, multi-layered mixed conifer, redwood, and Douglas-fir habitats in Northern California; oak and oak–conifer habitats in Southern California; elev. 0–2,300 m amsl.[2]	No	Not expected to occur	Virtually all records of the species occur in east San Diego County, outside the project site vicinity.[12] There is also no suitable woodland habitat for this species on site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Synthliboramphus hypoleucus (nesting colony) Guadalupe murrelet	FC,BCC/ST/ Group 2 (oceanic)	Offshore waters. Rare visitor to southern offshore waters in late summer and fall.[2]	No	Not expected to occur	The species is rarely seen near mainland California and breeds primarily in the Channel Islands.[12] There is also no suitable habitat for this species on site and no CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Thalasseus elegans (nesting colony) Elegant tern	None/WL/ Group 1	Coastal waters, estuaries, large bays and harbors, and mudflats; rarely occurs offshore and never found inland. Found along coastal California, most common in Southern California; not found north of Marin County.[2]	No	Not expected to occur	Nests and remains strictly on the direct coastline of San Diego County.[12] No suitable habitat for this species on site and the project site is outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Toxostoma bendirei Bendire's thrasher	BCC/SSC/ Group 2 (non-breeding)	Flat areas of desert succulent shrub and Joshua tree habitats in Mojave Desert area of San Bernardino and western Kern Counties.[2]	No	Not expected to occur	Species is known to strictly remain in Mojave Desert region of California and is seen extremely rarely in San Diego County.[12] No suitable habitat for this species on site and project site is located outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Toxostoma crissale Crissal thrasher	None/SSC/ Group 1	Dense thickets of shrubs or low trees in desert riparian and desert wash habitats. Also, dense sagebrush and other shrubs in washes within juniper and pinyon–juniper habitats up to 1,800 m amsl. Common in the Colorado River Valley; less common in the eastern Mojave Desert and Imperial, Coachella, and Borrego Valleys.[2]	No	Not expected to occur	Within San Diego County, there is only a 3-square-mile patch of habitat for this species located in the Borrego Valley.[12] No suitable habitat on site for this species and the project site is outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

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Toxostoma lecontei lecontei Le Conte's thrasher	BCC/SSC/| Group 2	Open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats, and Joshua tree habitat with scattered shrubs. Uncommon to rare, local resident in Southern California deserts from southern Mono County to the Mexican border and in San Joaquin Valley.[2]	No	Not expected to occur	Known exclusively to east San Diego County and adapted for extreme desert conditions.[12] No suitable habitat for this species on site and the project site is located outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Vireo bellii pusillus (nesting) Least Bell's vireo	FE/SE/Group 1	Willows and low, dense valley foothill riparian habitat and lower portions of canyons; along western edge of deserts in desert riparian habitat; elev. 0–600 m amsl. Found in San Benito and Monterey Counties and coastal Southern California from Santa Barbara County south.[2]	No	Low	The dSCLO on site is relatively disturbed, and the closest CNDDB occurrence is approximately 3.25 miles southeast of the project area.[5] Based on the site conditions and lack of records in the immediate vicinity, this species has low potential to occur on site.
Vireo vicinior (nesting) Gray vireo	BCC/SSC/| Group 1	Summer resident in arid pinyon–juniper, juniper, and chamise–redshank chaparral habitats in mountains of Southern California; elev. 600–2,000 m amsl.[2]	No	Not expected to occur	The gray vireo nests in dense chaparral in high elevations.[12] There is no suitable habitat on site for gray vireo and the project site is outside the known range of this species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Fish					
Cyprinodon macularius Desert pupfish	FE/SE/Group 2/| AFS:EN	Desert springs, outflow marshes, river-edge marshes, backwaters, saline pools, streams, and water less than 1 m depth. Tolerates low oxygen levels, high temperatures, and high salinity; can live in salinities from freshwater to 68 ppt and can withstand temperatures from 9°C to 45°C and DO levels down to 0.1 ppm. Found from San Felipe Creek, San Sebastian Marsh, Salt Creek, and the Salton Sea.[3]	No	Not expected to occur	This species does not occur in Buena Creek or surrounding tributaries.

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Eucyclogobius newberryi Tidewater goby	FE/SSC/ Group 1/AFS:EN	Coastal lagoons, upper ends of lagoons created by small coastal streams, and fresh to brackish water in lower sections of coastal streams; occurs in water 25–100 cm deep and prefers mud substrates and areas of high DO. Found with sparse distribution along the coast of California south of Del Norte County to San Diego County.[3]	No	Not expected to occur	This species does not occur in Buena Creek or surrounding tributaries.
Gasterosteus aculeatus williamsoni Unarmored threespine stickleback	FE/SE, FP/ Group 2 /AFS:EN	Clear, cool, slow-flowing streams with sand or mud substrate, weedy pools, backwaters, among emergent vegetation at stream edge, and in abundant aquatic vegetation in Santa Clara River drainage.[3]	No	Not expected to occur	This species does not occur in Buena Creek or surrounding tributaries.
Gila orcuttii Arroyo chub	None/SSC/ Group 1/AFS:VU	Permanent, small- to moderate-sized, moderate- to high-gradient streams with flow; headwaters, creeks, small to medium rivers, and intermittent streams. Prefers slow-moving sections with sand or mud substrate. Found in Southern California watersheds.[3]	No	Not expected to occur	This species does not occur in Buena Creek or surrounding tributaries.[2, 13]
Oncorhynchus mykiss irideus Southern steelhead rainbow trout – Southern California DPS	FE/SSC/ Group 1/AFS:EN	Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions. Ocean, rivers, creeks, and large inland lakes. Juveniles spend time in ocean before returning to natal stream to spawn; prefer summer temperatures 10°C–15°C. Migration requires deep (3 m) pools with cover along river course.[3]	No	Not expected to occur	This species does not occur in Buena Creek or surrounding tributaries.[2, 13]
Invertebrates					
Apodemia mormo peninsularis Mormon metalmark	None/None/ Group 1	Meadows. Larval host plant *Eriogonum wrightii* ssp. *membranaceum*. Specimen from meadows in Laguna Mountains; elev. 1,676 m amsl.[7]	No	Not expected to occur	Host species does not occur on site; outside known locations for this species.

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Ariolimax columbianus stramineus Palomar banana slug	None/None/ Group 2	Humid coastal forests; Santa Cruz Island.[8]	No	Not expected to occur	Outside known locations for this species.
Branchinecta sandiegonensis San Diego fairy shrimp	FE/None/ Group 1	Small, shallow, vernal pools, occasionally ditches and road ruts in coastal mesa system of Southern California and Baja California.[3]	No	Not expected to occur	No vernal pool habitat on site.
Brennania belkini Belkin's dune tanabid fly	None/None/ Group 2	Coastal sand dunes of Southern California. Only CNDDB records are from USGS Quad: Venice, Los Angeles County.[5]	No	Not expected to occur	No sand dunes on site.
Callophrys thornei Thorne's hairstreak butterfly	FC /None/ Group 1	Tecate cypress on chaparral-covered dry rocky slopes, Otay Mountain.[3]	No	Not expected to occur	No Tecate cypress on site.
Cicindela gabbii Western tidal flat tiger beetle	None/None/ Group 2	Estuaries and mudflats; generally on dark-colored mud; occasional on dry saline flats of estuaries or mouth of river, Orange and San Diego Counties.[5]	No	Not expected to occur	No estuaries or mudflats on site.
Cicindela hirticollis gravida Hairy-necked tiger beetle	None/None/ Group 2	Clean, dry, light-colored sand in upper zone of the beach dunes, close to non-brackish water along coastal California.[5]	No	Not expected to occur	No sand dunes on site.
Cicindela latesignata obliviosa Western beach tiger beetle	None/None/ Group 2	Inhabited the Southern California coastline from La Jolla north to the Orange County line. Occupied saline mudflats and moist sandy spots in estuaries of small streams in the lower zone. Has not been observed in 20 years.[3]	No	Not expected to occur	No estuaries or mudflats on site.
Cicindela senilis frosti Senile tiger beetle	None/None/ Group 2	Coastal saltmarshes; freshwater/brackish lagoons, open patches of *Salicornia*, dried salt pans, and muddy alkali areas. Records in Riverside, San Diego, Los Angeles, and Ventura Counties.[3, 5]	No	Not expected to occur	No estuaries, mudflats, or lagoons on site.

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Cicindela trifasciata sigmoidea S-banded tiger beetle	None/None/ Group 2	Has been identified along the fringe of a mudflat and low marsh habitat in San Diego County.[9]	No	Not expected to occur	No mudflats on site.
Coelus globosus Globose dune beetle	None/None/ Group 1	Foredunes, sand hummocks, and back dunes along immediate coast. Larvae, adults spend time under vegetation or debris from Santa Cruz County south to Ventura County. Possibly extirpated in San Diego and other coastal counties.[3]	No	Not expected to occur	No foredunes, sand hummocks, or back dunes on site.
Danaus plexippus Monarch butterfly	None/None/ Group 2	Overwinters in eucalyptus groves from San Francisco south to northern Baja California.[3]	No	Low	There are some eucalyptus trees scattered on site, but no groves. There is no suitable overwinter tree shelter on site.
Euphydryas editha quino Quino checkerspot butterfly	FE/None/ Group 1/ XERCES:CI	Sparsely vegetated hilltops, ridgelines, and occasionally rocky outcrops; host plant *Plantago erecta* and nectar plants must be present. San Diego and Riverside Counties.[3]	No	Not expected to occur	No *Plantago erecta* or nectar plants on site.
Euphyes vestris harbisoni Harbison's dun skipper	None/None/ Group 1	Canyon bottoms, creeks, and seeps beneath shade of oak trees in riparian habitats supporting host plant *Carex spissa* growing near *Toxicodendron diversilobum*. Found throughout western San Diego County to Santa Ana Mountains of Orange County, with largest population in Ramona–Escondido area.[10]	No	Not expected to occur	No *Carex spissa* or *Toxicodendron diversilobum* were detected on the project site.
Linderiella occidentalis California fairy shrimp	None/None/ Group 1	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools must have very low alkalinity, conductivity and TDS. Central Valley, Santa Rosa Plateau.[3]	No	Not expected to occur	No vernal pool habitat on site.

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Lycaena hermes Hermes copper	FC/None/| Group 1	Coastal sage scrub and southern mixed chaparral supporting at least 5% cover of host plant *Rhamnus crocea*. Adults visit *Eriogonum fasciculatum* and *Helianthus gracilentus*. On well-drained hillsides and canyon bottoms, coastal San Diego County south to Santo Tomas, Baja California.[3]	No	Not expected to occur	No coastal sage scrub or southern mixed chaparral on site. No occurrences of preferred host plant on site.
Megathymus yuccae (harbisoni) Yucca giant skipper	None/None/| Group 2	Coastal dunes, open yucca flats, desert canyons, open woodland, grassland, and old fields. Record from eastern San Diego County near Scissors Crossing. [3, 7]	No	Not expected to occur	No suitable habitat on site.
Panoquina errans Wandering skipper	None/None/| Group 1	Saltmarsh from Los Angeles to Baja California, Mexico. Host plant *Distichlis spicata* in saltmarshes or near beaches, mouths of rivers.[3]	No	Not expected to occur	No saltmarshes on site.
Papilio multicaudata Two-tailed swallowtail	None/None/| Group 1	Semiarid canyon land, mid-level mountains, and canyon bottoms; groves, parks, and roadsides.[3]	No	Low	This species has low potential to occur due to lack of host plant (California hoptree (*Ptelea crenulata*)) on site.
Plebejus saepiolus hilda Hilda greenish blue	None/None/| Group 1	Grassy meadow, near small ponds; oviposit on *Trifolium wormskioldii*. In San Bernardino Mountains.[7]	No	Not expected to occur	No *Trifolium wormskioldii* on site. Site is outside the species' known range.
Pseudocopaeodes eunus eunus Alkali skipper	None/None/| Group 1	Desert seeps, alkali flats of the Kern River, Kern County. Host plant grass: *Distichils spicata* var. *spicata*.[3]	No	Not expected to occur	Site is outside the species' known range.
Pyrgus ruralis lagunae Laguna Mountain skipper	FE/None/| Group 1/| XERCES:CI	Only in a few open meadows in yellow pine forest between 1,524 and 1,829 m amsl in the vicinity of Mount Laguna and Palomar Mountain. Eggs laid on leaves of *Horkelia clevelandii*. Larvae feed on leaves and overwinter on the host plant.[3]	No	Not expected to occur	Site is outside the species' known range.
Streptocephalus woottoni Riverside fairy shrimp	FE/None/| Group 1	Deep, long-lived vernal pools, vernal pool-like seasonal ponds, and stock ponds; warmwater pools that have low to moderate TDS; in patches of grassland or agriculture interspersed in coastal sage scrub vegetation in Southern California.[3]	No	Not expected to occur	No vernal pool habitat on site.

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Trigonoscuta blaisdelli Blaisdell trigonoscuta weevil	None/None/ Group 2	*Trigonoscuta* spp.: Coastal, desert, or inland sand dunes; wide variety of plant types used; the larvae feed on the roots and the adults on the leaves.[11]	No	Not expected to occur	No sand dune habitat on site.
Tryonia imitator California brackishwater snail	None/None/ Group 2	Coastal lagoons, herbaceous wetlands, and brackish saltmarshes; distributed among semicontinuous estuarine habitats along the coast.[3]	No	Not expected to occur	No brackish water on site.
		Mammals			
Bassariscus astutus Ringtail	None/None/ Group 2	Mixed forests and shrublands near rocky areas or riparian habitats. Forages near water and is seldom found more than 1 km from a water source. Is widely distributed throughout California.[2]	No	Not expected to occur	Residence has domestic pets and farm animals on site that would discourage use of the area by ringtails. There are no CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Chaetodipus californicus femoralis Dulzura pocket mouse	None/SSC/ Group 2	Occurs in a variety of habitats including coastal scrub, chaparral, and grasslands. Microhabitat includes grass–chaparral edges.[5]	No	Low	Preferred grassland–chaparral edge habitat does not occur on the project site. This species is known to occur within the project vicinity.[5]
Chaetodipus fallax fallax Northwestern San Diego pocket mouse	None/SSC (full species)/Group 2	Occurs in coastal scrub, chaparral, grasslands, sagebrush, and similar habitats in western San Diego County. Microhabitat includes sandy, herbaceous areas, usually in association with rocks or coarse gravel.[5]	No	Low	Some suitable open areas occur in the disturbed grassland area and sandy soils, but likely too disturbed to support the species. Nearest CNDDB occurrence is approximately 5.75 miles southwest of the project site.[5]
Chaetodipus fallax pallidus Pallid San Diego pocket mouse	None/SSC (full species)/Group 2	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland. Along southern margins of the Mojave Desert, along northern slopes of the San Bernardino Mountains, western edge of the Colorado Desert south to Baja California.[5]	No	Not expected to occur	Very limited suitable habitat occurs on site and the project area is outside the preferred range of the species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

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Choeronycteris mexicana Mexican long-tongued bat	None/SSC/ Group 2/ WBWG:M	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon–juniper woodland. Roosts in caves, mines, and buildings. Summer resident in San Diego County.[2]	No	Not expected to occur	Project site is outside the preferred range of the species. Riparian scrub is disturbed and elevation of the site is below species' known elevation range. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Dipodomys stephensi Stephens' kangaroo rat	FE/ST/Group 1	Open habitat, grassland, and sparse coastal sage scrub; sandy loam and loamy soils with low clay content; gentle slopes (<30%) and sparse vegetative cover. Found around the San Jacinto Valley.[2]	No	Not expected to occur	This species typically prefers native bunch grass, which does not occur on site. The open areas on site are regularly disturbed through residential use. Nearest CNDDB and USFWS records are more than 5 miles northwest of the project site.[5, 13]
Euderma maculatum Spotted bat	None/SSC/ Group 2/ WBWG:H	Foothills, mountains, desert regions of Southern California including arid deserts, grasslands, and mixed conifer forests. Roosts in rock crevices and cliffs. Feeds over water and along washes.[2]	No	Not expected to occur	This species is typically found in desert areas. No rock crevices or cliffs for roosting exist in the project vicinity.
Lepus californicus bennettii San Diego black-tailed jackrabbit	None/SSC/ Group 2	Arid habitats with open ground; grasslands, coastal sage scrub, agriculture, disturbed areas, and rangelands in Southern California.[2, 3]	No	Low	Some suitable habitat in disturbed open grassland section; however, there are no records within 6 miles of the project site. This species is typically found in more arid, open landscapes.
Macrotus californicus California leaf-nosed bat	None/SSC/ Group 2/ WBWG:H	Desert riparian, desert wash, desert scrub, desert succulent shrub, alkali desert scrub, and palm oasis. Found from Riverside, Imperial, San Diego, and San Bernardino Counties south to the Mexican border; fairly common along parts of the Colorado River; elev. approximately 600 m amsl.[2]	No	Not expected to occur	This species is typically found in desert areas. No suitable habitat occurs on the project site.

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Myotis ciliolabrum Western small-footed myotis	None/None/ Group 2/ WBWG:M	Occurs in a wide variety of habitats, primarily in arid wooded and brushy uplands near water. In coastal California it occurs from Contra Costa County south to the Mexican border; occurs in the Sierra Nevada and Great Basin and desert habitats from Modoc to Kern and San Bernardino Counties. Found from sea level to at least 2,700 m amsl.[2]	No	Low	There is some suitable foraging habitat on the project site. Limited suitable roost sites in the project vicinity.
Myotis evotis Long-eared myotis	None/None/ Group 2/ WBWG:M	Roosts in buildings, in crevices, under bark, and in snags. Caves used as night roosts. Feeds along habitat edges, in open habitats, and over water. Occurs primarily along the entire coast and in the Sierra Nevada, the Cascades, and the Great Basin; elev. 0–2,700 m amsl.[2]	No	Low	There is some suitable foraging habitat on the project site. Limited suitable roost sites in the project vicinity.
Myotis thysanodes Fringed myotis	None/None/ Group 2/ WBWG:H	Pinyon–juniper, valley foothill hardwood, and hardwood–conifer habitats. Roosts in caves, mines, buildings, or crevices. Forages over open habitats, early successional stages, streams, lakes, and ponds. Found throughout California except the Central Valley and the Colorado and Mojave Deserts.[2]	No	Low	There is some suitable foraging habitat on the project site. Limited suitable roost sites in the project vicinity. Riparian woodland covers the stream so there is a lack of open water for foraging.
Myotis volans Long-legged myotis	None/None/ Group 2/ WBWG:H	Occupies woodland and forest habitats over 1,200 m amsl. Feeds over open water and over open habitats such as chaparral and coastal scrub, using denser woodlands and forests for cover and reproduction. Roosts in rock crevices and buildings, under tree bark, and in snags, mines, and caves. Found in the Coastal Ranges, Cascade/Sierra Nevada Ranges, the Great Basin, and ranges in Mojave Desert.[2]	No	Not expected to occur	No suitable habitat occurs on site and the project area is below the preferred elevation range of the species.

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Myotis yumanensis Yuma myotis	None/None/ Group 2/ WBWG:LM	Closely tied to open water, which is used for foraging; open forests and woodlands are optimal habitat throughout California; elev. 0–3,300 m amsl.[2]	No	Low	Limited suitable habitat on site. Waters in dSCLO are covered by canopy and do not provide preferred foraging habitat, but the freshwater marsh is open. No CNDDB records within a 5-mile radius of the project site.[5]
Neotoma lepida intermedia San Diego desert woodrat	None/SSC/ Group 2	Joshua tree, pinyon–juniper, mixed and chamise–redshank chaparral, sagebrush, and most desert habitats. Found south of San Luis Obispo County to San Diego County and San Bernardino and Riverside Counties; elev. 0–2,600 m amsl.[2, 3]	No	Low	No suitable shrubland habitat on site. No CNDDB records within a 5-mile radius of the project site.[5]
Nyctinomops femorosaccus Pocketed free-tailed bat	None/SSC/ Group 2/ WBWG:M	Rocky desert areas with high cliffs or rock outcrops. Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis habitats in Riverside, San Diego, and Imperial Counties.[2]	No	Low	No suitable desert habitat on site. No CNDDB records within a 5-mile radius of the project site.
Nyctinomops macrotis Big free-tailed bat	None/SSC/ Group 2/ WBWG:MH	Rugged, rocky canyons in Riverside, Los Angeles, and San Diego Counties; scattered records across California to Oakland.[2, 5]	No	Low	Low potential to forage on site, but no roosting habitat. No CNDDB records within a 5-mile radius of the project site.[5]
Onychomys torridus ramona Southern grasshopper mouse	None/SSC/ Group 2	Alkali desert scrub and other desert scrub habitats and sparse coastal scrub, especially with friable soils for digging, in the Mojave Desert and southern Central Valley.[2]	No	Not expected to occur	Outside the known range of this species. No suitable desert habitats occur on the project site. No CNDDB records within a 5-mile radius of the project site.[5]
Ovis canadensis nelsoni pop. 2 Peninsular bighorn sheep DPS	FE/ST, FP/ Group 1	Alpine dwarf-shrub, low sage, sagebrush, bitterbrush, pinyon–juniper, palm oasis, desert riparian, desert succulent shrub, desert scrub, subalpine conifer, perennial grassland, montane chaparral, and montane riparian habitats from San Jacinto and Santa Rosa Ranges south to Mexico.[2]	No	Not expected to occur	Outside the species' known range. This species is limited to the Peninsular Ranges in eastern San Diego County.

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Perognathus longimembris brevinasus Los Angeles pocket mouse	None/SSC/ Group 2	Lower-elevation grassland, alluvial sage scrub, and coastal sage scrub. Historically occurred in the coastal basins of Southern California, from San Fernando and Burbank in the San Fernando Valley east to Cabazon, south through the San Jacinto and Temecula Valleys to Aguanga, Warner Pass, Vail, and Temecula. Current range does not include the San Fernando Valley.[6]	No	Not expected to occur	Lack of alluvial features on site, despite having disturbed grassland. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Perognathus longimembris internationalis Jacumba pocket mouse	None/SSC/ Group 2	Desert riparian, desert scrub, desert wash, coastal scrub, and sagebrush in San Diego and Riverside Counties.[2, 5]	No	Not expected to occur	No suitable desert or scrub habitat on site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Perognathus longimembris pacificus Pacific pocket mouse	FE/SSC/Group 1	Coastal dunes, river alluvium, and coastal sage scrub with firm sandy soils; along immediate coast in San Diego, Orange, and Los Angeles Counties.[3, 5]	No	Not expected to occur	No suitable habitat occurs on site. Sandy soils are in disturbed grassland area and unlikely to support the species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Puma concolor Mountain lion	None/None/ Group 2	Coastal sage scrub, chaparral, riparian, woodlands, and forest; rests in rocky areas and on cliffs and ledges that provide cover. Most abundant in riparian areas and brushy stages of most habitats throughout California except deserts.[2]	No	Low	No suitable scrub habitat occurs on site and dSCLO does not provide preferred cover or hunting habitat. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Taxidea taxus American badger	None/SSC/ Group 2	Dry, open treeless areas, grasslands, and coastal sage scrub, especially with friable soils, throughout California.[2]	No	Low	Some suitable open habitat occurs in the grassland areas with loose sandy soils (Las Posas fine sandy loam); however, the presence of the humans and farm animals likely exclude this species from the site. Nearest CNDDB occurrence is approximately 1.75 miles south of the project area.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
		Reptiles			
Actinemys marmorata pallida Western pond turtle	None/SSC/ Group 1	Ponds, rivers, streams, creeks, marshes, irrigation ditches with abundant vegetation and either rocky or muddy bottoms, woodland, forests, and grasslands. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish or seawater. Found in suitable aquatic habitat throughout California west of the Sierra–Cascade crest and in the Mojave Desert along the Mojave River and its tributaries; elev. 0–1,430 m amsl.[1, 2]	No	Low	Some suitable habitat occurs in waters within dSCLO, but limited areas for basking since canopy cover is thick. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Aspidoscelis hyperythra beldingi Belding's orange-throated whiptail	None/SSC (for full species)/ Group 2	Coastal sage scrub, chamise–redshank chaparral, mixed chaparral, and valley–foothill hardwood especially in areas with summer fog. Found from Santa Ana River (Orange County) and near Colton (San Bernardino County), west of Peninsular Ranges, south throughout Baja California; elev. 0–610 m amsl.[1, 2]	No	Low	No suitable habitat occurs in the project area. Nearest CNDDB occurrence is approximately 3 miles northeast of the project area.[5]
Aspidoscelis tigris stejnegeri Coastal whiptail	None/None/ Group 2	Variety of habitats, primarily hot and dry open areas with sparse foliage: chaparral, woodland, and riparian. Occurs in coastal Southern California, west of the Peninsular Ranges and south of the Transverse Ranges, north to Ventura County; elev. 0–2,130 m amsl.[1]	No	Low	Some suitable open areas occur in the disturbed grassland area.
Coleonyx switaki Switak's banded gecko (barefoot gecko)	None/ST/ Group 2	Primarily in rocky areas at the heads of canyons. Found in areas of massive rocks and rock outcrops, rock cracks, and crevices. Found in the Peninsular Ranges and at Scissor Crossing near Anza Borrego Desert.[2]	No	Not expected to occur	Project area outside the known range of the species. Suitable large rocky outcrops absent from the project site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Coleonyx variegatus abbotti San Diego banded gecko	None/None/ Group 1	Rocky areas in coastal sage and chaparral; occurs most often in granite or rocky outcrops in coastal and cismontane Southern California from interior Ventura County south, and is absent from the extreme outer coast.[1, 2]	No	Not expected to occur	Suitable rocky chaparral habitat absent from project site; granite outcrops also absent.
Crotalus ruber ruber Northern red-diamond rattlesnake	None/SSC/ Group 2	Arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, cultivated areas, rocky areas, and dense vegetation. Occurs along coastal San Diego County to the eastern slopes of the mountains and north through western Riverside County into southernmost San Bernardino County; elev. 0–900 m amsl.[1, 2]	No	Low	Suitable woodland and rocky grassland habitat does not occur on site, and is limited in the vicinity due to surrounding land use. Dense vegetation is limited to dSCLO, which is not a preferred habitat type of the species. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Diadophis punctatus similis San Diego ringneck snake	None/None/ Group 2	Prefers moist habitats, including wet meadows, rocky hillsides, gardens, farmlands, grassland, chaparral, mixed coniferous forests, and woodlands. Found mainly in San Diego County along the coast and into the Peninsular Range and into southwestern San Bernardino County.[1]	No	Not expected to occur	No suitable moist or rocky habitats on site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Lampropeltis zonata (pulchra) California mountain kingsnake (San Diego pop.)	None/SSC/ Group 2	Coniferous forests, oak pine woodlands, riparian woodlands, chaparral, manzanita, coastal sage scrub, wooded areas near a stream with rock outcrops, talus, or rotting logs. In central San Diego County Peninsular Ranges—Laguna, Palomar, Volcan, and Hot Springs Mountains; Santa Ana Mountains; and in the Hollywood Hills and Santa Monica Mountains; elev. 0–2,750 m amsl.[1]	No	Not expected to occur	No suitable habitat on site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Lichanura [=Charina] trivirgata roseofusca Coastal rosy boa	None/None/ Group 2	Rocky chaparral, coastal sage scrub, oak woodlands, and desert and semidesert scrub in hillsides and canyons; scrub flats with good cover; common in riparian areas but does not require permanent water.	No	Low	Suitable woodland and rocky grassland habitat does not occur on site, and is limited in the vicinity due to surrounding land use.

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Phrynosoma mcallii Flat-tailed horned lizard	None/SSC/ Group 1	Fine sand and sparse vegetation in desert washes and desert flats. It is probably most abundant in areas of creosote bush and is found in desert scrub, wash, succulent shrub, and alkali scrub habitats. Common in areas with high density of harvester ants and fine windblown sand; rarely occurs on dunes. Found in central Riverside, eastern San Diego, and Imperial Counties; elev. 0–180 m amsl.[1, 2]	No	Not expected to occur	Outside the known range of this species. No sand or desert wash habitat on site.
Salvadora hexalepis virgultea Coast patch-nosed snake	None/SSC/ Group 2	Semiarid brushy areas and chaparral in canyons, rocky hillsides, and plains from northern Carrizo Plains south through coastal zone, south and west of the deserts into coastal northern Baja California; elev. from below sea level to 2,130 m amsl.[1]	No	Low	There is no suitable shrubland on site.
Sauromalus ater Common chuckwalla	None/None/ Group 2	Rocky flats and hillsides, lava flows, large outcrops, and creosote bush habitats. Also found in atypical places (e.g., burrows in dirt, piles of railroad ties, artificial riprap). Found in the Mojave and Colorado Deserts from desert slopes of mountains, north through Owens Valley and east to the Colorado River; elev. 0–1,800 m amsl.[1]	No	Not expected to occur	No desert habitat on site and project site is outside the known range of the species.
Sceloporus graciosus vandenburgianus Southern sagebrush lizard	None/None/ Group 2	Shrublands such as chaparral, manzanita, and ceanothus; open pine and Douglas-fir forests in mountains; found in areas with scattered low bushes and abundant sun. Transverse and Peninsular Ranges of Southern California and Sierra San Pedro Martir of northern Baja California. Subspecies found at higher elevations: 1,371–2,926 m amsl.[1]	No	Not expected to occur	No suitable shrubland habitat on site.

Scientific Name / Common Name	Status (Federal/State/ County/Other)	Habitat Preferences / Requirements	Verified On Site (Direct/Indirect Evidence)	Potential to Occur On Site	Factual Basis for Determination
Taricha torosa torosa Coast range newt (Monterey County south only)	None/SSC/ Group 2	Wet forests, oak forests, chaparral, and rolling grasslands; in Southern California, occupies drier chaparral, oak woodland, and grasslands. Coastal Ranges from central Mendocino County south to northern San Diego County south to the vicinity of Boulder Creek. Found the length of the Sierra Nevada, primarily in foothills. Monterey County to San Diego County. Migrations to and from breeding site may occasionally exceed 1 km; elev. 0–1,830 m amsl.[1, 2]	No	Not expected to occur	No suitable habitat on site. No CNDDB records within the site's surrounding USGS nine-quad search area.[5]
Uma notata Colorado Desert fringe-toed lizard	None/SSC/ Group 1	Fine, loose, wind-blown sand dunes, dry lakebeds, sandy beaches or riverbanks, desert washes, and sparse desert scrub in the Colorado and Sonoran Deserts south of the Salton Sea in Imperial and San Diego Counties; elev. 0–180 m amsl.[2]	No	Not expected to occur	Site is outside the known range of the species. No sand dune, lakebed, or sandy beach habitat on site.

Status Designations

Federal Designations:

BCC	U.S. Fish and Wildlife Service: Birds of conservation concern
FC	Candidate for federal listing as threatened or endangered
(FD)	Federally delisted; monitored for 5 years
FE	Federally listed as endangered
FT	Federally listed as threatened
FPT	Federally proposed as threatened

State Designations:

SSC	California species of special concern
FP	California Department of Fish and Wildlife fully protected species
WL	California Department of Fish and Wildlife watch list species
SE	State listed as endangered
ST	State listed as threatened
(SD)	State delisted

Other Designations:

WBWG:H	Western Bat Working Group: High priority
WBWG:LM	Western Bat Working Group: Low–medium priority

WBWG:M	Western Bat Working Group: Medium priority
WBWG:MH	Western Bat Working Group: Medium–high priority
AFS:EN	American Fisheries Society: Endangered
AFS:VU	American Fisheries Society: Vulnerable
XERCES:CI	Xerces Society: Critically imperiled

m = meters; amsl = above mean sea level; dSCLO = disturbed southern coast live oak riparian forest; USFWS = U.S. Fish and Wildlife Service; CNDDB = California Natural Diversity Database; CDFW = California Department of Fish and Wildlife; USGS = U.S. Geological Survey; ppt = parts per thousand; DO = dissolved oxygen; ppm = parts per million; cm = centimeters; DPS = distinct population segment; TDS = total dissolved solids; km = kilometers

References

1. CaliforniaHerps.com. 2014. "California Herps: A Guide to the Amphibians and Reptiles of California." Accessed February 10, 2014. http://californiaherps.com
2. CDFW (California Department of Fish and Wildlife). 2014a. "CWHR Life History Accounts and Range Maps." California Wildlife Habitat Relationships System (CWHR). Accessed February 10, 2014. http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx.
3. NatureServe Explorer. 2014. "NatureServe Explorer: An Online Encyclopedia of Life." Accessed February 10, 2014. http://www.natureserve.org/explorer/.
4. Sogge, M.K., D. Ahlers, and S.J. Sferra. 2010. "A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher." U.S. Geological Survey Techniques and Methods 2A-10.
5. CDFW. 2014b. California Natural Diversity Database (CNDDB) RareFind, Version 3.1.0. Accessed February 10, 2014.
6. Bolster, B.C., editor. 1998. *Terrestrial Mammal Species of Special Concern in California*. Draft Final Report prepared by P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Report submitted to California Department of Fish and Game Wildlife Management Division, Nongame Bird and Mammal Conservation Program for Contract No.FG3146WM. Accessed February 11, 2014. http://www.dfg.ca.gov/wildlife/nongame/ssc/1998mssc.html.
7. Warren, A.D., K.J. Davis, E.M. Stangeland, J.P. Pelham, and N.V. Grishin. 2014. "Illustrated Lists of American Butterflies." Accessed February 11, 2014. http://butterfliesofamerica.com
8. Pilsbry, H.A., and E.G. Vanatta. 1896. "Revision of the North American Slugs: *Ariolimax* and *Aphallarion*." *Proceedings of the Academy of Natural Sciences* 48: 339–350. Accessed February 11, 2014. http://www.biodiversitylibrary.org/page/1675705#page/351/mode/1up.
9. USFWS (U.S. Fish and Wildlife Service). 2006. *San Diego Bay National Wildlife Refuge Final Comprehensive Conservation Plan/EIS*. Chapter 3. September 29, 2006. Accessed February 11, 2014. http://www.fws.gov/sandiegorefuges/new/ccp/ccp.htm.
10. City of Carlsbad. 2004. *Habitat Management Plan for Natural Communities in the City of Carlsbad*. December 1999; amended in 2004. Accessed February 11, 2014. http://www.carlsbadca.gov/services/environmental/hmp/docs/Pages/hmp.aspx.
11. Brown, N.L., C.D. Johnson, and D.F. Williams. 2006. "Doyen's dune weevil, *Trigonoscuta* sp." Turlock, California: Endangered Species Recovery Program, CSU Stanislaus. Accessed February 11, 2014. http://esrp.csustan.edu/speciesprofiles/profile.php?sp=trsp.
12. Unitt, P. 2004. *San Diego County Bird Atlas*. Proceedings of the San Diego Society of Natural History, no. 39. San Diego, California: Ibis Publishing Company.
13. USFWS. 2014. "Critical Habitat and Occurrence Data" [map]. Accessed March 21, 2014. http://www.fws.gov/data.

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APPENDIX G

Data Station Forms

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Lone Oak | City/County: Vista/SD | Sampling Date: 9/20/2013

Applicant/Owner: | State: CA | Sampling Point: 1

Investigator(s): Callie Ford and Scott Gressard | Section, Township, Range: S21 T12S R3W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): None | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 33.11'0.55 " N | Long: 117.11'59.67" W | Datum:

Soil Map Unit Name: Greenfield sandy loam 2-5% slope | NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●)	No ( )	
Hydric Soil Present?	Yes (●)	No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Wetland Hydrology Present?	Yes (●)	No ( )	

Remarks: Data station in open water.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Unknown non-native (canopy only)*	10	No	
2.			
3.			
4.			
Total Cover:	10 %		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Schoenoplectus acutus*	25	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	25 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	25 (A)		25 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

- [x] Dominance Test is >50%
- [x] Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture[3]	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[4]:

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks: Soil sample not taken. Assume hydric soils because is within a pond.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☒ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ◉ No ○ Depth (inches): unknown

Water Table Present? Yes ◉ No ○ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Aerial photo (Bing 2013).

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Lone Oak Project | City/County: Vista/SD | Sampling Date: 9/20/201

Applicant/Owner: | State: CA | Sampling Point: 2

Investigator(s): Callie Ford and Scott Gressard | Section, Township, Range:

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): concave | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 33.11'0.40" N | Long: 117.11'59.41" W | Datum:

Soil Map Unit Name: Greenfield sandy loam 2-5% slope | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes (●)	No ( )	
Hydric Soil Present?	Yes (●)	No ( )	**Is the Sampled Area within a Wetland?** Yes (●) No ( )
Wetland Hydrology Present?	Yes (●)	No ( )	

Remarks: Data station along outer boundary of Schoenoplectus acutus

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix lasiolepis (canopy)*	20	No	OBL
2. *Washingtonia robusta (canopy)*	10	No	FACW
3.			
4.			
Total Cover:	30 %		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Schoenoplectus acutus*	75	Yes	OBL
2. *Urtica dioica*	3	No	FAC
3. *Ricinus communis*	3	No	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	81 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 15 % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	10	x 2 =	20
FAC species	3	x 3 =	9
FACU species	3	x 4 =	12
UPL species		x 5 =	0
Column Totals:	111 (A)		136 (B)

Prevalence Index = B/A = 1.23

Hydrophytic Vegetation Indicators:

- [X] Dominance Test is >50%
- [X] Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes (●) No ( )

Remarks:

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture[3]	Remarks
0-10	5Y 2.5/2	100					loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[4]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks: Assumed hydric because of perennial saturation

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☒ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ◉	No ○	Depth (inches): 10"
Saturation Present? (includes capillary fringe)	Yes ◉	No ○	Depth (inches): 0"

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Lone Oak Project | City/County: Vista/SD | Sampling Date: 9/20/2013

Applicant/Owner: | State: CA | Sampling Point: 3

Investigator(s): Callie Ford and Scott Gressard | Section, Township, Range: S28 T11S R3W

Landform (hillslope, terrace, etc.): bank | Local relief (concave, convex, none): convex | Slope (%): 5

Subregion (LRR): C - Mediterranean California | Lat: 33.11'0.31" N | Long: 117.11'59.33" W | Datum:

Soil Map Unit Name: Greenfield sandy loam 2-5% slope | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area**
Wetland Hydrology Present?	Yes ( )	No (●)	**within a Wetland?** Yes ( ) No (●)

Remarks: Data station taken 5' from #2, on slope outside of Freshwater marsh.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix lasiolepis (canopy)*	20	No	FACW
2. *Washingtonia robusta (canopy)*	20	No	FACW
3.			
4.			
Total Cover:	40 %		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Urtica dioica*	5	No	FAC
2. *Schoenoplectus acutus*	20	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	25 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 60 % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	40	x 2 =	80
FAC species	5	x 3 =	15
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	65 (A)		115 (B)

Prevalence Index = B/A = 1.77

Hydrophytic Vegetation Indicators:

- [ ] Dominance Test is >50%
- [x] Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture[3]	Remarks
0-6	2.5Y 3/2	100	none				loamy sand	
6+								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[4]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: hard soil

Depth (inches): 6"+

Hydric Soil Present? Yes ○ No ◉

Remarks: No hydric soils

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Lone Oak Project | City/County: Vista/SD | Sampling Date: 9/20/2013

Applicant/Owner: | State: CA | Sampling Point: 4

Investigator(s): CJF and SCG | Section, Township, Range: S28 T11S R3W

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none | Slope (%):

Subregion (LRR): C - Mediterranean California | Lat: 33.11'0.31"N | Long: 117.11'59.19"W | Datum:

Soil Map Unit Name: Greenfield sandy loam 2-5% slope | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes ( )	No (●)	

Remarks: Data station taken at top of bank.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua (canopy)*	40	No	FAC
2. *Washingtonia robusta (canopy)*	10	No	FACW
3.			
4.			
Total Cover:	50 %		
Sapling/Shrub Stratum			
1. *Quercus agrifolia (sapling)*	10	Yes	Not Listed
2.			
3.			
4.			
5.			
Total Cover:	10 %		
Herb Stratum			
1. *Bromus diandrus*	40	Yes	Not Listed
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	40 %		
Woody Vine Stratum			
1. *none*			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species	10	x 2 =	20
FAC species	40	x 3 =	120
FACU species		x 4 =	0
UPL species	50	x 5 =	250
Column Totals:	100 (A)		390 (B)

Prevalence Index = B/A = 3.90

Hydrophytic Vegetation Indicators:

- [ ] Dominance Test is >50%
- [ ] Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture[3]	Remarks
0-4	10YR 3/2	100	none				sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[4]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: Hard soil

Depth (inches): 4"+

Hydric Soil Present? Yes ○ No ◉

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Lone Oak Project | City/County: Vista/SD | Sampling Date: 9/20/2013

Applicant/Owner: | State: CA | Sampling Point: 5

Investigator(s): Callie Ford and Scott Gressard | Section, Township, Range: S28 T11S R3W

Landform (hillslope, terrace, etc.): creek | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): C - Mediterranean California | Lat: 33.11'0.39N | Long: 117.12'0.81W | Datum:

Soil Map Unit Name: Greenfield sandy loam 2-5% slope | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ◉ No ○ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ○ No ◉
Wetland Hydrology Present?	Yes ◉	No ○	

Remarks: Data station taken within creek.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:	%		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	%		
Woody Vine Stratum			
1. *none*			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	(A)		0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ○ No ◉

Remarks: No vegetation within Buena Creek. Vegetation on top of bank outside investigation area.

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture[3]	Remarks
0-4	2.54 3/2	100	none				sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[4]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks: Assume hydric because in perennial creek.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☒ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ◉ No ○ Depth (inches): 3"+

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Lone Oak Project | City/County: Vista/SD | Sampling Date: 9/20/2013

Applicant/Owner: | State: CA | Sampling Point: 6

Investigator(s): Callie Ford and Scott Gressard | Section, Township, Range: S28 T11S R3W

Landform (hillslope, terrace, etc.): bank | Local relief (concave, convex, none): none | Slope (%): 5

Subregion (LRR): C - Mediterranean California | Lat: 33.11'0.63" N | Long: 117.12'1.05"W | Datum:

Soil Map Unit Name: Greenfield sandy loam 2-5% slope | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes ( )	No (●)	

Remarks: Data station taken at top of bank.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus agrifolia*	40	Yes	Not Listed
2. *Non-native*	60	Yes	Not Listed
3.			
4.			
Total Cover:	100%		
Sapling/Shrub Stratum			
1. *None*			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Cyperus eragrostis*	3	No	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	3 %		
Woody Vine Stratum			
1. *Toxicodendron diversilobum*	3	No	Not Listed
2.			
Total Cover:	3 %		

% Bare Ground in Herb Stratum 80 % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species	3	x 2 =	6
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species	103	x 5 =	515
Column Totals:	106 (A)		521 (B)

Prevalence Index = B/A = 4.92

Hydrophytic Vegetation Indicators:

- [ ] Dominance Test is >50%
- [ ] Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture[3]	Remarks
0-7	2.5Y 3/2	100	none				loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[4]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: Soil too hard

Depth (inches): 7"

Hydric Soil Present? Yes ○ No ◉

Remarks: No redox features

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: