Chapter 7
Biological Resources

7.1 Introduction

This chapter discusses the potential for the Proposed Project to affect wetland, riparian, and upland habitats, and the special-status plant and wildlife species that may use these habitats. Specifically, this chapter describes the existing environmental setting in the project area, discusses federal, State, and local regulations relevant to vegetation and wildlife resources that may be affected by the Proposed Project, identifies plant and wildlife species potentially affected by the Proposed Project, and proposes mitigation measures to avoid or reduce the potentially significant impacts.

The following appendices support this chapter:

- Appendix F. *Biological Resources – Supporting Documentation*

7.2 Regulatory Setting

7.2.1 Federal Laws, Regulations and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] § 1531 et seq.; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC § 1532). Section 7 of the ESA (16 USC § 1531 et seq.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds. Most actions that result in take, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. The USFWS is responsible for overseeing compliance with the MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC § 668; 50 CFR Part 22) prohibits take of bald and golden eagles and their occupied and unoccupied nests. USFWS administers the Bald and Golden Eagle Protection Act.

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. CWA Sections 401 and 404 are the key sections that pertain to biological resources.

Section 401

Section 401 of the CWA allows for evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the United States (waters of the U.S.). In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that might result in the discharge to waters of the U.S. (including wetlands) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA. Compliance with Section 401 is required for all projects that have a federal component and may affect state water quality.

Section 404

CWA Section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies, such as swimming pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under the provisions of the CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of state water quality certification pursuant to Section 401 of the CWA.

7.2.2 State Laws, Regulations and Policies

California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA).

NPPA (California Fish and Game Code §§ 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code §§ 2050-2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is state listed as endangered or threatened, or designated as a candidate for such listing. The California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code Sections 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Sections 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

7.2.3 Local Laws, Regulations, and Policies

Because the California Public Utilities Commission (CPUC) is a state agency, it generally is not subject to local laws and regulations; however, local laws, regulations, and policies are considered here for the evaluation of potential impacts to biological resources that could result from the Proposed Project to the extent that they may inform the analysis and allow for full disclosure of potential impacts.

County of San Diego General Plan

Several goals and policies within the Conservation and Open Space Element of the San Diego County General Plan (2011) relate to the protection of biological resources and are considered applicable to the Proposed Project. The following goals, and affiliated policies, in the County's general plan are applicable to biological resources:

Goal COS-1: Inter-Connected Preserve System. A regionally managed, inter-connected preserve system that embodies the regional biological diversity of San Diego County.

Policies:

COS-1.2 – Minimize Impacts. Prohibit private development within established preserves. Minimize impacts within established preserves when the construction of public infrastructure is unavoidable.

COS-1.3 – Management. Monitor, manage, and maintain the regional preserve system facilitating the survival of native species and the preservation of healthy populations of rare, threatened, or endangered species.

COS-1.4 – Collaboration with Other Jurisdictions. Collaborate with other jurisdictions and trustee agencies to achieve well-defined common resource preservation and management Goals.

COS-1.5 – Regional Funding. Collaborate with other jurisdictions and federal, state, and local agencies to identify regional, long-term funding mechanisms that achieve common resource management Goals.

COS-1.6 – Assemblage of Preserve Systems. Support the proactive assemblage of biological preserve systems to protect biological resources and to facilitate development through mitigation banking opportunities.

COS-1.7 – Preserve System Funding. Provide adequate funding for assemblage, management, maintenance, and monitoring through coordination with other jurisdictions and agencies.

COS-1.8 – Multiple-Resource Preservation Areas. Support the acquisition of large tracts of land that have multiple resource preservation benefits, such as biology, hydrology, cultural, aesthetics, and community character. Establish funding mechanisms to serve as an alternative when mitigation requirements would not result in the acquisition of large tracts of land.

COS-1.9 – Invasive Species. Require new development adjacent to biological preserves to use non-invasive plants in landscaping. Encourage the removal of invasive plants within preserves.

COS-1.10 – Public Involvement. Ensure an open, transparent, and inclusive decision-making process by involving the public throughout the course of planning and implementation of habitat conservation plans and resource management plans.

COS-1.11 – Volunteer Preserve Monitor. Encourage the formation of volunteer preserve managers that are incorporated into each community planning group to supplement professional enforcement staff.

Goal COS-2: Sustainability of the Natural Environment. Sustainable ecosystems with long-term viability to maintain natural processes, sensitive lands, and sensitive as well as common species, coupled with sustainable growth and development.

Policies:

COS-2.1 – Protection, Restoration and Enhancement. Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories, as well as within Village lands where appropriate.

COS-2.2 – Habitat Protection through Site Design. Require development to be sited in the least biologically sensitive areas and minimize the loss of natural habitat through site design.

Goal COS-3: Protection and Enhancement of Wetlands

Policies:

COS-3.1 – Wetland Protection. Require development to preserve existing natural wetland areas and associated transitional riparian and upland buffers and retain opportunities for enhancement.

COS-3.2 – Minimize Impacts of Development. Require development projects to:

1) Mitigate any unavoidable losses of wetlands, including its habitat functions and values; and

2) Protect wetlands, including vernal pools, from a variety of discharges and activities, such as dredging or adding fill material, exposure to pollutants such as nutrients, hydro-modification, land and vegetation clearing, and the introduction of invasive species.

San Diego Multiple Species Conservation Program

The San Diego Multiple Species Conservation Program (MSCP) was prepared pursuant to standards developed by USFWS and CDFW to meet the requirements of the California Natural Communities Act of 1991. The MSCP was developed for southwestern San Diego County, and protects 85 species in this area. The MSCP was approved in 1997. The MSCP has been implemented in southwestern San Diego County. The East County Plan, which would cover the Proposed Project area, is in the planning phase but has not yet been approved or implemented.

7.3 Environmental Setting

The following sections describe the environmental setting for biological resources in proximity to the Proposed Project. Information in this section was gathered from review of the NextEra Energy Transmission West, LLC (NEET West) Proponent's Environmental Assessment (PEA) (NEET West 2015a), which incorporates a Biological Technical Report (NEET West 2015b) prepared for the Proposed Project site.

7.3.1 Regional Setting

The Proposed Project would be located in unincorporated south-central San Diego County, in the Laguna Mountains of the Peninsular Ranges. Elevations in the Proposed Project area range from 3,000 to 3,200 feet (915 to 975 meters) above mean sea level. Topography in the area is undulating with steep hills interspersed with narrow valleys and relatively deep canyons. This portion of San Diego County is characterized by a Mediterranean climate, with hot dry summer and cool wet winters. High temperatures in the vicinity of the Proposed Project in August average 90.6 degrees Fahrenheit (°F) and low temperatures in December average 42.1°F (Western Regional Climate Center [WRCC] 2016). The majority of precipitation occurs between November and April, with average annual precipitation of approximately 16 inches (WRCC 2016). Soils in the Proposed Project area are mostly sandy loams (See Chapter 9, *Geology, Soils, and Seismicity* for more information).

7.3.2 Project Vicinity

The following section provides descriptions of biological communities and habitats in the Proposed Project area.

Habitats

Land cover in the vicinity of the Project area was mapped by SWCA biologists based on field visits and GIS analysis and is depicted in Figure 7-1 (NEET West 2015b). This vegetation study area extends past the Proposed Project footprint. Habitat descriptions are drawn from NEET West's PEA (NEET West 2015a).

Undeveloped areas within the Project footprint and immediate vicinity consist of chaparral scrub and oak woodlands. Within these habitats are disturbed areas which are dominated by non-native grasses and forbs. One habitat type (Engelmann Oak-Coast Live Oak/Poison Oak/Grass Association) present on a small portion of the Proposed Project footprint is considered a sensitive natural community by CDFW.

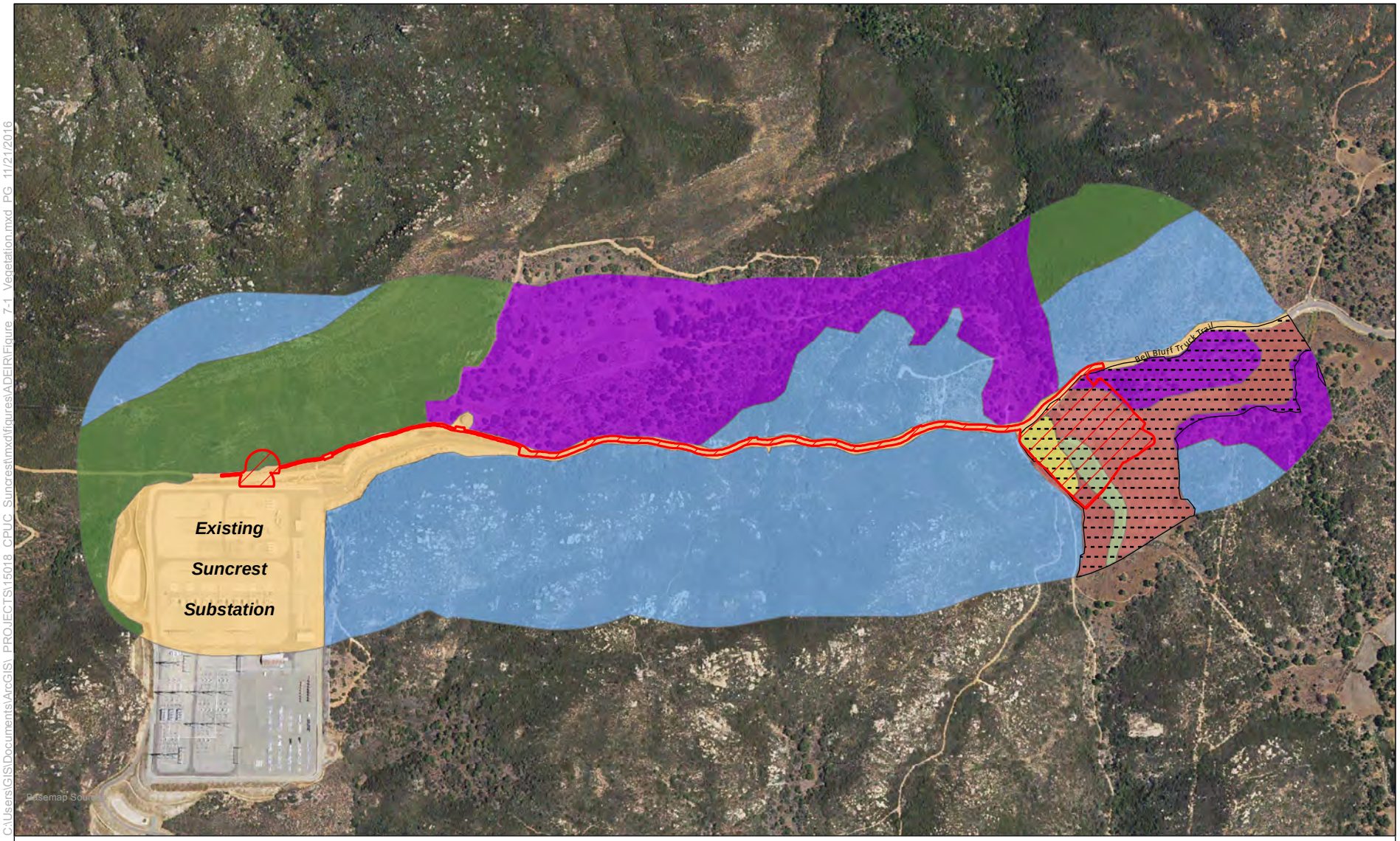
Habitats in the area where the SVC facility would be located have been repeatedly disturbed since 1994 (NEET West 2015a). This area has been disked in the past, and may have been used for grazing.

During the construction of the existing Suncrest Substation (completed in 2012), a portion of this area was disturbed by removal of topsoil and vegetation, and also graded. Following the completion of construction, this area was restored per SDG&E's *Sunrise Powerlink Restoration Plan for Sensitive Vegetation in Temporary Impacts Areas* (ICF and Chambers Group, Inc. 2011). In March 2016, CDFW and USFWS certified the restoration as having met the success criteria, and signed off the site mitigation as complete (Horizon 2016).

Engelmann Oak-Coast Live Oak/Poison Oak/Grass Association (Quercus engelmannii – Q. agrifolia/Toxicodendron diversilobum Association)

This association was mapped in the north-center and eastern portions of the vegetation study area, with stands concentrated along streams and other moist areas. Engelmann oak (*Quercus engelmannii*) and coast live oak (*Q. agrifolia*) are dominant in the canopy, with poison oak (*Toxicodendron diversilobum*) dominant in the shrub strata, and various grasses and forbs dominating the herbaceous layer. Subdominant shrubs observed include coastal sagebrush species, such as black sage (*Salvia mellifera*), white sage (*S. apiana*), California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), and bush monkey flower (*Mimulus aurantiacus*). Grasses present include the non-native species soft chess (*Bromus hordeaceus*), cheatgrass (*B. tectorum*), slender wild oats (*Avena barbata*), red brome (*B. madritensis* ssp. *rubens*), and ripgut brome (*B. diandrus*); native species include purple needlegrass (*Stipa pulchra*) and muhly grasses (*Muhlenbergia* spp.).

This habitat is considered a sensitive natural community by CDFW (California Department of Fish and Game [CDFG] 2010). In the vicinity of the Static VAR compensator (SVC) facility, this community has been repeatedly disturbed. In the disturbed areas, the understory component of this community is not fully developed and is more similar to the *Eriogonum fasciculatum* Association, described below.



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Horizon WATER and ENVIRONMENT

Vegetation Communities

- Bigberry Manzanita – Chamise Chaparral
- California Buckwheat Scrub
- Chamise Chaparral
- Engelmann Oak-Coast Live Oak/Poison Oak/Grass Association
- Non-native Grassland
- Ruderal
- Urban/Developed

Source: SCWA 2015a

- Project Area (limit of disturbance)
- Subject to repeated disturbance

Figure 7-1
Vegetation Types

Suncrest Dynamic Reactive Power Support Project

Table 7-1. Land Cover/Vegetation Types in the Project Area

Project Components	Land Cover / Vegetation Types (acres)*						
	Engelmann Oak-Coast Live Oak/ Poison Oak/ Grass Association *(Quercus engelmannii – Quercus agrifolia/ Toxicodendron diversilobum/* Grass Association)**	**Chamise Chaparral (*Adenostoma fasciculatum* Alliance)**	**California Buckwheat Scrub ** (*Eriogonum fasciculatum* Association)**	**Bigberry Manzanita – Chamise Chaparral Association (*Arctostaphylos glauca – Adenostoma fasciculatum* Association)**	**Non-native Grassland****	**Ruderal****	**Urban Developed****
SVC Facility and Access Driveways	0.3	--	4.5	--	1.1	1.7	0.1
Underground Transmission Line and Vaults	< 0.1	< 0.1	< 0.1	--	--	--	3.1
Riser Pole Area and Tie-in	--	0.4	--	--	--	--	0.1

Note: Acreage includes both temporary and permanent impacts

* Vegetation types follow the California Manual of Vegetation (Sawyer, Keeler-Wolf, and Evens 2009) as modified for San Diego County (Evens and San 2005; AECOM et al. 2011)

** These land cover and vegetation types within the Proposed Project have been subjected to repeated disturbance over the past two decades.

Source: NEET West 2015a

California Buckwheat Scrub (Eriogonum fasciculatum Association)

This alliance is present within the SVC footprint, south of Bell Bluff Truck Trail. The mapped areas are dominated by California buckwheat (*Eriogonum fasciculatum*). As described above, the SVC footprint area has been subject to repeated disturbances, and was planted with native species for site restoration following construction of the existing Suncrest Substation. Because California sagebrush (*Artemisia californica*) is largely absent from the California buckwheat scrub alliance in the study area, this community does not qualify as Diegan or Riversidean coastal sage scrub, which are sensitive natural communities.

Chamise Chaparral (Adenostoma fasciculatum Alliance)

This chaparral alliance is dominated by chamise (*Adenostoma fasciculatum*), which can form dense, monotypic stands and generally lacks an herbaceous layer. This alliance is found in the northwest and northeast portions of the vegetation study area, and within the Proposed Project footprint. This alliance typically occurs on dry slopes, on shallow soils over bedrock. Other shrubs which commonly occur in this alliance include manzanitas (*Arctostaphylos* spp.), sages (*Salvia* spp.), ceanothus (*Ceanothus* spp.), and chaparral yucca (*Hesperoyucca whipplei*).

Bigberry Manzanita – Chamise Chaparral (Arctostaphylos glauca – Adenostoma fasciculatum Association)

This chaparral association is located on granitic slopes in the study area, and forms a dense, closed canopy scrub. The canopy is dominated by bigberry manzanita (*Arctostaphylos glauca*) and chamise. Subdominant shrubs include ceanothus, scrub oak (*Quercus berberidifolia*), and chaparral yucca. This association was mapped immediately adjacent to, but not within the Proposed Project footprint.

Non-native Grassland

In the study area, non-native grassland occurs in areas where disturbed conditions favor non-native species, such as in the laydown area used for the Sunrise Powerlink. This habitat is dominated by non-native grasses, including slender wild oats, soft chess, cheatgrass, red brome, ripgut brome, as well as non-native fobs including red-stemmed filaree (*Erodium cicutarium*), and short-pod mustard (*Hirschfeldia incana*). Some native species persists in this habitat, including western ragweed (*Ambrosia psilostachya*), lupines (*Lupinus* spp.), doveweed (*Croton setigerus*), and Parish's bluecurls (*Trichostema parishii*).

Ruderal

The northwest portion of the SVC site contains bare ground and ruderal vegetation in areas cleared and/or graded by the property owner. This habitat is dominated by species which can quickly colonize disturbed areas. The majority of the species in these areas are non-native, but some native species are also present.

Urban Developed

The area of the paved Bell Bluff Truck Trail, within which the proposed transmission line would be installed, is classified as urban/developed. This classification is characterized by an absence of vegetation due to the installation of permanent features or structures.

Wetlands and Waters

Drainages in the vicinity of the Proposed Project flow both northward and southward, eventually flowing to the Sweetwater River. Surface waters flowing northward join unnamed streams and flow to the Sweetwater River, while drainages southward join Taylor Creek or other unnamed streams which all eventually also join the Sweetwater River. Streams and surface water features in the vicinity of the Proposed Project are generally intermittent in nature. Several unnamed features cross Bell Bluff Truck Trail via culverts (Figure 7-2). These features are anticipated to be dry during the majority of the year, only flowing after rain events. Ditches constructed in uplands along Bell Bluff Truck Trail and Avenida de los Arboles to convey runoff are not considered jurisdictional features.

USACE Jurisdictional Waters

In the vicinity of the Proposed Project, one unnamed ephemeral drainage, which flows north from Bell Bluff Truck Trail, may be subject to USACE jurisdiction (Figure 7-2). An ordinary high water mark (OHWM) is apparent, and this seasonal stream eventually flows into the Sweetwater River. The Proposed Project will avoid this feature. Other natural drainage features observed in the vicinity of the proposed project either did not exhibit an OHWM, or did not have an apparent connection to downstream waters of the United States, and therefore are not generally considered jurisdictional by the USACE (NEET West 2015a).

Topography in the vicinity of the Proposed SVC location was significantly disturbed during development of the Wilson Construction Yard for the Sunrise Powerlink project. Following construction of the existing Suncrest Substation, the site was recontoured to a surface that was intended to match the site's topography prior to its use as the construction staging area (Horizon 2016). Although the topography was restored at this site, altered drainage patterns may have resulted from the disturbance and modifications at the site.

The jurisdictional wetland delineation (JD) conducted for the Sunrise Powerlink identified a wetland within the proposed SVC site (SDG&E 2009); however, a 2015 wetland evaluation conducted by SWCA did not identify wetland features in this location (NEET West 2015a). The cause of this discrepancy may in part be due to potentially altered drainage patterns at the site caused by construction of the Suncrest Substation between the time of the first wetland evaluation in 2009 and the more recent wetland evaluation in 2015 (Horizon 2016). The other potential cause of this discrepancy could be the difference in methodology between these two wetland evaluations. Due to concerns about impacts to potential archaeological resources at the site, the 2009 delineation did not include digging test pits to evaluate the presence of hydric soils. This constraint may have resulted in a JD which included features which would not otherwise be considered wetlands.

The 2015 wetland evaluation conducted by SWCA followed the USACE Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008), including digging and testing for hydric soils (NEET West 2015a). The 2015 SWCA wetland evaluation concluded that neither hydric soils nor jurisdictional wetlands were present within the Proposed Project (NEET West 2015a). A formal JD report has not been prepared for the Proposed Project, as the Proposed Project has been designed to avoid all potentially jurisdictional features.

CDFW Jurisdictional Waters and Riparian Habitats

Two natural drainages on both sides of Bell Bluff Truck Trail and their associated riparian-influenced vegetation, in addition to the natural drainage north of the Proposed SVC location, may be subject to CDFW jurisdiction. These two drainages are conveyed across Bell Bluff Truck Trail through culverts. The Proposed transmission line would be installed beneath these culverts, and it is not anticipated that these culverts would need to be removed. However, culvert removal may be necessary in the instance that blasting is required beneath the culverts. Current designs anticipate that the connectivity of these waters would not be affected by the implementation of the Proposed Project. In the vicinity of these potentially jurisdictional features, the Proposed Project is limited to the developed portion of Bell Bluff Truck Trail.

Critical habitat

No designated critical habitat is present within the Proposed Project footprint, or in the immediate surrounding area (Figure 7-3) (USFWS 2016a). Final critical habitat for arroyo toad (*Anaxyrus californicus*), an ESA-listed endangered species, is approximately 0.6 miles north of the Proposed Project, along the Sweetwater River. Other critical habitat in the vicinity of the Proposed Project includes Cushenbury oxytheca (*Oxytheca parishii* var. *goodmaniana*) and San Diego thornmint (*Acanthomintha ilicifolia*) (2.7 miles northwest of the Proposed Project), coastal California gnatcatcher (*Polioptila californica californica*) (7.3 miles northwest of the Proposed Project), San Bernardino bluegrass (*Poa atropurpurea*) (8.6 miles southeast of the Proposed Project), and Quino checkerspot butterfly (*Euphydryas editha quino*) (10 miles southwest of the Proposed Project).

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Surface Waters
Potential Jurisdiction

CDFW

USACE and CDFW

Source: SCWA 2015a

Project Area

Figure 7-2
Potentially Jurisdictional Waters

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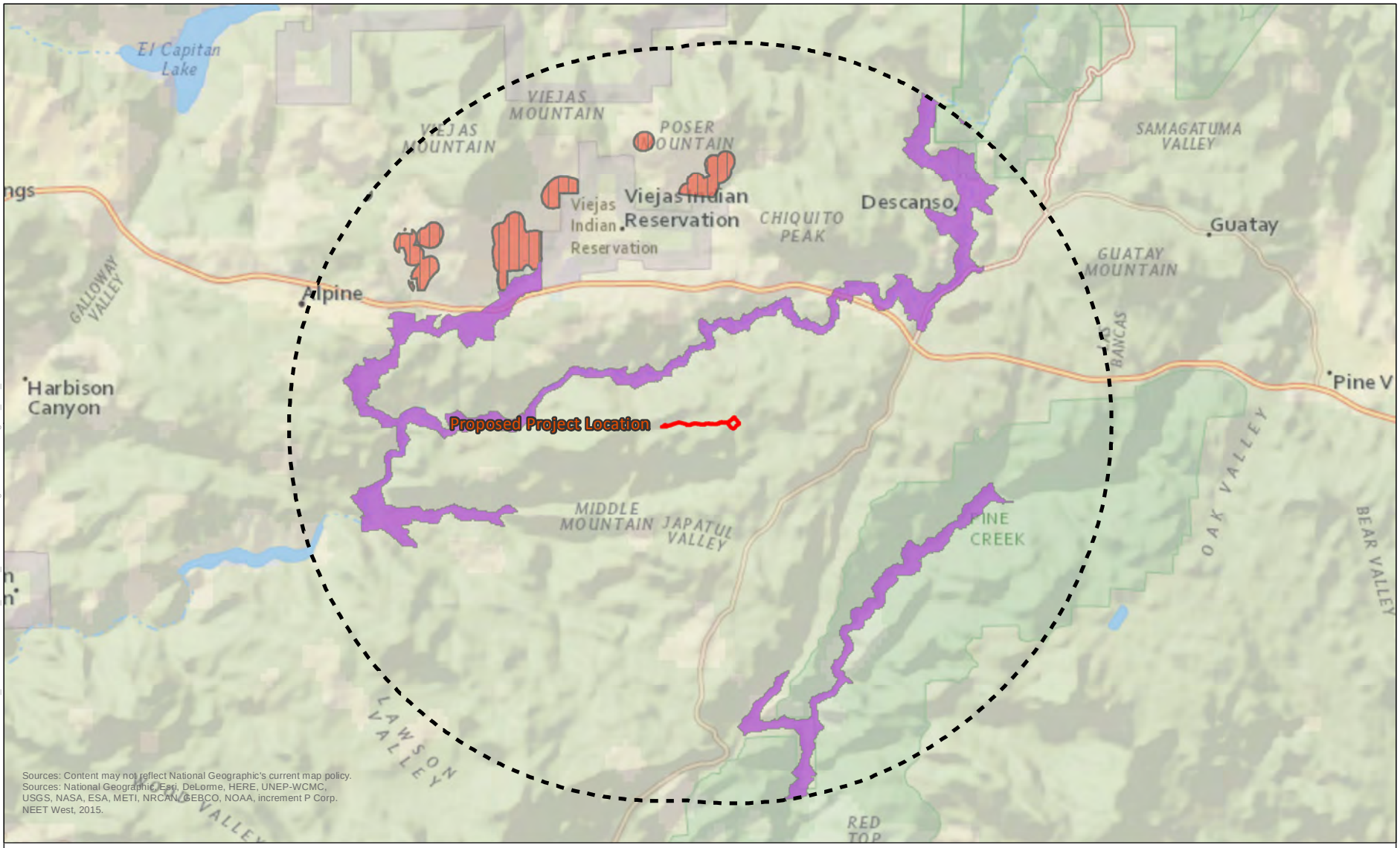
Suncrest Dynamic Reactive Power Support Project



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Critical Habitat

- Project Footprint
- 5-mile buffer
- Arroyo toad
- Cushenbury oxytheca
- San Diego thornmint

Source: USFWS 2016

Figure 7-3
Critical Habitat in the Vicinity of the Proposed Project

Suncrest Dynamic Reactive Power Support Project

Wildlife Corridors

The Proposed Project is surrounded by open space and low density residential development. This connection to open space allows for wildlife movement through the area. However, there are no major rivers or canyons within the Proposed Project area which would concentrate animal movement through the area. The Proposed Project is located within a Natural Landscape Block, but not within an Essential Connectivity Area (Spencer et al. 2010).

The Peninsular Ranges provide a large scale connection between the Transverse Ranges and the Baja Peninsula. Thus the region surrounding the Proposed Project is an important resource for wildlife movement and connectivity.

Special-Status Species

For the purposes of this EIR, special-status plant and wildlife species refers to those species that meet one or more of the following criteria:

- Species that are listed as threatened or endangered under the ESA (50 CFR 17.12 for listed plants, 50 CFR 17.11 for listed animals);
- Species that are candidates for possible future listing as threatened or endangered under ESA (76 Federal Register [FR] 66370);
- Species that are listed or proposed for listing by the State of California as threatened or endangered under CESA (14 CCR 670.5);
- Plants listed as rare under NPPA (California Fish and Game Code, § 1900 et seq);
- Plants considered by the California Native Plant Society [CNPS] to be "rare, threatened, or endangered in California" (CNPS Rare Plant Ranks 1, 2, 3 and 4);
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines, § 15380);
- Animals fully protected in California (California Fish and Game Code, § 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]); and
- Nesting raptors protected in California (California Fish and Game Code, § 3503.5).

Special-status plant and animal species with the potential to occur in the project area were identified through a review of the following resources:

- USFWS Information for Planning and Conservation (IPaC) Report for the Study Area (USFWS 2016b).
- California Natural Diversity Database (CNDDB) query for the nine U.S. Geological Survey (USGS) 7.5-minute quadrangles within and adjoining the Proposed Project, including: Alpine, Barrett Lake, Cuyamaca Peak, Descanso, Dulzura, El Cajon Mountain, Morena Reservoir, Tule Springs, and Viejas Mountain (CDFW 2016).

- CNPS's Inventory of Rare and Endangered Plants of California query for the nine USGS 7.5-minute quadrangles within and adjoining the Proposed Project (CNPS 2016).

Through a search of the above resources, sensitive species historically reported to occur within the general project vicinity were identified. A list of these species is provided in Table 7-2. Figure 7-3 shows critical habitat within a 5-mile radius of the Proposed Project. Figures 7-4 and 7-5 show the California Natural Diversity Database (CNDDB) occurrences of special-status plants and animals within a 5-mile radius of the Proposed Project. The potential for special-status species to occur in areas affected by the Proposed Project was evaluated according to the following criteria:

- **None:** Indicates that the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.

- **Not Expected:** Indicates situations where suitable habitat or key habitat elements may be present but may be of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, and degraded/substantially altered habitats.

- **Possible:** Indicates the presence of suitable habitat or key habitat elements that potentially support the species.

- **Present:** Indicates that either the target species was observed directly or its presence was confirmed by diagnostic signs (i.e., tracks, scat, burrows, carcasses, castings, prey remains) during field investigations or in previous studies in the area.

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Table 7-2. Sensitive Plant and Animal Species Known to Occur in the Vicinity of the Project Site

Scientific Name	Common Name	Federal Listing Status	State Listing Status	CNPS Rare Plant Rank	General Habitat	Micro Habitat	Potential to Occur at the Project Site
PLANTS							
Acanthomintha ilicifolia	San Diego thorn-mint	FT	SE	1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools.	Endemic to active vertisol clay soils of mesas & valleys. Usually on clay lenses within grassland or chaparral communities. 10-960 meters. Annual herb. Blooms April through June.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Ambrosia monogyra	singlewhorl burrobrush	-	-	2B.2	Chaparral, Sonoran desert scrub.	Sandy soils. 10-460 meters. Perennial shrub. Blooms August through November.	**None**. The Proposed Project is not within the elevation range for this species.
Ambrosia pumila	San Diego ambrosia	FE	-	1B.1	Chaparral, coastal scrub, valley and foothill grassland.	Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3-580 meters. Perennial rhizomatous herb. Blooms April through October.	**None**. The Proposed Project is not within the elevation range for this species.
Androsace elongata ssp. *acuta*	California androsace	-	-	4.2	Chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland, meadows and seeps, pinyon and juniper woodland.	Highly localized and often overlooked little plant. 150-1200 meters. Annual herb. Blooms March through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Arctostaphylos otayensis	Otay manzanita	-	-	1B.2	Chaparral, cismontane woodland.	Metavolcanic soils with other chaparral associates. 275-1700 meters. Perennial evergreen shrub. Blooms January through April.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Artemisia palmeri	San Diego sagewort	-	-	4.2	Coastal scrub, chaparral, riparian forest, riparian woodland, riparian scrub.	In drainages and riparian areas in sandy soil within chaparral and other habitats. 15-915 meters. Perennial deciduous shrub. Blooms February though September.	**Possible.** The Proposed Project contains suitable habitat for this species.
Asplenium vespertinum	western spleenwort	-	-	4.2	Chaparral, cismontane woodland, coastal scrub.	Rocky sites. 180-1000 meters. Blooms February through June.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Astragalus deanei	Dean's milk-vetch	-	-	1B.1	Chaparral, cismontane woodland, coastal scrub, riparian forest.	Open, brushy south-facing slopes in Diegan coastal sage, sometimes on recently burned-over hillsides. 75-695 meters. Blooms February through May.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Astragalus douglasii var. perstrictus	Jacumba milk-vetch	-	-	1B.2	Chaparral, cismontane woodland, valley and foothill grassland, pinyon and juniper woodland, riparian scrub.	Stony hillsides and gravelly or sandy flats in open oak woodland. 900-1370 meters. Blooms April through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Astragalus oocarpus	San Diego milk-vetch	-	-	1B.2	Chaparral, cismontane woodland.	Openings in chaparral or on gravelly flats and slopes in thin oak woodland. 120-1795 meters. Blooms May through August.	**Possible.** The Proposed Project contains suitable habitat for this species.
Atriplex pacifica	south coast saltscale	-	-	1B.2	Coastal scrub, coastal bluff scrub, playas, coastal dunes.	Alkali soils. 1-400 meters. Blooms March through October.	**None**. The Proposed Project lacks suitable habitat for this species.
Ayenia compacta	California ayenia	-	-	2B.3	Mojavean desert scrub, Sonoran desert scrub.	Sandy and gravelly washes in the desert; dry desert canyons. 60-1830 meters. Blooms March through April.	**None**. The Proposed Project lacks suitable habitat for this species.
Baccharis vanessae	Encinitas baccharis	FT	SE	1B.1	Chaparral, cismontane woodland.	On sandstone soils in steep, open, rocky areas with chaparral associates. 40-855 meters. Blooms August through November.	**None.** The proposed Project is not within the known range for this species (USFWS 2016c).

Scientific Name	Common Name	Federal Listing Status	State Listing Status	CNPS Rare Plant Rank	General Habitat	Micro Habitat	Potential to Occur at the Project Site
Bloomeria clevelandii	San Diego goldenstar	-	-	1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools.	Mesa grasslands, scrub edges; clay soils. Often on mounds between vernal pools in fine, sandy loam. 50-465 meters. Blooms April through May.	**None**. The Proposed Project is not within the elevation range for this species.
Boechera hirshbergiae	Hirshberg's rockcress	-	-	1B.2	Pebble (or pavement) plains.	1400-1415 meters. Blooms March through May.	**None**. The Proposed Project lacks suitable habitat for this species.
Brodiaea orcuttii	Orcutt's brodiaea	-	-	1B.1	Vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows and seeps.	Mesic, clay habitats; sometimes serpentine; usually in vernal pools and small drainages. 30-1695 meters. Blooms May through June.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Calandrinia breweri	Brewer's calandrinia	-	-	4.2	Chaparral, coastal scrub.	Sandy or loamy soils. Disturbed sites, burns. 10-1200 meters. Blooms January through June.	**None**. The Proposed Project lacks suitable habitat for this species.
California macrophylla	round-leaved filaree	-	-	1B.2	Cismontane woodland, valley and foothill grassland.	Clay soils. 15-1200 meters. Blooms March through May.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Calochortus dunnii	Dunn's mariposa-lily	-	SR	1B.2	Closed-cone coniferous forest, chaparral, valley and foothill grassland.	On gabbro or metavolcanic soils; also known from sandstone; often associated with chaparral. 255-1615 meters. Blooms February through June.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Camissoniopsis lewisii	Lewis' evening-primrose	-	-	3	Valley and foothill grassland, coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub.	Sandy or clay soil. 0-300 meters. Blooms March through June.	**None**. The Proposed Project is not within the elevation range for this species.
Carex obispoensis	San Luis Obispo sedge	-	-	1B.2	Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland.	Usually in transition zone on sand, clay, or serpentine; in seeps. 10-820 meters. Blooms April through June.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Caulanthus simulans	Payson's jewelflower	-	-	4.2	Chaparral, coastal scrub.	Frequently in burned areas, or in disturbed sites such as streambeds; also on rocky, steep slopes. Sandy, granitic soils. 90-2200 meters. Blooms February through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Ceanothus cyaneus	Lakeside ceanothus	-	-	1B.2	Closed-cone coniferous forest, chaparral.	200-1040 meters. Blooms April through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Ceanothus otayensis	Otay Mountain ceanothus	-	-	1B.2	Chaparral.	Metavolcanic or gabbroic soils. 75-1160 meters. Blooms January through April.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Ceanothus verrucosus	wart-stemmed ceanothus	-	-	2B.2	Chaparral.	1-380 meters. Blooms December through May.	**None**. The Proposed Project is not within the elevation range for this species.
Chaenactis parishii	Parish's chaenactis	-	-	1B.3	Chaparral.	Rocky sites. 1300-2500 meters. Blooms May through July.	**None**. The Proposed Project is not within the elevation range for this species.
Chamaebatia australis	southern mountain misery	-	-	4.2	Chaparral.	Gabbro or metavolcanic soils. 300-1020 meters. Blooms November through May.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Chorizanthe leptotheca	Peninsular spineflower	-	-	4.2	Chaparral, coastal scrub, lower montane coniferous forest.	On granitic soils, in alluvial fans. 300-1900 meters. Blooms May through August.	**Possible.** The Proposed Project contains suitable habitat for this species.
Chorizanthe polygonoides var. longispina	long-spined spineflower	-	-	1B.2	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools.	Gabbroic clay. 30-1530 meters. Blooms April through July.	**Not expected**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	CNPS Rare Plant Rank	General Habitat	Micro Habitat	Potential to Occur at the Project Site
Clarkia delicata	delicate clarkia	-	-	1B.2	Cismontane woodland, chaparral.	Often on gabbro soils. 235-1000 meters. Blooms April through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Clinopodium chandleri	San Miguel savory	-	-	1B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland.	Rocky, gabbroic or metavolcanic substrate. 120-1075 meters. Blooms March through July.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Comarostaphylis diversifolia ssp. diversifolia	summer holly	-	-	1B.2	Chaparral, cismontane woodland.	Often in mixed chaparral in California, sometimes post-burn. 30-945 meters. Blooms April through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Convolvulus simulans	small-flowered morning-glory	-	-	4.2	Chaparral, coastal scrub, valley and foothill grassland.	Wet clay, serpentine ridges. 30-700 meters. Blooms March through July.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Cordylanthus rigidus ssp. *brevibracteatus*	short-bracted bird's-beak	-	-	4.3	Chaparral, lower montane coniferous forest, pinyon-juniper woodland, upper montane coniferous forest.	In openings, on granitic substrate. 610-2590 meters. Blooms July through October.	**Possible.** The Proposed Project contains suitable habitat for this species.
Cylindropuntia californica var. californica	snake cholla	-	-	1B.1	Chaparral, coastal scrub.	15-290 meters. Blooms April through May.	**None**. The Proposed Project is not within the elevation range for this species.
Deinandra conjugens	Otay tarplant	FT	SE	1B.1	Coastal scrub, valley and foothill grassland.	Coastal plains, mesas, and river bottoms; often in open, disturbed areas; clay soils. 60-275 meters. Blooms April through June.	**None**. The Proposed Project is not within the elevation range for this species.
Deinandra floribunda	Tecate tarplant	-	-	1B.2	Chaparral, coastal scrub.	Often in little drainages or disturbed areas. 70-1220 meters. Blooms August through October.	**Possible.** The Proposed Project contains suitable habitat for this species.
Delphinium hesperium ssp. cuyamacae	Cuyamaca larkspur	-	SR	1B.2	Lower montane coniferous forest, meadows and seeps, vernal pools.	On dried edge of grassy meadows, also described as in mesic sites. 1220-1630 meters. Blooms May through July.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Delphinium parishii ssp. *subglobosum*	Colorado Desert larkspur	-	-	4.3	Chaparral, cismontane woodland, pinyon-juniper woodland, Sonoran desert scrub.	On dry stony fans and slopes. 600-1800 meters. Blooms March through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Dichondra occidentalis	western dichondra	-	-	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.	On sandy loam, clay, and rocky soils. 50-500 meters. Blooms January through July.	**None**. The Proposed Project is not within the elevation range for this species.
Downingia concolor var. brevior	Cuyamaca Lake downingia	-	SE	1B.1	Meadows and seeps, vernal pools.	In vernal seeps, lakes and pools, and on mudflats, with *Orthocarpus*, *Limnanthes*, *Collinsia*. 1400-1500 meters. Blooms May through July.	**None**. The Proposed Project is not within the elevation range for this species.
Dudleya variegata	variegated dudleya	-	-	1B.2	Chaparral, coastal scrub, cismontane woodland, valley and foothill grassland.	In rocky or clay soils; sometimes associated with vernal pool margins. 3-580 meters. Blooms April through June.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Ericameria cuneata var. macrocephala	Laguna Mountains goldenbush	-	-	1B.3	Chaparral.	Endemic to the Laguna Mountains. Among boulders; in crevices in granitic outcrops and in rocky soil. 1195-1850 meters. Blooms September through December.	**Not expected.** The Proposed Project is 12 miles west of the Laguna Mountains, to which this species is endemic.
Ericameria palmeri var. palmeri	Palmer's goldenbush	-	-	1B.1	Coastal scrub, chaparral.	On granitic soils, on steep hillsides. Mesic sites. 5-625 meters. Blooms July through November.	**None**. The Proposed Project is not within the elevation range for this species.
Eriogonum evanidum	vanishing wild buckwheat	-	-	1B.1	Chaparral, cismontane woodland, lower montane coniferous forest, pinyon and juniper woodland.	Sandy sites. 975-2240 meters. Blooms July through October.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.

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Euphorbia abramsiana	Abrams' spurge	-	-	2B.2	Mojavean desert scrub, Sonoran desert scrub.	Sandy sites. -45-1445 meters. Blooms August through November.	**None**. The Proposed Project lacks suitable habitat for this species.
Ferocactus viridescens	San Diego barrel cactus	-	-	2B.1	Chaparral, coastal scrub, valley and foothill grassland.	Often on exposed, level or south-sloping areas; often in coastal scrub near crest of slopes. 3-490 meters. Blooms May through June.	**None**. The Proposed Project is not within the elevation range for this species.
Fraxinus parryi	chaparral ash	-	-	2B.2	Chaparral.	Open mixed chaparral and in the chaparral-sage scrub interface in California. 213-620 meters. Blooms March through May.	**None**. The Proposed Project is not within the elevation range for this species.
Fremontodendron mexicanum	Mexican flannelbush	FE	SR	1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland.	Usually scattered along the borders of creeks or in dry canyons; found on gabbro, serpentine, or metavolcanics. 10-716 meters. Blooms March through June.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Geraea viscida	sticky geraea	-	-	2B.3	Chaparral.	Loamy coarse sand to gravelly sand soils; often in post burned areas and in bulldozed areas. 450-1700 meters. Blooms April through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Githopsis diffusa ssp. *filicaulis*	Mission Canyon bluecup	-	-	3.1	Chaparral.	Probably in open, grassy places and mesic, disturbed areas; much overlooked. 450-700 meters. Blooms April through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Grindelia hallii	San Diego gumplant	-	-	1B.2	Meadows, valley and foothill grassland, chaparral, lower montane coniferous forest.	Frequently occurs in low moist areas in meadows; associated species commonly include *Wyethia*, *Ranunculus*, *Sidalcea*. 185-1745 meters. Blooms May through October.	**Possible.** The Proposed Project contains suitable habitat for this species.
Harpagonella palmeri	Palmer's grapplinghook	-	-	4.2	Chaparral, coastal scrub, valley and foothill grassland.	Clay soils; open grassy areas within shrubland. 20-955 meters. Blooms March through May.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Hesperocyparis [Cupressus] forbesii	Tecate cypress	-	-	1B.1	Closed-cone coniferous forest, chaparral.	Primarily on north-facing slopes; groves often associated with chaparral. On clay or gabbro. 60-1645 meters.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Hesperocyparis stephensonii	Cuyamaca cypress	-	-	1B.1	Closed-cone coniferous forest, chaparral, chaparral, cismontane woodland, riparian forest.	Restricted to the southwest slopes of Cuyamaca Peak, on gabbroic rock. 1035-1705 meters.	**None**. The Proposed Project is not within the range of this species.
Heuchera brevistaminea	Laguna Mountains alumroot	-	-	1B.3	Broadleaved upland forest, chaparral, cismontane woodland, riparian forest.	Steep, rocky slopes. 1360-2000 meters. April through September.	**None**. The Proposed Project is not within the elevation range for this species.
Heuchera rubescens var. versicolor	San Diego County alumroot	-	-	3.3	Chaparral, lower montane coniferous forest.	Rocky outcrops. 1155-1950 meters. Blooms May through June.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Holocarpha virgata ssp. *elongata*	curving tarplant	-	-	4.2	Chaparral, coastal scrub, valley and foothill grassland, cismontane woodland.	60-1100 meters. Blooms May through November.	**Possible.** The Proposed Project contains suitable habitat for this species.
Horkelia truncata	Ramona horkelia	-	-	1B.3	Chaparral, cismontane woodland.	Habitats in California include: mixed chaparral, vernal streams, and disturbed areas near roads. Clay soil; at least sometimes on gabbro. 400-1300 meters. Blooms May through June.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Hulsea californica	San Diego sunflower	-	-	1B.3	Chaparral, lower montane coniferous forest, upper montane coniferous forest.	Burns, clearings, or openings in chaparral and pine-oak woodland. 365-1860 meters. Blooms April through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Isocoma menziesii var. decumbens	decumbent goldenbush	-	-	1B.2	Coastal scrub, chaparral	Sandy soils; often in disturbed sites. 10-135 meters. Blooms April through November.	**None**. The Proposed Project is not within the elevation range for this species.

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Iva hayesiana	San Diego marsh-elder	-	-	2B.2	Marshes and swamps, playas.	Riverwashes. 10-500 meters. Blooms April through October.	**None**. The Proposed Project lacks suitable habitat for this species.
Juncus acutus ssp. leopoldii	southwestern spiny rush	-	-	4.2	Salt marshes, alkaline seeps, coastal dunes (mesic sites).	Moist saline places. 3-900 meters. Blooms March through June.	**None**. The Proposed Project lacks suitable habitat for this species.
Juncus luciensis	Santa Lucia dwarf rush	-	-	1B.2	Vernal pools, meadows and seeps, lower montane coniferous forest, chaparral, Great Basin scrub.	Vernal pools, ephemeral drainages, wet meadow habitats and streamsides. 300-2040 meters. Blooms April through July.	**None**. The Proposed Project lacks suitable habitat for this species.
Lathyrus splendens	pride-of-California	-	-	4.3	Chaparral.	Sandy to gravelly soils. 200-1525 meters. Blooms March through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Lepechinia ganderi	Gander's pitcher sage	-	-	1B.3	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland.	Usually found in chaparral or coastal scrub; sometimes in Tecate cypress woodland. Gabbro or metavolcanic substrate. 305-1005 meters. Blooms June through July.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	-	-	4.3	Chaparral, coastal scrub.	Dry soils, shrubland. 1-885 meters. Blooms January through July.	**Possible.** The Proposed Project contains suitable habitat for this species.
Lewisia brachycalyx	short-sepaled lewisia	-	-	2B.2	Lower montane coniferous forest, meadows and seeps.	Dry to moist meadows in rich loam. 1370-2450 meters. Blooms February through July.	**None**. The Proposed Project is not within the elevation range for this species.
Lilium parryi	lemon lily	-	-	1B.2	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest.	Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows and seeps. 1220-2745 meters. Blooms July through August.	**None**. The Proposed Project lacks suitable habitat for this species.
Limnanthes alba ssp. parishii	Parish's meadowfoam	-	SE	1B.2	Meadows and seeps, vernal pools.	Vernally moist areas and temporary seeps of highland meadows and plateaus; often bordering lakes and streams. 600-1760 meters. Blooms April through June.	**None**. The Proposed Project lacks suitable habitat for this species.
Linanthus bellus	desert beauty	-	-	2B.1	Chaparral.	Dry slopes and flats; open sandy spots in chaparral, mostly in loamy coarse sandy soil types. 1000-1400 meters. Blooms April through May.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Linanthus orcuttii	Orcutt's linanthus	-	-	1B.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland.	Sometimes in disturbed areas; often in gravelly clearings. 915-2145 meters. Blooms May through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Microseris douglasii ssp. platycarpha	small-flowered microseris	-	-	4.2	Cismontane woodland, valley and foothill grassland, coastal scrub, vernal pools.	Alkaline clay in river bottoms. 15-1070 meters. Blooms April through May.	**None**. The Proposed Project lacks suitable habitat for this species.
Mimulus clevelandii	Cleveland's bush monkeyflower	-	-	4.2	Chaparral, cismontane woodland, lower montane coniferous forest.	Disturbed gravelly roadsides and slopes. 450-2000 meters. Blooms April through July.	**Possible.** The Proposed Project contains suitable habitat for this species.
Mimulus diffusus	Palomar monkeyflower	-	-	4.3	Chaparral, lower montane coniferous forest.	Sandy or gravelly soils. 1220-1830 meters. Blooms April through June.	**None**. The Proposed Project is not within the elevation range for this species.
Monardella hypoleuca ssp. lanata	felt-leaved monardella	-	-	1B.2	Chaparral, cismontane woodland.	Occurs in understory in mixed chaparral, chamise chaparral, and southern oak woodland; sandy soil. 300-1575 meters. Blooms June through August.	**Possible.** This species is present in the vicinity of the proposed Project (NEET West 2015b). The Proposed Project contains suitable habitat for this species.
Monardella macrantha ssp. hallii	Hall's monardella	-	-	1B.3	Broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland.	Dry slopes and ridges in openings within the above communities. 730-2195 meters. Blooms June through October.	**Possible.** The Proposed Project contains suitable habitat for this species.

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Myosurus minimus ssp. apus	little mousetail	-	-	3.1	Vernal pools, valley and foothill grassland. This subspecies has taxonomic problems; distinguishing between this and *M. sessilis* is difficult.	Alkaline soils. 20-640 meters. Blooms March through June.	**None**. The Proposed Project lacks suitable habitat for this species.
Navarretia peninsularis	Baja navarretia	-	-	1B.2	Lower montane coniferous forest, chaparral, meadows and seeps, pinyon and juniper woodland.	Wet areas in open forest. 1150-2365 meters. Blooms May through August.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Nolina cismontana	chaparral nolina	-	-	1B.2	Chaparral, coastal scrub.	Primarily on sandstone and shale substrates; also known from gabbro. 140-1275 meters. Blooms March through July.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Nolina interrata	Dehesa nolina	-	SE	1B.1	Chaparral.	Typically on rocky hillsides or ravines on ultramafic soils (gabbro or metavolcanic). 180-855 meters. Blooms June through July.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Packera ganderi	Gander's ragwort	-	SR	1B.2	Chaparral.	Recently burned sites and gabbro outcrops. 400-1200 meters. Blooms April through June.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Pentachaeta aurea ssp. aurea	golden-rayed pentachaeta	-	-	4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland, riparian woodland.	80-1850 meters. Blooms March through July.	**Possible.** The Proposed Project contains suitable habitat for this species.
Pickeringia montana var. tomentosa	woolly chaparral-pea	-	-	4.3	Chaparral.	Gabbroic or granitic substrates; usually clay. 0-1700 meters. Blooms May through August.	**Possible.** The Proposed Project contains suitable habitat for this species.
Piperia colemanii	Coleman's rein orchid	-	-	4.3	Chaparral, lower montane coniferous forest.	Often in sandy soils. 1200-2300 meters. Blooms June through August.	**Possible.** The Proposed Project contains suitable habitat for this species.
Piperia cooperi	chaparral rein orchid	-	-	4.2	Chaparral, cismontane woodland, valley and foothill grassland.	15-1585 meters. Blooms March through June.	**Possible.** The Proposed Project contains suitable habitat for this species.
Plagiobryoides vinosula	wine-colored tufa moss	-	-	4.2	Cismontane woodland, meadows and seeps, Mojavean desert scrub, pinyon and juniper woodland, riparian woodland.	Usually granitic rock or granitic soil along seeps and streams, sometimes clay. 30-1735 meters.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Poa atropurpurea	San Bernardino blue grass	FE	-	1B.2	Meadows and seeps.	Mesic meadows of open pine forests and grassy slopes, loamy alluvial to sandy loam soil. 1360-2455 meters. Blooms April through August.	**None**. The Proposed Project lacks suitable habitat for this species.
Polygala cornuta var. fishiae	Fish's milkwort	-	-	4.3	Cismontane woodland, riparian woodland, chaparral.	Scree slopes, brushy ridges, and along creeks; often with oaks. 100-1000 meters. Blooms May through August.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Quercus dumosa	Nuttall's scrub oak	-	-	1B.1	Closed-cone coniferous forest, chaparral, coastal scrub.	Generally on sandy soils near the coast; sometimes on clay loam. 15-400 meters. Blooms February through August.	**None**. The Proposed Project is not within the elevation range for this species.
Quercus engelmannii	Engelmann oak	-	-	4.2	Cismontane woodland, chaparral, riparian woodland, valley and foothill grassland.	50-1300 meters. Blooms March through June.	**Present.** This species is present in the Propose Project footprint.
Ribes canthariforme	Moreno currant	-	-	1B.3	Chaparral, riparian scrub.	Among boulders in oak-manzanita thickets; shaded or partially shaded sites. 340-1200 meters. Blooms February through April.	**Possible.** The Proposed Project contains suitable habitat for this species.

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Romneya coulteri	Coulter's matilija poppy	-	-	4.2	Coastal scrub, chaparral.	In washes and on slopes; also after burns. 20-1200 meters. Blooms March through July.	**Possible.** The Proposed Project contains suitable habitat for this species.
Rubus glaucifolius var. ganderi	Cuyamaca raspberry	-	-	3.1	Lower montane coniferous forest.	Open, moist forest; gabbro soils. 1200-1675 meters. Blooms May through June.	**None**. The Proposed Project lacks suitable habitat for this species.
Rupertia rigida	Parish's rupertia	-	-	4.3	Chaparral, lower montane coniferous forest, cismontane woodland, meadows and seeps, pebble plain, valley and foothill grassland.	700-2500 meters. Blooms June through August.	**Possible.** The Proposed Project contains suitable habitat for this species.
Salvia munzii	Munz's sage	-	-	2B.2	Coastal scrub, chaparral.	Rolling hills and slopes, in rocky soil. 35-575 meters. Blooms February through April.	**Possible**. The Proposed Project contains suitable habitat for this species.
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	-	-	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest.	In gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425-2000 meters. Blooms June through August.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Selaginella cinerascens	ashy spike-moss	-	-	4.1	Chaparral, coastal scrub.	20-640 meters.	**Possible.** The Proposed Project contains suitable habitat for this species.
Selaginella eremophila	desert spike-moss	-	-	2B.2	Sonoran desert scrub, chaparral.	Shaded sites, gravelly soils; crevices or among rocks. 200-900 meters.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Senna covesii	Cove's cassia	-	-	2B.2	Sonoran desert scrub.	Dry, sandy desert washes, slopes. 255-1295 meters. Blooms March through August.	**None**. The Proposed Project lacks suitable habitat for this species.
Sibaropsis hammittii	Hammitt's clay-cress	-	-	1B.2	Valley and foothill grassland, chaparral.	Mesic microsites in open areas on clay soils in *Stipa* grassland. Often surrounded by *Adenostoma* chaparral. 720-1065 meters. Blooms March through April.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Sidalcea neomexicana	Salt Spring checkerbloom	-	-	2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.	Alkali springs and marshes. 0-1530 meters. Blooms March through June.	**None**. The Proposed Project contains general habitat but lacks suitable micro habitat for this species.
Sphenopholis obtusata	prairie wedge grass	-	-	2B.2	Cismontane woodland, meadows and seeps.	Open moist sites, along rivers and springs, alkaline desert seeps. 300-2000 meters. Blooms April through July.	**None**. The Proposed Project lacks suitable habitat for this species.
Stemodia durantifolia	purple stemodia	-	-	2B.1	Sonoran desert scrub.	Sandy soils; mesic sites. 35-795 meters. Blooms January through December.	**None**. The Proposed Project lacks suitable habitat for this species.
Stipa diegoensis	San Diego County needle grass	-	-	4.2	Chaparral, coastal scrub.	Rocky slopes, sea cliffs and stream banks; often in mesic sites. 10-800 meters. Blooms February through June.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Streptanthus bernardinus	Laguna Mountains jewelflower	-	-	4.3	Chaparral, lower montane coniferous forest.	Clay or decomposed granite soils; sometimes in disturbed areas such as streamsides or roadcuts. 1440-2500 meters. Blooms May through August.	**Possible.** The Proposed Project contains suitable habitat for this species.
Streptanthus campestris	southern jewelflower	-	-	1B.3	Chaparral, lower montane coniferous forest, pinyon-juniper woodland.	Open, rocky areas. 900-2300 meters. Blooms April through July.	**Possible.** The Proposed Project contains suitable habitat for this species.
Symphyotrichum defoliatum	San Bernardino aster	-	-	1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040 meters. Blooms July through November.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Tetracoccus dioicus	Parry's tetracoccus	-	-	1B.2	Chaparral, coastal scrub.	Stony, decomposed gabbro soil. 165-1000 meters. Blooms April through May.	**Possible**. The Proposed Project contains suitable habitat for this species.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	CNPS Rare Plant Rank	General Habitat	Micro Habitat	Potential to Occur at the Project Site
Thermopsis californica var. semota	velvety false lupine	-	-	1B.2	Lower montane coniferous forest, meadows and seeps, cismontane woodland, valley and foothill grassland.	Pine forests and meadow edges, on rocky slopes and outcrops, and along roadsides. 1000-1870 meters. Blooms March through June.	**None**. The Proposed Project lacks suitable habitat for this species.
Viguiera laciniata	San Diego County viguiera	-	-	4.2	Chaparral, coastal scrub.	Slopes and ridges. 60-750 meters. Blooms February through August.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Xanthisma junceum	rush-like bristleweed	-	-	4.3	Chaparral, coastal scrub.	Dry hillsides. 240-1000 meters. Blooms May through January.	**Possible.** The Proposed Project contains suitable habitat for this species.
INVERTEBRATES							
Callophrys thornei	Thorne's hairstreak	-	-	-	Associated with the endemic tecate cypress (*Hesperocyparis forbesii*).	Only known from vicinity of Otay Mountain.	**None**. The Proposed Project lacks suitable habitat for this species.
Euphydryas editha quino	quino checkerspot butterfly	FE	-	-	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties.	Hills and mesas near the coast. Need high densities of food plants *Plantago erecta*, *P. insularis*, and *Orthocarpus purpurascens (=Castilleja exserta*).	**Not expected.** Host plants not observed at the site (NEET West 2015b), and 2010 surveys were negative (Chambers Group 2010).
Halictus harmonius	harmonious halictid bee	-	-	-	Known only from the foothills of the San Bernardino Mountains, possibly also the San Jacinto Mountains.	NA	**None**. The Proposed Project is not within the known range for this species.
Helminthoglypta milleri	peak shoulderband	-	-	-	Known only from the type locality at Cuyamaca Peak in San Diego County.	Found in rock piles.	**None**. The Proposed Project is not within the known range for this species.
Lycaena hermes	Hermes copper butterfly	FC	-	-	Found in southern mixed chaparral and coastal sage scrub at western edge of Laguna Mountains.	Host plant is *Rhamnus crocea*. Although *R. crocea* is widespread throughout the coast range, *Lycaena hermes* is not.	**Possible.** The Proposed Project contains suitable habitat for this species.
AMPHIBIANS AND REPTILES							
Anaxyrus californicus	arroyo toad	FE	SSC	-	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Aspidoscelis hyperythra	orangethroat whiptail	-	WL	-	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.	Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food-termites.	**Possible.** The Proposed Project contains suitable habitat for this species.
Aspidoscelis tigris stejnegeri	coastal whiptail	-	SSC	-	Found in deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas.	Ground may be firm soil, sandy, or rocky.	**Possible.** The Proposed Project contains suitable habitat for this species.
Crotalus ruber	red-diamond rattlesnake	-	SSC	-	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains.	Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	**Possible**. The Proposed Project contains suitable habitat for this species. A 2011 CNDDB occurrence is within the Proposed Project (CDFW 2016).
Emys marmorata	western pond turtle	-	SSC	-	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation.	Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 kilometer from water for egg-laying.	**None**. The Proposed Project lacks suitable habitat for this species.
Lampropeltis zonata (pulchra)	California mountain kingsnake (San Diego population)	-	WL	-	Restricted to the San Gabriel and San Jacinto Mountains of Southern California.	Inhabits a variety of habitats, including valley-foothill hardwood, coniferous, chaparral, riparian, and wet meadows.	**None**. The Proposed Project is not within the known range for this species.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	CNPS Rare Plant Rank	General Habitat	Micro Habitat	Potential to Occur at the Project Site
Phrynosoma blainvillii	coast horned lizard	-	SSC	-	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**Possible.** The Proposed Project contains suitable habitat for this species.
Plestiodon skiltonianus interparietalis	Coronado Island skink	-	WL	-	Grassland, chaparral, pinon-juniper and juniper sage woodland, pine-oak and pine forests in Coast Ranges of Southern California.	Prefers early successional stages or open areas. Found in rocky areas close to streams and on dry hillsides.	**Possible.** The Proposed Project contains suitable habitat for this species.
Salvadora hexalepis virgultea	coast patch-nosed snake	-	SSC	-	Brushy or shrubby vegetation in coastal Southern California.	Require small mammal burrows for refuge and overwintering sites.	**Possible.** The Proposed Project contains suitable habitat for this species.
Spea hammondii	western spadefoot	-	SSC	-	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	**None**. The Proposed Project lacks suitable habitat for this species.
Taricha torosa	Coast Range newt	-	SSC	-	Coastal drainages from Mendocino County to San Diego County.	Lives in terrestrial habitats and will migrate over 1 kilometer to breed in ponds, reservoirs and slow moving streams.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Thamnophis hammondii	two-striped gartersnake	-	SSC	-	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 feet elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	**None**. The Proposed Project lacks suitable habitat for this species.
BIRDS							
Accipiter cooperii	Cooper's Hawk	-	WL	-	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	**Possible.** The Proposed Project contains suitable habitat for this species, however nesting is not expected.
Agelaius tricolor	Tricolored Blackbird	-	SSC	-	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	**None**. The Proposed Project lacks suitable habitat for this species.
Aimophila ruficeps canescens	Southern California Rufous-Crowned Sparrow	-	WL	-	Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	**Possible.** The Proposed Project contains suitable habitat for this species.
Aquila chrysaetos	Golden Eagle	-	FP/WL	-	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also large trees in open areas.	**Possible.** The Proposed Project contains suitable habitat for this species. Nesting is not expected in the Proposed Project footprint.
Artemisiospiza belli belli	Bell's Sage Sparrow	-	WL	-	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yards apart.	**Possible.** The Proposed Project contains suitable habitat for this species.
Buteo swainsoni	Swainson's Hawk	-	ST	-	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Possible.** The Proposed Project contains suitable habitat for this species. However the breeding population in San Diego County is considered extirpated (Bloom 1980).
Empidonax traillii extimus	Southwestern Willow Flycatcher	FE	SE	-	Riparian woodlands in Southern California.	NA	**Not expected.** The Proposed Project lacks suitable breeding habitat for this species, although it could potentially be present during migration.
Falco mexicanus	Prairie Falcon	-	WL	-	Inhabits dry, open terrain, either level or hilly.	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	**Possible.** The Proposed Project contains suitable habitat for this species. Nesting is not expected in the Proposed Project footprint.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	CNPS Rare Plant Rank	General Habitat	Micro Habitat	Potential to Occur at the Project Site
Gymnogyps californianus	California Condor	FE	SE/FP	-	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude.	Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	**None.** The Proposed Project is not within the current range for this species (USFWS 2016d).
Polioptila californica californica	Coastal California Gnatcatcher	FT	SSC	-	Obligate, permanent resident of coastal sage scrub below 2500 feet in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	**None**. The Proposed Project lacks suitable habitat for this species.
Vireo bellii pusillus	Least Bell's Vireo	FE	SE	-	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 feet.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, *Baccharis*, or mesquite.	**None**. The Proposed Project lacks suitable habitat for this species.
MAMMALS							
Antrozous pallidus	pallid bat	-	SSC	-	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Possible.** The Proposed Project contains suitable habitat for this species.
Chaetodipus californicus femoralis	Dulzura pocket mouse	-	SSC	-	Variety of habitats including coastal scrub, chaparral and grassland in San Diego County.	Attracted to grass-chaparral edges.	**Possible.** The Proposed Project contains suitable habitat for this species.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	-	SSC	-	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	**Possible.** The Proposed Project contains suitable habitat for this species.
Corynorhinus townsendii	Townsend's big-eared bat	-	SC/ SSC	-	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Possible.** The Proposed Project contains suitable habitat for this species. This species is not expected to roost in the Proposed Project.
Dipodomys stephensi	Stephens' kangaroo rat	FE	ST		Primarily annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover.	Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	**Not expected.** The Proposed Project contains suitable habitat for this species, however it is not within the known range for this species (USFWS 2016e).
Eumops perotis californicus	western mastiff bat	-	SSC	-	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	**Possible.** The Proposed Project contains suitable habitat for this species. This species is not expected to roost in the Proposed Project.
Lasiurus blossevillii	western red bat	-	SSC	-	Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests.	Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging. Associated with riparian woodlands.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.
Macrotus californicus	California leaf-nosed bat	-	SSC	-	Desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub and palm oasis habitats.	Needs rocky, rugged terrain with mines or caves for roosting. In California occurs at elevations up to 600 meters.	**None**. The Proposed Project lacks suitable habitat for this species.
Neotoma lepida intermedia	San Diego desert woodrat	-	SSC	-	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	**Possible.** The Proposed Project contains suitable habitat for this species.
Nyctinomops femorosaccus	pocketed free-tailed bat	-	SSC	-	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Rocky areas with high cliffs.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.

Scientific Name	Common Name	Federal Listing Status	State Listing Status	CNPS Rare Plant Rank	General Habitat	Micro Habitat	Potential to Occur at the Project Site
Taxidea taxus	American badger	-	SSC	-	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Not expected.** The Proposed Project contains marginally suitable habitat for this species.

* List of Abbreviations for Federal and State Species-Status:

FE = Federal endangered
FT = Federal threatened
FC = Federal candidate for listing
FP = State fully protected species
SE = State endangered
ST = State threatened

SC = State candidate
SSC = State species of special concern
SR = State rare
WL = Watch List
1B = plants are considered rare, threatened, or endangered in California and elsewhere.
2 = plants are rare, threatened, or endangered in California, but more common elsewhere.
3 = plants about which more information is needed for review
4 = plants of limited distribution; a watch list

Threat Ranks:

0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

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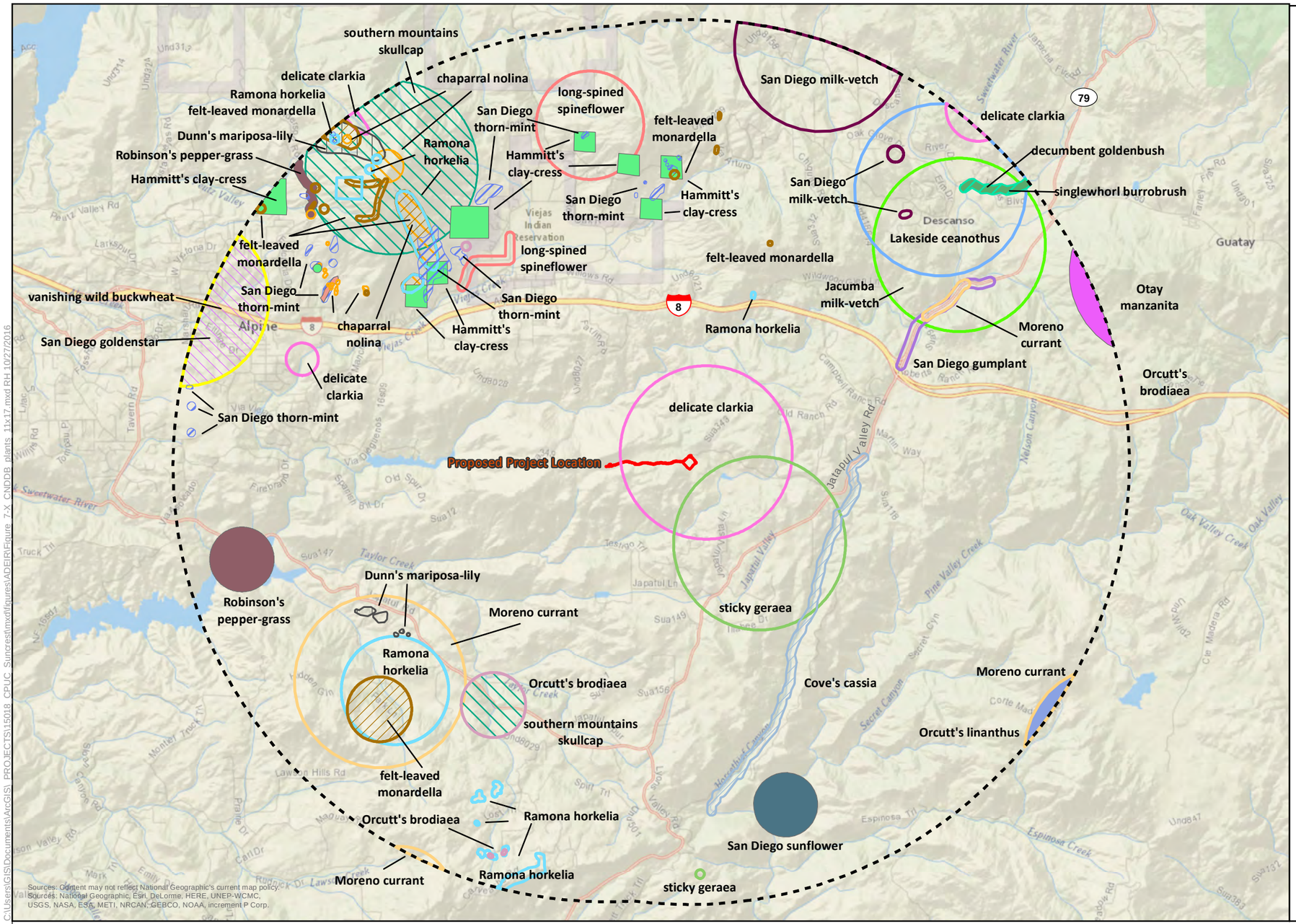

Special-status Plant Species Occurrences

- Cove's cassia
- Dunn's mariposa-lily
- Hammitt's clay-cress
- Jacumba milk-vetch
- Lakeside ceanothus
- Moreno currant
- Orcutt's brodiaea
- Orcutt's linanthus
- Otay manzanita
- Palmer's grapplinghook
- Ramona horkelia
- Robinson's pepper-grass
- San Diego goldenstar
- San Diego gumplant
- San Diego milk-vetch
- San Diego sunflower
- San Diego thorn-mint
- chaparral nolina
- decumbent goldenbush
- delicate clarkia
- felt-leaved monardella
- long-spined spineflower
- singlewhorl burrobrush
- southern mountains skullcap
- sticky geraea
- vanishing wild buckwheat

Source: CDFW, CNDDB, October 2016 update

N

0 2.5 5
Miles

Prepared by:
Horizon WATER and ENVIRONMENT

- Project Footprint
- 5-mile Buffer

Figure 7-4
CNDDB Plant Occurrences in the Vicinity of the Proposed Project

Suncrest Dynamic Reactive Power Support Project

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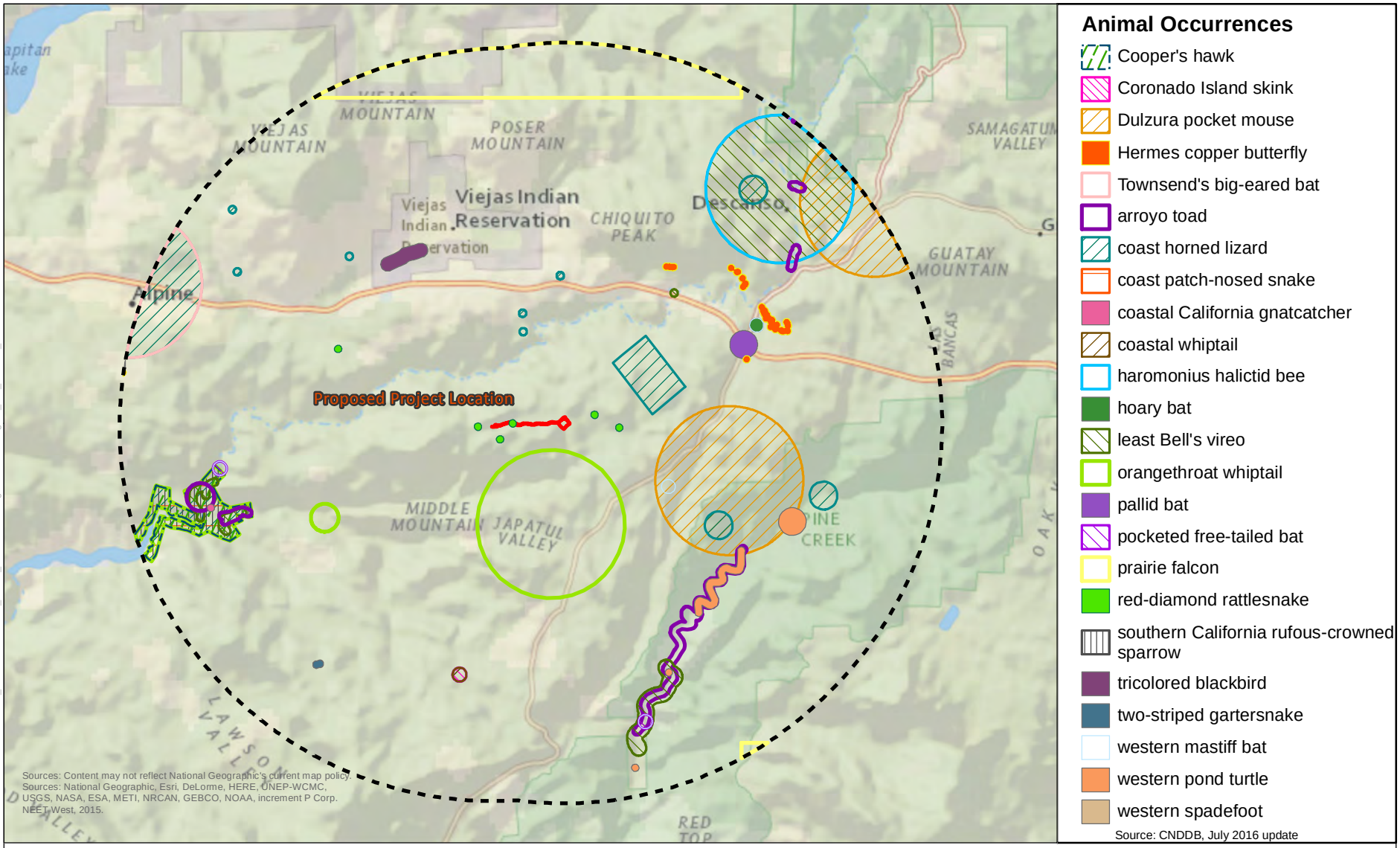

Animal Occurrences

- Cooper's hawk
- Coronado Island skink
- Dulzura pocket mouse
- Hermes copper butterfly
- Townsend's big-eared bat
- arroyo toad
- coast horned lizard
- coast patch-nosed snake
- coastal California gnatcatcher
- coastal whiptail
- haromonius halictid bee
- hoary bat
- least Bell's vireo
- orangethroat whiptail
- pallid bat
- pocketed free-tailed bat
- prairie falcon
- red-diamond rattlesnake
- southern California rufous-crowned sparrow
- tricolored blackbird
- two-striped gartersnake
- western mastiff bat
- western pond turtle
- western spadefoot

Source: CNDDB, July 2016 update

N

0 2.5 5
Miles

Project Footprint
5-mile Buffer

Prepared by:
Horizon WATER and ENVIRONMENT

Figure 7-5
CNDDB Animal Occurrences in the Vicinity of the Proposed Project

Suncrest Dynamic Reactive Power Support Project

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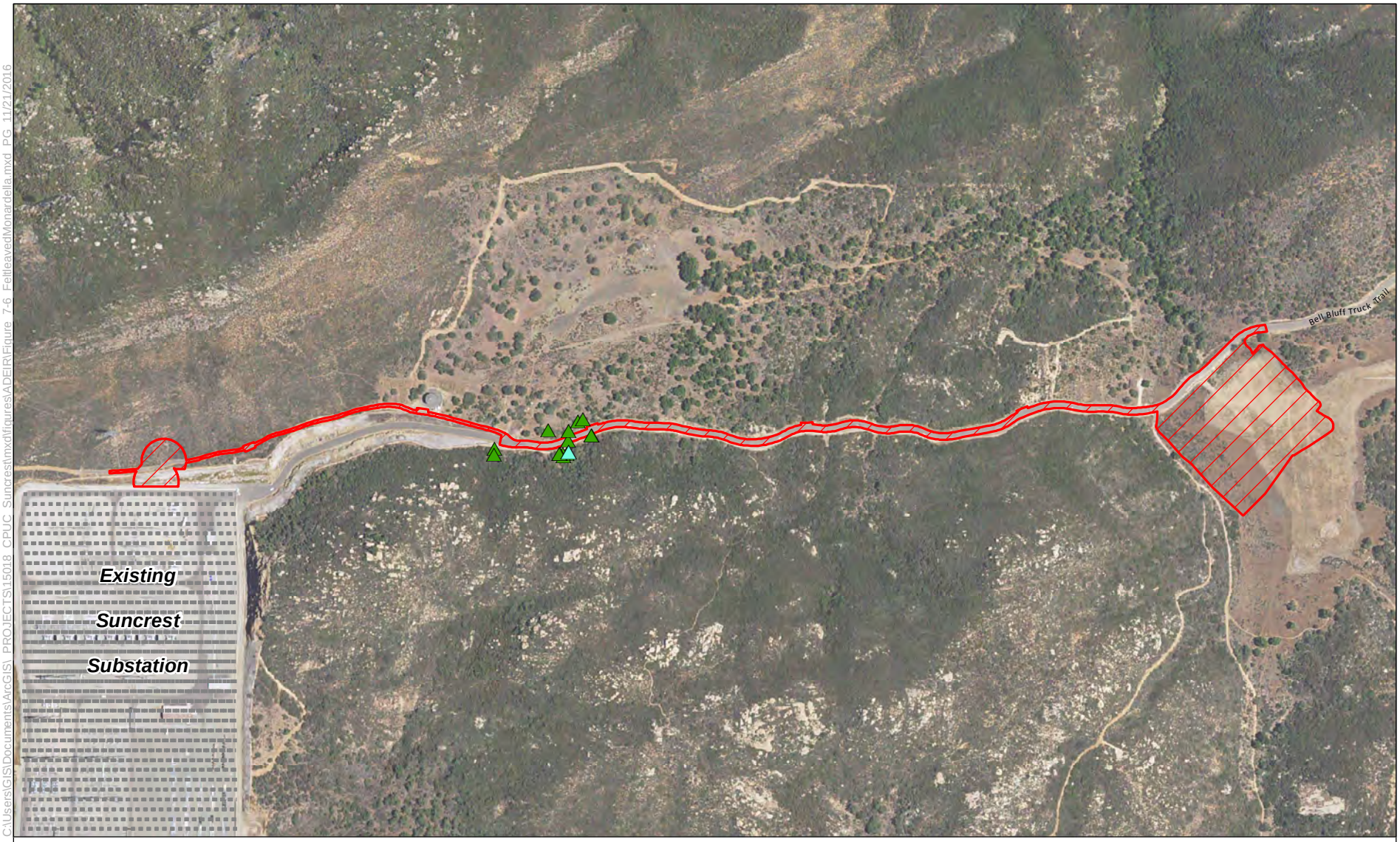
Special-Status Plants

SWCA conducted botanical surveys during 2014 and 2015 which were consistent with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009) (NEET West 2015a). During 2015 rare plant surveys, a population of felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*) was identified immediately adjacent to the Proposed Project footprint (NEET West 2015b). This species was also identified in 2010 surveys for the Sunrise Powerlink/Suncrest Substation (NEET West 2015b). Figure 7-6 shows both historic locations (2010) of this species, and locations identified in 2015. Stands of Engelmann oak (*Quercus engelmannii*) are present in the north central and eastern portions of the proposed project area. This species is part of the Engelmann Oak-Coast Live Oak/Poison Oak/Grass Association, which is considered a CDFW sensitive plant community. The location of this Association can be found in Figure 7-1.

Other special-status plant species with the potential to occur within the Proposed Project include California androsace (*Androsace elongata* ssp. *Acuta*), San Diego sagewort (*Artemisia palmeri*), San Diego milk-vetch (*Astragalus oocarpus*), Payson's jewelflower (*Caulanthus simulans*), Lakeside ceanothus (*Ceanothus cyaneus*), Peninsular spineflower (*Chorizanthe leptotheca*), delicate clarkia (*Clarkia delicate*), summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), short-bracted bird's-beak (*Cordylanthus rigidus* ssp. *Brevibracteatus*), Tecate tarplant (*Deinandra conjugens*), Colorado Desert larkspur (*Delphinium parishii* ssp. *Subglobosum*), sticky geraea (*Geraea viscida*), Mission Canyon bluecup (*Githopsis diffusa* ssp. *Filicaulis*), San Diego gumplant (*Grindelia hallii*), curving tarplant (*Holocarpha virgata* ssp. *Elongate*), San Diego sunflower (*Hulsea californica*), pride-of-California (*Lathyrus splendens*), Robinson's pepper-grass (*Lepidium virginicum var. robinsonii*), Orcutt's linanthus (*Linanthus orcuttii*), Cleveland's bush monkeyflower (*Mimulus clevelandii*), Hall's monardella (*Monardella macrantha* ssp*. hallii*), golden-rayed pentachaeta (*Pentachaeta aurea ssp. Aurea*), woolly chaparral-pea (*Pickeringia montana var. tomentosa*), Coleman's rein orchid (*Piperia colemanii*), chaparral rein orchid (*Piperia cooperi*), Moreno currant (*Ribes canthariforme*), Coulter's matilija poppy (*Romneya coulteri*), Parish's rupertia (*Rupertia rigida*), Munz's sage (*Salvia munzii*), ashy spike-moss (*Selaginella cinerascens*), Laguna Mountains (jewelflower *Streptanthus bernardinus*), southern jewelflower (*Streptanthus campestris*), Parry's tetracoccus (*Tetracoccus dioicus*) and rush-like bristleweed (*Xanthisma junceum*). These species were not detected within the Proposed Project footprint during rare plant surveys, but the Proposed Project contains suitable habitat for these species.



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0 500 1,000

Feet

Felt-leaved Monardella Locations

Current Location

Historic Location

Source: SCWA 2015a

Project Area

Figure 7-6
Felt-leaved Monardella in the Vicinity of the Proposed Project

Suncrest Dynamic Reactive Power Support Project

Prepared by:

Horizon WATER and ENVIRONMENT

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Special-Status Animals

Thirteen special-status animals have a "possible" potential to occur at the Proposed Project site. No special status species were identified during biological surveys conducted by SWCA in 2014 and 2015. There are CNDDB records of red-diamond rattlesnake (*Crotalus ruber*) within the Proposed Project site (CDFW 2016). SWCA biologists also observed woodrat houses approximately 820 feet north of Bell Bluff Truck trail (NEET West 2015a). These woodrat houses could have been constructed by either the San Diego desert woodrat (*Neotoma lepida intermedia*), a state species of special concern, or the dusky-footed woodrat (*Neotoma fuscipes*), which is not a special-status species.

Invertebrates

Hermes copper butterfly

Hermes copper butterfly (*Lycaena hermes*) is found in southern mixed chaparral and coastal sage scrub habitats. This species is dependent on its host plant, spiny redberry (*Rhamnus crocea*) as a larval food source, and nectars mainly on California buckwheat (Deutschman et al. 2011). Both of these species are present on the Proposed Project site (NEET West 2015a), though not in close enough proximity to each other to be considered suitable habitat for Hermes copper butterfly, as described further below. The closest CNDDB occurrence is approximately 2.8 miles northeast of the Proposed Project.

The Final EIR/EIS for the Sunrise Powerlink Project provides additional information on Hermes copper butterfly in the vicinity of the Proposed Project, although the information presented is not internally consistent. In Appendix 8J of the Final EIR/EIS, Figure Ap. 8J-36 shows Hermes copper butterfly observations approximately 8 miles south of the Proposed Project (CPUC and Bureau of Land Management [BLM] 2008). Appendix 8R of the EIR/EIS discloses that 80 Hermes copper butterflies were observed during 2008 surveys along the Modified Route D Alternative (CPUC and BLM 2008). Although maps of these observations are not provided, from the mile post descriptions it appears that a cluster of butterflies was observed just south of the current location of the San Diego Gas & Electric (SDG&E) Suncrest Substation. This would be the closest potential observation to the Proposed Project, at approximately 0.3 mile south.

SWCA conducted a habitat assessment for Hermes copper butterfly on October 28, 2015 (NEET West 2015a). This included surveys for spiny redberry shrubs within 15 feet of California buckwheat – preferred habitat for this species (SWCA 2015a). General habitat surveys were conducted in March 2015, but due to access restrictions these surveys were limited to within 10 feet of the roadway (NEET West 2015a). These surveys are outside the flight season for this species, so would be unlikely to detect this species if it were present at the Proposed Project site. These surveys used the *County of San Diego Guidelines for Hermes Copper Butterfly (Lycaena hermes)* (County of San Diego 2010) as a general guideline for the surveys, as there is no formal USFWS survey protocol (NEET West 2015a). These surveys did not identify any suitable habitat within the Proposed Project site, but did identify suitable habitat within 150 meters (500 feet) of the Proposed Project site (NEET West 2015a). This buffer area contains 36 stands of suitable habitat (NEET West 2015a).

As there is suitable habitat within 500 feet of the Proposed Project site, it is possible that Hermes copper butterfly could occur within the Proposed Project site.

Amphibians and Reptiles

Arroyo toad

Breeding habitat for arroyo toad consists of shallow, slow-moving streams and riparian habitats which are regularly disturbed by flooding (USFWS 2009). This species is abundant in third to sixth order streams, but small populations also exist in first and second order stream at elevations up to 4,600 feet above mean sea level (msl) (USFWS 2009). During the non-breeding season, this species uses several upland habitat types adjacent to rivers or streams, including sycamore-cottonwood woodlands, coastal sage scrub, chaparral, oak woodlands, and grassland (USFWS 2009). During this period, this species burrows into sandy areas in upland terraces for refuge (USFWS 2009).

Critical habitat for this species is located along the Sweetwater River, approximately 0.6 miles north of the Proposed Project site. Extant populations of arroyo toad are located within the Sweetwater River Basin (USFWS 2014a). The closest CNDDB occurrence is approximately 3.3 miles southeast of the Proposed Project (CDFW 2016). Surveys conducted for the Proposed Project did not identify suitable habitat for this species (NEET West 2015a). This species is not expected to occur at the Proposed Project site.

Red-diamond rattlesnake

This species is found in chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. A CNDDB occurrence of red-diamond rattlesnake is within the Proposed Project site, and there are several other occurrences nearby (CDFW 2016). The Proposed Project has suitable habitat for this species, and it is possible that this species could occur.

Coastal whiptail

Coastal whiptail (*Aspidoscelis tigris stejnegeri*) is a lizard which is found in deserts, semiarid areas as well as woodland and riparian areas. This species is possible in the Engelmann Oak-Coast Live Oak/Poison Oak/Grass Association habitat. The closest CNDDB occurrence is approximately 3.9 miles south of the Proposed Project site (CDFW 2016).

Coast horned lizard

Coast horned lizard (*Phrynosoma blainvillii*) occurs in a variety of habitats throughout California. In southern California, it can occur from the coast up to elevations of 6,000 feet in the mountains (CDFG 2000). It burrows into loose soil to avoid predators and heat, and mainly feeds on ants (CDFG 2000). The closest CNDDB occurrence is approximately one mile northeast of the Proposed Project site (CDFW 2016). Suitable habitat occurs in the Proposed Project vicinity, and this species may be present.

Coast patch-nosed snake

Coast patch-nosed snake (*Salvadora hexalepis virgultea*) is known to occur mainly in shrubby or brushy habitats in coastal southern California, ranging from San Luis Obispo to Baja California and elevations from sea level to approximately 7,000 feet above msl (Jennings and Hayes 1994). It generally preys upon whiptail lizards, and is thought to overwinter in burrows or woodrat nests (Jennings and Hayes 1994). The closest CNDDB occurrence is

approximately four miles southwest of the Proposed Project site (CDFW 2016). Suitable habitat occurs in the Proposed Project vicinity, and this species may be present.

Birds

Golden Eagle

Golden Eagle (*Aquila chrysaetos*) is found throughout California (except the center of the Central Valley), typically in rolling foothills, mountains, desert, and sage-juniper flats (Polite and Pratt 1990). Its elevation range is from sea level to 11,500 feet above msl (Polite and Pratt 1990). This species nests on cliffs and large trees in open areas, and feeds on small mammals, birds and reptiles (Polite and Pratt 1990).

Golden Eagles have been reported in the vicinity of the Proposed Project since 1971 (eBird 2016). The most recent report in the vicinity was in May of 2016, approximately 2.8 miles northeast of the Proposed Project site (eBird 2016). Occupied eagle nests were identified approximately 5 and 11 miles from the Proposed Project site during focused surveys in 2010 and 2011 (NEET West 2015a). Breeding activity occurred in the past within 1 mile of the Project site, but the nests are believed to have been destroyed in wildfires more than 8 years ago and no nests have been detected in recent surveys (NEET West 2015a). The closest CNDDB occurrence is approximately 9.8 miles south of the Proposed Project site (CDFW 2016).

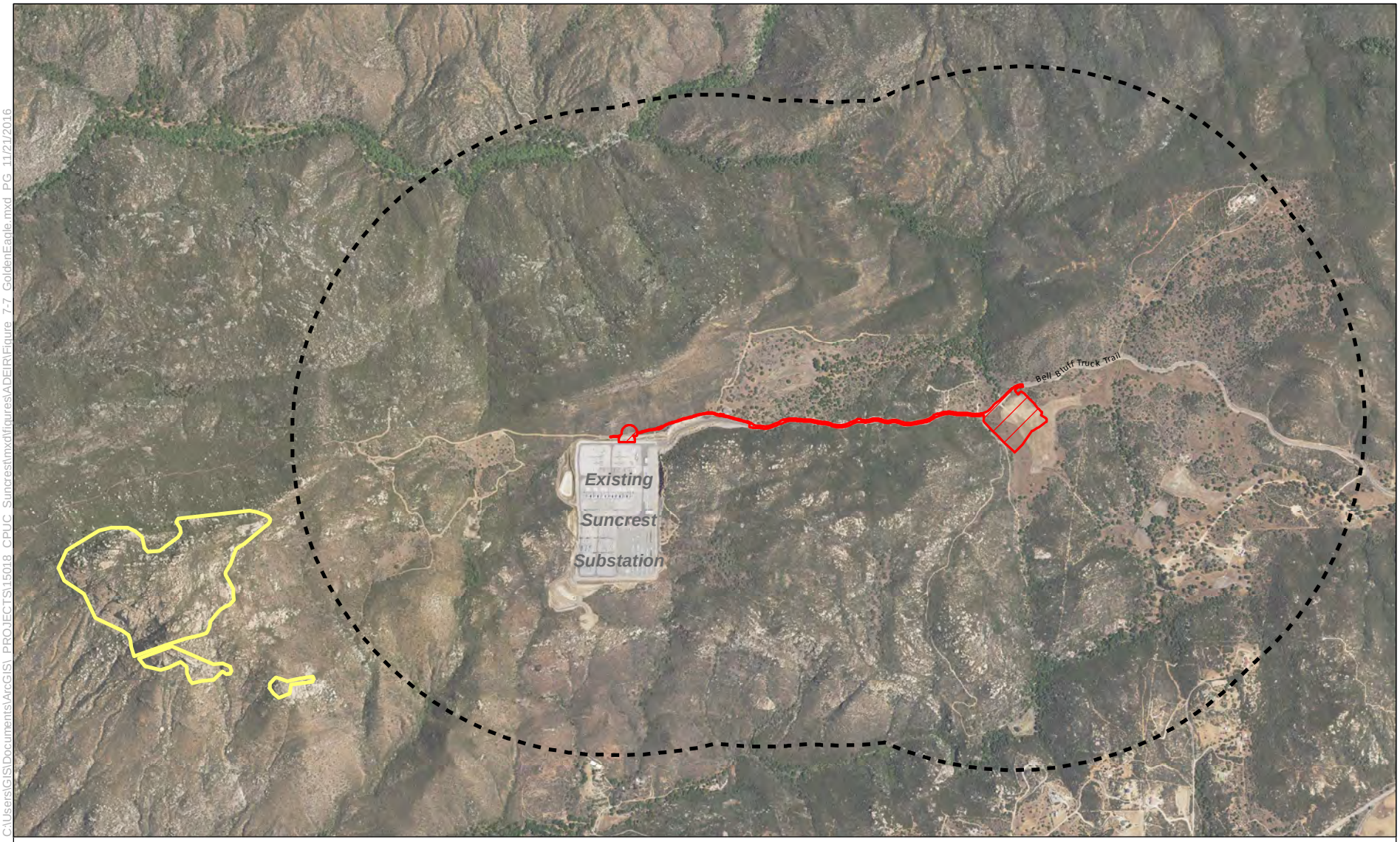
This species may forage within the Proposed Project site. There is no nesting habitat within the Proposed Project site, but cliffs in the vicinity provide potentially suitable nesting habitat. Golden eagles could potentially establish nests on Bell Bluff, west of the Proposed Project. SWCA identified potential nesting habitat in the vicinity of the Proposed Project. This habitat is more than 4,000 feet from the Proposed Project and is depicted in Figure 7-7 (NEET West 2015a).

Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is largely a summer and fall transient in southern California (Polite 2006). The breeding population in San Diego County is considered extirpated (Bloom 1980). The closest CNDDB occurrence is approximately 11.7 miles southwest of the Proposed Project (CDFW 2016). This species may occur at the Proposed Project site during migration, but is not expected to breed in the vicinity of the Proposed Project.

Southwestern Willow Flycatcher

Southwestern Willow Flycatcher (*Empidonax traillii extimus*) is a small, insect-eating migratory bird which historically migrated and bred in the southwest U.S. and northern Mexico (USFWS 2014b). This species nests in riparian vegetation from sea level to approximately 8,500 feet above msl (USFWS 2014b). Generally, this species does not nest in areas which lack willows (*Salix* spp.) or tamarisk (*Tamarix* spp.) (USFWS 2014b). Suitable nesting habitat likely exists along the Sweetwater River, 0.6 miles north of the Proposed Project. The closest CNDDB occurrence is approximately 10.6 miles northwest of the Proposed Project (CDFW 2016). The Proposed Project site lacks suitable nesting habitat, but this species could potentially be present during migration.



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N

0 1,000 2,000
Feet

Likely Golden Eagle Nesting Area

Source: SCWA 2015a

Project Area

4000-foot buffer

Figure 7-7
Likely Golden Eagle Nesting Area

Prepared by:
Horizon WATER and ENVIRONMENT

Suncrest Dynamic Reactive Power Support Project

Mammals

Pallid bat

In California, pallid bat (*Antrozous pallidus*) occurs in a variety of habitats throughout the state, such as oak woodland, brushy areas, rocky canyons, desert, and coastal redwood forests at elevations up to approximately 9,800 feet above msl (Pierson and Rainey 1998a). This species roosts in crevices in rock, old buildings, bridges, caves, mines, and tree cavities (Pierson and Rainey 1998a). It feeds on a variety of insect species. This species is not expected to roost at the Project site, but may forage there. The closest CNDDB occurrence is approximately 2.8 miles northeast of the Proposed Project (CDFW 2016).

Dulzura pocket mouse

Dulzura pocket mouse (*Chaetodipus californicus femoralis*) is found in San Diego County in habitats including coastal scrub, chaparral, and grassland. This species is often found at grass-chaparral edges. Suitable habitat occurs in the Proposed Project area, and this species may be present. The closest CNDDB occurrence is approximately 1.5 miles southeast of the Proposed Project (CDFW 2016).

Northwestern San Diego pocket mouse

Northwestern San Diego pocket mouse (Chaetodipus fallax fallax) is found in western San Diego County in coastal scrub, chaparral, grasslands, and sagebrush habitats. It prefers sandy areas, usually in association with rocks or coarse gravel. It is found at elevations from 0 to 6,000 feet above msl (Brylski 1990a). This species is a granivore (Dudek 2003). The closest CNDDB occurrence is approximately 11.5 miles west of the Proposed Project (CDFW 2016). Suitable habitat occurs in the Proposed Project vicinity, and this species may be present.

Townsend's big-eared bat

Townsend's big-eared bat (*Corynorhinus townsendii*) is a colonial bat species which is distributed throughout Western North America (Pierson and Rainey 1998). Small moths are the primary food source for this species, but it also consumes beetles and other insects (Harris 1990). This species generally roosts in caves, but may also roost in old mines or buildings (Pierson and Rainey 1998b). This species is known to roost in San Diego County (Pierson and Rainey 1998b). The closest CNDDB occurrence is approximately five miles northwest of the Proposed Project (CDFW 2016). The Project site does not contain suitable roosting habitat, but this species could potentially be present during foraging.

Stephens' kangaroo rat

Stephens' kangaroo rat (*Dipodomys stephensi*) typically occurs west of the Peninsular Ranges, at lower elevations in flat or gently rolling grasslands of inland valleys in western Riverside County and northern and Central San Diego County (USFWS 2010). This species prefers grasslands that are dominated by forbs (USFWS 2010). The closest known population of this species is located in the Ramona Grasslands, approximately 20 miles northwest of the Proposed Project (USFWS 2010). The closest CNDDB occurrence is approximately 19.8 miles northwest of the Proposed Project (CDFW 2016). The Project site is not considered part of this species current range (USFWS 2016e), thus this species is not expected to occur at the Project site. No surveys have been conducted for this species (NEET West 2015a).

Western mastiff bat

Western mastiff bat (*Eumops perotis californicus*) is a colonial bat found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. It roosts in crevices in cliff faces, large boulders and cracks in buildings and roosts are generally located at least 10 feet from the ground (Pierson and Rainey 1998). It largely feeds on moths (Pierson and Rainey 1998c). It ranges from central Mexico and across the southwestern U.S. (Pierson and Rainey 1998c). In southern California, it is widely distributed, with concentration in San Diego County and the Los Angeles basin (Pierson and Rainey 1998c). The closest CNDDB occurrence is approximately 1.8 miles southeast of the Proposed Project (CDFW 2016). The Proposed Project site contains suitable foraging habitat, but does not contain suitable roosting habitat. However, this species could potentially roost in nearby cliffs.

San Diego desert woodrat

San Diego desert woodrat is found in coastal scrub, and prefers moderate to dense canopies. It is found in greater numbers in rock outcrops, rocky cliffs, and slopes (Brylski 1990b). This species is distributed from San Diego County to San Luis Obispo County. This species builds houses out of twigs and other materials, often in rock crevices or in lower tree branches (Brylski 1990b). The closest CNDDB occurrence is approximately 11.6 miles west of the Proposed Project (CDFW 2016). Three woodrat nests were observed north of Bell Bluff Truck Trail, outside of the Project site (NEET West 2015a). The non-special status dusky-footed woodrat also overlaps in range with the Proposed Project. The woodrat houses could have been constructed by either of these species. As suitable habitat for San Diego desert woodrat occurs at the Proposed Project site, this species may be present at the Project site.

7.4 Impact Analysis

7.4.1 Methodology

The Proposed Project may impact biological resources through the direct or indirect disturbance, modification, or destruction of habitat such that it results in death, injury or harassment of individuals or populations of plant or animal species, or impedes or prevents the dispersal of individuals or populations of special-status species. Potential impacts on existing biological resources were evaluated by comparing the quantity and quality of habitats present in the project area under baseline conditions to anticipate conditions after implementation of the Proposed Project activities. Direct and indirect impacts on special-status species were assessed based on the potential for the species or their habitat to be disturbed or enhanced by implementation of the Proposed Project.

7.4.2 Criteria for Determining Significance

Based on Appendix G of the CEQA Guidelines and professional expertise, the Proposed Project would result in a significant impact to biological resources if it would:

A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW, USFWS, or NMFS;

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 CDFW, USFWS, or NMFS;

C. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; or

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 local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP).

The analysis considers both species and their habitats. A less-than-significant impact generally refers to a situation where there is a measurable impact, but the impact is not likely to result in an adverse outcome for the survival or fitness of a particular species, or a widespread or long-lasting adverse effect on a natural community. Conversely, an impact would be considered potentially significant if it may substantially decrease the likelihood of survival or fitness of a particular species (e.g., substantial decrease in a local population size or extirpation), or result in widespread or long-lasting adverse effects on a natural community. For impacts found to be potentially significant, mitigation measures are proposed. Any impact that remains significant after application of all feasible mitigation is considered significant and unavoidable.

7.4.3 Environmental Impacts

Impact BIO-1: Effects on Special-Status Plants (Less than Significant with Mitigation)

Construction of the Proposed Project would involve vegetation clearing, excavation, and grading that could result in a direct impact on special-status plant species or their habitat. This would be a significant impact. Operations of the Proposed Project are unlikely to result in surface disturbances to any special-status species or related habitats, and would not have a significant adverse impact on special-status plants.

Several special status plants have the potential to occur in the Proposed Project site. These include felt-leaved monardella. San Diego milk-vetch, delicate clarkia, Lakeside ceanothus, summer holly, Tecate tarplant, sticky geraea, San Diego gumplant, San Diego sunflower, Orcutt's linanthus, Hall's monardella, Moreno currant, and southern jewelflower.

No special status plants have been identified within the Project footprint to date. Felt-leaved monardella has historically been present in the immediate vicinity of the Proposed Project along Bell Bluff Truck Trail. This species was detected in 2010 pre-construction rare plant surveys for the Sunrise Powerlink transmission line and Suncrest Substation, and again in 2015 rare plant surveys conducted for the Proposed Project (NEET West 2015a). A population consisting of approximately 25 individuals was identified in 2015 adjacent to the

Bell Bluff Truck Trail, outside of the project footprint (NEET West 2015a). There is suitable habitat for this species within the Project site.

Construction in the vicinity of the known population of felt-leaved monardella would be limited to the paved portions of Bell Bluff Truck Trail, and the project has been designed to avoid this species. Although felt-leaved monardella is not currently present within the Project site, as this species is an annual, its location can change from year to year. If the Proposed Project were to overlap with occurrences of this species, due to design change or population movement, impacts could include mortality of individuals and/or population fragmentation. This would be a significant impact.

Several mitigation measures are proposed to avoid, reduce, or compensate for direct impacts on special-status plant species. Implementation of **Mitigation Measure BIO-1** would avoid or minimize disturbance to known occurrences of special-status plants (Figure 7-1), to the extent feasible. Within one year of the start of ground-disturbing activities, **Mitigation Measure BIO-2** would be implemented to identify the extent to which special-status plants are present and could be adversely affected by the Proposed Project. Mitigation Measure BIO-2 is necessary because the presence of special-status plants could change between the time rare plant surveys were conducted in 2015 and when construction commences. **Mitigation Measure BIO-3** would require monitoring to confirm avoidance or minimization of impacts to identified special-status plant populations. Finally, **Mitigation Measure BIO-4** would be implemented to provide compensatory mitigation should special-status plants be adversely affected.

With implementation of these mitigation measures, the impact on special-status plants would be less than significant with mitigation.

Mitigation Measure BIO-1: Design Project to Avoid or Minimize Impacts on Known Occurrences of Special-Status Plants.

NEET West or their contractor(s) shall implement the following measures:

- To the extent feasible, the Proposed Project shall avoid or minimize impacts on known occurrences of felt-leaved monardella (as shown on Figure 7-6 of this EIR). Avoidance and minimization measures may include adjustments of the project design to avoid special-status plants.

Mitigation Measure BIO-2: Perform Focused Surveys for Special-Status Plants.

NEET West or their contractor(s) shall implement the following measures:

Within 1 year before commencement of ground-disturbing activities, a qualified botanist shall perform surveys for special-status plant species with the potential to occur at the site. Floristic surveys will be performed according to the *Protocols for Surveying and Evaluating Impacts to Specials Status Native Plant Populations and Natural Communities* (CDFG 2009 or current version). Floristic surveys will be performed during the appropriate bloom period(s) for each species. If special-status plants are detected within the construction zone or within a 100-foot radius of the construction zone, Mitigation Measure BIO-3 shall be implemented.

Mitigation Measure BIO-3: Avoid or Minimize Impacts on Special-Status Plant Species during Construction.

If special-status plants are detected within the construction zone or within a 100-foot radius of the construction zone while implementing Mitigation Measure BIO-1b, NEET West or the contractor(s) shall install exclusion fencing to protect plants that remain in place. Locations of special-status plant populations shall be clearly identified in the field by staking, flagging, or fencing. The plants shall be monitored throughout the duration of construction to determine whether the project has resulted in adverse effects (direct or indirect), as determined by a qualified botanist. If the botanist determines that special-status plants may have been adversely affected, NEET West shall implement measures to compensate for the impact as described in Mitigation Measure BIO-4.

Mitigation Measure BIO-4: Compensate for Impacts to Special-Status Plant Species.

If avoidance of special-status plants is not feasible, NEET West shall implement measures to compensate for impacts on special-status plants. Compensation may be provided by purchasing credits at an approved mitigation bank (provided at a minimum 1:1 ratio [mitigation to impact]), or through transplanting perennial species, collecting and dispersing seed of annual species, and other conservation strategies that shall restore and protect the viability of the local population. Because of the differences in plant growth forms and life histories, conservation measures would be developed on a species-specific basis based on input from CDFW. If compensation measures are implemented, monitoring plant populations shall be conducted annually for 5 years to assess the mitigation's effectiveness. Monitoring shall assess vegetative density, population size, natural recruitment, and plant health and vigor. Monitoring results may trigger management actions such as collection and sowing of additional seed, tillage/disturbance within existing populations to induce establishment, installation of container plants, and control of other competing vegetation to ensure successful plant establishment and survival. The determination of success will be based on whether there has been a substantial reduction (> 20 percent) in the size or abundance of the population compared to baseline conditions. The site shall be evaluated at the end of the 5-year monitoring period to determine whether the mitigation has met the success criteria.

Impact BIO-2: Effects on Special-Status Birds and Species Protected under the Migratory Bird Treaty Act (Less than Significant With Mitigation)

Special status birds that could potentially be present at the Project site during migration include Swainson's Hawk and Southwest Willow Flycatcher. The Project site does not provide high quality foraging habitat for these species, and these species are not anticipated to nest within the Project site. Thus, impacts to these species are anticipated to be less than significant. Golden Eagles may potentially be present in the vicinity of the Proposed Project, and impacts to this species are addressed in Impact BIO-3. Although no special-status birds are anticipated to nest within the Project site, a variety of birds protected by the MBTA could potentially nest within the Project site or in the immediate vicinity.

Construction of the Proposed Project could disturb nesting birds by generating noise, creating visual distractions, or having a direct impact on occupied nests (e.g., vegetation removal). Transmission infrastructure may pose electrocution and collision hazards for raptors in the area. The impacts from construction activities that disturb nesting of birds protected under the MBTA would be considered potentially significant. Implementation of **Mitigation Measures BIO-5** and **BIO-6** would reduce this impact to a level that is less than significant with mitigation.

Impacts from transmission infrastructure would also be considered potentially significant. The Proposed Project has been designed to minimize impacts to birds from transmission infrastructure by locating the majority of the transmission line underground. To further reduce the potential of impacts from transmission infrastructure on birds, **Mitigation Measure BIO-7** would be implemented.

Mitigation Measure BIO-5: Avoid Impacts on Nesting Birds.

Whenever possible, NEET West or their contractor(s) shall avoid impacts on native nesting birds by not initiating Proposed Project activities that involve clearing vegetation, generating mechanical noise, or ground disturbance during the typical breeding season from February 1 to August 31.

Mitigation Measure BIO-6: Implement Preconstruction Surveys for Birds Protected under the MBTA.

If construction is scheduled to commence during the non-nesting season (September 1 to January 31), no preconstruction surveys for nesting birds are required. If construction begins between February 1 and August 31, NEET West or their contractor(s) shall ensure that surveys for nesting birds are be conducted by a qualified biologist within a 500-foot radius of the construction area. The survey shall be conducted no more than 14 days prior to construction. If the biologist determines that the area surveyed does not contain any active nests, then construction activities may commence without any further mitigation. If active nests are found, CDFW and USFWS will be notified and no-work buffers around nests shall be established that are sufficient to ensure that breeding is not likely to be disrupted or adversely affected by construction. Buffers for non-special-status birds protected under the MBTA shall be 250 feet around the nest. Special status birds are not anticipate to nest within 500 feet of the Proposed Project, but if active special status bird nest are detected, no-work buffer shall be 500 feet around the nest. Buffers will be maintained until the young have fledged or the nests become inactive.

Mitigation Measure BIO-7: Structures Constructed to Minimize Impacts to Raptors and other Avian Life.

NEET West or their contractor(s) shall construct structures to conform to "Suggested Practices for Raptor Protection on Power Lines" (Raptor Research Foundation, Inc. 1981) to minimize impacts to raptors. NEET West or their contractor(s) shall construct all aboveground power transmission lines to the Avian Power Line Interaction Committee (APLIC) Guidelines recommendations: *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*, and *Reducing Avian Collisions with Power Lines: State of the Art in 2012* (APLIC 2006, 2012).

Impact BIO-3: Effects on Golden Eagle (Less than Significant With Mitigation)

Golden Eagles are present in the vicinity of the Proposed Project, and have historically nested approximately 1 mile away from the Proposed Project. At this distance, construction of the Proposed Project is not anticipated to substantially affect nesting golden eagles through blasting noise. However, if nesting golden eagles were to occur within 500 feet of the construction footprint, and blasting was to be used during construction, nest abandonment might occur. This would be a significant impact.

As the Suncrest Substation was constructed in 2011 and 2012, and has been in operation since, any Golden Eagle nests established in the vicinity are presumably habituated to the increased human presence and noise associated with the substation. Operation of the Proposed Project is not anticipated to greatly increase human visitation and noise compared to current conditions at the site. Thus impacts from operation of the Proposed Project on golden eagles are anticipated to be minimal.

Implementation of **Mitigation Measures BIO-5** and **BIO-6** would reduce the potential for noise impacts from blasting on nesting Golden Eagles to a level that is less than significant with mitigation.

Impact BIO-4: Effects on Hermes Copper Butterfly (Less than Significant With Mitigation)

Suitable habitat for the Hermes copper butterfly is present in the vicinity of the Proposed Project. No suitable habitat was mapped within the Project site during the 2015 surveys conducted by SWCA. While California buckwheat and spiny redberry are present within the Project site, the two plant species are not in close enough proximity to be considered suitable habitat for the Hermes copper butterfly.

Suitable habitat for Hermes copper butterfly may develop within the project footprint prior to construction. If this occurs, the Proposed Project could have a substantial adverse effect on the species. This would be a significant impact. **Mitigation Measure BIO-8** and **BIO-9** would reduce potential impacts to Hermes copper butterfly to less than significant.

Mitigation Measure BIO-8: Survey for Potential Hermes Copper Habitat.

Prior to the start of vegetation clearing for the Project, a survey shall be conducted to determine the presence or absence of potentially suitable Hermes copper habitat within the Project footprint. Potentially suitable habitat is defined as mature (woody) spiny redberry shrub(s) within 15 feet of California buckwheat. If Hermes copper habitat is mapped within the project footprint and will be affected by Project activities, then Mitigation Measure BIO-9 shall be implemented.

Mitigation Measure BIO-9: Mitigate for Impacts to Hermes Copper Butterfly Habitat.

NEET West or their contractor(s) shall implement the following measures:

- If areas mapped as Hermes Copper butterfly habitat are advsersely affected by the Proposed Project, NEET West shall mitigate permanent impacts at a 1:1 ratio for unoccupied habitat and 3:1 ratio for occupied habitat. Habitat should be considered occupied if it is within 150 meters of a Hermes copper sighting (County of San Diego 2010).

Impact BIO-5: Effects on Special-Status Mammals and Reptiles (Less than Significant With Mitigation)

Several special-status mammals and reptiles have the potential to occur within the Project site, including red-diamond rattlesnake, coastal whiptail, coast horned lizard, coast patch-nosed snake, pallid bat, Dulzura pocket mouse, northwestern San Diego pocket mouse, Townsend's big-eared bat, Stephens' kangaroo rat, western mastiff bat, and San Diego desert woodrat. These species could be advserely affected by Proposed Project construction through effects on their habitat, and potentially direct mortality. Direct mortality (except for bats) could be caused by construction traffic, vegetation removal, and soil grading. Temporary impacts would include ground disturbance, fugitive dust, and night lighting. Night lighting could impact bats or other nocturnally active species such as the northwestern San Diego pocket mouse and Dulzura pocket mouse. Steep walled excavations (i.e. for the transmission line) could pose an entrapment hazard for special status mammals and reptiles. Habitat loss for these species would also occur. These impacts would be considered potentially significant.

Implementation of several mitigation measures would reduce the potential for impacts to these species. Implementation of **Mitigation Measures BIO-10** and **BIO-11** would reduce potential impacts to these special-status species through education of Proposed Project personnel and employing a biological monitor to monitor construction activities. Implementation of **Mitigation Measure BIO-12** would minimize impacts such as habitat destruction or direct mortality by generally restricting vehicles to existing roads and minimizing vehicle speed on roads in the Proposed Project. Implementation of **Mitigation Measure BIO-13** would reduce the potential for special status species to be present within the Proposed Project footprint prior to vegetation clearing and ground disturbing activities. Implementation of **Mitigation Measure BIO-14** would reduce the potential for steep-sided excavation or trenching to entrap special-status wildlife by twice-daily monitoring and fencing/covering of excavations at the end of each workday. **Mitigation Measure BIO-15** would reduce the potential for impacts to nocturnal animals from increased nighttime light. To minimize the Proposed Project impacts on special-status species habitat, **Mitigation Measure BIO-16** would be implemented to restore temporarily affected areas.

As described in Chapter 12, *Hydrology and Water Quality*, the Proposed Project would be required to obtain a General Construction Stormwater Permit from the SDRWQCB, which would require preparation and implementation of a stormwater pollution prevention plan (SWPPP). The SWPPP would include a list of BMPs to prevent erosion, including fugitive dust. Implementation of **Mitigation Measures HYD/WQ-1** and **BIO-12** would reduce the potential for fugitive dust by watering for dust control, minimizing the area of soil disturbance, and minimizing vehicle speed on roads.

With implementation of the above described mitigation measures, impacts to these species would be reduced a level that is less than significant with mitigation.

Mitigation Measure BIO-10: Educational Training.

NEET West or their contractor(s) shall ensure that before conducting construction activities all Proposed Project personnel shall participate in an educational training session conducted by a qualified biologist. All on-site personnel shall be informed about relevant special-status species and their habitat, conservation goals, identification, and procedures to follow in the event of a possible sighting. Personnel who miss the first training session or are hired later in the season must participate in a make-up session before conducting Project activities. A record of the personnel that attended the training shall be kept by the qualified biologist.

Mitigation Measure BIO-11: Biological Monitor.

NEET West or their contractor(s) shall employ a qualified biologist or environmental inspector who is familiar with the biological resources and issues at the Proposed Project to conduct monitoring during all construction-related ground-disturbing activities that may impact sensitive biological resources. These activities would include but not necessarily be limited to: initial clearing and vegetation removal; perimeter fence installation and excavation; and movement of construction equipment and other activities outside of fenced/paved areas within wildlife habitat. The biological monitor/environmental inspector shall flag or otherwise clearly mark environmentally sensitive areas with appropriate buffers, within which construction is not allowed. The monitor/inspector shall have the authority to stop work activities upon the discovery of sensitive biological resources, and allow construction to proceed after the identification and implementation of steps required to avoid or minimize impacts to sensitive resources. Such steps shall be pre-approved by CDFW and/or USFWS, as applicable given the species' status.

Mitigation Measure BIO-12: Vehicle Use of Existing Roads.

NEET West or their contractor(s) shall restrict all Proposed Project vehicle movement to existing roads as a part of the Proposed Project, except when not feasible due to physical or safety constraints. When it is not feasible to keep vehicles on existing access roads or avoid construction of access driveways during the nesting, breeding, or migration season, NEET West shall perform a site survey in the area where the work is to occur. This survey shall be performed to determine presence or absence of special-status nesting birds or other special-status species in the work area.

Parking or driving on unpaved areas underneath oak trees shall not be allowed in order to protect root structures. In addition, a 15-mile-per-hour speed limit shall be observed on roads in the Proposed Project area to reduce dust and allow reptiles and small mammals to disperse.

Mitigation Measure BIO-13: Preconstruction Sweeps for Biological Resources.

Prior to initial vegetation clearance, grubbing, and ground-disturbing activities, NEET West or their contractor(s) shall ensure that a qualified biologist shall conduct pre-construction sweeps of the Project site for special-status wildlife and plants. During these surveys, the biologist shall:

a) Ensure that potential habitats become inaccessible to wildlife (e.g., burrows are removed that would otherwise provide temporary refuge);

b) In the event of an unanticipated discovery of a special-status ground-dwelling animal, a biologist holding the appropriate State and/or federal permits shall recover and relocate the animal to adjacent suitable habitat within the Proposed Project at least 200 feet from the limits of grading; and,

c) In the event of the discovery of a previously unknown special-status plant, the area will be marked as an environmentally sensitive area, and avoided to the maximum extent practicable. If avoidance is not possible, NEET West will consult with USFWS and/or CDFW as appropriate given the species' status.

Mitigation Measure BIO-14: Inspect Excavations for Trapped Wildlife.

NEET West or their contractor(s) shall inspect all steep-walled trenches or excavations used during construction twice daily (early morning and evening) to protect against wildlife entrapment. If wildlife is located in a trench or excavation, the on-site biological resource monitor shall be contacted immediately to remove them if they cannot escape unimpeded. If the biological resource monitor is not qualified to remove the entrapped wildlife, a recognized wildlife rescue agency may be employed to remove the wildlife and transport them safely to other suitable habitats.

Steep-walled trenches and excavations shall be fenced and/or covered at the end of each workday, to prevent wildlife from becoming entrapped and for safety purposes. Alternatively, escape ramps shall be installed in trenches or excavation to allow wildlife to exit on their own volition.

Mitigation Measure BIO-15: Minimize Night Lighting.

NEET West or their contractor(s) shall minimize construction night lighting on adjacent habitats. Exterior lighting within the Proposed Project area adjacent to habitat shall be the lowest illumination allowed for human safety and security, selectively placed, shielded, and directed downward to the maximum extent practicable. Vehicle traffic associated with Proposed Project activities shall be kept to a minimum volume and speed to prevent mortality of nocturnal wildlife species.

Mitigation Measure BIO-16: Restoration and Revegetation.

NEET West shall develop a Restoration and Revegetation Plan to guide restoration activities on the Project site that promotes locally appropriate native plant growth and eliminates non-native and invasive species. The Restoration Plan shall identify measures and success criteria specific to each impacted plant community at the Proposed Project. The total area to be planted, and species composition, shall be tailored for each affected plant community based on existing standards and precedents. The Restoration Plan shall identify success criteria for each habitat type and develop monitoring measures to ensure that success criteria will be met.

Disturbed soils shall be revegetated with an appropriate weed-free, native seed mix. All areas designated for temporary impacts shall be revegetated with a seed blend

that includes native grasses, forbs, and shrub species characteristic of the plant community receiving the temporary impact. Revegetation activities shall be undertaken as soon as construction activities have been completed to minimize colonization by non-native weedy species and to ensure compliance with the Proposed Project's SWPPP. Herbicides, if required during the restoration period, shall be applied using hand-held applicators for spot-treatment and shall not be used within 100 feet of drainages or sensitive plant populations.

Impact BIO-6: Sensitive Natural Communities (Less than Significant With Mitigation)

The majority of the Proposed Project would be constructed on disturbed and previously developed land that does not support riparian habitat or other sensitive natural communities; however, portions of the Proposed Project would be constructed in the Engelmann Oak – Coast Live Oak/Poison Oak/Grass Association, a sensitive natural communities as identified by CDFW (CDFG 2010) (Figure 7-1). The Proposed Project would permanently impact approximately 0.3 acre of this habitat (Table 7-1).

Within the Project Area, this community has been subjected to repeated disturbances over the past 20 years. However, this community still provides habitat values. Temporary and permanent loss of the Engelmann Oak – Coast Live Oak/Poison Oak/Grass Association would be considered a potentially significant impact. Implementation of **Mitigation Measures BIO-17** and **BIO-18** would reduce this impact to a level that is less than significant with mitigation.

Mitigation Measure BIO-17: Minimize Area of Disturbance of Engelmann Oak – Coast Live Oak/Poison Oak/Grass Association Habitat.

NEET West or their contractor(s) shall ensure that the disturbance or removal of vegetation shall not exceed the minimum necessary to complete construction and shall only occur within the defined work area.

Mitigation Measure BIO-18: Develop and Implement a Restoration Plan for Engelmann Oak – Coast Live Oak/Poison Oak/Grass Association Habitat Disturbed during Construction.

NEET West or their contractor(s) shall develop and implement a Habitat Restoration Plan to mitigate any temporary and permanent impact on Engelmann Oak – Coast Live Oak/Poison Oak/Grass Association habitat. For any temporary impact, all disturbed soils and new fill in this habitat shall be revegetated with site-appropriate native species. For any permanent impact, Engelmann Oak – Coast Live Oak/Poison Oak/Grass Association habitat shall be mitigated at a ratio of 1.1:1 (replacement to impact). Engelmann Oak – Coast Live Oak/Poison Oak/Grass Association restoration or compensation may be completed at the Project site, in the vicinity, or at a conservation bank with a service area that covers the Project site. Revegetated or restored areas shall be maintained and monitored to ensure a minimum of 65 percent survival of woody plantings after 5 years.

Impact BIO-7: Effects on Waters (Less than Significant with Mitigation)

As described above, there are no USACE jurisdictional waters within the Proposed Project. The path of the transmission line crosses two drainages which are conveyed underneath Bell Bluff Truck Trail via culverts. It is anticipated that the excavation for the proposed transmission line would occur beneath these culverts, and that they would be shored and left in place; however, it is possible that culverts would need to be temporarily removed during construction. No impacts to the natural bed, bank, or riparian vegetation would occur. If culverts were removed during a period when water is flowing in these drainages, significant impacts to these waters could occur. Implementation of **Mitigation Measure HYD/WQ-2** would reduce these impacts by minimizing the potential for water to be present in drainage at the time of temporary culvert removal.

Construction of the Proposed Project would involve site clearing, grading, and excavation, which could potentially impact waters in the vicinity of the Proposed Project through erosion. Existing regulations would require the Proposed Project to implement a number of measures to prevent possible adverse effects on water quality. These measures are described in Chapter 12, *Hydrology and Water Quality*. **Mitigation Measure HYD/WQ-1**, also described in Chapter 12, details BMPs that would be protective of waters quality. Additionally, inadvertent release of hazardous materials could potentially impact waters. As described in Chapter 11, *Hazards and Hazardous Materials*, **Mitigation Measure HAZ-1** would require preparation and implementation of a Hazardous Materials and Waste Management Plan. With implementation of **Mitigation Measures HYD/WQ-1, HYD/WQ-2,** and **HAZ-1**, potential impacts to waters would be reduced to less than significant.

Impact BIO-8: Effects on Movement of Wildlife and Use of Breeding Sites (Less than Significant with Mitigation)

The majority of the Proposed Project would be constructed in previously disturbed or developed lands that do not function as a significant movement corridor for wildlife. Although the Peninsular Ranges provide an important pathway for wildlife migration, the specific Proposed Project location is not a known important migration area. Excavation for the proposed transmission line could create temporary barriers to wildlife movement in the immediate vicinity. Impacts of excavation on wildlife movement would be minimized by implementation of **Mitigation Measure BIO-14**, which requires that steep-sided excavation be covered or fenced at the end of each work day.

Wildlife may breed in the Proposed Project site. Implementation of **Mitigation Measures BIO-5, BIO-6,** and **BIO-7** would reduce potential impacts to wildlife breeding in the vicinity of the Proposed Project. With implementation of these mitigation measure, impacts would be reduced to a level that is less than significant with mitigation.

Impact BIO-9: Conflict with Local Ordinances or Policies Protecting Biological Resources (No Impact)

The CPUC has exclusive jurisdiction over the siting and design of the Proposed Project. As such, projects under CPUC jurisdiction, including the Proposed Project, are exempt from local regulations and permitting. Because these local policies or ordinances do not apply to the Proposed Project, there would be no impact. However, the construction and operation of the Proposed Project will not conflict with any environmental plans, policies, or regulations

adopted by agencies with jurisdiction over local regulations related to biological resources. No impact would occur.

Impact BIO-10: Effects on Existing Habitat Conservation Plans or Natural Community Conservation Plans (No Impact)

The Proposed Project is located within the San Diego County MSCP area. However, the East County Plan, which would cover the Proposed Project area, is in the planning phase and has not yet been approved or implemented. The Proposed Project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan, thus there would be no impact.