

February 18, 2019

Woodcrest Real Estate Ventures Attn: Steve Powell 1410 Main Street, Suite C Ramona, CA 92065

Biological Resource Letter Report

PROJECT NAME: Jamul Commercial

RECORD ID: PDS2018-MUP-18-008 and PDS2018-TPM-21262

ENVIRONMENTAL LOG NO.: PDS2018-ER-18-19-008

PROJECT ADDRESS: 3018 Jefferson Road, Jamul, San Diego County, CA

APN: 596-071-60

TRUST ACCOUNT NO.: 2078699-D-05254

Dear Mr. Powell.

Blackhawk Environmental, Inc. (Blackhawk) conducted biological fieldwork for the Jamul Commercial Project (Project) on APN: 596-071-60 located at 3018 Jefferson Road in the unincorporated community of Jamul in San Diego County, California (Figure 1) (County of San Diego Initial Consultation Record I.D. PDS2017-IC-17-081). This Biological Resource Letter Report (Report) summarizes the results of the surveys, existing conditions, and proposed impacts and mitigation, in accordance with the San Diego County Code of Regulatory Ordinances Chapter 6 Resource Protection Ordinance (County 2012), the County of San Diego Biological Mitigation Ordinance (County 2010a), the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements (County 2010b), and the County of San Diego Report Format and Content Requirements (County 2010b). This Report was prepared for the County of San Diego by Blackhawk under the supervision and review of County-approved CEQA Consultant Kris Alberts.

SUMMARY

The proposed Jamul Commercial Project includes the development of approximately 12.8 acres of disturbed habitat (former olive orchard) within a 19.41-acre parcel located at 3018 Jefferson Road in the Jamul-Dulzura Community Plan Area of unincorporated San Diego County. The Project boundary also contains 2.09 acres of coast live oak woodland, 0.57 acres of coastal sage scrub and 3.35 acres of disturbed habitat that will not be impacted and placed into an on-site Biological Open Space Easement, less approximately 0.77 acres of Irrevocable Offer of Dedication (IOD) easements that exist within the Project boundary along both Jefferson and Campo Roads. These easements include coast live oak woodland and disturbed habitat which will not be included in the 5.84 acres of on-site Biological Open Space Easement (Figure 5; includes the protection of the disturbed habitat adjacent to Resource Protection Ordinance (RPO) lands and Table 3) established from the unimpacted lands described above. The Biological Open Space Easement will include the coast live oak woodland, oak root protection zone, the RPO wetland and its associated buffer, coastal sage scrub and disturbed areas in between. A Limited Building Zone Easement will extend an additional 50 feet beyond the



perimeter of the Biological Open Space edge. In an email from County Assistant Fire Marshal James Pine, dated December 10, 2018, the County agreed to accept a reduction of the Fuel Modification Zone (FMZ) down to 59 feet with two-hour construction as mitigation for those portions of the structure that have less than 100 feet of FMZ. Selective vegetation clearing will only occur within the FMZ.

No access or disturbance would be allowed beyond the Biological Open Space Easement boundary. Signage along the Biological Open Space Easement boundary is proposed to stipulate the protected status of the area while discouraging human entry (other than basic stewardship such as trash removal) while allowing wildlife to enter and exit without any risk of exclusion, entrapment or entanglement.

The proposed development would include subdividing the property into two separate legal parcels, while concurrently processing a Major Use Permit (MUP) for two proposed uses. The entire parcel currently includes numerous transient living establishments scattered throughout the remnants of an olive orchard. The Project is located in Jamul, in south-central San Diego County, situated just north of State Route 94 (SR 94), along the west side of Jefferson Road. The Project is located within the areas covered by the approved MSCP, with the majority of the Project located within unincorporated land in the Metro-Lakeside-Jamul segment, outside of the Pre-Approved Mitigation Area (PAMA), with only the northern portion of the parcel located within the PAMA. The Project is detailed in the County of San Diego Initial Consultation Record I.D. PDS2017-IC-17-081.

This report provides information regarding existing conditions and impact analyses, based on the current Project design. Additionally, this report also includes recommended mitigation measures to minimize impacts before, during and after Project construction.

The initial site visit was conducted by Blackhawk biologists Seth Reimers and Kris Alberts on October 2, 2017 and included a general biological survey and jurisdictional assessment. Three habitat types were identified on-site: disturbed habitat, coastal sage scrub and coast live oak woodland. Of these, only coastal sage scrub and coast live oak woodland are afforded protection under the County's RPO. A second site visit was conducted by Blackhawk biologists Seth Reimers and Kris Alberts on June 25, 2018 and included a sensitive species mapping survey and focused rare plant survey.

No state or federally threatened and/or endangered plants or wildlife species were observed on-site.

A preliminary literature review revealed that 12 sensitive wildlife and three sensitive plant species occur within one mile of the Project site. County of San Diego staff also issued a Scoping Letter that required further analysis for additional special-status plant and wildlife species. Following the site visits, it was determined that there were four County-sensitive wildlife species present: Cooper's hawk (Accipiter striatus; Group 1 species, one individual observed), red-shouldered hawk (Buteo lineatus; Group 1 species, one individual observed) turkey vulture (Cathartes aura; Group 1 species, one individual observed) and Belding's orange-throated whiptail (Aspidoscelis hyperythra beldingi; Group 2 species, four individuals observed). It was also determined that there were two County-sensitive plant species present: Engelmann oak (Quercus engelmannii; County List D species) and San Diego County viguiera (Bahiopsis laciniata; County List D species).

Seven of the sensitive wildlife species identified during the preliminary literature review have a low to moderate potential to occur on site, due to the presence of appropriate habitats and/or other



conditions or were found present. However, no sensitive plant species identified during the preliminary literature review have any potential to occur on site.

Suitable habitat for two State and/or federally listed species [Quino checkerspot (Euphydrya editha quino) and coastal California gnatcatcher (Polioptila californica californica)] occurs on the northern portion of the Project site. However, all suitable habitat for both species is proposed to be dedicated as a Biological Open Space, and no suitable habitat for either species is proposed for development. Therefore, impacts to both species can be considered less than significant, regardless of presence/absence.

Impacts to disturbed habitat on site would occur as a result of the Project, though the impacts would be considered less than significant with the proposed mitigation herein. Potential impacts to sensitive plant and wildlife species with low to moderate potential to occur on-site, or present status, will be mitigated by the implementation of a Project-specific pre-construction nesting bird mitigation measure, biological monitoring and other measures to decrease the Project from contributing to significantly cumulative impacts to the resources involved.

PLEASE NOTE: In select locations along the westerly walkway of Jefferson Road, minor enhancements may be required in the IOD easement area for pedestrian improvements. Said improvements consist of minor grading with no biological disturbance, trash and dead wood debris cleanup, and regrooming of the existing decomposed granite (DG) path. Depending on need, encroachment may be up to five feet within the IOD easement. Proposed enhancements would occur for approximately 290 feet south on Jefferson Road from Olive Vista Drive, west of the existing fence line.



INTRODUCTION, PROJECT DESCRIPTION, LOCATION AND SETTING

The proposed Project site exists on a relic olive orchard formerly operated by Simpson Farms. The earliest known aerial imagery from 1928 shows the Project site as an established orchard, meaning it was likely planted as an orchard around the turn of the 20th century or shortly thereafter. This land conversion occurred well before any State, Federal and/or local regulations concerning such activities, including County-imposed grading regulations initiated in 1966. As such, the previously conducted land conversion from native habitat to an olive orchard was legal. At some point in the latter 20th century, the orchard was left to go fallow and was not tended to any longer. The Project site then became a haven for illegal dumping, homeless encampments, squatting and off-road vehicle use, and it remained that way for decades. High levels of disturbance have been documented by the Project proponent, and natural characteristics of the areas proposed for development are scant to non-existent. Much of the ground in the area proposed for development is completely bare or contains sparse coverage of weedy, ruderal, non-native and/or invasive herbaceous and/or grass species, along with relic ornamental trees and olive trees, bearing little to no resemblance to the pre-existing native habitat type(s).

The proposed Project includes the development of approximately 12.8 acres of disturbed habitat within a 19.41-acre parcel; the parcel will be subdivided into two separate legal parcels (1 and 2), while concurrently processing a MUP for the two proposed uses, as described below.

Proposed "Parcel 1" is approximately 7.59 acres in size, of which approximately 1.14 acres will be dedicated to permanent Open Space. This parcel will be developed with an 18,800 square foot Hobby Farm retail store, (Tractor Supply Company) that is 30 feet in overall height. Contiguous to the building will be 15,000 square feet of a fenced-in outdoor display that includes a 1,000-gallon propane tank for the sale of bulk propane and a 2,000 square foot storage shed. In addition, there will be 6,300 square feet of an unenclosed outdoor display, a rear loading dock for merchandise delivery, a dumpster enclosure, a parking lot to accommodate 83 vehicles, signage, all necessary on-site storm water facilities, all proposed landscaping, as well as all required off-site improvements. Tractor Supply Company hours of operation are Monday through Sunday 8 A.M. to 10 P.M. There are four to five employees on-site during normal business hours, with a total of eight to ten employees hired to cover all shifts.

Proposed "Parcel 2" is approximately 11.82 acres in size, with approximately 4.7 acres dedicated to permanent Open Space. This parcel will be developed with a single story, approximately 65,000 square foot (up to 600 vault) self-storage facility, including a 1,290 square foot administrative building (manager's office, two bathrooms, a utility room, associated retail sales space), a dumpster enclosure, a parking lot to accommodate nine vehicles, as well as landscaping and signage. Up to a 0.5-acre of unenclosed RV / boat storage will be located at the rear of the facility. Self-storage hours of operation will be Monday through Sunday 8 AM to 5 PM. There will be one to two employees during normal business hours, with a customer key pad access for after hour entry.

The 19.41-acre parcel is located at 3018 Jefferson Road in the Jamul-Dulzura Community Plan Area in unincorporated San Diego County (Figure 1). General Plan Designation is Rural Commercial, Zoning is C36, and a "P" designator requires the processing of a MUP. Independent access for each parcel will



be via private driveway connecting to Jefferson Road (County-maintained). Earthwork for the overall Project will consist of approximately 20,000 cubic yards of cut and approximately 65,000 cubic yards of fill. There will be no soil export. In select locations along the westerly walkway of Jefferson Road, minor enhancements may be required in the IOD easement area for pedestrian improvements. Said improvements consist of minor grading with no biological disturbance, trash and dead wood debris cleanup, and regrooming of the existing DG path. Depending on need, encroachment may be up to five feet within the IOD easement. Proposed enhancements would occur for approximately 290 feet south on Jefferson Road from Olive Vista Drive, west of the existing fence line. Water is served by the Otay Water District, and an on-site septic will provide sewer services. Power will be supplied by San Diego Gas & Electric (SDG&E). No off-site biological impacts will occur as a result of the proposed Project. The Project is located within the areas covered by the approved MSCP, with the majority of the Project located within unincorporated land in the Metro-Lakeside-Jamul, outside of the PAMA, with only the northern portion located within the PAMA.

The Project site is located in a semi-rural residential area, approximately 0.1 mile north of SR 94 and the Jefferson Road/Proctor Valley Road intersection, with commercial, residential and former agricultural development interspersed (Figure 1). The Project site does not contain any permanent dwellings or residences; however, numerous transient dwellings are found throughout the site.

REGIONAL CONTEXT

Topography and Soils

The Project is located in Section 4 of the Jamul Mountains U.S. Geological Service (USGS) 7.5′ Quadrangle, Range 1 East, Township 17 South (Figure 1). Elevation on the Project site ranges from approximately 925 feet above mean sea level (amsl) to approximately 995 feet amsl.

The United States Department of Agriculture (USDA) Web Soil Mapper was used to obtain soil data for the Project site, indicating seven present soil types. None of the mapped soils correlate to the current vegetation communities on-site, which is likely a result of past agricultural conversion and high disturbance levels. These soil types may be indicative of the historical vegetation community boundaries, such as coastal sage scrub, chaparral and coast live oak woodland. Results of the property soil analysis are shown in Table 1 below.



Table 1. Soils Occurring Within APN: 596-071-60-00

Map Unit Symbol	Map Unit Name	Percent of Project Site
CmrG	Cieneba very rocky coarse sandy loam, 30 to 75 percent slopes	13.2%
FaC2	Fallbrook sandy loam, 5 to 9 percent slopes, eroded	9.0%
FaE2	Fallbrook sandy loam, 15 to 30 percent slopes, eroded	0.6%
PeD2	Placentia sandy loam, 9 to 15 percent slopes, eroded	1.1%
PfC	Placentia sandy loam, thick surface, 2 to 9 percent slopes	0.7%
RaC2	Ramona sandy loam, 5 to 9 percent slopes, eroded	51.7%
RaD2	Ramona sandy loam, 9 to 15 percent slopes, eroded	23.6%

Site Survey

Blackhawk Environmental biologists Seth Reimers and Kris Alberts conducted a field survey of the Project site on October 2, 2017. A pedestrian survey of the entire approximate 19.41-acre Project site was done, followed by a visual survey of the 500-foot buffer area. The survey was conducted between 9:05 A.M and 11:03 A.M. Survey conditions are included in Table 2. The primary focus of the survey was to document and map the size, location and general quality of all habitat types, as well as the presence and/or potential for occurrence of any sensitive resources on-site. A second field survey was conducted on June 25, 2018 to map sensitive species locations, reassess existing conditions and conduct a focused rare plant survey.

Table 2. Site Survey Conditions

Biologist(s)	Date	Time	Air Temperature (°F)	Wind Speed (mph)	Cloud Cover (%)	Precipitation
Seth Reimers Kris Alberts	10/2/2017	0905 – 1103	68 – 72	1 - 7	50 - 85	None
Seth Reimers Kris Alberts	6/25/2018	1045 - 1320	74 – 83	1 - 8	0	None

Methods included pedestrian surveys using belt and meandering transects, spaced approximately 5 to 15 meters apart. Where appropriate, biologists paused at select vantage points to provide full visual coverage of the Project site and survey area. During the field survey, all plant and wildlife species



observed or detected were recorded in field notebooks. Binoculars were used, as needed, to identify wildlife species. Plant species observed were identified to species or subspecies level, when feasible, according to the nomenclature in The Jepson Manual: Vascular Plants of California Edition 2 (Baldwin et al. 2012). Vegetation communities were described according to dominant plant species present and digitized on a high-resolution satellite image of the Project site (Figure 2). Vegetation community mapping was performed following the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements (County 2010b). The initial habitat assessment did not include focused or protocol-level surveys for any sensitive plant or wildlife species.

Biological Resources Present

Three distinct habitat types were documented within the Project site: disturbed (Tier IV), coastal sage scrub (Tier II) and coast live oak woodland (Tier I). A total of 31 wildlife species and 92 plant species were observed during the two surveys. Two potentially jurisdictional drainages were observed on the Project site.

HABITATS AND VEGETATION COMMUNITIES

A summary of the habitat types and vegetation communities documented within the Project site, including determination of habitat types by acreage, dominant plant species present and overall habitat quality, are included in this section. Information regarding species abundance, composition and diversity can also be found in this section, in addition to habitat sensitivity levels and regional and local importance of conserving each habitat type. Representative photos of the Project site can be found in Appendix D.

Habitat descriptions are derived from the County of San Diego Report Format and Content Requirements (County 2010c) and Terrestrial Vegetation Communities in San Diego County based on Holland's Descriptions (Oberbauer 2008).

Habitats

The Project site currently supports three habitat types: disturbed, coastal sage scrub and coast live oak woodland (Figure 2). Of these, only coastal sage scrub and coast live oak woodland are considered sensitive habitat. A comprehensive list of wildlife and plant species observed during the site survey can be found in Appendix A and Appendix B, respectively.

Disturbed (Habitat Code 11300):

Approximately 16.75 acres of Disturbed Habitat (Tier IV) that occurs on-site is dominated by previously stumped, overgrown and unkempt olive trees (Olea sp.), with an understory composed of commonly found non-native annual grasses and forb species. Sparsely distributed native annual and perennial species are also found throughout; however, the dominant plants found in and around the olive trees include Russian tumbleweed (Salsola tragus), short-pod mustard (Hirschfeldia incana), ripgut brome (Bromus diandrus), tocalote (Centaurea melitensis) and doveweed (Croton setiger). Other plant species observed within this habitat include Canada horseweed (Erigeron canadensis), Peruvian peppertree (Shinus molle), smilo grass (Stipa miliacea) and rancher's fiddleneck (Amsinckia



intermedia). Extensive anthropogenic disturbance was observed within this habitat type, precluding the potential for most sensitive plant and wildlife species. The regional value of disturbed habitat onsite is low, having potential for foraging habitat for raptors and use by rodents capable of withstanding frequent anthropogenic disturbance, such as Botta's pocket gopher (Thomomys bottae). Wildlife observed and/or detected within this habitat included yellow-rumped warbler (Setophaga coronata), bushtit (Psaltriparus minimus), white-crowned sparrow (Zonotrichia leucophrys), California towhee (Melozone crissalis), house finch (Haemorhous mexicanus) and Botta's pocket gopher (burrows).

Diegan Coastal Sage Scrub (Habitat Code 32500):

Approximately 0.57 acres of Coastal Sage Scrub habitat occurs on-site, with the majority located in the northern portion of the Project site proposed to be dedicated as Biological Open Space. This habitat type occurs on-site in several disjunctive patches. The Coastal Sage Scrub areas are dominated by California sagebrush (Artemisia californica) and California buckwheat (Eriogonum fasciulatum). Other plant species observed within this habitat include broom baccharis (Baccharis sarothroides) and Menzies' goldenbush (Isocoma menziesii var. menziesii). While some evidence of past disturbance is present as dirt trails and dirt roads, the Coastal Sage Scrub habitat on-site is considered mature and could potentially harbor several sensitive wildlife species, particularly Quino checkerspot, Hermes copper and coastal California gnatcatcher. The regional value of the Coastal Sage Scrub habitat on-site is moderate, serving as peripheral habitat to the Coast Live Oak Woodland, but not expansive enough to feasibly support nesting coastal California gnatcatchers or other keystone Coastal Sage Scrub species. Wildlife detected within this habitat included California towhee (Melozone crissalis), wrentit (Chamaea fasciata), white-crowned sparrow, Bewick's wren (Thryomanes bewickii) and dusky-footed woodrat (Neotoma fuscipes) dens.



Coast Live Oak Woodland (71160):

Approximately 2.09 acres of Coast Live Oak Woodland habitat occur on-site in the areas surrounding the potentially jurisdictional drainages in the northern and extreme southern portions of the Project site. The Coast Live Oak Woodland areas are dominated by coast live oak trees (Quercus agrifolia), and also include toyon (Heteromeles arbutifolia) and California sycamore (Platanus racemosa). Other plant species observed within this habitat include Engelmann oak (Q. engelmannii), scrub oak (Q. berberidifolia) and Fremont cottonwood (Populus fremontii). While some evidence of past disturbance is present as dirt trails and dirt roads, the Coast Live Oak Woodland habitat on-site is considered mature and could potentially harbor several sensitive wildlife species. The regional value of the Coast Live Oak Woodland habitat on-site is high, connecting upstream and downstream drainage features and woodlands, facilitating water passage and offering multi-tiered canopies for a wide variety of wildlife species. Wildlife detected within this habitat included Cooper's hawk, bushtit, white-crowned sparrow, Nuttall's woodpecker (Picoides nuttallii), blue-gray gnatcatcher (Polioptila caerulea), western wood peewee (Contopus sordidulis) and dusky-footed woodrat dens.

SPECIAL STATUS SPECIES

Blackhawk Environmental conducted a database records search centered on the Project site within the USGS 7.5' Jamul Mountains quadrangle. Overall, a one-mile radius surrounding the Project site was reviewed for sensitive biological resources. The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2017), the U.S. Fish & Wildlife Service (USFWS) Species Occurrence Database (USFWS 2017) and the California Native Plant Society's (CNPS) Electronic Inventory (EI) of Rare and Endangered Plants of California (CNPS 2017) were reviewed for sensitive plant and wildlife species records in the Jamul Mountains quadrangle that contains the Project site (Figure 3). CNDDB contains records of reported occurrences of federal and state-listed species, proposed endangered or threatened species, federal Birds of Conservation Concern, California Species of Special Concern (SSC), or otherwise sensitive species or communities that may occur within or in the vicinity of the Project area. This database and literature review were used to provide details on sensitive biological species/resources that have a potential to occur within or adjacent to the Project site, prior to conducting the field survey (CNDDB accessed October 2, 2017).

Initial methods described above focused on the potential for occurrence of sensitive plant and wildlife species. Species were considered sensitive, and therefore subject to analysis in this section, if they met one or more of the following criteria:

- Plant and animal species listed as endangered (FE), threatened (FT), or candidates (FC) for listing under the Federal Endangered Species Act (FESA);
- Plant and animal species listed as endangered (SE), threatened (ST), or candidates (SC) for listing under the California Endangered Species Act (CESA);
- Animals designated as Fully Protected Species (FP), as defined in California Fish and Game Code Sections 3511, 4700, 5050, and 5515;
- Animal species designated as Species of Special Concern (SSC) by the CDFW;
- MSCP-covered species;



- County of San Diego Sensitive Animals;
- Bat species designated as High Priority (H) by the Western Bat Working Group;
- Plants that are state-listed as Rare¹; or
- Plant species ranked by the CNPS as having a California Rare Plant Rank (CRPR) of 1 or 2.2

Sensitive natural communities are communities that have a limited distribution and are often vulnerable to the environmental effects of projects. These communities may or may not contain sensitive species or their habitats. For purposes of this assessment, sensitive natural communities include any of the following:

- Vegetation communities listed in the CNDDB;
- Communities listed in the Natural Communities List with a rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable); or
- Communities listed in the South County MSCP Subarea Plan as a Tier 1, 2 or 3.

Utilizing the background data described above, the initial field survey was conducted to assess the Project site for its existing conditions and its capacity to potentially harbor sensitive biological resources identified in the literature review (target species).

Following the initial field survey/habitat assessment, potentials for sensitive species to occur were evaluated based on proximity, recentness and abundance of known occurrences, availability of suitable habitats, connectivity to source populations and historic distributions of the species. Potentials for occurrence were generally evaluated based on the following criteria:

- Present The species was observed within the survey area during the survey effort.
- High Historic records indicate that the species has been known to occur within the regional vicinity of the Project (1 mile), and suitable habitat occurs onsite.
- Moderate Historic records indicate that the species has been known to occur within the vicinity
 of the Project, but low quality suitable habitat occurs on-site, or; no historic records occur within
 the vicinity of the Project, but the Project site occurs within the historic range of the species, and
 moderate to high quality habitat occurs on or adjacent to the Project site.
- Low Historic records indicate that the species has not been known to widely occupy the regional vicinity of the Project, and low-quality habitat for the species exists on-site.
- No Potential The species is restricted to habitats not occurring within or adjacent to the Project site or is considered extirpated from the vicinity of the Project.

The County of San Diego issued a Scoping Letter on June 18, 2018 that included numerous additional special-status plant and wildlife species that required assessments and/or surveys. Therefore, a second field survey was conducted on June 25, 2018 to assess and/or survey for the species included in the Scoping Letter. Following the second field survey/habitat assessment, potentials for sensitive species to occur were evaluated based on the same parameters detailed above.

¹ Plants that were previously state listed as "Rare" have been re-designated as State-threatened.

² Under the CEQA review process, only CRPR 1 and 2 species are considered, as these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to List 3 and 4 species do not meet CEQA's definition of "rare" or "endangered."



Sensitive Plants

The literature review resulted in a list of three sensitive plant species with the potential to occur on the Project site and in the surrounding vicinity. These three sensitive plant species and their potentials for occurrence are further described in Appendix C. Due to a lack of suitable habitat types, soil types, elevational restrictions, connectivity to source populations and/or other factors, there is no potential for the following three species to occur on the Project site in areas proposed for permanent or temporary impact, and therefore, they will not be discussed further in this report: Dehesa nolina (Nolina interrata), Parry's tetracoccus (Tetracoccus dioicus), and snake cholla (Cylindropuntia califonica var. californica). A complete list of plant species observed is included as Appendix B.

Following the field surveys, it was determined that there were two County-sensitive plant species present: Engelmann oak (Quercus engelmannii; County List D species) and San Diego sunflower (Bahiopsis laciniata; County List D species). In addition, three plant species that serve as larval host plants for three sensitive butterfly species were found in the area proposed to be dedicated as Open Space on the northern portion of the Project site. These plant species and their mapped locations are shown in Figure 2. The plants and associated butterfly species include: dwarf plantain (Plantago erecta), associated with the federally-endangered Quino checkerspot (Euphydryas editha quino); spiny redberry (Rhamnus crocea), associated with the narrow endemic, federal candidate species Hermes copper (Lycaena hermes); and San Diego sedge (Carex spissa), associated with the narrow endemic Harbison's dun skipper (Euphyes vestris harbinsoni).

Following the site visits, the second of which incorporated a focused rare plant survey, it was determined that no State and/or federally listed plant species were observed on the Project site. Therefore, no impacts are associated with any State and/or Federally listed plant species, which is a less than significant impact.

Sensitive Wildlife

The literature review resulted in a list of 12 sensitive wildlife species with the potential to occur on the Project site and in the surrounding vicinity. Due to a lack of suitable habitat types, soil types, elevational restrictions, connectivity to source populations, roosting substrates and/or other factors, there is no potential for the following five species to occur on the Project site in areas proposed for permanent or temporary impact: Thorne's hairstreak (Mitoura thornei), pallid bat (Antrozous pallidus), Yuma myotis (Myotis yumaensis), Townsend's big-eared bat (Corynorhinus townsendii) and Swainson's hawk (Buteo swainsoni). Of the seven remaining sensitive wildlife species identified during the literature review, one species was found present [Belding's orange-throated whiptail (Aspidoscelis hyperythra beldingi], one has a moderate potential to occur [Coronado skink (Plestiodon skiltonianus interparietalis)], and five have low potentials to occur [Baja California coachwhip (Coluber fuliginosus), coastal California gnatcatcher, coastal whiptail (Aspidoscelis tigris stejnegeri), long-eared myotis (Myotis evotis), and western small-footed myotis (Myotis ciliolabrum)]. All 12 sensitive wildlife species and their potentials for occurrence are further described in Appendix C. Species that are not federally or state-listed, fully protected, Species of Special Concern, South County MSCP-covered or County of San Diego Sensitive Animals are not evaluated in this report (e.g. Watchlist species). A complete list of wildlife species observed is included as Attachment A.



Following the site visits, it was determined that there were four County-sensitive wildlife species present: Cooper's hawk (Accipiter cooperii; Group 1 species, one individual observed), red-shouldered hawk (Buteo lineatus; Group 1 species, one individual observed), turkey vulture (Cathartes aura; Group 1 species, one individual observed) and Belding's orange-throated whiptail (Aspidoscelis hyperythra beldingi; Group 2 species, four individuals observed).

Suitable habitat and larval host plant patches were found for the federally endangered Quino checkerspot, though all such suitable habitats were found in the northern portion of the Project site proposed to be set aside as dedicated Biological Open Space. No larval host plant patches were observed in the highly degraded areas proposed for development. Therefore, there are no anticipated adverse impacts associated with this species through the construction or operations and maintenance phases. In addition, the mapped locations for spiny redberry and San Diego sedge all occur within the same northern portion of the Project site proposed to be set aside as dedicated Biological Open Space. Therefore, no adverse impacts are associated with Hermes copper or Harbison's dun skipper through the construction or operations and maintenance phases. Since all suitable habitat for special-status and/or listed butterfly species occurs outside the development footprint, no focused or protocol-level surveys should be required.

The County of San Diego required that this report include focused survey(s) and/or site assessments for the following rare and endangered species: burrowing owl (Athene cunicularia), arroyo toad (Anaxyrus californicus), southwestern willow flycatcher (Empidonax traillii extimus), Quino checkerspot, Hermes copper, coastal California gnatcatcher and least Bell's vireo (Vireo bellii pusillus). There is no suitable habitat present on or within 500 feet of the Project site for arroyo toad, southwestern willow flycatcher or least Bell's vireo. However, suitable habitat is present in the northern portion of the Project site proposed to be dedicated as Biological Open Space for Quino checkerspot, Hermes copper and coastal California gnatcatcher. Since the area that contains suitable habitat for Quino checkerspot, Hermes copper and coastal California gnatcatcher is proposed to be set aside as dedicated Biological Open Space, and since no construction will occur in proximity to these suitable habitats, no adverse impacts are anticipated for any of these species, and Project-related impacts can be considered less than significant. In addition, there should be no need to conduct focused or protocollevel surveys for these species, as the Project design entirely avoids their suitable habitats.

JURISDICTIONAL WETLANDS AND WATERWAYS

Potentially jurisdictional water resources on and adjacent to the Project site were reviewed on high-resolution aerial imagery, topographic maps and the National Wetland Inventory (NWI) database (NWI 2018). If potentially jurisdictional features were observed during the field survey, the biologists documented the associated vegetation communities, presence of ordinary high watermarks (OHWMs) or streambeds, substrates, hydrological indicators and potential connectivity to receiving waters. Since the Project description does not call for impacts to drainage features found on-site, the habitat assessment did not include a formal jurisdictional delineation effort.

Army Corps of Engineers

According to the Corps of Engineers Wetlands Delineation Manual by the U.S. Army Corps of Engineers



(USACE), wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions" (USACE 1987).

For purposes of the Clean Water Act, 33 U.S.C. 1251 et seq. and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term "waters of the United States" means:

- (1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters, including interstate wetlands;
- (3) The territorial seas;
- (4) All impoundments of waters otherwise identified as waters of the United States under this section;
- (5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section;
- (6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;
- (7) All waters in paragraphs (a)(7)(i) through (v) of this section where they are determined, on a casespecific basis, to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. The waters identified in each of paragraphs (a)(7)(i) through (v) of this section are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required. (i) Prairie potholes. Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest. (ii) Carolina bays and Delmarva bays. Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain. (iii) Pocosins. Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain. (iv) Western vernal pools. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers. (v) Texas coastal prairie wetlands. Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.
- (8) All waters located within the 100- year floodplain of a water identified in paragraphs (a)(1) through (3) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through



(3) of this section. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (3) of this section or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required (United States 1972).

Non-navigable tributaries that do not constitute relatively permanent waters (RPW; exhibit at least seasonal flow, typically three months) may be considered Waters of the United States based on significant nexus standards, including an assessment of downstream hydrology and ecological functions of the tributary.

Wetlands are delineated using three parameters: hydrophytic vegetation, wetland hydrology and hydric soils. According to the USACE, indicators for all three parameters must normally be present to qualify as a wetland.

Vernal pools are considered "problem areas" since vegetation or hydric soils may be lacking due to the seasonal filling and drying of vernal pools. As described in the Arid West Supplement, "the species composition of some wetland plant communities in the Arid West can change in response to seasonal weather patterns and long-term climatic fluctuations. Wetland types that are influenced by these shifts include vernal pools, playa edges, seeps, and springs. Lack of hydrophytic vegetation during dry periods should not immediately eliminate a site from further consideration as a wetland" (USACE 2008). In addition, when soil investigations are performed within vernal pools, vernal pools may also lack hydric soil indicators as they support seasonally ponded soils, described under problem soils as "seasonally ponded, depressional wetlands occur in basins and valleys throughout the Arid West. Most are perched systems, with water ponding above a restrictive soil layer, such as a hardpan or clay layer, that is at or near the surface (e.g., in vertisols). Some of these wetlands lack hydric soil indicators due to limited saturation depth, saline conditions, or other factors."

The USACE also requires the delineation of non-wetland jurisdictional Waters of the United States. These waters must have strong hydrology indicators such as the presence of seasonal flows and an OHWM. An OHWM is defined as:

... that line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas (33 CFR Part 328.3).

Areas delineated as non-wetland jurisdictional waters may lack wetland vegetation or hydric soil characteristics. Hydric soil indicators may be missing because topographic position precludes ponding and subsequent development of hydric soils. Absence of wetland vegetation can result from frequent scouring due to rapid water flow. These types of jurisdictional waters are delineated by the lateral and upstream/downstream extent of the OHWM of the particular drainage or depression.



Due to the absence of indicators such as hydric soils, hydrophytic vegetation and/or hydrology, USACE wetlands do not occur on the portions of the Project site proposed for development. Drainage features classified as USACE non-wetland Waters of the United States occur within the OHWMs of the Coast Live Oak Woodland areas near the northern and southern boundaries of the Project site, but no Project impacts are to occur in either of these locations. Therefore, Section 404 USACE permitting is not necessary for this Project.

Regional Water Quality Control Board

The Regional Water Quality Control Board (RWQCB) is the regional agency responsible for protecting water quality in California. The jurisdiction of this agency includes Waters of the State, as mandated by the federal CWA Section 401. When CWA Section 404 jurisdiction is not present for isolated water, the RWQCB will assert jurisdiction via the California Porter-Cologne Water Quality Control Act. Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California State Water Resources Board 2018). The Porter-Cologne Water Quality Control Act provides a regulatory framework to provide comprehensive protections for surface and groundwater within the State of California. Waters subject to jurisdiction under the Porter-Cologne Water Quality Control Act require that any discharge that may negatively impact or otherwise affect a Water of the State must coordinate with RWQCB.

Due to the absence of indicators, such as hydric soils, hydrophytic vegetation and/or hydrology, RWQCB wetlands do not occur on the portions of the Project site proposed for development. RWQCB jurisdiction is limited to the areas within the OHWMs of the Coast Live Oak Woodland areas near the northern and southern boundaries of the Project site, but no Project impacts are to occur in either of these locations. Therefore, Section 401 RWQCB permitting is not necessary for this Project.

California Department of Fish and Wildlife

Under Sections 1600–1607 of the Fish and Game Code, CDFW regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. CDFW has jurisdiction over riparian habitats (e.g., riparian woodland) associated with watercourses. CDFW jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. Although CDFW does not typically regulate vernal pools, under Section 1602 of the Fish and Game Code, CDFW will assert jurisdiction over isolated riparian features (including vernal pools) if California state threatened and/or endangered species are present via the California Endangered Species Act, or which provide resources directly or indirectly to fish and wildlife of the region. CDFW may also assert jurisdiction over modified or man-made waterways, generally based on the value of such features to support riparian or aquatic plant or animal species. For clarification, of features that may be subject to CDFW jurisdiction, the CDFW Legal Advisor has prepared the following opinion (CDFG 1994):

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects, and riparian vegetation will be treated like natural waterways.
- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses should be treated by [CDFW] as natural waterways.



 Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions.

CDFW jurisdictional limits also include artificial stock ponds and irrigation ditches constructed within uplands, and outer drip line limits of adjacent riparian habitat supported by a river, stream or lake, regardless of the riparian area's federal wetland status or its location beyond the defined bed, bank or channel.

Due to the absence of indicators, such as hydric soils, hydrophytic vegetation, hydrology and/or state-listed plant or wildlife species, CDFW jurisdictional areas do not occur on the portions of the Project site proposed for development. CDFW jurisdiction is limited to the areas within the riparian canopies of the Coast Live Oak Woodland areas near the northern and southern boundaries of the Project site, but no Project impacts are to occur within the riparian canopies at either of these locations. Therefore, CDFW Section 1600 permitting is not necessary for this Project.

Resource Protection Ordinance

The Coast Live Oak Woodland and Disturbed Habitat areas containing drainages on the Project site qualify as RPO wetland areas. All RPOs are to be avoided by a minimum of 50 feet from all proposed Project elements with the implementation of an RPO Wetland Buffer (Figure 4).

OTHER UNIQUE FEATURES/RESOURCES

Wildlife Corridors and Linkages

The Project site is surrounded by a mosaic of development, agriculture and disturbed habitat lands that, with the exception of the development, are known to support or potentially support a number of species of invertebrates, amphibians, reptiles, birds and mammals. Movement by these species occurs on a local scale throughout the undeveloped or open areas of the general vicinity, as well as within the Project site itself. Besides the existing nearby development, there are no real encumbrances to wildlife movement across the Project site, such as large highways, fences and infrastructure that often impedes wildlife movement elsewhere where humans have severely altered landscapes. Thus, wildlife, including large mammals, may utilize the Project site for passage toward more natural areas or open, agricultural lands.

However, given that the largest section of the proposed Project site is currently undeveloped, but will be developed following Project establishment, local wildlife movement and corridor usage potential is anticipated to be decreased by the proposed Project. Nevertheless, given the small size of the Project, the availability of other similar parcels nearby, and proposed Biological Open Space in the immediate area north and south of the development footprint, wildlife movement is anticipated to continue nearly unabated. In addition, the drainage channels, associated riparian corridors and adjacent coast live oak woodlands are proposed to be set aside as dedicated Biological Open Space, preserving contiguous areas of native habitat and linkage to adjacent habitats, as mandated by the Biological Mitigation Ordinance.



Wildlife Nursery Sites

Potential maternal roosting sites (nursery sites) for bats were not observed during the survey. Very limited roosting opportunities may occur for opportunistic tree-roosting bat species, such as long-eared myotis and western small-footed myotis. Therefore, the Project site largely does not support habitat, other than that for foraging, for most bat species.

Raptor Nesting and Foraging

The Project site contains numerous large coast live oak and California sycamore trees suitable for raptor nesting, including Cooper's hawk and red-shouldered hawk, which were observed on the Project site. Suitable raptor foraging habitat exists in the form of open, disturbed habitat on the Project site, as well as open coastal sage scrub, grasslands and agricultural areas adjacent to the Project site. These two components combined indicate that the Project site is suitable for raptor nesting and foraging. The oak woodlands most suitable for nesting would be preserved as Biological Open Space, while the formerly farmed olive orchard would be converted to development. This constitutes a land use change that would change raptor foraging and nesting potential on and adjacent to the Project site, though the impacts of such a land use change are considered less than significant, largely based on decades of heavy human disturbance associated with the areas proposed for development, as balanced by the proposed dedication of Biological Open Space, where the optimal nesting locations were found. In addition, several raptor species can reasonably be expected to continue to utilize the proposed developed areas as foraging and/or nesting opportunities after construction, including red-tailed hawk (Buteo jamaicensis), red-shouldered hawk, Cooper's hawk, American kestrel (Falco sparverius), great horned owl (Bubo virginianus) and barn owl (Tyto alba).

Suitable nesting burrows for ground nesting raptors, specifically burrowing owl, were not observed during the survey. Burrowing owl populations are known to occur within the region; however, burrowing owls were not observed within the Project site or 500-foot survey area during the survey, and the absence of suitable burrows on the Project site indicates that burrowing owls are absent.

SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

The proposed Project is the development of approximately 12.8 acres of disturbed habitat within a 19.41-acre parcel. No off-site impacts will occur, since the Project will utilize access from the existing Jefferson Road, and any required fuel management will be accommodated on-site, or where it would extend off-site, the land is already developed or maintained for adjacent land use, such as County maintained roads. Applicable mitigation measures are proposed in order to reduce impacts to sensitive biological resources to a less than significant level in conformance with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements (County 2010b).



Table 3 identifies the potential impacts as a result of the proposed Project. Habitat-based mitigation is not required for impacts to disturbed and urban/developed habitats per the County guidelines.

Table 3. Project Impact Summary Table

Habitat/Vegetation Community/Zone	Existing (acres)	Impacts On-site (acres)	Impacts Off-site (acres)	Mitigation Ratio	Mitigation Required (acres)	Within IOD Easement	Preserved On-site (acres)	Off-site Mitigation (acres)
Disturbed Habitat	16.75	12.8	0	0:1	0	0.6	3.35	0
Coastal Sage Scrub	0.57	0	0	1:1	0	0	0.57	0
Coast Live Oak Woodland	2.09	0	0	3:1	0	0.17	1.92	0
Total	19.41	12.8	0	N/A	0	0.77	5.84	0



Significance of Project Impacts

The following discussion describes the Project's potential to directly, indirectly and cumulatively impact sensitive biological resources during development, and provides analyses of significance for each potential impact in conformance with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements (County 2010b).

Direct Impacts

Direct impacts include those involving the loss, alteration and/or disturbance of plant communities, and consequently, the flora and fauna of the affected area. Direct impacts also include the destruction of individual plants and/or wildlife. Direct impacts may adversely affect regional populations of certain species or result in isolated populations, reducing genetic diversity and rangewide population stability; conversely, in some cases direct impacts may also have intended or unintended positive effects.

Indirect Impacts

Indirect impacts include a variety of effects related to areas or habitats that are not directly removed by Project development, such as loss of foraging habitat, increased ambient noise, artificial light, introduced predators (e.g., domestic cats, dogs and other non-native animals), competition with exotic plants and animals, and increased human presence and associated disturbances (e.g., trash, green waste, physical intrusion). Indirect impacts may include long- and/or short-term daily activities associated with project build-out, such as increased traffic, permanent barriers or fences, buildings, exotic seed-bearing ornamental plantings, irrigated landscapes and human presence, among others. These types of impacts are known as edge effects and over time, may result in some encroachment on native plants by exotic plants, altered behavioral wildlife patterns, reduced wildlife diversity, and decreased wildlife abundance in habitats adjacent to a given project site. However, as is the case with direct impacts, indirect impacts may also have intended or unintended positive effects for certain species.

Cumulative Impacts

Cumulative impacts are defined by the collective impacts of two or more projects, that when considered individually are minimal, but over time may become collectively significant.

Thresholds of Significance

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

"Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."



Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA Guidelines, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects (California State Assembly 2018). A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources, CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

"The project has the potential to: substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species..."

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed project.

Attachment G of the 1998 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.



f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Direct and Indirect Impacts to Mapped Habitat Types

Project-related impacts to the mapped habitat types are restricted to Disturbed Habitat. There are no direct or cumulative impacts associated with Coastal Sage Scrub or Coast Live Oak Woodlands on the Project site, though indirect impacts are possible. Depending on the specific location, the Disturbed Habitat areas consist of bare ground, non-native grasses and forb species, debris, or unmaintained olive orchard trees. Direct, indirect and cumulative impacts to Disturbed Habitat would not be considered significant with the mitigation measures herein to be implemented before, during and after construction.

Direct impacts to Disturbed Habitats on the Project site would be considered less than significant with the mitigation measures proposed herein. Furthermore, no direct impacts will occur to sensitive plant or wildlife species.

Indirect impacts to sensitive plant and/or wildlife species within Disturbed Habitats, Coastal Sage Scrub and Coast Live Oak Woodlands would be mitigated through the implementation of the mitigation measures stated herein, as well as industry standard dust control measures, reduced on-site speed limits, noise reduction measures and storm water protection measures. With proper implementation of the mitigation measures, no indirect impacts are anticipated to occur to sensitive plant or wildlife species. Therefore, no significant indirect impacts are anticipated to result from the Project.

CUMULATIVE IMPACTS

With implemented mitigation measures, the Project does not propose to have any direct or indirect impacts to sensitive habitats, plants or wildlife. Therefore, there are no cumulative impacts to sensitive habitats, plants or wildlife. Though Disturbed Habitat would be directly impacted through the development of the proposed facilities and their associated features, with the mitigation measures proposed herein to be implemented, direct impacts to Disturbed Habitat would be considered less than significant under the South County MSCP. Depending on a wide variety of factors (e.g., project sizes, locations, existing conditions, connectivity, etc.), impacts to Disturbed Habitat may be considered potentially significant when assessing cumulative impacts; however, the small size of this Project in relation to the regional context renders cumulative impacts insignificant for this Project. There are few other projects pending in the area surrounding this Project. As currently designed, the Project would not contribute to potential cumulative impacts associated with nearby similar projects, such as the Simpson Farm Development Project.



Mitigation

The proposed Project will result in the loss of Tier IV disturbed habitat. Mitigation credits will not need to be purchased to offset the impacts to the disturbed habitat. Several sensitive species have a low to moderate potential for occurrence on the Project site, or were found present, and in order to reduce any potential impacts to below a level of significance to comply with CEQA, the following mitigation measures are recommended for implementation:

- MM-BIO 1: Nesting Birds. To the extent feasible, conduct vegetation removal outside of the nesting bird season (generally between February 1 and September 15). If vegetation removal is required during the nesting bird season, conduct a pre-construction avoidance survey for MBTA and CDFW-protected nesting birds within 100 feet of areas proposed for vegetation removal and/or initial grading activities; additionally, the survey shall be extended to 500 feet for raptors and be included from January 1 to July 15. The survey shall also extend to 500 feet for California gnatcatchers and other potentially occurring sensitive avian species. The survey shall be conducted by a qualified biologist(s) within seven days (=168 hours) of vegetation removal and/or initial groundbreaking activities. If active, protected nests are observed within the survey area(s), a qualified biologist will determine appropriate minimum disturbance buffers or other adaptive mitigation techniques (e.g., biological monitoring of active nests during construction-related activities, staggered work schedules, altered work locations, sound walls, noise abatement, etc.) and work with the contractor to ensure that direct and indirect impacts to all protected nesting birds are avoided until such nests are no longer active. If the results of the survey are negative, the Project may proceed without any further surveys or monitoring as long as there is not a significant lapse (greater than seven days) in Project activity.
- MM-BIO 2: Biological Monitoring. A biological monitor shall be present during all initial vegetation clearing, grubbing, and rough grading activities to relocate wildlife out of harm's way, including but not limited to the potentially present Baja California coachwhip, coastal whiptail, Coronado skink and Belding's orange-throated whiptail.
- MM-BIO 3: Construction Runoff. Develop a Storm Water Pollution Prevention Plan (SWPPP) for the Project to implement Best Management Practices (BMPs) during construction activities to avoid unanticipated impacts to adjacent, potentially jurisdictional waters, drainage features and/or water bodies. All BMPs shall be regularly inspected for integrity and repaired or replaced, as-needed. Post-construction measures shall include BMPs and/or design features to avoid or minimize Project-related impacts to adjacent waterways and storm drains.
- MM-BIO 4: Dust Control. Excessive airborne dust caused by Project construction activities could result in indirect impacts to off-site plants by decreasing the photosynthetic capabilities of plants whose leaves may become coated with dust. Excessive Project-related airborne dust may also indirectly impact wildlife through the reduction of air quality. These impacts would be considered potentially significant impacts, as defined by the thresholds of significance. To mitigate for this impact during construction, on-site speed limits are to be kept below 15 miles per hour to reduce fugitive dust levels. The Project site must be kept adequately watered during the construction phase so that fugitive dust levels are maintained below 20 percent



opacity. Applications of water with water trucks, hoses, water buffalos or other means shall be applied as-needed throughout construction to minimize airborne dust.

- MM-BIO 5: Litter Control. No Project personnel may litter on or adjacent to the Project site. Keep
 trash in secured containers on-site with regular disposal timelines to approved facilities, and/or
 in Project vehicles. This measure shall apply during the construction, operations and
 maintenance phases.
- MM-BIO 6: Invasive Plants. Accidental introduction of non-native, invasive plant material and/or seed stock to the Project environment can occur during construction. It can also occur during operation, through the introduction of exotic invasive plant species in landscaping. To prevent the accidental introduction of non-native, invasive plant material and/or seed stock to the Project environment during construction, all vehicles must arrive to the Project site clean and free of mud and debris. Post-construction operational measures shall stipulate that no invasive plant species, according the California Invasive Plant Council, are included in the Landscaping Plans. Invasive plants shall also be controlled if and when detected, through hand-pulling, mechanical whipping/mowing and/or pursuant to a pesticide management plan.
- MM-BIO 7: Construction Equipment. All Project vehicles must be kept in good maintenance and shall not leak fluids onto the Project site. In such cases, spills and leaks are to be cleaned up and disposed of properly, following Federal and State guidelines, and the causes of such spills and leaks shall be immediately repaired. When staging Project-related construction equipment overnight, spill kits, secondary containment devices, spill mats and/or other measures should be employed to catch unanticipated leaks or spills.
- MM-BIO 8: Lighting. Lighting used for Project construction and operations could result in indirect impacts to adjacent wildlife species by artificially lighting habitats during nighttime hours, altering circadian rhythms, disrupting natural behaviors and/or causing wildlife to vacate their territories. Excessive lighting would be considered a potentially significant impact, as defined by the thresholds of significance. To reduce lighting impacts to less than significant levels, several design features are proposed. First, during construction, lighting will be limited to security lighting at night that is to be shielded from the surrounding natural habitats. Second, construction hours are limited to 7:00 A.M. to 7:00 P.M., Monday through Saturday. Third, construction activities are anticipated to occur only during daylight hours, with no night lighting proposed for usage during construction. During the operations phase, all permanent lighting will be shielded away from the surrounding natural habitats.
- MM-BIO 9: Biological Open Space Protection. In order to protect the proposed Biological Open Space Easement from entry, informational signs shall be installed. The areas to be dedicated as Biological Open Space shall be delineated with temporary fencing and signage before and during construction activities, 50 feet beyond the edges of the mapped oak woodlands and RPO Wetlands on the southern and northern portions of the Project site. In addition to the temporary fencing, a 100-foot Limited Building Zone Easement will be established adjacent to the Biological Open Space Easement boundary (Figure 4) to prohibit the building of structures that would require vegetation clearing within the protected open space for fuel management



purposes. Permanent fencing is not proposed for the Biological Open Space Easement boundary as it may impede or deter wildlife movement through the area. Permanent signage shall be installed at the Biological Open Space boundary every 75 feet. The signs must be corrosion resistant, a minimum of 6" x 9" in size, on posts not less than three (3) feet in height from the ground surface, and must state the following:

Sensitive Environmental Resources
Area Restricted by Easement
Entry without express written permission from the County of San Diego
is prohibited. To report a violation or for more information about easement
restrictions and exceptions contact the County of San Diego,
Planning & Development Services
Reference: (insert permit type & number)



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2011 7.5-minute topographic quadrangle map for Jamul Mountains, California.



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Geth Ri

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ATTACHMENTS:

Figure 1 - Project Location

Figure 2 - Vegetation Communities

Figure 3 - CNDDB Results Map

Figure 4 - County of San Diego RPO Wetlands/Impacts Map

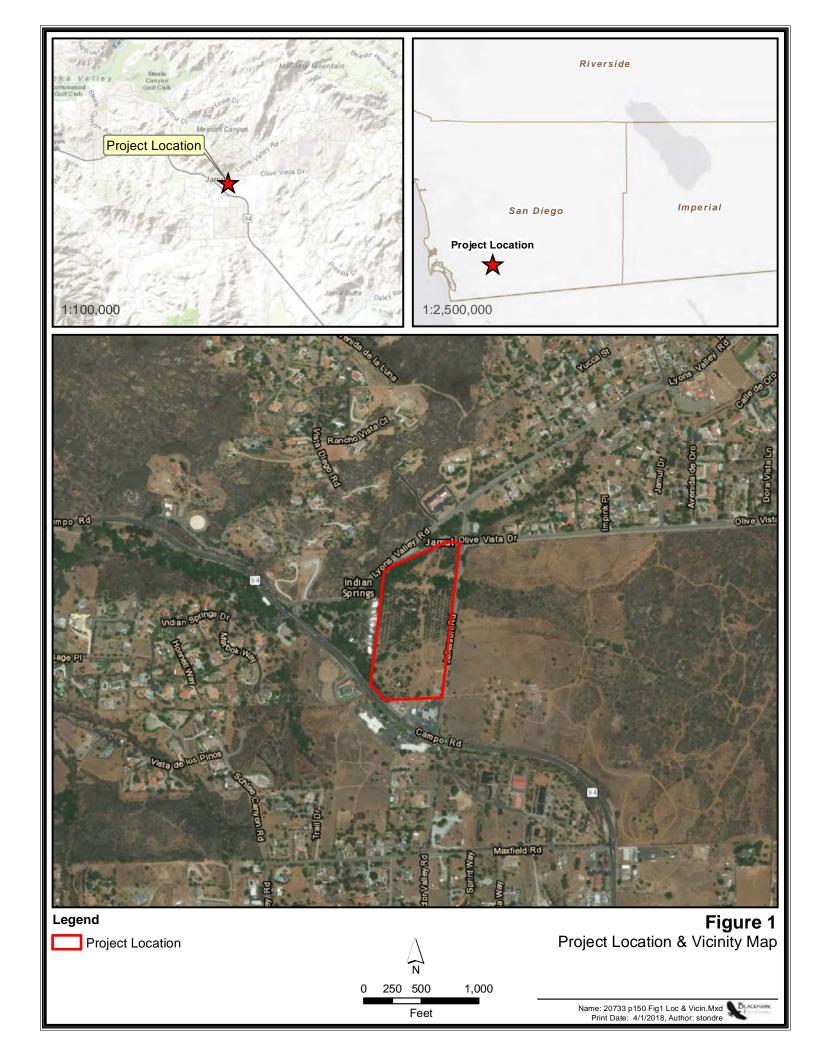
Figure 5 - Biological Open Space Easement Map

Appendix A - Wildlife Species List

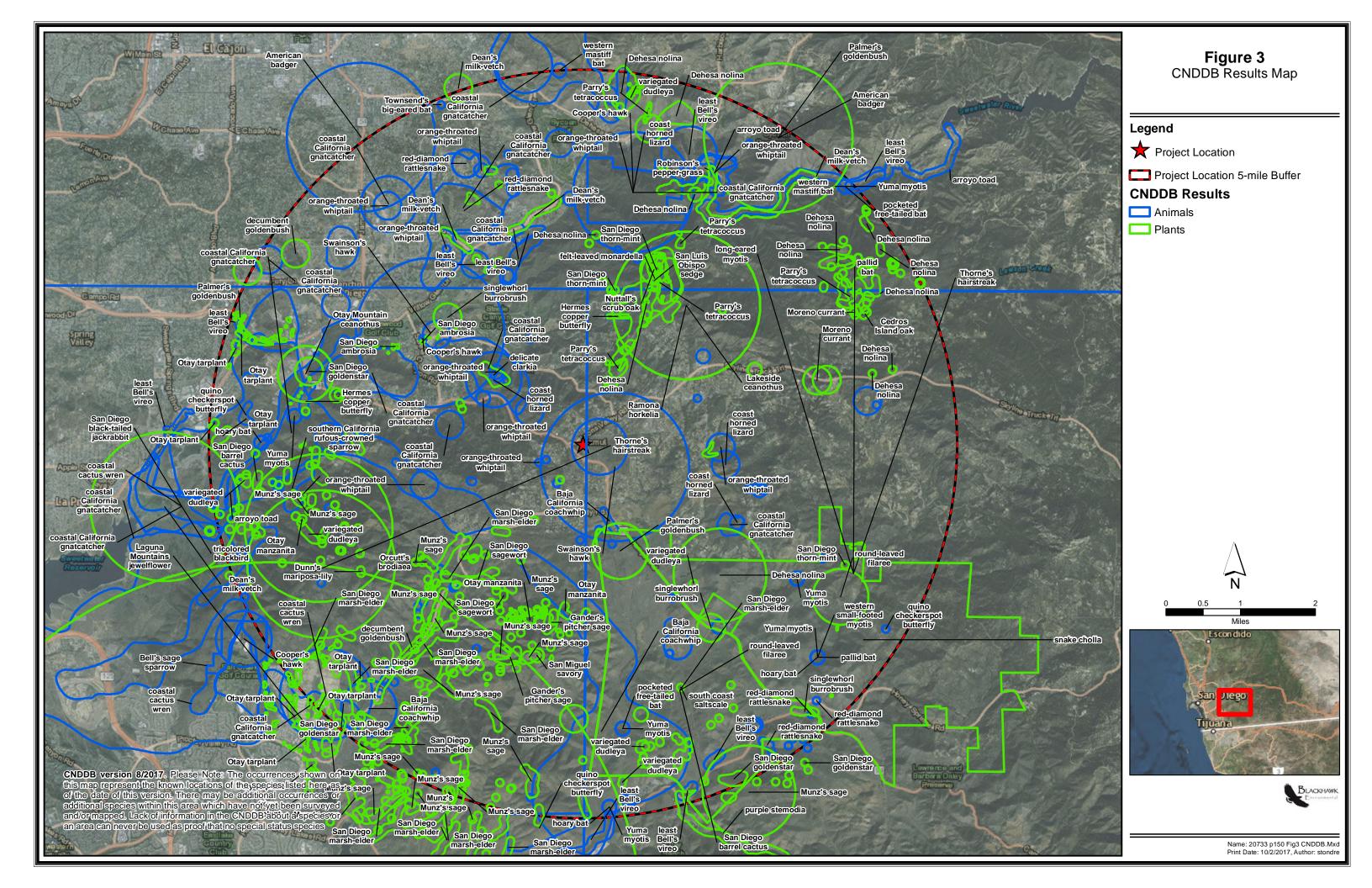
Appendix B - Plant Species List

Appendix C - Sensitive Plant and Wildlife Species with the Potential to Occur

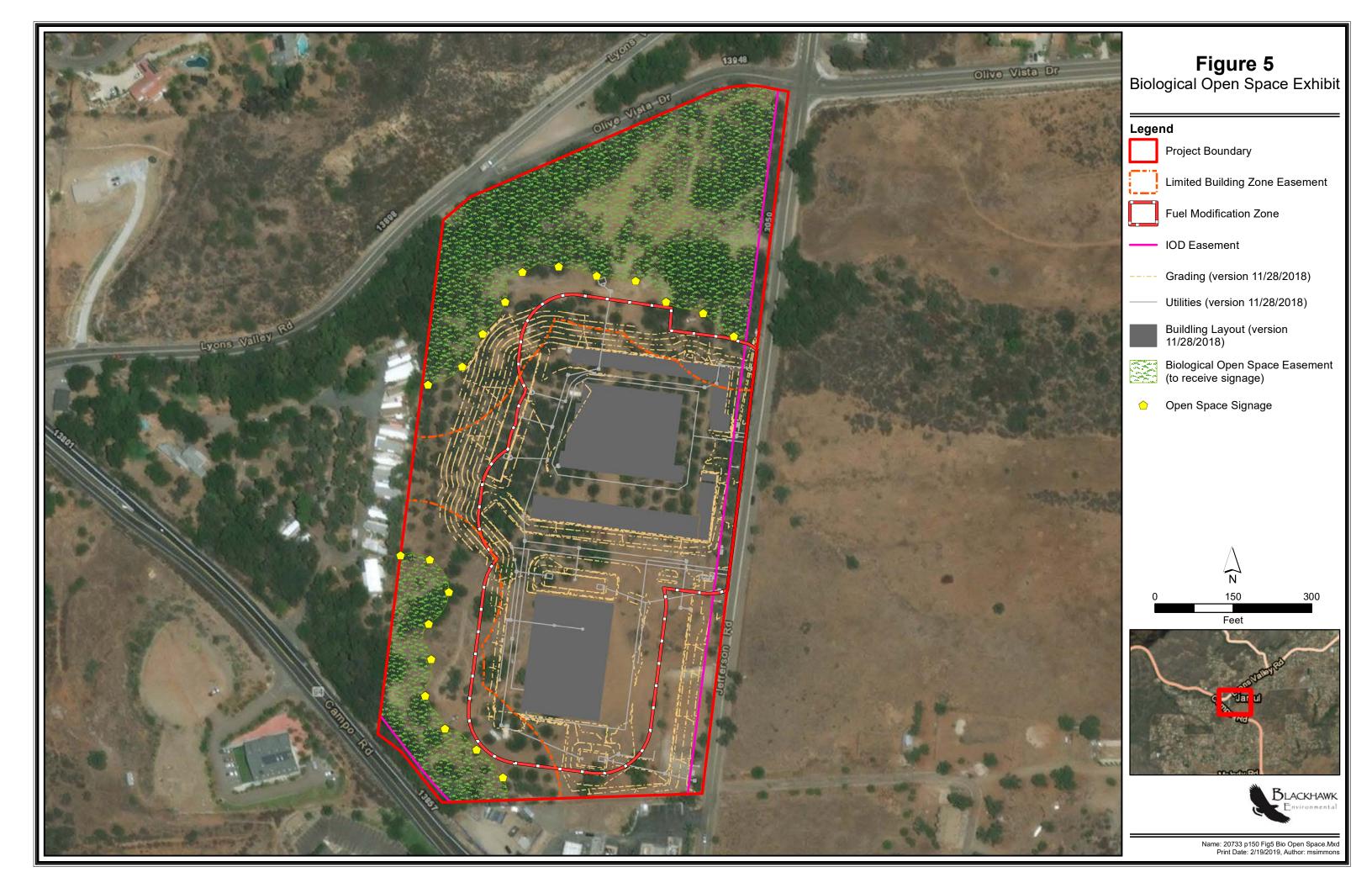
Appendix D – Representative Photos











APPENDIX A

Wildlife Species Observed List





APPENDIX A

WILDLIFE SPECIES LIST

AVES	BIRDS
ACCIPITRIDAE	Kites, Hawks, Eagles and Allies
Accipiter cooperii ¹	Cooper's hawk ¹
Buteo lineatus ¹	red-shouldered hawk1
AEGITHALIDAE	Bushtits
Psaltriparus minimus	bushtit
CORVIDAE	Jays, Magpies and Crows
Aphelocoma californica	California scrub-jay
Corvus brachyrhynchos	American crow
CATHARTIDAE	Storks & Relatives
Cathartes aurai	turkey vulture ¹
COLUMBIDAE	Pigeons & Doves
Zenaida macroura	mourning dove
EMBERIZIDAE	New World Sparrows & Buntings
Pipilo maculatus	spotted towhee
Melozone crissalis	California towhee
Zonotrichia leucophrys	white-crowned sparrow
FRINGILLIDAE	Finches and Allies
Haemorhous mexicanus	house finch
Spinus psaltria	lesser goldfinch
MIMIDAE	Mockingbirds and Thrashers
Toxostoma redivivum	California thrasher
PARULIDAE	New World Warblers
Setophaga coronata	yellow-rumped warbler
PICIDAE	Woodpeckers
Picoides nuttallii	Nuttall's woodpecker
POLIOPTILIDAE	Gnatcatchers
Polioptila caerulea	blue-gray gnatcatcher
SYLVIIDAE	Sylviid Warblers
Chamaea fasciata	wrentit
STURNIDAE	Starlings and Mynas
*Sturnus vulgaris	European starling
TROCHILIDAE	Hummingbirds
Calypte anna	Anna's hummingbird
TYRANNIDAE	Tyrant Flycatchers
Contopus sordidulus	western wood-pewee
Myiarchus cinerascens	ash-throated flycatcher
Sayornis nigricans	black phoebe
TROGLODYTIDAE	Wrens
Thyromanes bewickii	Bewick's wren



REPTILIA	REPTILES
PHRYNOSOMATIDAE	Spiny Lizards
Sceloporus occidentalis	western fence lizard
Uta stansburiana	common side-blotched lizard
TEIIDAE	Whiptails and Racerunners
Aspidoscelis hyperythra beldingi ²	Belding's orange-throated whiptail ²

MAMMALIA	MAMMALS
CANIDAE	Foxes, Wolves & Allies
*Canis familiaris	domestic dog
CRICETIDAE	Mice, Rats and Voles
Neotoma fuscipes	dusky-footed woodrat
GEOMYIDAE	Pocket Gophers
Thomomys bottae	Botta's pocket gopher
LEPORIDAE	Rabbits and Hares
Sylvilagus audubonii	Audubon's cottontail
SCIURIDAE	Squirrels, Chipmunks, Marmots, Prairie Dogs
Otospermophilus beecheyi	California ground squirrel

*: Non-native species

1: County of San Diego Group 1 species

2: County of San Diego Group 2 species

APPENDIX B

Plant Species Observed List





APPENDIX B

PLANT SPECIES LIST

FERNS

PTERIDACEAE	Brake Family
Pentagramma triangularis	silverback fern

GYMNOSPERMS

PINACEAE	Pine Family
Pinus sp.	ornamental pine

ANGIOSPERMS MONOCOTS

AGAVACEAE	Agave Family
*Agave sp.	agave
Hesperoyucca whipplei	chaparral yucca
ALOACEAE	Aloe Family
*Aloe spp.	ornamental aloe (2 species)
ARECACEAE	Palm Family
**Washingtonia robusta	Mexican fan palm
ASPARAGACEAE	Asparagus Family
**Asparagus asparagoides	African asparagus fern
IRIDACEAE	Iris Family
*Iris sp.	ornamental iris
Sisrynchium bellum	western blue-eyed grass
LILIACEAE	Lily Family
*Lilium sp.	ornamental lily
POACEAE	Grass Family
**Arundo donax	giant reed
**Avena barbata	slender oat
**Bromus diandrus	ripgut brome
**Bromus madritensis	foxtail brome
*Bromus hordeaceus	soft chess
**Festuca myuros	rat-tail fescue
**Hordeum murinum	foxtail barley
*Stipa miliacea	smilo grass

DICOTS

ADOXACEAE	Moschatel Family
Sambucus nigra ssp. caerulea	blue elderberry
AMARANTHACEAE	Amaranth Family





Amaranthus blitoides	prostrate pigweed
ANACARDIACEAE	Sumac Family
Malosma laurina	laurel sumac
Rhus integrifolia	lemonade berry
*Schinus molle	Peruvian pepper tree
*Schinus terebinthifolius	Braziliaan pepper tree
Toxicodendron diversilobum	poison-oak
ASTERACEAE	Sunflower Family
Artemisia californica	California sagebrush
Baccharis sarothroides	broom baccharis
Bahiopsis laciniata ^D	San Diego County viguiera ^D
**Carduus pycnocephalus	Italian thistle
*Centaurea melitensis	tocalote
Corethrogyne filaginifolia	California aster
Erigeron canadensis	Canada horseweed
Eriophyllum confertiflorum	golden yarrow
Deinandra fasciculata	tarweed
**Glebionis coronaria	crown daisy
Gutierrezia californica	California matchweed
Hazardia squarrosa var. grindelioides	sawtooth goldenbush
Heterotheca grandiflora	telegraph weed
Isocoma menziesii var. menziesii	Menzies' goldenbush
*Lactuca serriola	prickly lettuce
*Logfia gallica	narrow-leaf filago
*Sonchus asper	prickly sow thistle
Stephanomeria exigua	small wreath-plant
Stephanomeria virgata	twiggy virgata
Pseudognaphalium californicum	ladies' tobacco
*Pseudognaphalium luteoalbum	common cudweed
BRASSICACEAE	Mustard Family
**Hirschfeldia incana	short-pod mustard
**Sisymbrium irio	London rocket
*Sisymbrium sp.	tumble mustard
BORAGINACEAE	Borage Family
Amsinckia intermedia	rancher's fiddleneck
Cryptantha sp.	popcorn flower
CACTACEAE	Cactus Family
*Opuntia ficus-indica	Indian fig cactus
CAPRIFOLIACEAE	Honeysuckle Family
Lonicera subspicata	southern honeysuckle
CRASSULACEAE	Stonecrop Family
*Crassula ovata	jade plant
CHENOPODIACEAE	Goosefoot Family
**Bassia hyssopifolia	five-hook bassia
**Salsola tragus	Russian Thistle

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CUCURBITACEAE	Gourd Family
Marah macrocarpus	wild cucumber
ERICACEAE	Heath Family
Xylococcus bicolor	mission manzanita
EUPHORBIACEAE	Spurge Family
Chamaesyce albomarginata	rattlesnake spurge
Croton setiger	doveweed
*Ricinus communis	castor bean
FABACEAE	Legume Family
Acmispon glaber	deer weed
*Parkinsonia florida	blue palo verde
FAGACEAE	Oak Family
Quercus agrifolia	coast live oak
Quercus berberdifolia	scrub oak
Quercus engelmannii ^D	Engelmann oak ^D
GERANIACEAE	Geranium Family
*Erodium botrys	long-beak filaree
LAMIACEAE	Mint Family
*Marrubium vulare	horehound
Salvia apiana	white sage
Trichostema lanceolatum	vinegar weed
MALVACEAE	Mallow Family
*Malva parviflora	cheese weed
MORACEAE	Mulberry and Fig Family
*Ficus carica	edible fig
MYRSINACEAE	Myrsine Family
*Lysimachia arvensis	scarlet pimpernel
MYRTACEAE	Myrtle Family
*Eucalyptus globulus	blue gum
OLEACEAE	Olive Family
Fraxinus velutina	velvet ash
*Olea europaea	olive tree
OXALIDACEAE	Oxalis Family
**Oxalis pes-caprae	Bermuda buttercup
PLANTAGINACEAE	Plantain Family
Plantago erecta	California plantain
PLATANACEAE	Sycamore Family
Platanus racemosa	California sycamore
POLEMONIACEAE	Phlox Family
Navarretia hamata	skunk weed
POLYGONACEAE	Buckwheat Family
Eriogonum fasciculatum	flat-top buckwheat
*Rumex crispus	curly dock
RHAMNACEAE	Buckthorn Family
Rhamnus crocea	spiny redberry

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ROSACEAE	Rose Family
Adenostoma fasciculatum	chamise
Heteromeles arbutifolia	toyon
SALICACEAE	Willow Family
Populus fremontii	western cottonwood
Salix gooddingii	Goodding's black willow
Salix laevigata	red willow
Salix lasiolepis	arroyo willow
SCROPHULARIACEAE	Figwort Family
*Kickxia elatine	sharp-leaf fluellin
SOLANACEAE	Nightshade Family
**Nicotiana glauca	tree tobacco
TAMARICACEAE	Tamarix Family
**Tamarix ramosissima	tamarisk

Key to Symbols:

^{* :} Non-native

 $^{^{\}star\star}$: Non-native and Invasive according to the California Invasive Plant Council

D : County of San Diego List D species

APPENDIX C

Sensitive Plant and Wildlife Species with the Potential to Occur



APPENDIX C SENSITIVE PLANT SPECIES OBSERVED OR WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE COMMERCIAL DEVELOPMENT PROPERTY APN: 596-071-60 USGS JAMUL MOUNTAINS QUAD									
Scientific Name and Common Name		Sensitivit	y Codes	000037	Habitat Preference/	Verified On-Site	Potential to	Factual Basis for	
	CRPR	County	State	Federal	Requirements	Yes/No	Occur On-Site	Determination of Occurrence Potential	
Blue streamwort Stemodia durantifolia	2B.1	List B	None	None	A perennial herb typically occurring in riparian habitats on wet sand or rocks, as well as drying streambeds. Blooms: Jan-Dec (all year) Elevation: <400 m	No	No Potential	One known record exists for this species 4.8 miles from the project site. This species was not observed onsite during the rare plant survey conducted within its blooming period. Therefore, this species is assumed absent from the project site.	
California black walnut Juglans californica	4.2	List D	None	None	Perennial deciduous tree occurring in alluvial or well-drained soils in chaparral, cismontane woodlands, coastal scrub, and riparian woodland habitats. Often on slopes and hillsides. Blooms: Mar-May Elevation: 30-900 m	No	No Potential	This species is easily identified year-round and has not been observed on the project site. Therefore, this species is assumed absent from the project site.	
Campo clarkia Clarkia delicata	1B.2	List A	None	None	An annual herb typically occurring in chaparral and cismontane habitat, often in gabbroic, seasonally moist soils. Blooms: Apr-Jun Elevation: 235-1000 m	No	No Potential	At least six records are known within five miles of the project site. However, no Clarkia of any species were observed onsite, regardless of bloom period. This species was not observed onsite during the rare plant survey conducted within the latter part of its blooming period. Therefore, this species	

								is assumed absent from the project site.
Cooper's rein orchid Piperia cooperi	4.2	List D	None	None	A perennial herb usually occurring in chaparral, cismontane woodland, and native grassland habitats. Blooms: Mar-Jun Elevation: 15-1,585 m	No	No Potential	No records are known for this species within five miles from the project site. No Piperia of any species were observed onsite, regardless of bloom period. This species was not observed onsite during the rare plant survey conducted within the latter part of its blooming period. Therefore, this species is assumed absent from the project site.
Dean's milkvetch Astragalus deanei	1B.1	List A	None	None	A perennial herb usually found in chaparral, cismontane woodland, coastal scrub, riparian forest. Blooms: Feb-May Elevation: 75-695 m	No	No Potential	At least seven records of this species are known within five miles from the project site. No Astragalus of any species were observed onsite, regardless of bloom period. Therefore, this species was not observed onsite during the rare plant survey. Therefore, this species is assumed absent from the project site.
Dehesa nolina Nolina interrata	1B.1	List A, MSCP, NE	SE	None	Perennial herb found as a narrow endemic in gabbro soils of chaparral in foothills. Blooms: Jun-Jul Elevation: 185-855 m	No	No Potential	At least nine records of this species are known within five miles from the project site. While this species has been documented in the surrounding

								vicinity and is easily identified year-round, it was not observed during the surveys; therefore, it has been determined to be absent.
Engelmann oak Quercus engelmannii	4.2	List D	None	None	A perennial deciduous tree associated with chaparral, cismontane woodland, riparian woodland, valley and foothill grassland habitats. Blooms Mar. – Jun Elevation: 50-1,300 m.	Yes	Present	Several mature individuals of this species were mapped in the oak woodland associated with the drainage feature in the northern portion of the project site.
Golden-rayed pentachaeta Pentachaeta aurea aurea	4.2	List D	None	None	An annual herb usually occurring in chaparral, coastal scrub, cismontane woodland, riparian woodland, coniferous forest, and native grassland habitats. Blooms: Mar-Jul Elevation: 80-1,850 m	No	No Potential	No records are known for this species within five miles from the project site. This species was not observed onsite during the rare plant survey conducted within its blooming period. Therefore, this species is assumed absent from the project site.
Large leaf fillary California macrophylla (formerly Erodium macrophyllum var macrophyllum)	CBR	List B	None	None	An annual herb usually found in valley grassland and foothill woodland. Blooms: Mar-May Elevation: 15-1,200 m	No	No Potential	At least two records of this species are known within 3.6 miles from the project site. Featuring characteristically large leaves, the potential presence of this species can be discerned without floral characters present; this species was not observed onsite during the field

								surveys. Therefore, this
								species is assumed absent from the project site.
Mesa club moss Selaginella cinerascens	4.1	List D	None	None	A perennial rhizomatous herb typically found in chaparral and coastal scrub habitats. Blooms: N/A Elevation: 20-640 m	No	No Potential	No records are known for this species within five miles from the project site. This species is identifiable year-round, and it was not observed onsite during the field surveys. Therefore, this species is assumed absent from the project site.
Munz sage Salvia munzii	2B.2	List B	None	None	A perennial evergreen shrub typically occurring in chaparral and coastal scrub. Blooms: Feb-Apr Elevation: 115-1,065 m	No	No Potential	At least 13 occurrences of this species are known within 4.5 miles from the project site. This species is identifiable year-round, and it was not observed onsite during the field surveys. Therefore, this species is assumed absent from the project site.
Narrow-petaled rein orchid Piperia leptopetala	4.3	List D	None	None	A perennial herb typically occurring on generally dry sites in scrub, cismontane woodland and montane coniferous forest, Blooms: May-Jul Elevation: 380-2,225 m	No	No Potential	No records are known for this species within five miles from the project site. No Piperia of any species were observed onsite, regardless of bloom period. This species was not observed onsite during the rare plant survey conducted within its blooming period.

								Therefore, this species is assumed absent from the project site.
Orcutt's brodiaea Brodiaea orcuttii	1B.1	List B, MSCP	None	None	A perennial bulbiferous herb occurring in mesic clay soils in native grasslands often associating with vernal pools. This plant is also known to occur in closed-on coniferous forests, chaparral, cismontane woodland, meadows and seeps, and along stream courses at higher elevations. Blooms: May-Jul Elevation: 30-1,692 m	No	No Potential	One record of this species is known 2.5 miles from the project site. No Brodiaea of any species were observed onsite, regardless of bloom period. This species was not observed onsite during the rare plant survey conducted within its blooming period. Therefore, this species is assumed absent from the project site.
Palmer's goldenbush Ericameria palmeri palmeri	1B.1	List B, MSCP, NE	None	None	A perennial evergreen shrub species occurring in mesic soils in chaparral and coastal scrub habitats. Blooms: (Jul) Sep-Nov Elevation: 30-600 m	No	No Potential	At least eight records are known for this species within five miles from the project site. This species is identifiable yearround, and it was not observed onsite during the field surveys. Therefore, this species is assumed absent from the project site.
Palmer's grappling hook Harpagonella palmeri	4.2	List D	None	None	An annual herb that prefers clay soils in dry, semi-barren areas within chaparral, coastal scrub, and valley and foothill grassland communities. Blooms: Mar-May Elevation: 20-955 m	No	No Potential	One record of this species is known two miles from the project site. This species was not observed onsite during the field surveys, including senesced individuals that would likely have been detectable

								during the June 2018 survey. Therefore, this species is assumed absent from the project site.
Palmer's sage Artemisia palmeri	4.2	List D	None	None	A perennial deciduous shrub typically found in sandy, mesic soils in chaparral, coastal scrub and riparian habitats. Blooms: (Feb) May-Sep Elevation: 15-915 m	No	No Potential	At least four records are known for this species within five miles from the project site. This species is identifiable yearround, and it was not observed onsite during the field surveys. Therefore, this species is assumed absent from the project site.
Parry's tetracoccus Tetracoccus dioicus	1B.2	List A, MCSP	None	None	A perennial deciduous shrub found on the dry slopes of coastal sage scrub and chaparral habitats. Blooms: Apr-May Elevation: 165-1000 m	No	No Potential	At least six records are known for this species within 4.4 miles from the project site. While there is suitable habitat for this species on site, it would have been observed due to its upright and perennial nature, but it was not; therefore, it has been determined to be absent.
Pride of California Lathyrus splendens	4.3	List D	None	None	A perennial herb typically found in chaparral habitat. Blooms: Mar-Jun Elevation: 20-1,525 m	No	No Potential	No records are known for this species within five miles from the project site. No Lathyrus of any species were observed onsite, regardless of bloom period. This species was not observed onsite during the rare

								plant survey conducted within its late-blooming/early senescing period. Therefore, this species is assumed absent from the project site.
Prostrate spineflower Chorizanthe procumbens	CBR	None	None	None	An annual herb usually found on dry, sandy or gravelly openings within chaparral, valley grassland, pinyon-juniper woodland, and coastal sage scrub habitats. Blooms: Apr-Jun Elevation: 40-1300 m	No	No Potential	No Chorizanthe of any species were observed onsite, regardless of bloom period. This species was not observed onsite during the rare plant survey conducted within its late-blooming/early senescing period. Therefore, this species is assumed absent from the project site.
Rush like bristle bush Xanthisma junceum (formerly Machaeranthera juncea)	4.3	List D	None	None	A perennial herb typically found in chaparral and coastal scrub habitat. Blooms: May-Jan Elevation: 240-1000 m	No	No Potential	No records are known for this species within five miles from the project site. This species is identifiable year-round, and it was not observed onsite during the field surveys. Therefore, this species is assumed absent from the project site.
San Diego ambrosia Ambrosia pumila	1B.1	List A, MSCP, NE	None	FE	Perennial herb found in sandy loam or clay, often in disturbed areas, sometimes alkaline areas, in chaparral, coastal scrub, valley and foothill grassland, vernal pool and wetland habitats. Blooms: Apr-Oct Elevation: 20-415 m	No	No Potential	At least four records are known for this species within 3.8 miles from the project site. No Ambrosia of any species was observed onsite. This species was not observed onsite during the field

								surveys conducted within its bloom period. Therefore, this species is assumed absent from the project site.
San Diego goldenstar Bloomeria clevelandii (formerly Muilla clevelandii)	1B.1	List A, MSCP	None	None	Perennial bulbiferous herb found in coastal scrub, chaparral, vernal pools and mesa grasslands in association with clay soils. Blooms: Apr-May Elevation: 50-465 m	No	No Potential	At least 10 records are known for this species within five miles from the project site. This species was not observed onsite during the field surveys, including a lack of recently senesced individuals that may have been detectable. Therefore, this species is assumed absent from the project site.
San Diego needlegrass Stipa diegoensis (formerly Achnatherum diegoense)	4.2	List D	None	None	Perennial grass usually found in wetlands, sometimes in non-wetlands, typically in rocky, often mesic, chaparral and coastal sage scrub habitat. Blooms: Feb-Jun Elevation: 10-800 m	No	No Potential	No records are known for this species within five miles from the project site. This species was not observed onsite during the field surveys, and only limited suitable habitat is available. Therefore, this species is assumed absent from the project site.
San Diego sunflower Bahiopsis laciniata (formerly Viguiera laciniata)	4.3	List D	None	None	A perennial shrub usually occurring in chaparral and coastal scrub. Blooms: Feb-June (Aug) Elevation: 60-750m	Yes	Present	Two individuals of this species were observed on the east-central portion of the project site during the first field survey.
San Diego thorn-mint Acanthomintha ilicifolia	1B.1	List A, MSCP,	SE	FT	An annual herb occurring in openings in valley and foothill	No	No Potential	At least six records are known for this species

		NE			grasslands, coastal scrub, chaparral, vernal pools, wetlands and riparian systems. Blooms: Apr-Jun Elevation: 10-960 m			within 4.5 miles from the project site. This species was not observed onsite during the rare plant survey conducted within the latter part of its bloom period. Therefore, this species is assumed absent from the project site.
Slender pod jewellflower Caulanthus heterophylles heterphyllus (formerly Caulanthus stenocarpus)	CBR	None, MSCP	None	None	An annual herb typically occurring in fire-disturbed areas within open coastal sage scrub and chaparral habitats. Blooms: Mar-May Elevation: 20-1,630 m	No	No Potential	No Caulanthus of any species were observed onsite, regardless of bloom period. This species was not observed onsite during the field surveys. Therefore, this species is assumed absent from the project site.
Snake cholla Cylindropuntia californica var. californica	1B.1	List A, MSCP, NE	None	None	A perennial stem succulent usually found in coastal sage scrub and chaparral habitats. Blooms: Apr-May Elevation: 30-150 m	No	No Potential	At least two records are known for this species within 1.3 miles from the project site. While there is suitable habitat for this species on site, it would have been observed due to its upright and perennial nature; therefore, it has been determined to be absent.
Southern skullcap Scutellaria bolanderi austromontana	1B.2	List A	None	None	A perennial rhizomatous herb typically occurring in mesic soils in chaparral, cismontane woodland, lower montane coniferous forest habitats. Blooms: Jun-Aug Elevation: 425-2000 m	No	No Potential	No records are known for this species within five miles from the project site. This species was not observed onsite during the rare plant

								survey conducted within its bloom period. Therefore, this species is assumed absent from the project site.
Southwestern spiny rush Juncus acutus leopoldii	4.2	List D	None	None	A perennial grass-like herb typically occurring in coastal dunes (mesic), meadows and seeps (alkaline seeps), marshes and swamps (coastal salt). Blooms: (Mar) May-Jun Elevation: 3-900 m	No	No Potential	No records are known for this species within five miles from the project site. This species is identifiable year-round, and it was not observed onsite during the field surveys. In addition, no suitable habitat exists onsite. Therefore, this species is assumed absent from the project site.
Spreading navarretia Navarretia fossalis	1B.1	List A, MSCP	None	FT	An annual herb that occurs in vernal pools, and depressions and ditches in areas that once supported vernal pools in saline and alkaline soils. Typically found in chenopod scrub, marshes and swamps (shallow, freshwater), and playas. Blooms: Apr-Jun Elevation: 30-655 m	No	No Potential	No records are known for this species within five miles from the project site. This species was not observed onsite during the rare plant survey conducted in the latter part of its bloom period. In addition, no suitable habitat exists onsite. Therefore, this species is assumed absent from the project site.
Tecate tarplant Deinandra floribunda (formerly Hemizonia floribunda)	1B.2	List A	None	None	An annual herb typically occurring in chaparral and coastal scrub habitats. Blooms: Aug-Oct Elevation: 70-1,220 m	No	No Potential	No records are known for this species within five miles from the project site. This species was not observed onsite during the field

								surveys. Therefore, this species is assumed absent from the project site.
Variegated dudleya Dudleya variegata	1B.2	List A, MSCP, NE	None	None	A perennial fleshy-leaved herb typically occurring in clay soils on dry hillsides and mesas containing chaparral, grassland, woodland, sage scrub, vernal pool or wetland habitats. Blooms: Apr-Jun Elevation: 3-580 m	No	No Potential	At least 16 occurrences of this species have been documented within five miles from the project site. This species is identifiable year-round and was not observed onsite during the field surveys. Therefore, this species is assumed absent from the project site.
Western dichondra Dichondra occidentalis	4.2	List D	None	None	A perennial rhizomatous herb typically occurring among rocks and shrubs in chaparral, cismontane woodland, coastal scrub, oak woodlands, and valley and foothill grasslands. Blooms: (Jan) Mar-Jul Elevation: 50-500 m	No	No Potential	No records are known for this species within five miles from the project site. This species was not observed onsite during the rare plant survey conducted during the latter part of its bloom period. Therefore, this species is assumed absent from the project site.

State listed as Endangered
State listed as Threatened
Federally listed as Endangered
Federally listed as Threatened
Covered by the Multiple Species Conservation Plan
MSCP Narrow Endemic species
Considered but Rejected SE ST FE FT

MSCP

NE CBR

APPENDIX C SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE COMMERCIAL DEVELOPMENT PROPERTY APN: 596-071-60 USGS JAMUL MOUNTAINS QUAD

Scientific Name and Common Name	Se County	nsitivity Cod State	des Federal	Habitat Preference/ Requirements	Verified On-Site Yes/No	Potential to Occur On-Site	Factual Basis for Determination of Occurrence Potential
American badger Taxidea taxus	Group 2, MSCP	CDFW- SSC	None	Prefers open areas, in flat terrain to moderate slopes, in grasslands, alluvial fans, meadows and deserts.	No No	No Potential	Though two CNDDB records exist approximately four miles from the Project site, no American badgers, burrows and/or their sign were observed on the Project site.
Arroyo Toad Anaxyrus californicus (formerly Bufo microscaphus californicus)	Group 1, MSCP	CDFW- SSC	FE	Requires low gradient streams with exposed sandy stream-sides and stable terraces for burrowing, with scattered vegetation for shelter, and quiet pools free of predatory fishes with sandy or gravel bottoms for breeding.	No	No Potential	Though three CNDDB records exist from 3.4 to 4.7 miles from the Project site, no arroyo toads or suitable habitat were observed on the Project site.
Baja California coachwhip Coluber fuliginosus	None	CDFW- SSC	None	Found mainly in open areas such as grassland, shrubland, and coastal sand dunes.	No	Low	Although this species has been recorded within the vicinity of the Project site, and habitat, albeit low quality, is found on site, the high level of disturbance reduces the likelihood of this species being observed on the Project site.
Belding's orange-throated whiptail Aspidoscelis hyperythra	Group 2, MSCP	None	None	Occurs in semi-arid brushy areas typically with loose soil and rocks, including washes, stream-sides, rocky hillsides, and coastal chaparral.	Yes	Present	Areas with loose soils, rocks and patches of vegetation within the Project site provide suitable habitat for this species. Numerous individuals were documented on site on June 25, 2018.
Bell's sage sparrow Artemisiospiza belli belli (formerly Amphispiza belli belli)	Group 1	None	None	Bell's sparrows breed in coastal sagebrush, chaparral, and other open, scrubby habitats. In chaparral, they tend toward younger, less dense stands that are growing back from recent	No	Low	Though two CNDDB records exist approximately 2.2 to 4.8 miles from the Project site, suitable habitat is limited to a small area of coastal sage scrub on the northern portion of the Project site. Therefore, this species has a low potential to occur along the

				fires. Bell's sage sparrows typically put their nests within shrubs, but also in bunchgrasses, and occasionally on the ground under shrubs, including California sagebrush, brittlebush, white sage, black sage, California buckwheat, bush mallow, chamise, cholla, willow, and others.			northern portion of the Project site.
Big free-tailed bat Nyctinomops macrotis	Group 2	CDFW- SSC	None	Occurs in a variety of habitat types, including sage scrub, pine-oak woodlands, and rocky canyon lands. Forages on a variety of insects in flight. Roosts primarily in high rocky outcrops, rugged cliffs and rockstrewn slopes, but will also roost in caves, crevices, mines, tunnels, abandoned buildings, roof tiles and other structures.	No	No Potential (Roosting) Moderate (Foraging)	One CNDDB record exists 4.2 miles from the Project site. With an absence of suitable roosting substrates, this species is considered absent for roosting proposes, but it has a moderate potential to occur as a foraging species.
Burrowing owl Athene cunicularia hypugea (burrow sites & some wintering sites)	Group 1, MSCP, NE	CDFW- SSC	None	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a yearlong resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	No	No Potential	
California leaf-nosed bat Macrotus californicus	Group 2	CDFW- SSC	None	This non-migratory species roosts mostly in caves, mines and tunnels, but	No	No Potential (Roosting)	No CNDDB records exist within five miles from the Project site. With an absence of suitable roosting

				does not hibernate. It forages on a wide variety of insects by gleaning from foliage or directly off the ground, flying low while hunting prey.		Low (Foraging)	substrates, this species is considered absent for roosting proposes, but it has a low potential to occur as a foraging species.
California red-legged frog Rana draytoni (formerly Rana aurora draytoni)	Group 1, MSCP, NE	CDFW- SSC	FT	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and stream-sides with plant cover. Most common in lowlands or foothills. Breeding habitat is in permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation when the wetlands are dry.	No	No Potential	No CNDDB records exist within five miles of the Project site, and there is no suitable habitat on site. Therefore, this species is considered absent.
Coast patch-nosed snake Salvadora hexalepis virgultea	Group 2	CDFW- SSC	None	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains.	No	Low	No CNDDB records exist within five miles of the Project site, but suitable habitat is present. Therefore, this species has a low potential to occur on the Project site.
Coastal California gnatcatcher Polioptila californica californica	Group 1, MSCP, NE	CDFW- SSC	FT	Coastal sage scrub dominated by California sagebrush, buckwheat, sage and prickly-pear cactus	No	Low	Although this species has been recorded within the vicinity of the Project site, and habitat is found on site, the patch size of the coastal sage scrub habitat is relatively small, disconnected and somewhat isolated from other similar habitats in the surrounding area. Therefore, this species has a low potential to occur on the

							Project site.
Coastal rosy boa Charina trivirgata roseofusca	Group 2	None	None	Inhabits arid scrublands, semi-arid shrublands, rocky shrublands, rocky deserts, canyons, and other rocky areas. Appears to be common in riparian areas but does not require permanent water.	No	No Potential	No CNDDB records exist within five miles of the Project site, and suitable habitat is not present. Therefore, this species is assumed absent from the Project site.
Coastal whiptail Aspidoscelis tigris stejnegeri (formerly Cnemidophorus tigris multiscutatus)	Group 2	CDFW- SSC	None	Sparsely vegetated chaparral, woodland and riparian areas.	No	Low	Although this species has been recorded within the vicinity of the Project site, overall habitat quality for this species is low.
Common barn-owl Tyto alba	Group 2	None	None	Typically occurs in open or semi-open country in lowlands. May nest in forests or urban areas if nearby areas include good open foraging territory, such as farmland, marsh, prairie, desert. Nests in manmade structures, caves and hollow trees. Where no existing cavities are available, will dig holes in dirt banks.	No	Moderate	Suitable nesting and foraging habitat occurs throughout the Project site. Therefore, this species has a moderate potential to occur on the Project site.
Cooper's hawk Accipiter cooperii (nesting)	Group 1, MSCP, NE	None	None	Mature forest, open woodlands, wood edges, river groves. Nests in coniferous, deciduous, and mixed woods, typically those with tall trees and with openings or edge habitat nearby. Also found along trees along rivers through open country, and increasingly in suburbs and cities where some tall trees exist	Yes	Present	This species was observed within the northern coast live oak woodland on the Project site, Suitable nesting trees are found over most of the Project site, though nesting evidence by this species was not obtained.

				for nest sites.			
Coronado skink Plestiodon skiltonianus interparietalis, (formerly Eumeces skiltonianus interparietalis)	Group 2	None	None	Grasslands, woodlands, pine forests and chaparral with open areas for sunning; often in rocky areas near creeks and rivers that have abundant vegetation. Also found in areas away from water.	No	Moderate	Two CNDDB records exist within five miles of the Project site. The coast live oak woodland and the immediately adjacent areas within the Project site provide suitable habitat for this species.
Dulzura California pocket mouse Chaetodipus californicus femoralis	Group 2	CDFW- SSC	None	Found in foothills, mountains, and a short distance into the desert slopes. Prefers gravelly substrates with good sun exposure, usually in or near chaparral, but also in coastal sage scrub, oak woodland, or at the edges of grasslands.	No	Low	No CNDDB records exist within five miles from the Project site. Suitable habitat is found on the Project site; however, repeated anthropogenic disturbances for nearly a century have degraded the habitat quality reducing this species' potential to occur on the Project site to low.
Harbison's dun skipper Euphyes vestris harbisoni	Group 1, MSCP, NE	None	None	Prefers riparian areas with nearby oak woodlands. It is a generalist feeder with a preference for milkweeds and thistle. Larvae are host-specialists, feeding only on the San Diego sedge that is often associated with riparian oak woodlands.	No	Low	Several small patches of San Diego sedge were found in the northernmost drainage feature within the Project site that could serve as host plant patches for this species. However, due to the small size of the patches and the lack of CNDDB observations within five miles, this species has a low potential to occur on the Project site.
Fringed myotis Myotis thysanodes	Group 2	None	None	Roosts in crevices in buildings, mines, rocks, cliff faces, trees and bridges. In San Diego, it occurs primarily in the mountains, usually in oak woodlands and coniferous trees, but sometimes in transitional habitats at lower	No	No Potential (Roosting) Low (Foraging)	No CNDDB records exist within five miles from the Project site. With an absence of suitable roosting substrates, this species is considered absent for roosting proposes, but it has a low potential to occur as a foraging species.

				elevations.			
Golden eagle Aquila chrysaetos (nesting & wintering)	Group 1, MSCP	CDFW- FP	None	In Southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Typically nests on rock outcrops and ledges.	No	No Potential (nesting) Low (foraging)	Though suitable nesting locations are known to occur within five miles of the Project site, there is no suitable nesting habitat on or adjacent to the Project site for this species. Only limited foraging potential exists on the barren, disturbed habitats.
Greater western mastiff bat Eumops perotis californicus	Group 2	CDFW- SSC	None	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Crevices in cliff faces, high buildings, trees, and tunnels are required for roosting. When roosting in rock crevices, it needs vertical faces to drop off to take flight. Nursery roosts described as tight rock crevices at least 35 inches deep and two inches wide, or crevices in buildings. Suitable habitat consists of extensive open areas with abundant roost locations provided by crevices in rock outcrops and buildings. Is known to forage over 25 miles away from its roost site.	No	No Potential (Roosting) Moderate (Foraging)	No CNDDB records exist within five miles from the Project site. With an absence of suitable roosting substrates, this species is considered absent for roosting proposes, but it has a moderate potential to occur as a foraging species.
Hermes copper Lycaena hermes	Group 1	None	FC	Occurs in coastal sage scrub and southern mixed chaparral in close association with California buckwheat and its sole	No	Low	Three CNDDB records exist within five miles from the Project site. With scattered spiny redberry found in the northern portion of the Project site, this species has a

				larval host plant, spiny redberry.			low potential to occur.
Large-blotched salamander Ensatina eschscholtzii klauberi	Group 1	None	None	Inhabits moist, shaded evergreen and deciduous forests and oak woodlands. Found under rocks, logs, and other debris, or in animal burrows and woodrat nests.	No	Low	No CNDDB records exist within five miles from the Project site. With suitable habitat for this species on the Project site limited to the coast live oak woodlands and drainage features, this species has a low potential to occur.
Least Bell's vireo Vireo bellii pusillus (nesting)	Group 1, MSCP, NE	SE	FE	Occupies riverine riparian habitats that typically feature dense cover within 1-2 meters of the ground and a dense, stratified canopy. It inhabits low, dense riparian growth along water or along dry parts of intermittent streams. Primarily associated with willows and mule fat.	No	No Potential	Though nine CNDDB records exist within five miles from the Project site, there is no suitable nesting habitat on the Project site. Therefore, this species is assumed absent.
Loggerhead shrike Lanius ludovicianus (nesting)	Group 1	CDFW- SSC	None	Inhabits open country with short vegetation and well-spaced shrubs or low trees, particularly those with spines or thorns. Frequents agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses and cemeteries.	No	Low	No CNDDB records exist within five miles from the Project site. With suitable habitat for this species on the Project site limited to open areas within the disturbed olive orchard, this species has a low potential to occur.
Long-legged myotis Myotis volans	Group 2	None	None	Primarily occurs in coniferous forests, but also seasonally in riparian and desert habitats. Uses abandoned buildings, cracks in the ground, cliff crevices, exfoliating tree bark, and hollows within snags as summer day	No	No Potential (Roosting) Low (Foraging)	No CNDDB records exist within five miles from the Project site. With an absence of suitable roosting substrates, this species is considered absent for roosting proposes, but it has a low potential to occur as a foraging species.

				roosts, and caves and mines as hibernacula. It is a rapid, direct flier, often traveling some distance while foraging, and feeds in and around the forest canopy, primarily on moths and other soft-bodied insects. In San Diego, it primarily occurs in the mountains and transitional habitats at higher elevations including pine-oak woodlands, but also in desert transition vegetation, and in the desert at the base of the eastern foothills in association with palm groves and possibly desert riparian habitat.			
Long-eared myotis Myotis evotis	Group 2	None	None	Occur in a variety of habitats, from sage to high altitude coniferous forests, mainly in forested regions; buildings and under tree bark daytime roosts	No	Low (Roosting) Moderate (Foraging)	Five CNDDB records exist within five miles from the Project site. With limited suitable roosting substrates, this species is considered low for roosting proposes, but it has a moderate potential to occur as a foraging species. The coast live oak woodland within the Project site provides very limited roosting habitat for this species.
Long-eared owl Asio otus (nesting)	Group 1	CDFW- SSC	None	Favored habitat includes dense trees for nesting and roosting, with adjacent open country for hunting. Inhabits a wide variety of such settings, including forest with extensive meadows, groves of conifers or	No	Low	No CNDDB records exist within five miles from the Project site. With suitable habitat for this species on the Project site limited to the coast live oak woodlands, this species has a low potential to occur.

				deciduous trees in prairie country, and streamside groves in desert generally avoids unbroken forest.			
Mexican long-tongued bat Choeronycteris mexicana	Group 2	CDFW- SSC	None	This bat occurs in a variety of habitats, including thorn scrub, Palo Verde-saguaro desert, semi-desert grassland, oak woodland and tropical deciduous forests. In the southwestern United States, they are typically observed in oak-conifer woodlands and semi desert grasslands. Prefers to roost in caves, mines, rock crevices, under exposed roots, and in buildings. In San Diego, they have been found exclusively in man-made structures.	No	No Potential (Roosting) Low (Foraging)	No CNDDB records exist within five miles from the Project site. With an absence of suitable roosting substrates, this species is considered absent for roosting proposes, but it has a low potential to occur as a foraging species.
Monarch butterfly Danaus plexippus (Pop. 1 California overwintering population)	Group 2	None	None	At overwintering sites, monarchs require high humidity, fresh water, and an absence of freezing temperatures or high winds. They are found at sites consisting of roost trees, in which monarchs cluster, surrounded by a larger grove or windrow of trees. Trees most commonly used for roosting include Monterey pine, Monterey cypress blue gum eucalyptus, red gum eucalyptus, western sycamore, and coast live	None	Moderate	No CNDDB records are known within five miles of the Project site. No larval host plants [milkweed (Asclepias spp.) were observed on the Project site. Therefore, this species may be considered absent from the Project site for egg-laying and larval metamorphosis life history functions, but may be considered as moderate potential to occur as a fly-over species.

				oak.			
Mountain lion Puma concolor californica (formerly Felis concolor)	Group 2, MSCP	None	None	Found in riparian woodland, forest, scrub, chaparral, grassland and desert wherever mule deer and sufficient cover to stalk them exist.	No	Low	The coast live oak woodlands provide shelter, passage and foraging opportunities for this apex predator, though the more wide-open lands beyond Jamul provide better opportunities. Therefore, this species has a low potential to occur on the Project site.
Northern Harrier Circus cyaneus hudsonius (nesting)	Group 1, MSCP	CDFW- SSC	None	Inhabits marshlands, wet meadows, dense grasslands, open riparian scrub and open riparian woodland habitats. May forage occasionally over other nearby habitat types. Hunts for a variety of prey items, consuming mostly small mammals.	No	No Potential	No CNDDB records exist within five miles from the Project site, and there is no suitable nesting habitat on the Project site. Therefore, this species is assumed absent.
Northern red diamond rattlesnake Crotalus ruber ruber	Group 2	CDFW- SSC	None	Inhabits arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, cultivated areas. On the desert slopes of the mountains, it ranges into rocky desert flats.	No	Low	Seven CNDDB records exist within five miles from the Project site, Limited suitable habitat occurs in the coastal sage scrub on the Project site. Therefore, this species has a low potential to occur on the Project site.
Northwestern San Diego pocket mouse Chaetodipus fallax fallax	Group 2	CDFW- SSC	None	Prefers loose, sandy, and gravelly soils, or mixed rocks, on moderate to steep rocky slopes with nearby shrubs. Known range extends north to the San Bernardino and San Gabriel mountains, east to the San Jacinto Mountains, and south into Baja California.	No	No Potential	No CNDDB records exist within five miles of the Project site and there is no suitable habitat for this species on the Project site; therefore, this species is assumed absent.
Pallid bat Antrozous pallidus	Group 2	CDFW- SSC	None	Forages within a number of habitat types,	No	No Potential (roosting)	Three CNDDB records exist within five miles from the Project site.

				frequently by pursuing insects while walking on the ground. Most commonly associated with arid open scrub or grassland and gentle terrain with scattered rocky outcrops. Can also be found in higher elevation coniferous forests on steep terrain. Often occurs on oak- and sycamore-lined flood plain terraces at low elevations in the inland valleys. Uses some agricultural areas for foraging. Roosts in manmade structures, rock and sandstone crevices and caves, under tree bark, and in rodent burrows or crevices in the ground.		Moderate (foraging)	With an absence of suitable roosting substrates, this species is considered absent for roosting proposes, but it has a moderate potential to occur as a foraging species. Although this species has been recorded in the vicinity, overall habitat quality is low, and there are no suitable roosting habitats onsite.
Pocketed free-tailed bat Nyctinomops femorosaccus	Group 2	CDFW- SSC	None	Colonial species that roosts primarily in crevices in steep rugged cliffs, high rocky outcrops and slopes; it is readily found in abandoned quarries. May also roost in buildings, caves, and under roof tiles. It has been found in a wide variety of plant associations, including riparian, oak woodland, coniferous forest, open meadow and grassland, and coastal and desert scrublands, including over scrubby ridges, reservoirs, ponds, wetlands, and	No	No Potential (roosting) Moderate (foraging)	Ten CNDDB records exist within five miles from the Project site. With an absence of suitable roosting substrates, this species is considered absent for roosting proposes, but it has a moderate potential to occur as a foraging species. Although this species has been recorded in the vicinity, overall habitat quality is low, and there are no suitable roosting habitats onsite.

				artificial lights.			
Quino checkerspot butterfly Euphydryas editha quino	Group 1, MSCP, NE	None	FE	Adult quino checkerspots nectar primarily on annuals including goldfields, cryptantha, gilia, linanthus, and trefoil. The larvae may use either dwarf plantain or purple owl's clover, both of which may be common in meadows and upland sage scrub/chaparral habitat.	No	Low	Thirteen CNDDB records exist within five miles of the Project site. Suitable habitat of larval host plant patches containing dwarf plantain were observed in openings between coastal sage scrub patches on the northern portion of the Project site proposed to be dedicated as Biological Open Space. This species can be assumes absent from areas on the Project site devoid of host plants, but is considered to have a low potential to occur in the northern portion, primarily due to the limited extent of the suitable habitat at that location enclosed by oak woodlands.
Red-shouldered hawk Buteo lineatus	Group 1	None	None	Typically occurs in riparian woodlands, oak woodlands, eucalyptus groves, ranchland, orchards, and sometimes nesting in palm trees in urban areas.	Yes	Present	This species was observed within the northern coast live oak woodland on the Project site, Suitable nesting trees are found over most of the Project site, though nesting evidence by this species was not obtained.
Ringtail Bassariscus astutus	Group 2	None	None	Occurs in chaparral, oak woodland, coniferous forest, riparian areas, or palm oases, typically where steep vertical rock surfaces or tree trunks provide readily climbable escape routes.	No	Low	No CNDDB records are known within five miles of the Project site, but suitable habitat is present in the oak woodlands. Therefore, this species has a low potential to occur on the Project site.
Rufous-crowned sparrow Aimophila ruficeps canescens	Group 1, MSCP	None	None	Found in coastal lowlands and foothills in sage scrub, open or burned chaparral, and grassland with scattered shrubs. Typical habitat is fairly	No	Low	Seven CNDDB records exist within five miles of the Project site, but suitable habitat is largely not present. Therefore, this species has a low potential to occur on

San Diego banded gecko Coleonyx variegatus abbotti	Group 1	CDFW- SSC	None	steep south-facing slopes with about 50% cover of low shrubs. Sage scrub on gentle rolling hillsides is even more favorable but now greatly reduced and fragmented. Prefers rocky areas in coastal sage and chaparral.	No	No Potential	No CNDDB records are known within five miles of the Project site, and there is no suitable habitat onsite. Therefore, this species is assumed absent from the Project
San Diego black-tailed jackrabbit Lepus californicus bennettii	Group 2	CDFW- SSC	None	Prefers grasslands or open areas with patches of scrub of varying density for cover and escape.	No	Low	site. Three CNDDB records exist within five miles of the Project site, but suitable habitat is largely not present. Therefore, this species has a low potential to occur on the Project site.
San Diego desert woodrat Neotoma bryanti intermedia (formerly Neotoma lepida intermedia)	Group 2	CDFW- SSC	None	Usually occurs around large boulder outcrops in coastal sage scrub and chaparral from sea level to pinyon-juniper woodland (but not coniferous forest) at higher elevations, and desert scrub.	No	Low	One CNDDB record exists within five miles of the Project site, but suitable habitat is largely not present. Therefore, this species has a low potential to occur on the Project site.
San Diego horned lizard Phrynosoma coronatum blainvillei	Group 2, MSCP	CDFW- SSC	None	Inhabits open areas of loose, sandy soil and low vegetation in grasslands, coniferous forests, woodlands, chaparral, washes and along dirt roads, usually in close association with harvester ants.	No	Low	Eleven CNDDB record exists within five miles of the Project site, but suitable habitat is largely not present. Therefore, this species has a low potential to occur on the Project site.
San Diego ringneck snake Diadophis punctatus similis	Group 2	None	None	Prefers moist areas in wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral,	No	Low	One CNDDB record exists within five miles of the Project site, but suitable habitat is present in the coast live oak woodlands and

				mixed coniferous forests, and woodlands.			drainage features. Therefore, this species has a low potential to occur on the Project site.
Sharp-shinned hawk Accipiter striatus (nesting)	Group 1	None	None	Found in a wide variety of habitats, but more frequently in areas with trees or tall shrubs than in those without them. Any place that concentrates flocks of small birds such as house finches, house sparrows, white-crowned sparrows, or juncos is likely to attract the hawk. In the desert the species is found mainly at oases, in developed areas, and in mesquite thickets.	No	No Potential	This species is not known to nest within five miles of the Project site. Therefore, it is assumed absent for nesting purposes.
Silvery legless lizard Anniella stebbinsi (formerly Anniella pulchra pulchra)	Group 2	CDFW- SSC	None	Occurs in moist, loose soils with some plant cover in coastal sand dunes, suburban gardens, chaparral, pine-oak woodlands, stream terraces with sycamores, cottonwoods, or oaks, oak woodlands, Joshua/juniper woodland, mixed conifer forest, desert scrub, sandy washes, and alluvial fans.	No	Low	No CNDDB records are known within five miles of the Project site, but suitable habitat may be present in pockets of looser soils. Therefore, this species has a low potential to occur on the Project site.
South Coast garter snake Thamnophis sirtalis novum	Group 2	CDFW- SSC	None	Found in areas near permanent water with riparian vegetation in marsh and upland habitats.	No	No Potential	No CNDDB records are known within five miles of the Project site, and there is no suitable habitat onsite. Therefore, this species is assumed absent from the Project site.
Southern grasshopper mouse Onychomys torridus ramona	Group 2	CDFW- SSC	None	Typically found in open habitats, including native perennial grasslands and coastal sage scrub to the	No	Low	No CNDDB records are known within five miles of the Project site, but suitable habitat may be present in the coastal sage scrub.

				west of the mountain and alluvial fans and desert scrub to the east.			Therefore, this species has a low potential to occur on the Project site.
Southern mule deer Odocoileus hemionus	Group 2, MSCP	None	None	Inhabits a wide array of habitats from coastal sage scrub to chaparral, oak woodland, riparian woodland, and montane conifer-hardwood forest in the mountains and riparian woodland and desert scrub on the east slope of the mountains. Tend to use south-facing slopes in summer.	No	High	This species is likely present in the coast live oak woodlands and would be anticipated to utilize the woodlands for shelter, dispersal and foraging opportunities.
Southwestern pond turtle Emmys marmorata (formerly Clemmys marmorata pallida)	Group 1, MSCP, NE	CDFW- SSC	None	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Estivates during summer droughts by burying itself in mud.	No	No Potential	No CNDDB records are known within five miles of the Project site, and there is no suitable habitat onsite. Therefore, this species is assumed absent from the Project site.
Southwestern willow flycatcher Empidonax traillii extimus (formerly Empidonatrailii extimus) (nesting)	Group 1, MSCP, NE	SE	FE	Restricted to riparian woodlands along streams and rivers with mature, dense stands of willows, cottonwoods, or smaller spring fed or boggy areas with willows or alders.	No	No Potential	One CNDDB record exists almost five miles from the Project site. However, suitable nesting habitat is not present. Therefore, this species is assumed absent.
Spotted bat Euderma maculatum	Group 2	CDFW- SSC	None	Typically occurs in rugged, rocky, arid to	No	No Potential (roosting)	No CNDDB records exist within five miles from the Project site. With an

				semi-arid habitats ranging from ponderosa pine to open scrublands and deserts. Usually roosts in high cliffs near wide expanses of open habitat. In mountains typically forages along the forested edges of meadows, marshes and other clearings. In deserts, foraging occurs along riparian corridors. Appears to move from higher elevations in summer to lower elevations in fall and winter.		No Potential (foraging)	absence of suitable roosting substrates, this species is considered absent for roosting proposes. With a paucity of regional observations, this species may also be assumed absent to occur as a foraging species.
Summer tanager Piranga rubra (nesting)	Group 1	CDFW- SSC	None	Inhabits mature riparian woodland, especially where Fremont cottonwoods form a fairly continuous canopy.	No	No Potential	No CNDDB records are known within five miles of the Project site, and there is no suitable habitat onsite. Therefore, this species is assumed absent from the Project site.
Swainson's hawk Buteo swainsoni (nesting)	Group 1, MSCP	ST	None	Prefers open habitats for foraging. Although much of their native prairie and grassland habitat has been converted to crop and grazing land, these hawks have adjusted well to agricultural settings. They rely on scattered stands of trees near agricultural fields and grasslands for nesting sites.	No	No Potential nesting	Although this species has been recorded in the vicinity of the Project, foraging habitat is limited to the grasslands in the surrounding areas with better hunting opportunities. With no nesting records nearby, this species is assumed absent for nesting.
Thorne's hairstreak Callophrys thornei (formerly Mitoura thornei)	Group 1, MSCP, NE	None	None	Chaparral that contains Tecate cypress, typically on north facing slopes to 4,200 feet in elevation	No	No Potential	Although this species has been recorded in the vicinity, the absence of chaparral habitat with Tecate cypress eliminates

							any potential for occurrence.
Townsend's big-eared bat Corynorhinus townsendii	Group 2	CDFW- SSC	None	Found in a variety of habitats from scrub deserts to pine and piñon-juniper forests, prefers mesic habitats. Roosts in caves, mines, tunnels, flumes, buildings, bridges and large tree cavities. Regularly switches roost sites in summer and winter based on temperature, resource availability, and/or disturbance. Preferred foraging is among the foliage of trees and shrubs in mosaics of forested and edge habitats, including riparian zones, but tends to avoid open grasslands.	No	No Potential roosting	Although this species has been recorded in the vicinity, overall habitat quality for this species is low, and there are no suitable roosting habitats onsite.
Tricolored blackbird Agelaius tricolor (nesting colony)	Group 1, MSCP	SCE, CDFW- SSC	None	Nests in colonies and prefers freshwater marshes dominated by cattails or bulrushes and occasionally in willows, blackberries, thistles and nettles. Breeding habitat now includes diverse upland and agricultural areas. Small breeding colonies in southern California occur at lakes, reservoirs, and parks surrounded by urban development. Adults from such colonies may forage in nearby undeveloped uplands.	No	No Potential	No nesting records are known within five miles of the Project site, and there were no suitable nesting areas on the Project site. Therefore, this species is assumed absent for nesting purposes.
Turkey vulture Cathartes aura	Group 1	None	None	Widespread over open country, woods, deserts, mountains and foothills.	No	Present	This widespread species was observed flying overhead during both field surveys. There are no

				Usually nests in caves or crevices on steep rocky slopes.			suitable nesting substrates on the Project site; therefore, this species may be assumed absent for nesting purposes.
Two-striped garter snake Thamnophis hammondii	Group 1	CDFW- SSC	None	Generally found around pools, creeks, cattle tanks, and other water sources, often in rocky areas, in oak woodland, chaparral, brushland, and coniferous forest.	No	No Potential	One CNDDB record is known within five miles of the Project site. However, there is no suitable habitat onsite. Therefore, this species is assumed absent from the Project site.
Western bluebird Sialia mexicana	Group 1, MSCP	None	None	Found in areas of scattered trees, open conifer forests, farms. Breeds in semi-open areas including pine woods, oak woodlands, streamside groves, ranch country, sometimes in pinyon-juniper woods, but avoiding hot dry regions. Winters in many kinds of open or semi-open habitats, especially in pinyon-juniper, also in desert, farmland, others.	No	Moderate	While this species is not documented in the CNDDB within five miles of the Project site, it may reasonable be expected to occur nearby. Nesting opportunities are present in limited cavities on the scattered trees of the disturbed habitat.
Western red bat Lasiurus blossevillii	Group 2	CDFW- SSC	None	Roosts only in foliage, typically in riparian trees such as cottonwoods, sycamores, and oaks, but also uses large shrubs, ornamental vegetation, and orchard trees. Can also be found in nonnative vegetation (tamarisk, eucalyptus, bougainvillea). Forages along river and stream courses but also along forested meadow edges, sometimes in suburban and urban parks and	No	Low (roosting) Moderate (foraging)	Four CNDDB records exist within five miles from the Project site. With limited suitable roosting substrates, this species is considered low for roosting proposes, but it has a moderate potential to occur as a foraging species.

				neighborhoods, and around artificial lighting.			
Western small-footed myotis Myotis ciliolabrum	Group 2	None	None	Strongly associated with chaparral and montane habitats on both sides of the mountains in San Diego County. Forages in areas with water and riparian habitat in chaparral, oak woodlands, coniferous forests and rocky areas along the desert edge. Roosts in rock crevices, mines, caves, snags, or buildings.	No	Low (Roosting) Moderate (foraging)	Eight CNDDB records exist within five miles from the Project site. With limited suitable roosting substrates, this species is considered low for roosting proposes, but it has a moderate potential to occur as a foraging species. The coast live oak woodland within the Project site provides very limited roosting habitat for this species.
Western spadefoot toad Spea hammondii	Group 2	CDFW- SSC	None	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains.	No	No Potential	Two CNDDB records exist within five miles from the Project site. However, there is no suitable habitat onsite. Therefore, this species is assumed absent from the Project site.
White-tailed kite Elanus leucurus (formerly Elanus caeruleus) (nesting)	Group 1	CDFW- FP	None	Typically found in savanna, open woodlands, marshes, desert grassland, partially cleared lands, and cultivated fields. Kites typically nest in the upper third of trees that may be 10–160 feet tall. These can be open-country trees growing in isolation, or at the edge of or within a forest.	No	Low	No CNDDB records are known within five miles of the Project site, but there is suitable nesting habitat onsite. Therefore, this species has low potential to occur on the Project site.
Yellow warbler Setophaga petechia brewsteri	Group 2	CDFW- SSC	None	Breeds in shrubby thickets and woods, particularly	No	No Potential	One CNDDB record exists within five miles from the Project site.

(formerly Dendroica petechia brewsteri) (nesting)				along watercourses and in wetlands.			However, there is no suitable nesting habitat on the Project site. Therefore, this species is assumed absent.
Yellow-billed cuckoo Coccyzus americanus occidentalis (nesting)	Group 1, MSCP, NE	SE	FT	Restricted to dense, wide riparian woodlands with well-developed understories and a perennial water source for breeding. It occurs in densely foliaged, deciduous trees and shrubs, especially willows.	No	No Potential	No CNDDB records exist within five miles from the Project site, and there is no suitable nesting habitat on the Project site. Therefore, this species is assumed absent.
Yellow-breasted chat Icteria virens (nesting)	Group 1	CDFW- SSC	None	This migratory species utilizes riparian woodlands, riparian scrub and tall, dense vegetation adjacent to riparian and wetland systems for nesting and foraging purposes.	No	No Potential	One CNDDB record exists within five miles from the Project site. However, there is no suitable nesting habitat on the Project site. Therefore, this species is assumed absent.
Yuma myotis Myotis yumanensis	Group 2	None	None	Occurs in a wide range of habitats, but most often in association with rivers, creeks, ponds, and reservoirs. Roosts in a variety of cavities in rocks, caves, mines, trees, and man-made structures. Forages mostly over open water and along river and stream courses, but also in dry stands of oak woodlands and native scrub habitat.	No	No Potential (roosting) Moderate (foraging)	Eleven CNDDB records exist within five miles from the Project site. With limited suitable roosting substrates, this species is considered absent for roosting proposes, but it has a moderate potential to occur as a foraging species. The coast live oak woodland within the Project site provides very limited roosting habitat for this species.

SE- State listed as Endangered

ST - State listed as Threatened

SCE - State candidate for listing as Endangered SCT - State candidate for listing as Threatened

CDFW-SSC CDFW Species of Special Concern CDFW-FP CDFW Fully Protected MSCP – covered by the Multiple Species Conservation Plan NE - MSCP Narrow Endemic species

FE - Federally listed as Endangered FT - Federally listed as Threatened

FC - Federal candidate species

APPENDIX D

Representative Photos







Photo 1: Southwest-facing view of coastal sage scrub near the north end of the Project site.



Photo 2: Southwest-facing view of coast live oak woodland from disturbed habitat clearing.





Photo 3: South-facing view of trash and debris dumped among olive trees.



Photo 4: North-facing view of olive trees near the western boundary of the Project site.





Photo 5: North-facing view of trail leading through old olive grove.



Photo 6: Southeast-facing overview of Project site with transient dwellings.





Photo 7: East-facing overview of the Project site.



Photo 8: Northwest-facing overview depicting the disturbed nature of the Project site.





Photo 9: West-facing view of coast live oak woodland near the southwest boundary of the Project site.



Photo 10: Northwest-facing view of disturbed understory of the coast live oak woodland.





Photo 11: Northwest-facing view of disturbed area between two coast live oak woodland areas to be dedicated to open space preserve.



Photo 12: North-facing view of disturbed area between two coast live oak woodland areas.