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D.5 Biological Resources

This section evaluates the potential for the South Bay Substation Relocation Project (Proposed Project) to impact biological resources in the project area. Section D.5.1 provides a summary of the environmental setting of the existing biological resources present in the vicinity of the Proposed Project. Applicable regulations, plans, and standards are listed in Section D.5.2. Potential impacts and mitigation measures for the Proposed Project are presented in Section D.5.3, and alternatives are described and discussed in Section D.5.4. Mitigation monitoring, compliance, and reporting are discussed in Section D.5.5.

D.5.1 Environmental Setting for the Proposed Project

This section summarizes the existing biological resources within the project area. Biological resources include living organisms and the physical environment in which they occur. Biological resources are categorized in this report into plant communities/wildlife habitat, sensitive plant and animal species, and wildlife movement corridors. Plant communities are characterized by dominant species and physiognomy. Vegetation and plant species are often associated with specific soils, slopes, aspects, and/or elevations. Animal species are typically found in particular habitats that are defined by plant communities and physical features (e.g., rock outcrops and sandy soils). Wildlife movement corridors are travel routes that allow animals to reach habitat areas for daily use, seasonal movement, and/or juvenile dispersal.

D.5.1.1 Regional Setting

The Proposed Project is located entirely within San Diego County in the Bayfront coastal area of the City of Chula Vista (City). San Diego County is a biologically diverse region that supports rare and declining native habitats, numerous federally and state-listed plant and animal species, and an increasing amount of federally designated critical habitat for listed species. The Proposed Project site is within the south coast geographic floristic subdivision, which is dominated by Diegan coastal sage scrub and chaparral vegetation communities. The site is partially located on a former liquefied natural gas (LNG) site, and transmission line improvements would occur within San Diego Gas & Electric Company (SDG&E) easements. The site is industrial in character and contains substantial amounts of disturbed coyote brush scrub, seasonal ponds, and non-native grassland habitat; and the remainder of the site consists primarily of developed land, non-native grassland, and disturbed habitat with ornamental vegetation present at the eastern boundary of the site within an SDG&E easement. Telegraph Creek and a number of drainages and swales are also located on the Proposed Project site (see Section D.9, Hydrology and Water Quality, of this EIR).

D.5.1.2 Methodology

This section considers information presented in SDG&E's Proponent's Environmental Assessment (PEA) for the Proposed Project (SDG&E 2010a), including the supporting preliminary jurisdictional wetland delineation report prepared by Merkel & Associates Inc. (2010) and the Biological Resources Technical Report prepared by Insignia Environmental (2011a). In addition, resource and conservation plans including the City of Chula Vista Multiple Species Conservation Program (MSCP) (City of Chula Vista 2003), Chula Vista General Plan (City of Chula Vista 2005a), Chula Vista Local Coastal Program (LCP) Land Use Plan and Bayfront Specific Plan (City of Chula Vista 1995), Unified Port District of San Diego (Port District) Master Plan (Port District 1980), and amendments to Port Master Plan as proposed in the Chula Vista Bayfront Master Plan (Port District 2010) and the SDG&E Subregional Natural Community Conservation Plan (NCCP) (SDG&E 1995) were also reviewed to ensure that the Proposed Project would not conflict with the regulations and objectives of plans applicable to the Proposed Project. While the San Diego Bay National Wildlife Refuge (NWR) Comprehensive Conservation Plan (CCP) would not be applicable to the Proposed Project (the project components would not be within the management authority of the refuge), consistency with the CCP is considered due to proximity.

As part of the literature review (which included a study of aerial photographs, U.S. Geological Survey topographic maps, National Wetland Inventory maps, USDA Soil Conservation Service mapping, the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California*, and the *San Diego County Bird Atlas*), a search of the California Natural Diversity Database (CNDDB) was conducted by Insignia Environmental for all U.S. Geological Survey quadrangle maps within 5 miles of the Proposed Project site to determine known occurrences of special-status species. Dudek reviewed this information and also conducted a CNDDB search of the site to verify the data presented in the PEA.

A reconnaissance-level biological survey of the entire site (including all project component locations) was conducted by Insignia Environmental on March 9, 2010. In addition to project component locations, all existing and proposed access roads and the existing easements for the 230-kilovolt (kV) loop-in, 138 kV extension, and 69 kV transmission relocation (including all proposed pole locations, work areas, fly yards, pull sites, and staging areas) were surveyed. During the general biological surveys, vegetation communities and other land covers were mapped and classified by Insignia Environmental according to R.F. Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California*, the California Department of Fish and Game's (CDFG's) *A Guide to Wildlife Habitats in California* and California Wildlife Habitat Relationship System, and James Lightner's *San Diego County Native Plants* (SDG&E 2010a). In addition, plant and animal species observed on site, as well as the potential for special-status plant and wildlife

species to occur, were documented by Insignia Environmental. A wet season branchiopod sampling of seasonal wetlands within the Proposed Project site was conducted according to the U.S. Fish and Wildlife Service (USFWS) protocol by Insignia Environmental in April 2011, and ~~according to~~in accordance with USFWS protocol, a ~~second season of protocol survey a~~ dry season survey ~~is required and~~ was conducted ~~as a dry season survey~~ in November 2011 (Merkle & Associates Inc. 2011). Insignia Environmental also conducted a rare plant survey of the Proposed Project area on May 5 and 6, 2011. Due to previous industrial use of the site, which has resulted in highly degraded vegetation communities, and based on the results of the general survey, Insignia Environmental determined that additional focused surveys were unnecessary. Dudek reviewed the data presented in the PEA and made independent determinations regarding the potential for special-status plant and animal species to occur on site.

A delineation of the Proposed Project was conducted to identify any jurisdictional waters regulated under the federal Clean Water Act (CWA), California Porter-Cologne Water Quality Control Act, California Fish and Game Code Section 1600–1616, the California Coastal Act, the City of Chula Vista LCP, and the City of Chula Vista Wetlands Protection Program (WPP). The field investigation and reconnaissance survey for the wetland delineation was conducted by Merkel & Associates Inc. and Insignia Environmental between March 8 and 11, 2010, and between May 3 and 5, 2010. A complete delineation of the site including all project component locations was conducted in accordance with U.S. Army Corps of Engineers (ACOE) 1987 Wetland Delineation Manual (ACOE 1987) and Interim Regional Supplement to the ACOE Wetland Delineation Manual: Arid West Region (ACOE 2008). A "three parameter" approach (the presence of hydrophytic vegetation, wetland hydrology, and hydric soils) was used to identify areas of potential ACOE jurisdiction, and a "single parameter" approach was used to identify areas of potential CDFG/CDFW and California Coastal Commission (CCC) jurisdiction. Additionally, guidance provided by the ACOE and the U.S. Environmental Protection Agency (EPA) in their December 2008 memorandum, "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States" (ACOE and EPA 2008) was used to determine the jurisdictional authority over each identified wetland area occurring on site. Lastly, a summary of wetlands and waters on the project site (as well as a description of each water feature and basis for jurisdictional determination) was prepared for the ACOE and provided to the CPUC by SDG&E on October 28, 2011 (this data was incorporated into the EIR).

D.5.1.3 Vegetation

Based on the vegetation mapping provided by Insignia Environmental (2011a) and Merkel & Associates Inc. (2010), and as shown in Table D.5-1, 11 vegetation communities were mapped and identified as occurring within the site. Figure D.5-1 depicts the location and extent of

vegetation communities. (Special-status species are shown on Figure D.5-2.) An acreage breakdown for each identified vegetation community on the site is provided in Table D.5-1, and a general description of each vegetation community follows.

Table D.5-1
Vegetation Communities/Land Covers in the Study Area

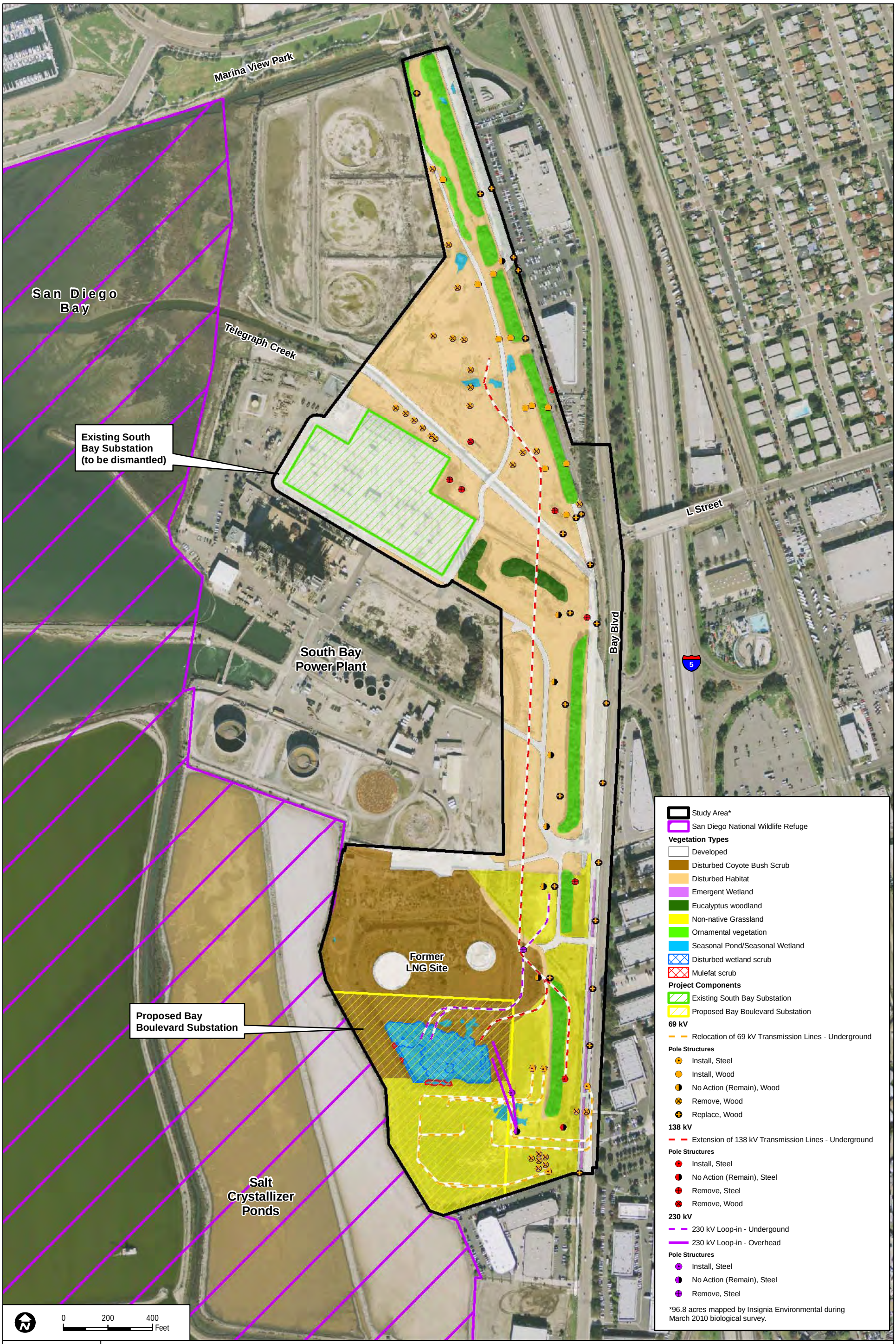
Vegetation Community/Land Cover (Holland Code)	Total Acreage in Biological Study Area
Seasonal Pond/Seasonal Wetland (No Holland code)	0.84
Disturbed Wetland Scrub (11200)	1.75
Mulefat Scrub (63310)	0.06
Emergent Wetlands (52440)	0.36
Non-Native Grassland (42200)	14.58
Disturbed Coyote Brush Scrub (32500)	14.25
Eucalyptus Woodland (79100)	0.87
Ornamental Vegetation (No Holland Code)	5.31
Disturbed Habitat (11300)	27.37
Developed Land (12000)	20.64

Source: SDG&E 2010a and 2011; Merkel & Associates Inc. 2010

Seasonal Ponds/Seasonal Wetland

The amount and duration of standing water present in seasonal ponds/seasonal wetlands (typically shallow depressions in the ground) vary and are strong factors in determining the plant and animal species present. Heavy rains, groundwater, clay soils, and flat topography can all contribute to the seasonal saturation associated with seasonal ponds.

A total of 15 seasonal ponds occur in multiple locations on the Proposed Project site. The presence of on-site seasonal ponds likely resulted from rainwater accumulating on the clay soils and/or the impoundment of water within artificially lined, bermed areas. Identified seasonal ponds (4 were identified within the bermed area located within the proposed substation site, and 11 others were identified at various locations outside the proposed substation site; see Figure D.5-1) are wetland features. Within the bermed area the deepest and most long-lived of the ponds is approximately 3 to 4 feet deep; the other three depressions are relatively short-lived, holding water at a maximum depth of 3 to 4 inches and a maximum duration of 8 to 10 days. The deepest and most long-lived of the seasonal ponds outside of the retention basin are water features 2 through 4 (see Figure D.5-3). Water feature 2, the most long-lived of these features, retains water for a maximum of 4 to 8 weeks. All of the other seasonal ponds located outside of the retention basin are generally shallow (2 to 4 inches deep) and retain water for approximately 8 days (Insignia Environmental 2011a). Two seasonal wetlands are included in the category of seasonal pond/seasonal wetland. These features meet one of the three wetland parameters and have no connectivity to navigable waters.



DUDEK

SOURCE: Digital Globe 2008
SDG&E PEA 2010

FIGURE D.5-1

Vegetation Communities Map

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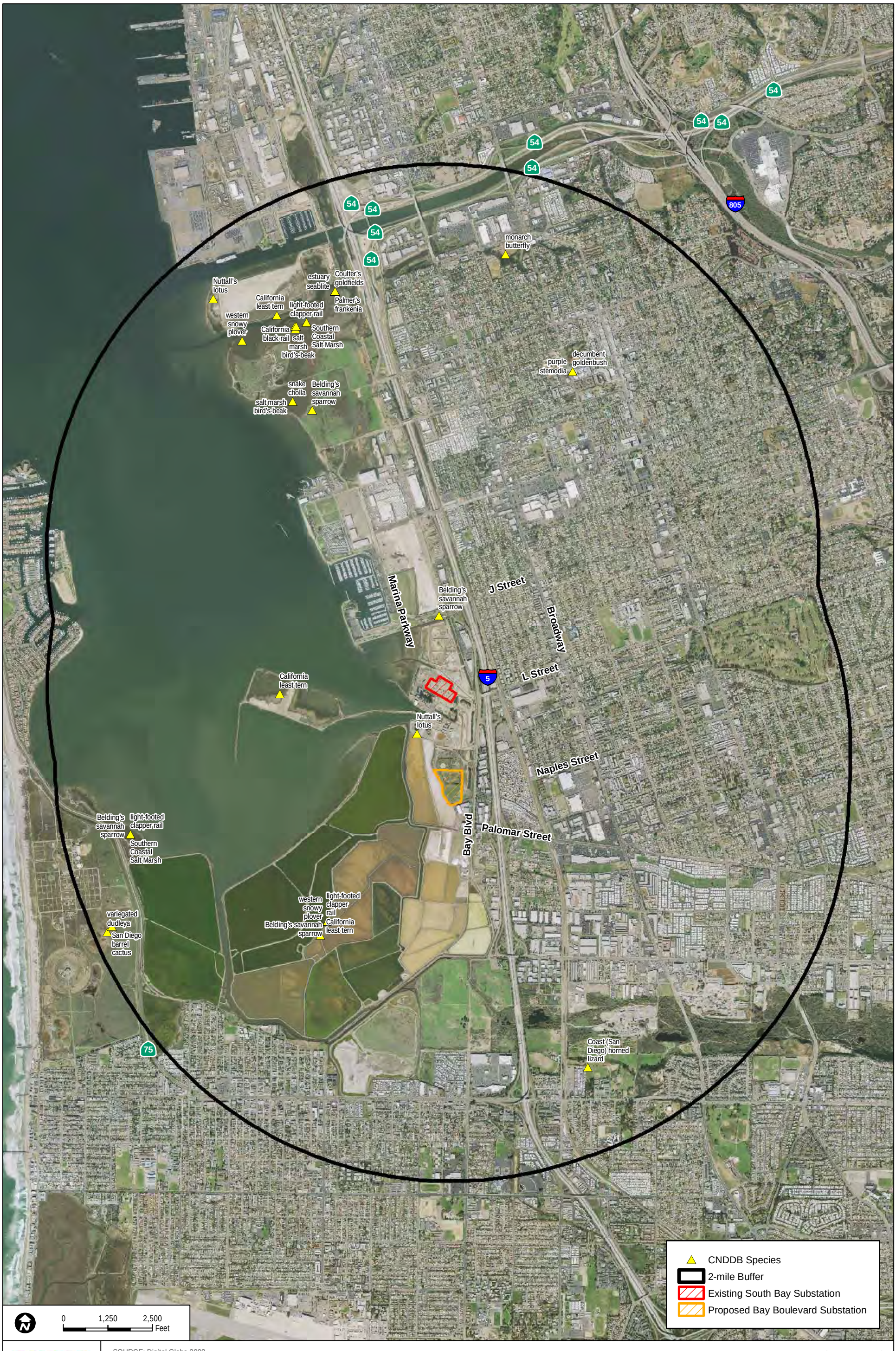

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SOURCE: Digital Globe 2008
SDG&E PEA 2010
CNDDB 2010

FIGURE D.5-2

CNDDB Special-Status Species

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Marina View Park
San Diego Bay
Telegraph Creek
Existing South Bay Substation (to be dismantled)
South Bay Power Plant
Former LNG Site
Proposed Bay Boulevard Substation
Salt Crystallizer Ponds
L Street
Bay Blvd
5
26
25
24
23
22
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6
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1

Project Components
- Existing South Bay Substation
- Proposed Bay Boulevard Substation

69 kV
- Relocation of 69 kV Transmission Lines - Underground

Pole Structures
- Install, Steel
- Install, Wood
- No Action (Remain), Wood
- Remove, Wood
- Replace, Wood

138 kV
- Extension of 138 kV Transmission Lines - Underground

Pole Structures
- Install, Steel
- No Action (Remain), Steel
- Remove, Steel
- Remove, Wood

230 kV
- 230 kV Loop-in - Undergound
- 230 kV Loop-in - Overhead

Pole Structures
- Install, Steel
- No Action (Remain), Steel
- Remove, Steel

Potential Jurisdiction of Wetlands and Waters
- City of Chula Vista and CCC
- RWQCB and CCC
- RWQCB, CDFG and CCC
- RWQCB, City of Chula Vista and CCC
- USACE, RWQCB and CCC
- USACE, RWQCB, CDFG and CCC
- USACE, RWQCB, CDFG, City of Chula Vista and CCC
- USACE, RWQCB, City of Chula Vista and CCC

0 200 400 Feet

DUDEK

SOURCE: Digital Globe 2008
SDG&E PEA 2010

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FIGURE D.5-3
Wetlands and Waters of the U.S./State

South Bay Substation Relocation Project Draft EIR

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A non-native forb, grass poly (*Lythrum hyssopifolia*), is the dominant plant species in the majority of the seasonal ponds. Other hydrophytic plant species found include alkali weed (*Cressa truxillensis*), saltmarsh sand-spurry (*Spergularia salina*), and curly dock (*Rumex crispus*). Species present in seasonal ponds located outside of the bermed area associated within the former LNG facility include hairy clover fern (*Marsilea vestita* ssp. v*estita*) and spike rush (*Eleocharis* sp.) and within the bermed area, mule fat (*Baccharis salicifolia*) and small-flower tamarisk (*Tamarix parviflora*) are present near the ponded water.

The seasonal pond/seasonal wetland features present on the Proposed Project site are vegetated with many non-native plant species and are disturbed as a result of previous on-site development. However, upon review of soils and records of vernal pools, it is documented that the site contains Huerhuero soils, which are considered to be one of the soils associated with vernal pools. Although geological investigations indicate that the site no longer contains characteristics of the Huerhuero soils (see Section D.7, Geology and Soils, of this EIR), there may still be water-holding functions of the clay layer. The seasonal ponds also contain grass poly, which is considered a vernal pool ~~indicator~~ associated plant species (Bauder and McMillan 1998). Recent reviews indicate that vernal pool remnants are present along the southwest edge of San Diego Bay (Bauder and McMillan 1998). The presence of the seasonal ponding, suitable vernal pool soils, ~~and~~ a vernal pool associated plant ~~indicator~~species, as well its proximity to other vernal pools, may indicate the presence of relict vernal pools on site and potential for vernal pool wildlife species and special-status species. The typical seasonal saturation also provides an ideal breeding habitat for many amphibian species. Because water is only present for part of the year, fish and other aquatic predators cannot be supported in this environment.

Disturbed Wetland Scrub

Disturbed wetland scrub vegetation occurs within the bermed area located within the Proposed Project site and occurs adjacent to and is interspersed with seasonal pond features discussed previously. Seasonal ponding within this depressed area promotes the growth of shallow- and adventitious-rooted hydrophytic vegetation including tamarisk (*Tamarix parviflora*), mulefat (*Baccharis salicifolia*), and coyote brush (*Baccharis pilularis*), which are dispersed throughout the bermed area. In addition to hydrophytic vegetation, the herbaceous understory includes a variety of hydrophytic plants, such as sourclover (*Melilotus indicus*), brassbuttons (*Cotula coronopifolia*), and pineapple weed (*Amblyopappus pusillus*).

Wildlife use of the bermed area is expected to be low given the predominance of non-native plant species including tamarisk within the bermed area and freeway acacia (*Acacia redolens*) along the berm slopes. In addition, the general lack of natural habitats surrounding the bermed area contributes to the overall low expected use of the area. Bird use is likely limited to species that are typically associated with upland disturbed environments and species associated with

urban environments (e.g., house finch (*Carpodacus mexicanus*), lesser goldfinch (*Carduelis psaltria*), and northern mockingbird (*Mimus polyglottos*)).

Mulefat Scrub

In addition to seasonal ponds and disturbed wetland scrub, clumps of mulefat scrub occur within the man-made berms along the toe of the southern and western berms. The understory of this community includes forbs such as sourclover and Douglas' nightshade (*Solanum douglasii*). The matrix of the sandy clay soils in these mapped area showed evidence of depletion and small, scattered redox concentrations, and soil was saturated within the upper 12 inches of the matrix, which indicates wetland hydrology (Merkel & Associates Inc. 2010). Mulefat scrub provides similar wetland functions and values as the disturbed wetland scrub vegetation discussed previously, and wildlife use of this community is similar to that described for the disturbed wetland scrub.

Emergent Wetlands

Characterized by vertical hydrophilic plant species, typical freshwater emergent wetlands are flooded frequently enough to support an anaerobic soil environment that allows the roots of the characteristic sparse year-round marsh plants to grow. Due to saturated or periodically flooded soils, hydrophytic plant species including big leaf sedge (*Carex amplifolia*), Baltic rush (*Juncus balticus*), and redroot nutgrass (*Cyperus erythrorhizos*) are typically found on the upper margins of the emergent wetlands. Common cattail (*Typha latifolia*) and tule bulrush (*Schoenoplectus californicus*) are common on more saturated sites.

The emergent wetland habitat within the Proposed Project site is disturbed and appears channelized, and species diversity is relatively low. This vegetation community occurs in one location on the project site: a man-made ditch adjacent to Bay Boulevard (see Figure D.5-1). This wetland is approximately 4 to 6 inches deep and plant species within and around the feature includes non-native hydrophytic species including Dallis grass (*Paspalum dilatatum*), Bermuda grass (*Cynodon dactylon*), and curly dock.

Species diversity and productivity is expected to be relatively low due to the small size, narrow configuration, and disturbed nature of the emergent habitat. However, species that are relatively tolerant of disturbance and proximity to urban environments may occur within the habitat, including common yellowthroat (*Geothlypis trichas*) and song sparrow (*Melospiza melodia*).

Non-Native Grasslands

The flora of non-native grasslands includes a dense to sparse cover of introduced annual grasses, which may include numerous species of showy-flowered, non-native, and native wildflowers. Non-native grassland areas likely supported native grassland or other plant communities at one time but have since been invaded by exotic annuals. Non-native grasslands typically include at least 50% cover of the entire herbaceous layer attributable to annual non-native grass species, although other native and non-native plant species are often intermixed. Deep, fine-textured soils that contain some clay content are routinely associated with non-native grasslands.

This community occurs within the southern section of the project area, within areas previously disturbed by grading and clearing activities from past projects (see Figure D.5-1). On-site vegetation is dominated by low-growing species such as Bermuda grass and barley (*Hordeum* spp.). A high composition of herbaceous species, including black mustard (*Brassica nigra*), white-stemmed filaree (*Erodium brachycarpum*), garland daisy (*Glebionis coronaria*), and peppergrass (*Lepidium* spp.), were observed on site and were intermixed with the low-lying grass species. Pockets of coyote brush (*Baccharis pilularis* ssp. *consanguinea*) were also observed in some areas of non-native grassland.

Typical wildlife species utilizing this community include the mourning dove (*Zenaida macroura*), western meadowlark (*Sturnella neglecta*), and red-tailed hawk (*Buteo jamaicensis*).

Disturbed Coyote Brush Scrub

A sub-type of the coastal sage scrub community, coyote brush scrub is dominated by coyote bush and is typically composed of a more open shrub canopy and monotypic character. The herbaceous understory is typically sparse. Usually indicative of disturbed conditions, coyote bush scrub is often found in moist low-lying settings in Southern California and is often found with species such as California sagebrush (*Artemisia californica*), bush monkeyflower (*Mimulus aurantiacus*), sages (*Salvia* spp.), bush lupines (*Lupinus* spp.), and California buckwheat (*Eriogonum fasciculatum*). The understory of this community is often dominated by non-native species such as filaree (*Erodium* spp.) and canarygrass (*Bromus* spp.), and native species such as rushes (*Juncus* spp.) and deer grass (*Muhlenbergia rigens*).

Within the Proposed Project site, this community (which occurs on the northern portion of the proposed Bay Boulevard Substation site and extends north across the former LNG site) contains a large number of non-native and ornamental plants, including but not limited to crystalline ice plant (*Mesembryanthemum crystallinum*), slender-leaved ice plant (*Mesembryanthemum nodiflorum*), and tree tobacco (*Nicotiniana glauca*), and is not associated with any of the typical

plant species found in the coastal sage scrub community. However, coyote brush scrub often is low in species diversity and may contain little understory.

Wildlife use most often associated with coastal coyote brush scrub includes species such as the California towhee (*Pipilo crissalis*), spotted towhee (*Piplio maculatus*), California thrasher (*Toxostoma redivivum*), and western scrub-jay (*Aphelocoma californica*).

Eucalyptus Woodland

Typically dominated by several species of eucalyptus (*Eucalyptus* spp.), eucalyptus woodlands are not native to California and are considered invasive species due to their rapid growth rates and broad coverage. The prevalence of the eucalyptus species can be partly explained by its popularity as a functional windbreak and for aesthetic and horticultural purposes around houses and other developed areas.

This community occurs in two small patches primarily associated with disturbed and developed habitat east of the existing South Bay Substation. Mapped on-site eucalyptus woodlands are dominated by several species of eucalyptus, including blue gum (*Eucalyptus globulus*).

Raptors typically use these woodlands for nesting sites. In addition, a large variety of warblers may also be present in this community during winter migration. Limited wildlife habitat is available within the understory, however, due to the typical lack of shrub cover.

Ornamental Vegetation

Typical ornamental vegetation includes non-native shrubs and trees planted for groundcover, as a windbreak, or for aesthetic purposes. This community occurs intermittently within the 300-foot-wide SDG&E easement located at the eastern boundary of the project site. Identified species include peppertree (*Schinus* spp.), acacia (*Acacia* spp.), olive (*Olea europaea*), and oleander (*Nerium oleander*).

Typical wildlife species utilizing this community include Anna's hummingbird (*Calypte anna*), house finch, and lesser goldfinch.

Disturbed Habitat

Disturbed habitat is often characterized by land cleared of vegetation or by lands dominated by non-native plant species. In addition, areas that are mowed or landscaped regularly (thus precluding the development of native species) are also considered disturbed habitat.

This community was observed throughout the majority of the northern section of the Proposed Project site. Disturbed habitat includes all areas within the Proposed Project site or in the immediate vicinity that have been previously disturbed and have not returned to native habitat. This includes herbaceous annuals and grasses, such as black mustard, white-stemmed filaree, and castor bean (*Ricinus communis*).

Wildlife species typically found in disturbed habitats include American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), house finch, house sparrow (*Passer domesticus*), northern mockingbird, and rock dove (*Columbia livia*).

Developed Land

Developed land includes areas where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, or where landscaping is cleared, tended, and maintained. Developed land occurs in portions of the Proposed Project area, including the H & Bay Yard, the existing South Bay Substation site, and existing access roads.

D.5.1.4 Sensitive Vegetation Communities

Several of the vegetation communities within the project area as described in Section D.5.1.3 above are considered sensitive or have special status due to their natural rarity and their decline in the area due to development and/or the number of sensitive plant or animal species dependent upon them. Sensitive habitats also include those regulated by the federal government under the Clean Water Act (i.e., jurisdictional wetlands and "waters of the United States") or the Endangered Species Act (i.e., site-specific designated critical habitat areas for federally listed wildlife species); and those regulated by CDFG under Section 1600 of the California Fish and Game Code. These habitats include seasonal ponds, disturbed wetland scrub, mulefat scrub, emergent wetlands, and drainages. The upland vegetation communities, including disturbed coyote brush scrub and non-native grassland, as well as the wetland vegetation communities listed previously, are ~~rare natural~~sensitive plant communities found within the project area that local jurisdictions such as the City and the resource agencies consider sensitive. Although non-native grassland is not a native plant community, it is often used by special--status species and is considered raptor foraging habitat by the resources agencies and, therefore, is considered sensitive.

D.5.1.5 Special-Status Plants and Wildlife

Special-status species are protected under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). Plants may also be listed by the CNPS as rare or

endangered in California or covered under the SDG&E NCCP. The term "special-status species" used in this section is defined as including species that are:

- Listed, proposed for listing, or candidates for listing, as threatened or endangered under the Federal Endangered Species Act (CDFG 2011a, b, and c)
- Listed, or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (Title 14, California Code of Regulations (CCR), Section 670.5; CDFG 2011a, b, and c)
- Identified by CDFG as species of concern (fish and wildlife species that do not have state or federal threatened or endangered status but may still be threatened with extinction; CDFG 2011a, b, and c)
- Protected by the Migratory Bird Treaty Act (MBTA; U.S.C. 703–712; Ch. 128; July 13, 1918; 40 Stat. 755, as amended)
- Covered in the SDG&E NCCP (1995)
- Listed in the CNPS on-line Inventory of Rare and Endangered Vascular Plants (CNPS 2011) and shown in Figure D.5-2
- Considered to otherwise meet the definition of rare, threatened, or endangered under CEQA.

In addition to on-site habitat suitability (as determined by Dudek), the CNDDB (CDFG 2011d) search results of all surrounding quadrangle maps within 5 miles of the Proposed Project site indicate that several special-status species (as described in the following subsections) have the potential to occur in the Proposed Project site. CNDDB occurrences within 2 miles of the Proposed Project site are depicted in Figure D.5-2; however, the analysis of the potential for occurrence was based on the 5-mile distance from the project.

Special-Status Plants

Special-status plant species are typically those listed by the USFWS and CDFG as endangered, threatened, proposed, or candidate species (species listed as sensitive or rare, and those occurring in the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (2001) are also considered). Attachment D.5-1 lists the special-status plants with potential to occur in the Proposed Project area.

As shown in Attachment D.5-1, 65 special-status plant species were identified as having potential to occur within the Proposed Project site based on occurrences within 5 miles, suitable soils, or suitable habitat. Of these special-status species, 56 were determined to have no or low potential to occur, 8 were determined to have moderate potential to occur, and 1

species was documented as present within the Proposed Project site. One special-status plant species— decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)—was found on the Proposed Project site during the May 2011 rare plant survey. The one individual plant was located in non-native grassland habitat southwest of the bermed area within the former LNG site (Insignia Environmental 2011a).

Based on the analysis of distribution, soils, habitat, and CNDDB records, the eight plant species determined to have a moderate potential to occur in the Proposed Project site are San Diego ambrosia (*Ambrosia pumila*), south coast saltscale (*Atriplex pacifica*), variegated dudleya (*Dudleya variegata*), Palmer's frankenia (*Frankenia palmeri*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), Nuttall's lotus (*Lotus nuttallianus*), spreading navarretia (*Navarretia fossalis*), and prostrate vernal pool navarretia (*Navarretia prostrate*). Of these eight species, the San Diego ambrosia, variegated Dudleya, Coulter's goldfields, spreading navarretia, and prostrate vernal pool navarretia are all found in moist areas or vernal pools. Most of these also occur within clay soils. Nuttall's lotus, recorded adjacent to the Proposed Project site, occurs in sandy soils dunes or coastal scrub. None of these moderate potential to occur species were detected within the Proposed Project site during the spring rare plant survey.

D.5.1.6 Special-Status Wildlife

Special-status wildlife are typically those listed by the USFWS and CDFG as endangered and/or threatened and also include those listed by CDFG as fully protected or species of special concern and those listed as regionally sensitive in SDG&E's NCCP. Attachment D.5-1 lists the special-status wildlife species with potential to occur in the Proposed Project site. Figure D.5-2 depicts the location of CNDDB occurrences within 2 miles of the Proposed Project site, but the analysis of special-status species was reviewed within 5 miles of the site.

As shown in Attachment D.5-1, 43 special-status wildlife species were identified as having potential to occur within the Proposed Project site. Of these, 1 special-status species was determined to have a high potential, 13 special-status species were determined to have a moderate potential to occur, and 28 special-status species were determined to have no or low potential to occur within the Proposed Project site. ~~One special-status wildlife species, California horned lark (*Eremophila alpestris*), was observed during the March 2010 survey conducted by Insignia Environmental.~~

A number of special-status wildlife species are known to occur within the San Diego Bay NWR. Although suitable habitat is not present for these species, they have been documented as nesting, foraging, or wintering within the South Bay Unit. These species include but are not limited to green turtle (*Chelonia mydas*), western snowy plover (*Charadrius alexandrinus nivosus*), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), California brown pelican

(*Pelecanus occidentalis californicus*), light-footed clapper rail (*Rallus longirostris levipes*), American peregrine falcon (*Falco peregrinus*), California least tern (*Sterna antillarum browni*), elegant tern (*Sterna elegans*), and gull-billed tern (*Gelochelidon nilotica*). Many of these species are recorded in the CNDDB records for the area. It was also noted that western snowy plover have been observed as close as 200 to 400 feet from the western edge of the Proposed Project site and that the western snowy plover and California least tern have been recorded nesting closer than the CNDDB records document (USFWS and CDFG 2011). A number of other species of seabirds also have been recorded nesting on the salt pond levees within the San Diego Bay NWR.

Special-status wildlife ~~S~~species known to occur and species with a moderate to high potential to occur within the Proposed Project area are discussed as follows.

Two-Striped Garter Snake

Typically distributed from central California to Baja California, the two-striped garter snake (*Thamnophis hammondii*) is probably the most common snake in Southern California. In the San Diego and larger Southern California region, the two-striped garter snake is found from the coast to the foothills and mountains. Throughout its range, this snake is commonly encountered in (or near) water features, including streams, ponds, and lakes (they can also be found in seasonal water features such as vernal pools). During general surveys, the two-striped garter snake was not observed and a review of the CNDDB revealed that no records of the species occur within 1 mile of the Proposed Project area (SDG&E 2010a). The Proposed Project area does, however, contain numerous small water sources; therefore, suitable two-striped garter snake habitat occurs within the Proposed Project area.

Orange-Throated Whiptail

The orange-throated whiptail (*Aspidoscelis hyperythra*) commonly occurs in dry, often rocky hillsides, ridges and valleys that support coastal sage scrub, open chaparral, dry washes, and sparse grasslands mixed with sage scrub species. Although typically occurring in areas of sandy soil, it can also occur in areas with clay soils provided there is suitable sparse shrub cover. This species is especially noted in CNDDB as occurring east of the project area and is located within 5 miles of the site.

San Diego Horned Lizard

Typically found in open habitats, the San Diego horned lizard (*Phrynosoma coronatum* population *blainvillei*) occurs in coastal sage scrub, chaparral, grasslands, and juniper and oak woodlands. It is more commonly found in open sandy washes with scattered shrubs used for cover. The species

typically requires fine, loose, sandy soils where individuals can bury themselves, an abundance of native ants as a food source, and open areas for basking. Although the project site is not typified with sandy soils, it does contain open habitat. Native ants were not observed during site visits. CNDDB records contain occurrences of the species within 1.5 miles of the site.

Western Spadefoot

The western spadefoot (*Spea hammondii*) prefers open areas with sandy or gravelly soils, and it occurs in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. It especially requires rain pools or vernal pools that do not contain bullfrogs, fish, or crayfish. There are CNDDB records of this species south of the project area within 5 miles, and suitable seasonal ponds are located on site.

Short-Eared Owl

The generally diurnal short-eared owl (*Asio flammeus*) typically inhabits marshes and grassland habitats and nests on the ground in close proximity to mounds, tufts, or herbaceous ground cover. Locally, the species is regularly observed wintering (in small numbers) at the South Bay estuary (SDG&E 2010a). This species was not observed during general surveys of the Proposed Project site in March 2010, but an owl pellet from an unidentified species was found on site. Although suitable foraging habitat exists within and in the vicinity of the Proposed Project site, no CNDDB records are documented within 1 mile of the Proposed Project area. In addition, suitable nesting habitat was not identified in the project area during the March 2010 general survey of the Proposed Project site; therefore, this species is not expected to nest in the area but could migrate through or winter on site.

Northern Harrier

Foraging habitat for the northern harrier (*Circus cyaneus*) includes meadows, grasslands, rangelands, desert sinks, and freshwater and emergent wetlands. The species is known to occur within the vicinity of the Proposed Project area, and suitable foraging habitat exists throughout the area. However, northern harrier was not observed during the March 2010 general survey, and there are no CNDDB occurrences with 1 mile of the project site. Lastly, suitable nesting habitat was not observed on site during the March 2010 general survey; therefore, this species is not expected to nest in the area but could migrate through or winter on site.

White-tailed Kite

The white-tailed kite *(Elanus leucurus)* forages in agricultural areas, grasslands, marshes, savannas, and other open land or sparsely wooded or vegetated areas. The species prefers to nest in riparian woodland, oaks, and sycamore. They are generally found in lower elevation areas. The species has been regularly observed foraging along the coastal areas within the National Wildlife Refuges. There are no CNDDB occurrences that have been documented within 5 miles of the area; however, it is confirmed as a breeding species south of the project area.

American Peregrine Falcon

Although typically a cliff-nesting species, the American peregrine falcon has become opportunistic in its selection of nesting locations and has been documented as nesting at the South Bay Salt Works and under the Coronado Bridge for a number of years. It is regularly observed foraging along the Southern California coast during the winter. Although there are no nesting opportunities available within the Proposed Project site, this species could forage anywhere within the site. There are no CNDDB records of the species within 2 miles of the project area, but it has been documented by local bird enthusiasts as being present within the area.

~~California Horned Lark~~

~~Typically inhabiting sandy shores, grasslands, mesas, and other areas with sparse vegetation, the California horned lark forages by walking and running on the ground and feeds on spiders, insects, insect larvae, snails, buds, and berries. During the March 2010 general survey, two flocks of California horned larks were observed in the project area (the species has also previously been observed in the area). Although suitable foraging habitat exists within the project area, no CNDDB occurrences were documented within 1 mile of the project area. However, due to the presence of open disturbed habitat, the species could breed in the area.~~

Western Burrowing Owl

The western burrowing owl (*Athene cunicularia hypugaea*) typically resides in dry, open, shortgrass areas; and in San Diego, this species ranges through the coastal lowlands in grasslands, agricultural areas, and coastal dunes. While western burrowing owls were not observed during the March 2010 general survey, the species is known to occur in the project area (one owl was observed during a previous SDG&E field survey of the project area). Suitable foraging habitat occurs in the project area; however, burrows for breeding habitat were not observed during the March 2010 survey and no CNDDB occurrences are documented within 1 mile of the project area.

Belding's Savannah Sparrow

The nonmigratory subspecies of the savannah sparrow is the Belding's savannah sparrow, which is endemic to the coastal areas of Southern California. Is it restricted to coastal marshes dominated by pickleweed and places its nest in dense marsh vegetation on or near the ground. The species depends entirely on the saltmarsh ecosystem for nesting and foraging, and has been observed at all times of the year foraging on mudflats, sandflats, and rock jetties. Suitable foraging habitat is located near the project site, but there is no salt marsh habitat located within the Proposed Project area. The species could, however, forage occasionally within the grassland areas located on site.

Light-Footed Clapper Rail

The light-footed clapper rail occurs in Southern California coastal salt marshes, especially where cordgrass dominates. They build their nests of hollow cordgrass stems, allowing the nest to float with the changing tidal regime. The light-footed clapper rail is nonmigratory, but young birds disperse from their natal marsh and nest location through relatively unsuitable habitat, ultimately recolonizing areas from which the species was extirpated. Although not observed or recorded for the site, recorded occurrences for light-footed clapper rail have been documented in the project vicinity (see Figure D.5-2), and therefore, the species could disperse through the site within the numerous drainages, some of which are vegetated with emergent vegetation.

San Diego Black-Tailed Jackrabbit

While known to feed in cultivated pastures and prairies, the San Diego black-tailed jackrabbit (*Lepus californicus bennetti*) is typically found in desert, prairie, and chaparral communities. The jackrabbit does not construct a nest for giving birth. The young are born fully furred and with eyes open and are mobile immediately after being born. While suitable habitat exists throughout the project area, this species was not observed during the March 2010 survey and no CNDDB records are documented with 1 mile of the project area.

San Diego Fairy Shrimp and Riverside Fairy Shrimp

The San Diego fairy shrimp (*Branchinecta sandiegonensis*) is commonly associated with seasonal astatic pools occurring in tectonic swales or earthen basins found in patches of agriculture and grasslands interspersed in coastal sage scrub and southern mixed chaparral vegetation (SDG&E 1995). This species occurs throughout San Diego County. According to the Biological Resource Technical Report (Insignia Environmental 2011a), although marginal habitat is present within the seasonal wetlands in the Proposed Project area; ~~however,~~ because one CNNDB occurrence has been documented for the species and is located within 5 miles of the

Proposed Project area, San Diego fairy shrimp were determined to have a moderate potential to occur on site (Insignia Environmental 2011a).

Based on recent documentation prepared by the Department of the Navy and submitted to the CCC, suitable habitat areas for the San Diego fairy shrimp occur and the species was recorded in multiple vernal pools across the San Diego Bay from the Proposed Project site at the Navy's Silver Strand Training Complex South (generally located south of Silver Strand State Beach, approximately 1.75 miles southwest of the proposed Bay Boulevard Substation site) (CCC 2010). Therefore, because seasonal ponds and basins holding water are present on site, suitable soils are present; and because occurrences of San Diego fairy shrimp are recorded within the general project area, San Diego fairy shrimp were reevaluated and concluded to have a high potential to occur on site.

The Riverside fairy shrimp (*Streptocephalus woottoni*) is commonly associated with deep, cool, lowland vernal pools that retain water through late spring. Originally thought to occur only in Riverside County, the species has since been documented in a few pools within the southern mesas of San Diego County and a few pools in Baja California. Marginal habitat is present within the Proposed Project area within the bermed retention basin on the former LNG site, and one CNDDB occurrence for the species has been documented between 1 and 5 miles from the Proposed Project area. Therefore, according to the Biological Resources Technical Report, Riverside fairy shrimp have moderate potential to occur on site (Insignia Environmental 2011a).

Wet-season branchiopod sampling of the seasonal wetlands within the Proposed Project site was conducted by Insignia Environmental from November 2011 through April 2011. Within the Proposed Project area, USFWS-protocol surveys of ten seasonal ponds present with the former LNG site (including four within the existing containment berm) and an additional five seasonal ponds and one ephemeral swale located in SDG&E's existing easement and adjacent to the existing South Bay Substation and proposed Bay Boulevard Substation were conducted and no listed branchiopods (including San Diego and Riverside fairy shrimp) were detected (Insignia Environmental 2011a). Subsequent dry-season survey sampling of the 15 seasonal ponds and 1 ephemeral swale was conducted in November 2011 and no federally listed endangered brachiopod species (including San Diego and Riverside fairy shrimp) were detected (Merkel & Associates 2011). Thus, although the fairy shrimp species were concluded to have a moderate to high potential to occur based on the ponding, soils, and proximity of other known occurrences, the two seasons of protocol surveys concluded that neither species is present on site.

Critical Habitat

To the extent prudent and determinable (as dictated by ESA), the USFWS is required to designate critical habitat for endangered and threatened species (16 U.S.C. 1533 (a)(3)). Defined as areas of

land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species, designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter.

No USFWS-designated critical habitat is located in or within 1 mile of the project area. Critical habitat for San Diego fairy shrimp, western snowy plover (*Charadrius alexandrinus nivosus*), least Bell's vireo (*Vireo bellii pusillus*), coastal California gnatcatcher (*Polioptila californica californica*), quino checkerspot butterfly (*Euphydryas editha quino*), and Otay tarplant (*Deinandra conjugens*) exists within 5 miles of the project area.

Environmentally Sensitive Habitat Areas (ESHAs)

Defined by the California Coastal Act as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments," both the California Coastal Act (Section 30240) and the City of Chula Vista LCP provide for the protection of ESHAs (Chapter 19.86 of the LCP implements Section 30240 of the California Coastal Act). Specific to the City, however, is the express focus of ESHA protection via the reduction and mitigation of reducing impacts on the Sweetwater Marsh NWR. The City of Chula Vista LCP does not designate the Proposed Project site as an ESHA, and no portions of the study area are anticipated to be ESHAs (SDG&E 2010a). Factors contributing to this determination include the high degree of site disturbance, the lack of sensitive habitat types, the isolation of the habitat from other areas, and the lack of rare species or suitable habitat to support rare species.

Wildlife Corridors

Defined as an area that connects suitable habitat in regions otherwise fragmented by rugged terrain, changes in vegetation, or human development, wildlife migration or movement corridors are important because they provide access to mates, food, and water. In addition, corridors (which can include canyon drainages, ridgelines, and areas with vegetative cover) also allow the dispersal of wildlife away from high-population areas and facilitate genetic diversity among populations. Wildlife corridors are considered sensitive by resource and conservation agencies.

The presence of water bodies and mudflats in the vicinity of the project attracts species as part of the Pacific Flyway. One of the six major north–south migration routes for waterfowls in the United States, Mexico, and Canada, the Pacific Flyway links breeding grounds in the north to wintering areas in the south and is, therefore, used by numerous bird species during migration. These avian migration routes are located just west of the Proposed Project area within the San Diego Bay. San Diego Bay waters provide high-quality rest and forage areas for birds during the migratory seasons. Thus, a major wildlife corridor is located off site to the west of the Proposed

Project site. On site, there are few resources for wildlife, and cover is sparse. Birds and terrestrial mammals and reptiles would be expected to use resources opportunistically, but definitive signs of wildlife use and presence of resources for wildlife movement are lacking on site. The wildlife species observed on site are dominated by urban adapted species.

Regarding terrestrial wildlife species, natural drainages that provide protective cover from predators and sources for foraging are typically used by such species. There are no natural drainage features within the Proposed Project site. Telegraph Creek is approximately 2,000 feet from the edge of the Proposed Project facility. Telegraph Creek is an intermittent to perennial drainage with a small amount of wetland vegetation composed of Goodding's willow, soft-flag cattail, and watercress that has colonized a sediment accumulation within a small section of the channel. The channel is otherwise lacking developed soils, thus precluding development of vegetation. Wildlife use of the channel is described as being by mammal species including urban--tolerant species and occasional transient use by migratory waterfowl and shorebirds. (Telegraph Creek is a realigned channel of a natural drainage feature, is concrete-lined, and features little to no protective cover within the project site). However, the unnamed drainage along the eastern side of the site that is composed of emergent vegetation may provide some cover for species movement. Also, because development occurs throughout the immediate project area, the quality of the site as a wildlife movement corridor for terrestrial species is reduced.

Preserve Areas

While there are no preserve areas in the Proposed Project area, several are located in the vicinity. A portion of the larger San Diego Bay NWR abuts the southwest portion of the Proposed Project site, and the Chula Vista Wildlife Reserve, San Diego Bay, and a portion of the San Diego Bay NWR are located west of the Proposed Project site. Lastly, the project area is not located within a habitat preserve area as delineated on the City of Chula Vista MSCP Subarea and Planning Map (City of Chula Vista 2004).

While the Proposed Project would not be located within the management authority of the San Diego Bay NWR (South San Diego Bay Unit), the refuge is located adjacent to the proposed Bay Boulevard Substation site; therefore, a brief discussion of the refuge area is provided as follows.

San Diego Bay National Wildlife Refuge, South San Diego Bay Unit

The San Diego Bay NWR, established in 1998, is one refuge within the San Diego National Wildlife Refuge Complex. These refuges help conserve the rich and varied natural heritage of the San Diego region. The South San Diego Bay Unit of the San Diego Bay NWR is located at the south end of the San Diego Bay and consists of the open bay, active solar salt evaporation ponds (salt ponds), and the western end of the Otay River drainage basin (USFWS 2006). The South San

Diego Bay Unit was established in 1999 to protect and enhance the South Bay's habitat for threatened and endangered migratory and resident wildlife, including the federally and state-listed endangered California least tern (*Sterna antillarum browni*) and the federally listed threatened western snowy plover (*Charadrius alexandrinus nivosus)* (USFWS 2006). The approved refuge boundary is 3,940 acres and the proposed Bay Boulevard Substation site occurs adjacent to salt crystallizer ponds, which are within the management authority of the USFWS. The Proposed Project, however, does not cross the refuge and the project site is not considered part of the San Diego Bay NWR and is not under San Diego Bay NWR jurisdiction.

D.5.1.7 Wetlands and Jurisdictional Waters

Water features (i.e., wetlands or other jurisdictional waters) that may be subject to regulations by the ACOE, Regional Water Quality Control Board (RWQCB), CDFG, CCC, and Chula Vista Wetland Protection Program occur within the project site. During early consultation with wildlife agencies, Dudek was informed by ACOE that a jurisdictional determination for the water features occurring on the Proposed Project site had not been completed as of December 2010 (Dudek 2010a); however, according to SDG&E, ACOE had completed its jurisdictional determination for on-site features as of September 2011 (SDG&E 2011). The waters under each agency's jurisdiction (as identified in SDG&E's PEA and subsequent documentation) are discussed as follows, and jurisdictional acreage of wetland and non-wetland resources are listed in Table D.5-2. The determination of jurisdiction is subject to change depending on the decision of the regulatory agencies.

Table D.5-2
Summary of Jurisdictional Resources

Feature Type	Wetlands or Non-Wetland Waters of the U.S.	Vegetation Community	Jurisdictional Acreage				
			ACOE	*RWQCB*	*CCC*	*CDFG*	*City of Chula Vista*
Wetland (Feature 1)	Wetlands	Emergent Wetland	0.366	0.366	0.366	0.366	0.366
Wetland (Features 2, 3, 4, 6, 7, 8, 9, 10, 11, 19, 20, 21, 24, 25, 26)	Wetlands	Seasonal Pond/Seasonal Wetlands	0.354[1]	0.500[2]	0.512	0.00	0.398[3]
Wetland (Feature 5)	Wetlands	Seasonal Wetlands, Mulefat scrub, Disturbed wetlands	2.141	2.141	2.141	0.00	0.00

Feature Type	Wetlands or Non-Wetland Waters of the U.S.	Vegetation Community	Jurisdictional Acreage				
			ACOE	*RWQCB*	*CCC*	*CDFG*	*City of Chula Vista*
Wetland (Feature 22)	Wetlands	Mulefat scrub	0.00	0.00	0.005	0.00	0.005
Ephemeral Drainage (earthen) (Features 12, 13, 14, 15, 17, 23)	Non-wetland Waters of the U.S.	Unvegetated	0.444[4].	0.472	0.472	0.472	0.00
Ephemeral Drainage (Concrete lined) (Feature 16)	Non-wetland Waters of the U.S.	Unvegetated	0.013	0.013	0.013	0.013	0.0
Intermittent Drainage (Feature 18)	Non-wetland Waters of the U.S.	Unvegetated	1.653	1.653	1.653	1.653	1.653
Total			**4.97**	**5.14**	**5.16**	**2.50**	**2.42**

Source: Merkel & Associates 2010, SDG&E 2011
1. ACOE is not anticipated to take jurisdiction over Features 21, 24, 25, and 26.
2. RWQCB is not anticipated to take jurisdiction over Feature 26.
3. City of Chula Vista is not anticipated to take jurisdiction over Features 6, 7, 8, and 25.
4. ACOE is not anticipated to take jurisdiction over Features 14, 17, and 23.

United States Army Corps of Engineers

Approximately 4.97 acres of wetlands or waters of the United States are considered to be the jurisdiction of the ACOE within the Proposed Project area. Drainages depicted as water features 1, 12, 13, 15, 16 and 18 in Figure D.5-3 display an ordinary high water mark and/or have connectivity with navigable waters and are, therefore, considered ACOE-jurisdictional. In addition, an ACOE-jurisdictional emergent wetland, located within water feature 1, is located within the roadside drainage adjacent to Bay Boulevard. The roadside drainage is the only ACOE-jurisdictional wetland in the project area.

Approximately 17 seasonal ponds/seasonal wetlands were observed within the project area. Of the 17 seasonal ponds/seasonal wetlands detected in the project area, nine of the features (features 2, 3, 4, 5, 6, 7, 8, 9, 10 – see Figure D.5-3) appear to be connected hydrologically to adjacent waters (including groundwater in some instances) and hence are under the jurisdiction of ACOE. In addition, ACOE has determined that a small portion of the southwest corner of the large seasonal pond within the bermed area at the proposed Bay Boulevard Substation (feature 5 – see Figure D.5-3) is Historic Section 10 and, therefore, under jurisdiction of ACOE. In addition to the nine features discussed previously, two seasonal ponds (water features 19 and 20) are ACOE jurisdictional even though these two features have been disked since the original jurisdictional delineation (ACOE jurisdiction was determined by ACOE

during an August 2011 field visit). The remaining on-site ponds/wetlands are considered isolated because they appear to be disconnected hydrologically from adjacent waters and hence are under the jurisdiction of some combination of the RWQCB, the CCC, and the City as shown on Figure D.5-3.

Regional Water Quality Control Board

All waters of the United States and waters of the state as defined by both the federal CWA and the California Porter-Cologne Water Quality Control Act are within the jurisdictional authority of the RWQCB. Waters of the state are waters outside of the jurisdiction of the CWA (including isolated wetlands) and wetlands that lack one of more of the three wetland parameters but have the hydrology parameter (evidence of ponding water). A total of 5.14 acres of RWQCB-jurisdictional features, including 15 seasonal ponds, all on-site drainages, and the emergent wetland adjacent to Bay Boulevard (Feature 1) occurs within the Proposed Project site. As shown on Figure D.5-3, water features 1 through 21 and 23 through 25 are under the jurisdiction of the RWQCB.

California Department of Fish and Game

Approximately 2.50 acres of CDFG-jurisdictional waters occur within the Proposed Project site. These waters include all non-tidal streambeds mapped at the width of the channel from bank to bank and all on-site drainages. Because the CDFG typically does not take jurisdiction over isolated water, the observed seasonal ponds/seasonal wetlands are likely not within the jurisdictional authority of the CDFG. In addition, the CDFG will not likely take jurisdiction over the seasonal ponds within the bermed area. As shown on Figure D.5-3, water features 1, 12, 13 through 18, and 23 are under the jurisdiction of the CDFG.

California Coastal Commission

Development within the coastal zone, including development within wetlands located within the coastal zone, is generally regulated by the CCC. Typically the CCC applies a "one-parameter test" (a wetland need only contain one of the three parameters including hydrophytic vegetation, wetland hydrology, and hydric soils) to identify wetlands. Therefore, the majority of the on-site water features, including seasonal ponds/seasonal wetlands, drainages, and the identified emergent wetland, contain at least one of these parameters and these features are potentially within the jurisdictional authority of the CCC. There is potential for the CCC to take jurisdiction of the four seasonal ponds within the bermed area as well. While there is no specific provision within the California Coastal Act for exclusion of features meeting physical wetland criteria but created in uplands for a specific industrial function, there is a CCC precedent for excluding such features under the circumstances present at the Proposed Project site. However, the four seasonal

ponds are assumed to be under the jurisdiction of the CCC until confirmed otherwise. Coordination between SDG&E and the CCC to verify this conclusion is ongoing.

Approximately 5.16 acres of likely CCC-jurisdictional features are located in the Proposed Project area. As shown on Figure D.5-3, water features 1 through 26 are within the jurisdictional authority of the CCC.

City of Chula Vista Multiple Species Conservation Program Wetland Protection Program

Twelve of the seasonal ponds/seasonal wetlands (and the emergent wetland adjacent to Bay Boulevard) in the Proposed Project area meet the wetland category definitions established in the City of Chula Vista MSCP Subarea Plan; therefore, these features are subject to the Chula Vista WPP. Appendix B of the Chula Vista MSCP Subarea Plan includes descriptions of wetland vegetation communities, including freshwater/alkali marsh, disturbed scrub, open water/freshwater, natural flood channel, and disturbed wetlands. As previously discussed for other agencies, the four seasonal ponds located within the bermed area are not anticipated to be within the jurisdictional authority of the Chula Vista WPP. Approximately 2.42 acres of water features is under the jurisdiction of the Chula Vista WPP. Water features 1 through 4, 9 through 11, 18 through 22, 24, and 26, as depicted on Figure D.5-3, are under the jurisdiction of the Chula Vista WPP.

D.5.2 Applicable Regulations, Plans, Standards

Federal

Clean Water Act

The ACOE and the EPA have jurisdiction over "waters of the United States," which are generally classified as wetlands, navigable water, or other waters and include marine waters, tidal areas, stream channels, and associated wetlands.[1] Under federal regulations, wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (40 CFR 232.2).

Policies regulating the loss of wetlands generally stress the need to compensate for wetland acreage losses by creating wetlands from non-wetland habitat on at least an acre-for-acre basis. Projects that cause the discharge of dredged or fill materials in waters of the United States

[1] Visit the following website for further specification regarding non-navigable (i.e., wetlands) waters that are classified as waters of the United States: http://www.epa.gov/owow/wetlands/pdf/ CWA_Jurisdiction_Following_Rapanos120208.pdf.

require permitting by the ACOE. Actions affecting small areas of jurisdictional waters may qualify for a Nationwide Permit, provided conditions of the permit are met (such as avoiding impacts to threatened or endangered species or to important cultural sites). Projects that do not meet the Nationwide Permit conditions or projects that disturb a larger area require an Individual Permit. The process for obtaining an Individual Permit requires a detailed alternatives analysis and development of a comprehensive mitigation/monitoring plan.

Rivers and Harbor Act of 1899

Section 10 of the Rivers and Harbors Act (33 U.S.C. 401 et seq.) requires authorization from the ACOE for the construction of any structure in or over any navigable water of the United States, the excavation/dredging or deposition of material in these waters, or any obstruction or alteration in a "navigable water." The construction of structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, condition, or capacity of the water body.

Endangered Species Act

The federal ESA provides legislation to protect federally listed plant and animal species. Section 7 of the ESA requires that all federal agencies must, in consultation with the USFWS or National Marine Fisheries Service, ensure that the lead agency's actions do not jeopardize the continued existence of a listed species, or destroy or adversely modify the listed species' "critical habitat." Section 9 prohibits the take of any fish or wildlife species listed under the ESA as endangered. Take of threatened species also is prohibited under Section 9 unless otherwise authorized by federal regulations. *Take*, as defined by the ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Harm* is defined as "any act that kills or injures the species, including significant habitat modification." Section 9 also prohibits removing, digging up, cutting, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 10 of the ESA describes the process by which take permits are issued by USFWS/National Marine Fisheries Service for take of listed species incidental to an otherwise lawful activity.

Migratory Bird Treaty Act

The MBTA (16 U.S.C. 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed in 50 CFR 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and includes any part, egg, or nest of such bird (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the ESA. The MBTA, which is enforced by USFWS,

makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird or attempt such actions, except as permitted by regulation. The applicable regulations prohibit the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

State

California Coastal Act

The California Coastal Act (California Public Resources Code, Section 30000 et seq.) was enacted in 1976 by the California Legislature to provide long-term protection of the state's 1,100 miles of coastline. The policies of the Coastal Act focus on the protection and expansion of public access to the shoreline and recreational opportunities; protection, enhancement, and restoration of biological resources; and protection of scenic seascapes and coastal landscapes. Article 4, Marine Environment, contains policies specific to the protection of marine resources. Applicable policies established in Article 4 include the following:

Section 30230: Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231: The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233: (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
(6) Restoration purposes.
(7) Nature study, aquaculture, or similar resource dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable long-shore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California," shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

(d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Article 5 of the California Coastal Act includes coastal resource planning and management policies regarding land resources. Among the identified land resources are environmentally

sensitive habitat areas or ESHAs. Applicable policies established in Article 5 pertaining to ESHAs include the following:

Section 30240 (a): Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

Section 30240 (b): Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

California Endangered Species Act

CESA provides legal protection for plants or wildlife species listed as rare, threatened, or endangered. The act prohibits the take of endangered and threatened species; however, habitat destruction is not included in the state's definition of take. Under CESA, *take* is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include harm or harass. CESA Section 2090 requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. CDFG administers the act and authorizes take through Section 2081 agreements, except for species designated as fully protected.

Animal species considered endangered or threatened by the state are listed in 14 CCR 670.5, and the CDFG maintains lists of plant and animal species designated endangered, threatened, and rare. The CDFG also maintains a list of "species of special concern" based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. The CDFG is empowered by state law to review projects for their potential to impact state-listed species and species of special concern, as well as their habitats.

California Fish and Game Code

The California Fish and Game Code governs state-designated wetlands, including riparian and stream habitat, and mandates that mitigation be implemented to replace wetland extent and value lost to development. Sections 1600–1607 of the Fish and Game Code regulates activities that would affect rivers, streams, or lakes by altering the flow; substantially changing or using any materials from the bed, channel, or bank of any river, stream, or lake; or disposing of debris. Activities that affect these areas, as well as associated riparian habitats, would require a Streambed Alteration Permit from the Fish and Game Code. Section 3503 of the Fish and Game

Code prohibits impacts to actively nesting birds, their nests, or their eggs. Section 3503.5 prohibits killing of raptor species and destruction of raptor nests.

The Fish and Game Code provides protection from take for a variety of species, referred to as *fully protected species*. Fish and Game Code Section 3511 lists fully protected birds and prohibits take of these species. The code defines *take* as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Except for take related to scientific research, all take of fully protected species is prohibited.

Prior to creation of CESA and the federal ESA, the State of California first began to designate species as "fully protected" and typically applied this designation to those animals that were rare or faced possible extinction. Fish and Game Code Section 4700 (a)(1) affirms the state's protection of fully protected species by regulating that such species "may not be taken or possessed at any time."

Porter-Cologne Water Quality Control Act and Section 401 of the Clean Water Act.

California's RWQCB administers both the Porter-Cologne Water Quality Control Act and Section 401 of the CWA. The Porter-Cologne Water Quality Control Act, California Water Code Section 13260, requires that "any person discharging waste, or proposing to discharge waste, within any region that could affect the 'waters of the State' to file a report of discharge" with the RWQCB. Waters of the state are defined in the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050 (e)).

According to the RWQCB, waters of the state include but are not limited to rivers, streams, lakes, bays, marshes, mudflats, unvegetated seasonally ponded areas, drainage swales, sloughs, wet meadows, natural ponds, vernal pools, diked bay lands, seasonal wetlands, and riparian woodlands pursuant to Section 401 of the CWA. The RWQCB has also claimed jurisdiction and exercised discretionary authority over "isolated waters."

Local

San Diego Multiple Species Conservation Program

The MSCP, approved in 1996, provides a framework for protection of 23 vegetation types and 85 species in southwestern San Diego County. The Multiple Habitat Planning Area was designated within the permanent MSCP preserve, which will be assembled through conservation of lands already in public ownership (85,190 acres), purchase of private lands from willing sellers (27,000 acres), and additional contributions through mitigation for development impacts (63,170 acres).

The MSCP is to be implemented through Subarea Plans by the County of San Diego and 11 cities in the plan area. The status of the Subarea Plan for the City is described as follows.

Chula Vista Multiple Species Conservation Program Subarea Plan

The Chula Vista Subarea Plan provides protection and take authorization for 86 species (85 species covered under the San Diego County MSCP and Quino checkerspot butterfly (*Euphydryas editha editha*)) by preserving 9,243 acres of habitat, including 4,250 acres outside the City limits. The Chula Vista Subarea Plan was adopted by the City Council in May 2003 and was subsequently approved by USFWS, but without the "no surprises" clause, which restricted additional species protection measures, following the U.S. District Court ruling in *Spirit of the Sage v. Department of Interior*.

A total of 86 special-status species (including Quino checkerspot butterfly) are considered to be adequately conserved in return for conservation of approximately 4,993 acres of land within the City and an additional 4,250 acres within the County of San Diego Preserve. The Subarea Plan designates four types of areas with differing degrees of permissible development: 100% Conservation Areas, 75%–100% Conservation Area, Development Areas outside of Covered Projects, and Development Areas within Covered Projects. Mitigation requirements for sensitive habitat types and sensitive plant and wildlife species vary depending on the location of the impact and preservation areas and the sensitivity of the habitat. Chula Vista has proposed Habitat Loss and Incidental Take regulations that establish development standards to implement the Subarea Plan.

SDG&E Subregional Natural Community Conservation Plan

The SDG&E NCCP was approved in December 1995, authorizing take of 110 species (covered species) resulting from impacts from SDG&E's ongoing activities including installation, use, maintenance, and repair operations and expansion to those systems. The SDG&E NCCP, USFWS, and CDFG have, concurrent with the approval date, entered into a long-term Implementing Agreement that describes the legal rights and obligations regarding each of these parties with respect to the implementation and maintenance of this NCCP. The Implementing Agreement authorizes SDG&E to conduct its activities within the plan area provided they are performed in conformance with the plan. The NCCP prescribes as "operational protocols" various protection, mitigation, and conservation measures SDG&E must implement as part of its covered activities to ensure the survivability and conservation of protected species and their habitat. The 61 operational protocols provided in SDG&E's NCCP include provisions for personnel training; pre-activity studies; and maintenance, repair, and construction of facilities, including access roads, survey work, and emergency repairs. SDG&E's NCCP does not exempt projects subject to permits from the California Public Utilities Commission (CPUC), CCC, or other agencies, thereby triggering the requirement for California Environmental Quality Act (CEQA) and National Environmental Policy

Act (NEPA) review, using the SDG&E NCCP for the evaluation of impacts to covered species and their habitats. SDG&E's NCCP also has defined a number of plant and animal species as narrow endemics. These species are restricted in their distribution, may have rigid or narrow ecological requirements, and generally have low population numbers. As such, take authorization of these species is limited to emergencies and unavoidable impacts from repairs to existing facilities. Take of the species for non-emergency work may not occur without first conferring with the USFWS and CDFG. Furthermore, for new projects, destruction of narrow endemic wildlife species or their supporting habitat would not be covered by the NCCP.

Under its NCCP, SDG&E consults with the USFWS and CDFG on certain project or activities in natural areas by preparing "pre-activity surveys" that evaluate the scope and nature of potential impacts in advance of construction or maintenance activities. The pre-activity survey~~, when~~ is submitted to document the~~, initiates consultation with the USFWS and CDFG under established timeframes to identify potential~~ impacts and feasible avoidance, minimization, and/or mitigation measures ~~as described in~~per the NCCP.

SDG&E's NCCP allows for up to 400 acres of impacts in natural areas before requiring an amendment to the NCCP. The NCCP anticipates 124 acres of grading impacts in natural areas over the next 25 years based on current technology, construction methods, and forecasts for populations and general plans. Mitigation for these impacts include the following: avoidance whenever possible accomplished by the implementation of the 61 operational protocols; allowing use of SDG&E fee-owned right-of-way for wildlife corridors to connect regional conservation areas; establishment of 240 acres of mitigation credits, which will be debited to mitigate for actual impacts as projects are realized; and use of restoration and enhancement sometimes instead of debits to the mitigation credits and sometimes in addition to such debits.

As described in the Implementing Agreement for the SDG&E NCCP, USFWS, CDFG, and SDG&E agree that absent unforeseen circumstances, the mitigation measures provided in SDG&E's NCCP constitute the only mitigation measures that shall be required for any activity covered by the plan where it results in an impact to a covered species or its habitat.

The Proposed Project falls within the area where SDG&E's utility operations are governed by the NCCP, including the City. For the Proposed Project, SDG&E has adopted the operational protocols contained in the NCCP as well as project-specific protocols (applicant proposed measures (APMs)). While the project area is located within areas included in the City's MSCP, SDG&E's public utility activities, such as the Proposed Project, are not subject to the regulatory jurisdiction of such local governments and, therefore, are not governed by the terms and conditions of such plans. However, in implementing its NCCP for the project, SDG&E would coordinate with the City and other jurisdictions to achieve consistency to the extent feasible.

Where consistency is not feasible, SDG&E's NCCP provides for appropriate protocols and mitigation measures to protect natural community and natural resource values in these conservation-planning areas.

Port District Master Plan

The Port Master Plan (2009, as amended) provides planning policies for the 5,480 acres of tidelands located bayward of the mean high tide line. All tidelands are within the Coastal Zone; as such, the Port Master Plan has been prepared in accordance with the California Coastal Act. While the Port District owns the majority of the tidelands, portions are owned by the military, State of California, County of San Diego, and cities of San Diego and Coronado. The Port Master Plan study area is divided into nine planning areas: Shelter Island, Harbor Island/Lindbergh Field, Center City/Embarcadero, Tenth Avenue Marine Terminal, National City Bayfront, Coronado Bayfront, Chula Vista Bayfront, Silver Strand South, and South Bay Salt Lands, as well as Imperial Beach Ocean Front. The Proposed Project components would be located in the Chula Vista Bayfront Planning Area. Each planning area contains a precise plan map, description of land and water uses, a statement regarding major problems, and a list of projects. With regard to the Chula Vista Bayfront (Planning District 7), the Port District has jurisdictional authority over the project area but has not included land use designations or policies for the area.

The draft Port Master Plan amendment is similar in content to the amended plan with the exception of the project area being included in boundary of Planning District 7. In addition, land use designations are applied to Proposed Project component sites.

City of Chula Vista General Plan

The City's General Plan (2005a) establishes goals and objectives to provide guidance in the growth of the City. The General Plan contains six elements: Land Use and Transportation, Economic Development, Housing, Public Facilities and Services, Environmental, and Growth Management. The overarching objective of the Environmental Element is to "conserve Chula Vista's sensitive biological resources" by implementing the City's MSCP Subarea Plan (City of Chula Vista 2005a). The MSCP Subarea Plan was adopted by the City as a component of the General Plan in May 2003.

The City's Municipal Code refines the General Plan by providing specific detail regarding allowed and conditional uses and specific development standards for the various zoning districts established in the City. Within the City's coastal zone, the Bayfront Specific Plan and City of Chula Vista LCP Land Use Plan further guide the development of land use, infrastructure, and water resources.

City of Chula Vista LCP Land Use Plan

Chapter 19.81 of the Municipal Code implements the City's LCP. The LCP regulates all development within the LCP program boundary and delineates the planning area into subareas. According to the existing LCP, the northern portion of the project area (including the South Bay Substation) is included in the designated Industrial Subarea and the southern portion of the project area (including the proposed Bay Boulevard Substation site) is included in the Southern Parcel Subarea. Conversely, in the draft LCP Land Use Plan, the entire project area is outside of the LCP Planning Area (the project would be within the Chula Vista Bayfront Master Plan Redevelopment Planning Area). Chapter 19.86, Environmental Management System, of the Municipal Code provides for the protection of environmentally sensitive habitat areas. The section goes on to identify major wetlands and sensitive habitat in the Bayfront area and associates these with the Sweetwater Marsh National Wildlife Refuge. The LCP provides detailed mitigation and biological resources management requirements that apply within areas delineated within the Midbayfront Subarea (these measures and requirements are not applicable to the Proposed Project). Regarding areas other than the Midbayfront, Section 19.86.005 discloses that sensitive habitats exist in undelineated areas, that all environmental resources must be analyzed by an environmental professional, and that an environmental management plan must be adopted to protect any sensitive habitats discovered. The City of Chula Vista LCP does not designate the Proposed Project site as an ESHA.

Regarding impacts to sensitive habitat areas, the LCP Land Use Plan requires mitigation for all disturbance of wetland areas be provided at the ratio of 4:1 of new wetland areas created to areas disturbed, and for riparian resources, 3:1 replacement for impacted area. In addition, open space preservation in perpetuity of sensitive resource areas is also required pursuant to an appropriate mechanism. Lastly, the LCP Land Use Plan states that diking, dredging, or filling of wetlands or other wet environmentally sensitive habitat areas shall not be permitted without prior CCC approval through the LCP amendment process.

The LCP also provides for buffers around sensitive habitat areas. Buffer zones of 100 feet in width are required around all identified wetland areas, and buffer zones of 50 feet in width are required around all identified riparian areas. These buffer zones are mandatory unless the applicant is able to demonstrate that a buffer of lesser width can protect the identified resources, based on site-specific information. Required site specific information shall include, but is not limited to, the type and size of the development and/or proposed mitigation (such as planting of vegetation or the construction of fencing), which will also achieve the purposes of the buffer.

San Diego Bay NWR Comprehensive Conservation Plan

The purpose of the CCP (USFWS 2006) is to develop a plan that will provide the San Diego Bay Refuge (Refuge) areas with a 15-year management plan for the conservation of fish, wildlife, and plant resources and their related habitats, while also providing opportunities for compatible wildlife-dependent recreation. The Refuge, consisting of the Sweetwater Marsh and South San Diego Bay Units, is located at the south end of San Diego Bay and encompasses approximately 2,620 acres of land and water in and around San Diego Bay. The South San Diego Bay Unit, which is adjacent to the Proposed Project site, includes approximately 2,300 acres and portions of the open bay, active solar salt evaporation ponds, and the western end of the Otay River drainage basin. The CCP is required to fulfill the USFWS obligation to prepare a habitat restoration plan for the 1,035-acre portion of the existing salt works property. There are several alternatives included that would implement the policy for ensuring that the biological integrity, diversity, and environmental health of the Refuge is maintained and restored. The goals for the South San Diego Bay Unit include the following (USFWS 2006):

- Protect, manage, enhance, and restore open water, coastal wetlands, and native upland habitat to benefit the native fish, wildlife, and plant species supported within the South San Diego Bay Unit.
- Support recovery and protection efforts for the federally and state listed threatened and endangered species and species of concern that occur within the South San Diego Bay Unit.
- Provide high-quality foraging, nesting, and breeding habitat for colonial nesting seabirds and migratory shorebirds and waterfowl, and salt marsh–dependent species.
- Provide opportunities for compatible wildlife-dependent recreation and interpretation that foster public appreciation of the unique natural and cultural heritage of South San Diego Bay.

D.5.3 Environmental Impacts and Mitigation Measures

D.5.3.1 Definition of Use of Significance Criteria

In accordance with Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), the Proposed Project would have a significant impact on biological resources if it would result in any of the following conditions:

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

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

D.5.3.2 Applicant Proposed Measures

Table D.5-3 presents the APMs proposed by SDG&E to avoid or minimize the project's potential impacts to biological resources, along with other environmentally important resources. These APMs are in addition to the operational protocols outlined in SDG&E's NCCP and provided as Attachment 4.4-C to the SDG&E PEA (June 2010). The following APMs provide project-specific detailed actions relative to the location and habitats within this project.

Table D.5-3
APMs for Biological Resources

APM No.	Description
APM-BIO-01	SDG&E would conduct activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources.
APM-BIO-02	A biological monitor would be present during all vegetation removal activities. Within 14 days prior to vegetation removal, the biological monitor would survey the site to ensure that no sensitive species would be impacted.
APM-BIO-03	If a raptor nest is observed during pre-construction surveys, a qualified biologist would determine if it is active. If the nest is deemed inactive, SDG&E, under the supervision of a biological monitor, would remove and dismantle the nest promptly from existing structures that would be affected by Proposed Project construction. Removal of nests would occur outside of the raptor breeding season (January to July). If the nest is determined to be active, it would not be removed and the biological monitor would monitor the nest to ensure nesting activities and/or breeding activities are not disrupted. If the biological monitor determines that Proposed Project activities are disturbing or disrupting nesting activities, the monitor would make recommendations to reduce the noise and/or disturbance in the vicinity of the nest.
APM-BIO-04	Structures would be constructed to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors.

Table D.5-3
APMs for Biological Resources

APM No.	Description
APM-BIO-05	Permanent impacts to all jurisdictional resources would be compensated through a combination habitat creation (i.e., establishment) and ~~through a combination of habitat restoration (i.e., establishment) and~~ habitat restoration at a minimum of a one-to-one ratio or as required by the permitting agencies.
APM-BIO-06	Impacts to decumbent goldenbush would be minimized by avoiding impacts to individual plants to the maximum extent practical. If avoidance is not feasible, individual plants would be transplanted and relocated to an appropriate site (as determined by a qualified biologist) within the Proposed Project area. The plants would be located as close as possible to their original location and in the same orientation (e.g., with the west-facing side of the plant facing west when relocated). If relocation of decumbent goldenbush is not feasible, or if transplanted individuals are unsuccessful, seeds would be collected and used in restoration efforts following construction of the Proposed Project.

D.5.3.3 Bay Boulevard Substation

Impact BIO-1: Construction activities would result in temporary and permanent loss of native vegetation.

Table D.5-4, quantifies the acreage of temporary and permanent impacts to vegetation communities resulting from construction and operation of the Proposed Project.

Table D.5-4
Summary of ~~Permanent Acreage~~ Impacts on Vegetation Communities

Vegetation Community	Summary of Acreages	
	Acreage of Temporary Impact	*Acreage of Permanent Impact*
Seasonal Pond/Seasonal Wetland	0	0.61
Disturbed Wetland Scrub	0	1.75
Mulefat Scrub	0	0.06
Emergent Wetland	0.01	0.03
Non-Native Grassland	0.98	9.46
Disturbed Coyote Brush Scrub	1.07	5.03
Eucalyptus Woodland	0	0
Ornamental Vegetation	0.06	<0.01
Disturbed Habitat	0.15	0.18
Developed Land	0.05	0.24
Total	2.32	17.36

Source: SDG&E 2010; Dudek 2010b
Note: To calculate permanent impacts, Dudek utilized geographic information system (GIS) data for vegetation communities and permanent impacts associated with the Bay Boulevard Substation provided by SDG&E as well as transmission pole footprint and foundation data included in the SDG&E PEA. Temporary impacts were calculated by utilizing GIS data provided by SDG&E and the project's temporary workspace requirements identified in the SDG&E PEA.

Construction of the Bay Boulevard Substation would result in temporary impacts to approximately 0.05 acre of developed land, 0.15 acre of disturbed land, 0.06 acre of ornamental vegetation, 0.98 acre of non-native grassland, 1.07 acres of disturbed coyote sage scrub, and 0.01 acre of emergent wetland. These impacts are associated with the limits of temporary disturbance as depicted on Figure D.5-1. Development of the substation facility would also result in permanent impacts to approximately 0.61 acre of seasonal pond/seasonal wetland, 1.75 acres of disturbed wetland scrub, 0.06 acre of mulefat scrub, 5.03 acres of disturbed coyote brush scrub, and 9.46 acres of non-native grasslands. Permanent impact also would occur to 0.24 acre of developed land and 0.18 acre of disturbed habitat. Coyote brush scrub and non-native grasslands are considered sensitive natural communities according to the resource agencies and because these habitats may be used by special--status species or by raptors as foraging habitat. ~~Disturbed coyote brush scrub (a subtype of coastal sage scrub) and non-native grasslands are considered sensitive natural communities according to the City's MSCP Subarea Plan (coastal sage scrub is considered a Tier II upland habitat and non-native grasslands are considered a Tier III upland habitat).~~ In addition, disturbed wetland scrub, emergent wetland, and mulefat scrub are considered sensitive natural communities due to their typical association with wetland features (impacts to wetlands and others waters of the United States are discussed in Section D.5.3 (c)). Seasonal pond/seasonal wetlands are also considered sensitive natural communities by the City and are under the jurisdiction of the RWQCB based on communication between SDG&E and the RWQCB (SDG&E 2010b). Impacts to the wetland communities including disturbed wetland scrub, emergent wetland, mulefat scrub, and seasonal ponds are discussed as follows.

As described in the project description and APM-BIO-01, SDG&E would conduct activities in accordance with NCCP operational protocols (including protocols 7, 11, 13–17, 20, 24, 25, 28–30, 35, 36, 39, 41–44, 48, and 57) to avoid, minimize, or mitigate impacts to biological resources by restricting vehicles to existing roads when feasible, minimizing impacts by defining the disturbance areas, designing the Proposed Project to avoid or minimize new disturbance and erosion, and adjusting access roads to avoid sensitive habitats. In addition, APM-BIO-02 requires a biological monitor to be present during all vegetation removal activities in order to avoid impacts to sensitive resources. Also, all areas used for temporary work space will be restored to preconstruction conditions. In addition to the project APMs, implementation of Mitigation Measures BIO-1 and BIO-2 will ensure that impacts to sensitive vegetation communities would be mitigated to less than significant (Class II).

BIO-1 **Provide Habitat Compensation or Restoration for Permanent Impacts to Native Vegetation Communities**. Where impacts to disturbed coyote brush scrub and non-native grasslands cannot be avoided, SDG&E shall restore temporarily disturbed areas to pre-construction conditions following construction and deduct credits from the SDG&E Mitigation Credits for

permanent impacts to sensitive communities, as stated in the SDG&E NCCP. Where on-site restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the applicant shall identify a habitat restoration specialist to be approved by the CPUC or that the resource agencies have indicated is acceptable to determine the most appropriate method of restoration. Restoration techniques can include hydroseeding, handseeding, imprinting, and soil and plant salvage, as discussed in Section 7.2.1 of the NCCP. Monitoring will include visual inspection of restored areas after 1 year. A second application may be made. If, after the second year, restoration is deemed unsuccessful, the USFWS and CDFG, in cooperation with SDG&E, shall determine whether the remaining loss shall be mitigated through a deduction from the SDG&E Mitigation Credits, or whether a third application would better achieve the intended purpose. The mitigation objective for impacted sensitive vegetation communities shall be restoration to pre-construction conditions as measured by species cover, species diversity, and exotic species cover. The cover of native species should increase while the cover of non-native or invasive species should decrease. Success criteria shall be established by comparison with reference sites. If, however, roots are not grubbed during temporary impacts, restoration/hydroseeding may not be necessary. This applies to impacts greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E's mitigation credits at a 1:1 ratio.

In addition, SDG&E shall mitigate for permanent impacts to disturbed coyote brush scrub at a ratio of 1.5:1 and non-native grasslands at a ratio of 1:1 for all permanent impacts that would result from construction activities. These habitats require mitigation because they are considered sensitive habitats by the resource agencies, are potential habitat for sensitive species, and provide foraging habitat for raptors. Evidence shall be provided to the CPUC that 7.55 acres of coastal sage scrub and 9.46 acres of non-native grasslands have been deducted from NCCP credits.

BIO-2 **Topsoil Salvaging.** During construction, the upper 12 inches of topsoil (or less depending on existing depth of topsoil) shall be salvaged and replaced wherever open trenching ~~occurs~~ activities are required through open land with native vegetation (not including graded roads and road shoulders) for the installation of the underground banks.

Impact BIO-2: **Construction activities would result in substantial adverse effects to jurisdictional waters, including wetlands, through vegetation removal, placement, or fill; erosion; sedimentation; and degradation of water quality.**

Construction of the proposed Bay Boulevard Substation and transmission line components would result in temporary and permanent impacts to waters under the jurisdiction of the ACOE, RWQCB, CDFG, CCC, and Chula Vista WPP. ~~As shown in Table D.5-5, approximately 2.51 acres of ACOE-jurisdictional waters would be permanently impacted and 0.01 acre would be temporarily impacted by the Proposed Project (temporary acreage does not include work areas associated with jack and bore operations). One ACOE-jurisdictional emergent wetland, located within the channel paralleling Bay Boulevard, would be permanently impacted by the Proposed Project (as proposed, a substation access road and culvert would be constructed through this feature).~~ Impacts to waters and non-wetland waters of the United ~~.~~States~~.~~ by jurisdiction are listed ~~below~~ in Table D.5-5.

Table D.5-5
Summary of Impacts to Waters and Non-Wetland Waters of the United States

Wetland or Non-Wetland Waters of the U.S.	Vegetation Community	Acreage of Impact by Jurisdiction[1]				
Temporary Impacts						
		ACOE	*RWQCB*	*CCC*	*CDFG*	*City*
Wetland	Seasonal Pond/Seasonal Wetland	0	0	0	0	0
Wetland	Emergent Wetland	0.01	0.01	0.01	0.01	0.01
Wetland	Mule Fat Scrub	0	0	0	0	0
Wetland	Disturbed Wetland Scrub	0	0	0	0	0
Non-wetland Waters of the U.S.	Unvegetated	<0.01	<0.01	<0.01	<0.01	0
	Subtotal (Temporary Impacts)	*0.02*[2]	*0.02*	*0.02*	*0.02*	*0.01*
Permanent Impacts						
		ACOE	*RWQCB*	*CCC*	*CDFG*	*City*
Wetland	Seasonal Pond/ Seasonal Wetland	0.61	0.61	0.61	0	0.18
Wetland	Emergent Wetland	0.03	0.03	0.03	0.03	0.03
Wetland	Mule Fat Scrub	0.06	0.06	0.06	0	0
Wetland	Disturbed Wetland Scrub	1.75	1.75	1.75	0	0
Non-wetland Waters of the U.S.	Unvegetated	0	0	0	0	0
	Subtotal (Permanent Impacts)	*2.45*	*2.45*	*2.45*	*0.03*	*0.21*
	Total Impacts	**2.47**	**2.47**	**2.47**	**.05**	**0.22**

Source: SDG&E 2010; Dudek 2010b
Notes:
[1] Impact acreages in Table D.5-5 do not include areas of disturbances resulting from jack and bore operations. Pursuant to Mitigation Measure BIO-~~11~~10, jack and bore operations and other temporary work areas would not occur within sensitive vegetation communities including wetlands (see Mitigation Measure BIO-~~11~~10).
[2] Total has been rounded for summation purposes.

As stated previously, during construction SDG&E would avoid wetland features to the extent possible. Nonetheless, impacts to wetlands and waters are considered significant and mitigation would be required to reduce this impact to a less-than-significant level. Implementation of Mitigation Measure BIO-3 (which replaces and supersedes APM-BIO-05) will reduce impacts to wetlands to a less-than-significant level (Class II).

In addition, the applicant would also be required to mitigate for temporary effects on aquatic habitat for two-striped garter snake, and western spadefoot~~, and San Diego and Riverside fairy shrimp,~~ which would include seasonal ponds, disturbed wetland scrub, and emergent wetland. These impacts to special-status species and applicable APMs and mitigation measures are discussed in Impact BIO-7.

BIO-3 **Provide Habitat Compensation or Restoration for Permanent Impacts to Jurisdictional Resources**. Permanent impacts to all jurisdictional resources shall be compensated through a combination habitat creation (i.e., establishment) and habitat restoration at a minimum of a 4:1 ratio with at least 1:1 creation of new jurisdictional areas or as required by the permitting agencies. The creation/restoration effort shall be implemented pursuant to a habitat restoration plan, which shall include success criteria and monitoring specifications and shall be approved by the permitting agencies prior to construction of the project. A habitat restoration specialist will be designated and approved by the permitting agencies and will determine the most appropriate method of restoration. Restoration techniques may include hydroseeding, hand-seeding, imprinting, and soil and plant salvage. All habitat creation and restoration used as mitigation on public lands shall be located in areas designated for resource protection and management. All habitat creation and restoration used as mitigation on private lands shall include long-term management and legal protection assurances. Appropriate permits from the wetland resource agencies including ACOE, CDFG, RWQCB, and CCC for the impacts to wetlands and jurisdictional waters shall be provided to the CPUC prior to construction. Buffers for wetland areas shall be included as required by the wetland resource agencies.

Impact BIO-3: Construction and operation/maintenance activities would result in the introduction of invasive, non-native, or noxious plant species.

The Bay Boulevard Substation study area includes ~~both undisturbed native vegetation communities with low levels of invasive or noxious plant species and~~ disturbed vegetation communities located within the ~~a~~ former liquefied natural gas site and an existing transmission corridor. Non-native grasses and forbs (e.g., *Bromus* and *Erodium* species) occur as a component of the understory in most of the vegetation communities in the study area. Areas within the Bay Boulevard Substation

study area where ground disturbance is occurring or has occurred support a higher level of and potential for invasive, non-native, and noxious plant species.

All components of the Bay Boulevard Substation construction would result in temporary ground-disturbance activities that would then result in the disturbance or removal of existing vegetation. Ground-disturbing activities expose soils and allow invasive and non-native plant species to become established. Increased human and vehicle activity in the project area during construction would have the potential to introduce seeds of invasive and non-native species into the area. During operation and maintenance of all components of the Proposed Project, the human and vehicle activities would have the potential to spread invasive and non-native species throughout the area. The introduction and spread of invasive, non-native, or noxious plant species has the potential to degrade plant and species habitat through changes in species composition and habitat type conversion, including areas known to support special-status species and sensitive natural communities. Establishment of invasive species on site has the potential to affect the off-site habitat areas on the Refuge as well. This impact would be significant; therefore, Mitigation Measure BIO-4 has been provided to mitigate this impact to a level that is considered less than significant (Class II).

BIO-4 **Prepare and implement a Noxious Weeds and Invasive Species Control Plan.** A Noxious Weeds and Invasive Species Control Plan shall be prepared and reviewed by the California Department of Fish and Game and California Public Utilities Commission~~applicable permitting agencies~~. The plan shall be submitted to the CPUC at least 30 days prior to ground-disturbance activities. The plan shall be implemented during all phases of project construction ~~and operation~~. The plan shall include best management practices (BMPs) to avoid and minimize the direct or indirect effect of the establishment and spread of invasive plant species during construction that were not present prior to construction. Implementation of specific protective measures shall be required during construction, such as ~~cleaning vehicles prior to off-road use,~~ using weed-free imported soil/material and~~,~~ restricting vegetation removal~~, and requiring topsoil storage~~. Development and implementation of weed management procedures shall be used to monitor and control the spread of weed populations that were not present along the construction access and transmission line rights-of-way. ~~Vehicles used during construction shall be cleaned prior to operation off maintained roads. Existing vegetation shall be cleared only from areas scheduled for immediate construction work and only for the width needed for active construction activities.~~ Noxious weed management shall be conducted annually for 2 years to ~~prevent establishment and~~ limit the spread of localized invasive plant species. This shall include weed abatement efforts targeted at plants listed as invasive exotics by the California Exotic Plant Pest Council in its

most recent "A" or "Red Alert" list. Pesticide/herbicide use shall be limited to pre-emergent ~~non-persistent~~ pesticides and shall only be applied in accordance with label and application permit directions and restrictions for terrestrial and aquatic applications.

Impact BIO-4: Construction activities would create dust that would result in degradation of vegetation.

The construction of the Bay Boulevard Substation has the potential to generate dust that would cover plants within vegetation communities adjacent to construction areas. Dust cover on plants can cause reduced plant vigor and degraded plant and wildlife habitat through burial of plants or interruption of photosynthesis and other processes, including areas known to support special-status species and sensitive natural communities. This impact would be significant, and therefore, Mitigation Measure BIO-5 has been provided to mitigate this impact to a level that is considered less than significant (Class II).

BIO-5 **Prepare and implement a Dust Control Plan**. A Dust Control Plan shall be prepared and submitted to the California Public Utilities Commission. The project proponent shall (a) pave, apply water ~~three times~~ daily, as needed to control fugitive dust, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas if construction activity causes persistent visible emissions of fugitive dust beyond the work area; (b) pre-water sites as appropriate up to 48 hours in advance of clearing; (c) reduce the amount of disturbed area where feasible; (d) spray all dirt stock-pile areas daily as needed; (e) cover loads in haul trucks or maintain at least 6 inches of free-board when traveling on public roads; (f) pre-moisten prior to transport and import and export of dirt, sand, or loose materials; (g) sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets or wash trucks and equipment before entering public streets; (h) plant vegetative ground cover in disturbed areas as soon as possible following construction or in accordance with the landscape plan, taking into account the appropriate planting season; and (i) apply chemical soil stabilizers or apply water to form and maintain a crust on inactive construction areas (disturbed lands that are unused for 14 consecutive days); and (j) prepare and file with the CPUC a Dust Control Plan that describes how these measures would be implemented and monitored throughout construction.

Impact BIO-5: Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants.

Construction of the Bay Boulevard Substation could result in temporary disturbance to and/or permanent loss of rare plant communities and special-status plant species. Special-status plant species known to occur within the project area (based on the results of the May 2011 rare plant survey and recorded occurrences and/or associations with on-site vegetation communities) as well as their potential to occur on site are listed in Attachment D.5-1. As shown in Attachment D.5-1, a number of special-status plant species known to occur within the project area (or those associated with on-site vegetation communities) were determined to have a low to no potential to occur on site (species including but not limited to San Diego thorn-mint (*Acanthomintha ilicifolia*) and California adolphia (*Adolphia californica*)). A number of special-status plant species, including San Diego ambrosia, south coast saltscale, variegated dudleya, Palmer's frankenia, Coulter's goldfields, Nuttall's lotus, spreading navarretia, and prostrate vernal pool navarretia, were determined to have moderate potential to occur on site and within the vicinity of the project area. A single individual of one rare plant, decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), was observed during the rare plant survey, and construction activities are anticipated to directly impact the individual plant. No other listed sensitive plant species with potential to occur were found on site during the rare plant survey; therefore, impacts to any of the other listed plant species are not anticipated.

As described in the project description and APM-BIO-01, SDG&E would conduct activities in accordance with NCCP operational protocols (including protocols 7, 11, 13–17, 20, 24, 25, 28, 29, 30, 33, 35, 36, 39, 41–44, 48, and 57) to avoid, minimize, or mitigate impacts to biological resources by restricting vehicles to existing roads when feasible, minimizing impacts by defining the disturbance areas, designing the Proposed Project to avoid or minimize new disturbance and erosion, and adjusting access roads to avoid sensitive habitats. In addition, APM-BIO-02 requires a biological monitor to be present during all vegetation removal activities to prevent impacts to special-status species, and APM-BIO-06 ensures that impacts to decumbent goldenbush would be minimized through avoidance of individual plants to the maximum extent practical (if avoidance of individual plants is not feasible, then individual plants would be transplanted and relocated to an appropriate site within the Proposed Project area). Therefore, with implementation of APMs BIO-01, BIO-02, and BIO-06, temporary and permanent impacts to special-status plant species would be less than significant (Class III).

Impact BIO-6: Construction, including the use of access roads, would result in disturbance to wildlife and result in wildlife mortality.

Construction of the Bay Boulevard Substation has the potential to disturb wildlife in and adjacent to the construction areas. Wildlife would be displaced within the construction areas and may avoid the area immediately surrounding the construction areas due to human presence and noise. Except where such construction-related disturbance or direct mortality affects special-status wildlife, which is addressed under Impact BIO-7, the construction-related impact of the Bay Boulevard Substation on wildlife disturbance and direct mortality would be considered less than significant (Class III). Potential disturbance and mortality of common wildlife does not rise to a level of significance, and mitigation measures implemented to avoid, minimize, and mitigate construction-related impacts to special-status wildlife species would also be protective of common wildlife species.

Impact BIO-7: Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife.

A number of special-status wildlife species have the potential to occur within the Proposed Project site based on on-site habitat and the location of the project as noted in Attachment D.5-1. The potential to impact these special-status wildlife species is discussed as follows.

SDG&E NCCP covered special-status wildlife species that have been recorded for the project study area or have a moderate to high potential to occur include two-striped garter snake, orange-throated whiptail, San Diego horned lizard, western spadefoot, northern harrier, white-tailed kite, western burrowing owl, American peregrine falcon, Belding's savannah sparrow, light-footed clapper rail, and San Diego black-tailed jackrabbit~~, San Diego fairy shrimp, and the Riverside fairy shrimp~~. The short-eared owl has a moderate potential to occur~~, and the California horned lark was present during field surveys~~ (impacts ~~to these two species~~ are not covered under the SDG&E NCCP).

As shown on Figure D.5-1, construction of the proposed Bay Boulevard Substation would result in temporary disturbance and permanent removed of disturbed coyote brush scrub, seasonal ponds, disturbed wetland scrub, mulefat scrub, and non-native grasslands in the southern extent of the Proposed Project area. Specifically, construction activities would result in both temporary and permanent impacts to 6.10 acres of disturbed coyote brush scrub, 0.61 acres of seasonal ponds, 1.75 acres of disturbed wetland scrub, 0.06 acres of mulefat scrub, and 9.46 acres of non-native grassland.

Construction activities within suitable habitat also have the potential to cause direct injury or mortality to snakes or western spadefoot as a result of an increase in vehicles and equipment noise; direct strike and mortality by vehicles; and disruption of hibernating, feeding, and

breeding from increased human activity. Impacts could also occur if these species were to fall into and become trapped in areas being excavated as part of the proposed construction activities. These potential direct and indirect effects to two-striped garter snake and western spadefoot as a result of the permanent loss of seasonal ponds and native and non-native vegetation communities are considered a significant impact to these species.

To minimize the potential for direct and indirect effects to two-striped garter snake and western spadefoot, the applicant will implement APMs BIO-01 and BIO-02. As described in the project description and APM-BIO-01, SDG&E would conduct activities in accordance with NCCP operational protocols (including protocols 7, 11, 13, 14, 16, 17, 20, 21, 24, 25, 33–37, 41, 44, 48, and 57) to avoid, minimize, or mitigate impacts to biological resources by restricting vehicles to existing roads when feasible, minimizing impacts by defining the disturbance areas, designing the Proposed Project to avoid or minimize new disturbance and erosion, and adjusting access roads to avoid sensitive habitats. APM-BIO-01 requires that the NCCP operational protocol requiring pre-activity studies including focused surveys are conducted. Impacts to t~~T~~he western spadefoot, and two-striped garter snake ~~potentially occur in vernal pools and impacts~~ would be avoided with the implementation of APM-BIO-01, which requires that the NCCP operational protocols~~ including protocol 33, which prevents impacts to vernal pools~~ be implemented. The implementation of protocol 33, which prevents impacts to vernal pools, is~~n~~ not necessary because the seasonal ponds were not concluded to be vernal pools due to the negative surveys for fairy shrimp species and lack of other vernal pool indicators. In addition, APM-BIO-02 requires a biological monitor to be present during all vegetation removal activities to prevent impacts to special-status species. Thus, implementation of APMs BIO-01 and BIO-02 will result in avoidance of impacts to special-status species or mitigation for unavoidable impacts. Implementation of these measures will reduce potentially significant impacts to a less-than-significant level (Class III).

Grading and trenching associated with construction of the Proposed Project could also result in the disturbance and/or removal of foraging habitat for several avian species, including the short-eared owl, northern harrier, white-tailed kite, Belding's savannah sparrow, light-footed clapper rail, American peregrine falcon, and the western burrowing owl. Although they may forage in the area, disturbance to short-eared owl, northern harrier, white-tailed kite, Belding's savannah sparrow, light-footed clapper rail, and American peregrine falcon is not anticipated based upon the small area in which the project would occur, the large range over which these species forage, and because construction activities would not impact nesting of these species. Therefore, impacts are anticipated to be less than significant (Class III).

Construction of the Proposed Project would result in the temporary disturbance and permanent removal of habitat suitable for orange-throated whiptail, San Diego horned lizard, ~~California~~

~~horned lark,~~ and San Diego black-tailed jackrabbit. As identified in Attachment D.5-1, these species are typically associated with coastal sage scrub and grassland communities, and as shown on Figure D.5-1, construction of the Proposed Project would result in temporary and permanent impacts to these communities during grading, trenching, and excavation activities associated with the proposed Bay Boulevard Substation. In addition to direct impacts, construction could also result in indirect impacts as a result of increased vehicle presence, construction noise and vibration, and construction worker presence. Construction activities that would result in the harm or destruction of individuals or populations of these species would be considered a significant impact.

To minimize the potential for direct and indirect effects on orange-throated whiptail, San Diego horned lizard, ~~California horned lark,~~ and San Diego black-tailed jackrabbit, the applicant will implement APMs BIO-01 and BIO-02. As described in the project description and APM-BIO-01, SDG&E would conduct activities in accordance with NCCP operational protocols (including protocols 7, 11, 13, 14, 16, 17, 20, 21, 24, 25, 33–37, 41, 44, 48, and 57) to avoid, minimize, or mitigate impacts to biological resources by restricting vehicles to existing roads when feasible, minimizing impacts by defining the disturbance areas, designing the Proposed Project to avoid or minimize new disturbance and erosion, and adjusting access roads to avoid sensitive habitats. APM-BIO-01 requires that the NCCP operational protocol requiring pre-activity studies, including focused surveys, be conducted. APM-BIO-02 requires a biological monitor to be present during all vegetation removal activities to prevent impacts to special-status species. With implementation of these measures, impacts would be less than significant (Class III).

~~Because construction activities would not impact nesting opportunities (as well as because of the relatively small project area and large foraging range), impacts to western burrowing owl are not anticipated. However, i~~Impacts could potentially occur if owls elect to use man-made or other nontraditional locations opportunistically (i.e., within pipes or other materials stored on site) either for nesting or during winter. Therefore, to reduce potential impacts to western burrowing owl during construction, SDG&E will implement Mitigation Measure BIO-6. Implementation of this measure will ensure impacts remain less than significant during construction (Class II).

BIO-6 A survey shall be conducted within 30 days prior to initiation of construction by a qualified biologist in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) to determine the presence or absence of the burrowing owl in the Proposed Project site limits, plus 250 feet beyond. The survey results shall be provided to the CPUC within 14 days following completion of the surveys. In addition, the burrowing owl shall be looked for opportunistically as part of other surveys and the monitoring required during project construction. If the burrowing owl is absent, then no mitigation is required.

If the burrowing owl is present, no disturbance shall occur within 160 feet of occupied burrows from ~~September 1 through January 31~~October 16 through March 31 or within ~~250~~ 660 feet of occupied burrows from April 1 through October 15 ~~February 1 through August 31~~ (CDFG ~~1995~~2012).

During construction, any pipe or similar construction material that is stored on site for one or more nights shall be inspected for burrowing owls by a qualified biologist before the material is moved, buried, or capped.

Passive relocation of owls shall be implemented prior to construction only at the direction of CDFG and only if the previously described occupied burrow disturbance absolutely cannot be avoided (e.g., due to physical or safety constraints). Relocation of owls shall only be implemented during the nonbreeding season (October 16 through March 31~~September 1 through January 31~~; CDFG ~~1995~~2012). Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows that are beyond 160 feet from the impact zone and that are within or contiguous to a minimum of 6.5 acres of preserved (or acquired and preserved, if not already preserved) foraging habitat for each relocated owl (single owl or owl pair).

Passive relocation is accomplished by first creating two artificial burrows in contiguous, preserved foraging habitat (if no natural burrows exist) for each occupied burrow that would be impacted; and second, installing one-way doors on occupied burrow entrances so owls can leave the burrow but not reenter it. Following passive relocation, the area of impact and the preserved foraging habitat with alternate burrows are surveyed daily for 1 week to confirm owl use of alternate burrows before excavating burrows in the impact zone. All passive relocation shall be conducted by a biologist approved by CDFG. If the alternate burrows are not used by the relocated owls, then the applicant shall work with CDFG to provide alternate mitigation for burrowing owls. If the alternate burrows are used, no other mitigation shall be required.

If it is not possible to preserve contiguous habitat on which to provide alternate burrows (e.g., on private land), and occupied owl burrows would be directly impacted, then the owls shall be passively relocated without the creation of alternate burrows prior to construction (relocation should only be implemented during the nonbreeding season (September 1 through January 31)). The loss of occupied owl habitat shall be mitigated by acquiring and preserving other occupied habitat elsewhere per the *Staff Report on Burrowing Owl Mitigation*

(CDFG ~~1995~~2012) ~~and the *Burrowing Owl Survey Protocol and Mitigation Guidelines* (The Burrowing Owl Consortium 1993)~~, or as otherwise determined in consultation with the CDFG.

In addition, lighting associated with construction and operation of the Proposed Project may result in indirect impacts to the wildlife located adjacent to the Proposed Project site. Artificial lighting at night during construction could illuminate nearby roost sites and nests, thus increasing the potential for disruption to breeding patterns and detection by nocturnal predators (Longcore and Rich 2004). In addition, artificial lighting may contribute to bird strikes against buildings and/or transmission structures (Erickson et al. 2005). As discussed in Section D.2, Aesthetics, lighting utilized during nighttime construction would be shielded and directed downward to minimize the potential for light trespass and glare onto adjacent habitat, preserve areas, and open water. With the exception of floodlights installed at each of the Bay Boulevard Substation gates, permanent lighting installed at the substation facility would normally be turned off during nighttime hours (except during emergencies). All facility lighting would be directed downward to minimize lighting trespass and glare onto surrounding habitat, preserve areas, and open water. In addition to lighting, project components including conductors and steel transmission structures could result in indirect impacts to avian species as a result of increased glare in the area. To reduce glare, non-specular conductors would be used, and steel transmission structures would be galvanized and would dull over time. Therefore, the potential for indirect impacts resulting from lighting and glare during construction and operation of the Proposed Project would be less than significant (Class III).

Grading and trenching activities occurring within the footprint of the proposed Bay Boulevard Substation (and excavation associated transmission line removal and replacement) could result in permanent direct or indirect impacts to observed seasonal ponds. Conducted according to USFWS protocol, wet- and dry-season branchiopod sampling of the 15 on-site seasonal ponds and one ephemeral swale did not result in detections of any branchiopod species (including San Diego and Riverside fairy shrimp). Therefore, based on the results of wet- and dry-season sampling, San Diego and Riverside fairy shrimp are not present within the identified seasonal ponds or within the identified ephemeral swale. As such, no impacts to San Diego and Riverside fairy shrimp during construction of the Bay Boulevard Substation (and during construction associated with transmission interconnections) would occur.

Impact BIO-8: Construction activities would result in a potential loss of nesting birds (violation of the MBTA).

Any impacts to nests of any raptor species occurring within eucalyptus woodlands (located southeast of the existing South Bay Substation fence line) or within the ornamental vegetation

occurring within the SDG&E transmission easement (located in the eastern extent of the project site) would be considered a significant impact. To minimize the potential for direct effects on raptors, the applicant will implement APM-BIO-03, which ~~requires that~~ states that if a raptor nest is observed during pre-construction surveys, a qualified biologist would determine if it is active, and if deemed inactive, SDG&E, under the supervision of a biological monitor, would remove and dismantle the nest (outside of the raptor breeding season) promptly from existing structures that would be affected by Proposed Project construction (see Table D.5-3 for additional detail). ~~a qualified biologist conduct a nesting survey prior to the start of construction and, if identified nests are determined to be active, make recommendations to reduce construction disturbances occurring in the vicinity of the nest (if the nest is determined to be inactive, it would be removed immediately).~~ Implementation of this measure would reduce potentially significant impacts to a less-than-significant level (Class III).

A number of non-raptor bird as well as some raptor species use scrub and grassland habitats or wetlands if sufficient cover is available for nesting during the bird breeding season. The breeding season for non-raptor bird species, as well as a number of raptor species, is defined as February 15 through September 1~~5~~. Impacts to an active nest of any bird species addressed under the MBTA during construction activities would be considered potentially significant. Direct impacts to nesting bird species would be considered significant (Class II). Implementation of Mitigation Measure BIO-7 will ensure that impacts to nesting birds are reduced to less than significant.

BIO-7 If construction activities including but not limited to grading or site disturbance are to occur between February 15 and September 15, a nesting bird survey shall be conducted by a qualified avian biologist to determine the presence of nests or nesting birds within 500 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species such as but not limited to California horned lark, California least tern, western snowy plover, Caspian tern, gull-billed tern, and other nesting birds that may be disturbed by human activity. All ground-disturbance activity within 500 feet of an active nest will be halted until that nesting effort is finished. The on-site biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Work can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to CPUC. ~~If grading or site disturbance must occur within 500 feet of an active nest, Mitigation Measure BIO-8 shall be implemented.~~

Impact BIO-9: **Construction or operational activities would adversely affect linkages or wildlife movement corridors, the movement of fish, and/or native wildlife nursery sites.**

Construction

The presence of the San Diego NWR and the San Diego Bay to the west of the Proposed Project site routinely attracts migrating birds using the Pacific Flyway. The presence of large construction equipment (including a helicopter during transmission line improvement activities (see Section B.6)) could ~~directly~~ indirectly interfere with the movement of avian species if activities were to occur within the migration season. Activities associated with construction of the Proposed Project could also result in indirect noise impacts to avian species nesting within the San Diego NWR. Known nesting bird and special-status species located in the refuge include but are not limited to California least tern, western snowy plover, Caspian tern (*Hydroprogne caspia*), and gull-billed tern, in addition to other colony nesting birds. Impacts to nesting birds would be considered significant should noise levels exceed 60 dBA Leq(h) during the breeding season between February 15 and September 1~~5~~. Construction equipment, including small mobile cranes, large cranes, boom and trucks, and bucket lifts, would be similar in vertical profile to existing transmission structures located on site, and potential impacts associated with construction activities will be minimized through implementation of Mitigation Measures BIO-7 through BIO-8. Therefore, the presence of construction equipment is not anticipated to result in significant impacts to avian migration corridors (Class II).

BIO-8 Prior to ~~completing~~ commencing any construction activity including ground disturbance, SDG&E shall provide a noise report to CPUC from a certified acoustician to document the noise levels that would result from proposed construction activities at the active nests identified under BIO-~~1~~7. In the event the report prepared by a certified acoustician indicates construction noise levels may exceed 60 dBA Leq(h) at nearby sensitive habitat areas and/or active nests, a temporary noise barrier shall be constructed to reduce noise levels to below 60 dBA Leq(h) where feasible or otherwise approved by the CDFG,~~,~~ to attenuate noise from construction equipment. The height and materials of the noise barrier would depend on several factors, including the construction noise level as well as distance from sensitive habitat areas and active nests. Depending on various geometric and design factors, a temporary noise barrier could attenuate construction noise by approximately 5 to 15 dB. If the installation of a temporary noise barrier is infeasible for specific construction activities, or if noise levels cannot be reduced below 60 dBA Leq(h), mufflers or other noise-suppression devices that exceed the original manufacturer's specifications shall

be utilized to help reduce noise levels. Noise-monitoring equipment would be installed near active nests for areas where noise walls are infeasible to monitor noise levels during construction, and equipment would be turned off when not required for active construction activities. If noise levels still exceed 60 dBA Leq(h) at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged unless otherwise approved by the CDFG.

Because construction of the proposed Bay Boulevard Substation would be located in an area with little cover for wildlife movement and ~~result in minimal alterations to existing habitats and would encompass a relatively small development footprint that~~ would not substantially block movement between existing open space areas in the project vicinity that are located west of the Proposed Project site, animals that currently use these areas within the San Diego NWR are expected to continue to move through the landscape west of the project area after construction has been completed. Creeks, drainages, and ditches that often serve as movement corridors for various wildlife species in the project area would only be temporarily affected during the construction phase of the Proposed Project because noise, vibrations, and human presence associated with construction activities are expected to cause terrestrial wildlife species to avoid movements in the vicinity of these activities only during construction periods. In addition, the creeks, drainages, and ditches on site are not natural features and they do not provide protective cover (terrestrial wildlife species typically travel along natural drainages where protective cover from predators and good foraging habitat occurs). However, exposed trenches and excavations could trap small mammals, amphibians, or reptiles moving through the area. Nocturnal animals would be particularly vulnerable to falling into the exposed trenches. If animals cannot escape from the trench or bore, the risk of exposure to predators or the lack of food and cover could result in mortality. These~~is~~ temporary ~~barrier~~ trenches and excavations represent~~s~~ a potentially significant impact to movement of terrestrial wildlife species in the project vicinity. Implementation of APM-BIO-01, which requires SDG&E to conduct construction activities in coordination with NCCP operational protocols (including inspecting all trenches and excavations twice daily for wildlife entrapment and requiring excavations to be sloped on one end to provide an escape route), will reduce this impact to less-than-significant levels (Class III).

Operations

Operation of the proposed Bay Boulevard Substation is expected to result in limited disturbance on home range and dispersal movements of native wildlife using ~~on-site habitats~~wildlife corridors located within the San Diego NWR. Potential impacts would primarily result from vehicular traffic during routine maintenance activities. However, due to the temporary and sporadic nature of maintenance activities and because these activities are similar to current traffic

activities in the project area, disturbances associated with vehicular travel are anticipated to result in minimal disturbance. In addition, the proposed substation and transmission line structures would be similar in size and character to the existing substation and transmission line structures located in the study area. Species that currently move through the natural areas west of the site are likely to do so following construction and during operation and maintenance activities. Therefore, operation and maintenance activities would not result in significant impacts to wildlife movement or established movement corridors or nursery sites (Class III).

Raptors may be attracted to the project transmission structures for use as hunting vantage points. Structures in the Proposed Project that may provide hunting perches for raptors include the steel pole structures and the lattice communications tower. These structures can give raptors a competitive advantage over sage scrub, grassland, mudflat, and other low-stature habitat prey species. This is of greatest concern where special-status bird species are present and constitute prey. This artificially provided perch advantage can lead to higher than normal raptor numbers in the area, resulting in increased predation pressure (Oles 2007). Large structures also enable the encroachment of traditional tree-nesting and perch-hunting raptors, such as the red-tailed hawk (*Buteo jamaicensis*). Because of these effects, projects that provide such additional perch features can fragment the habitat and possibly contribute to lower populations of special-status prey species (Oles 2007).

The Proposed Project is located adjacent to the San Diego NWR, which is occupied by a number of special-status species. Because of the proximity of the Proposed Project and associated poles and towers, there is a potential for impact to special-status bird species, which could result from the potential perch site for raptors that prey on bird species native to the preserve habitat. Although predation of these species by raptors is a naturally occurring event, the *artificial* increase in available perches for predators has the potential to alter community relationships of the species (Boarman 1992; Bosler 2011). Increased predation of special-status bird species as a result of creating perch sites in areas that do not naturally contain such vantage points is a significant impact.

To reduce impacts to special-status avian species from predatory birds that may perch on and hunt from the Proposed Project structures, especially those nesting in the refuge, SDG&E will implement Mitigation Measure BIO-9. Implementation of this measure will ensure that impacts will be at a less-than-significant level (Class II).

BIO-9 SDG&E shall install ~~several rows of~~sufficient raptor perch deterrent devices (~~such as but not limited to using spikes available from Mission Environmental)~~ on the top of project components including buildings, structures, steel poles, and the lattice communication tower~~. These devices are intended~~ to discourage

raptors~~birds~~ from landing on the surface and potentially preying on special-status ~~avian~~ wildlife species in the area. The condition of the raptor perch deterrent devices will be monitored on at least an annual basis and replaced if missing or showing signs of wear~~The installation of the raptor perch deterrent devices will reduce or avoid potential impacts from perching raptors on special-status birds nesting and foraging in the open habitat and especially within the refuge.~~.

Impact BIO-10: Presence of transmission lines may result in electrocution of, and/or collisions by, listed or sensitive bird or bat species.

See discussion under Impact BIO-10, Section D.5.3.5.

Impact BIO-11: Maintenance activities would result in disturbance to wildlife and could result in wildlife mortality.

Maintenance of the proposed Bay Boulevard Substation is expected to result in limited disturbance to existing special-status resources within or adjacent to these project features. Proposed maintenance activities are expected to result in disturbances that are similar to current industrial and traffic activities in the project area. Consequently, maintenance activities would not result in significant impacts to any sensitive natural communities (Class III).

Impact BIO-12: Impacts to Regional Plans, NCCPs, HCPs, Conservation Plans, and Critical Habitat

No local plans, policies, or regulations would apply to the Proposed Project because, pursuant to General Order No. 131-D, the CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project. Consequently, the Proposed Project would not conflict with any applicable local plans, policies, or regulations of an agency with jurisdiction over the project (No Impact).

Although the Proposed Project would be exempt from local plans, the CPUC has consulted with local agencies regarding land use matters potentially affected by the Proposed Project. The following consistency analysis regarding the Proposed Project and policies of local plans established to protect biological resources is provided for informational purposes only.

City of Chula Vista General Plan

As discussed previously in Section D.5.2, the overarching objective of the General Plan Environmental Element is to conserve the sensitive biological resources occurring within Chula Vista by implementing the City's MSCP Subarea Plan. In implementing its NCCP for the Proposed Project, SDG&E would coordinate with the City to achieve consistency with local policies to the extent feasible. Where consistency is not feasible, SDG&E's NCCP provides for

appropriate protocols and mitigation measures to protect natural community and natural resource values. In addition, the NCCP was developed in coordination with the USFWS and CDFG and is designed to be consistent with local habitat conservation plans. Therefore, the Proposed Project would be consistent with environmental policies in the City's General Plan.

City of Chula Vista LCP (including the Land Use Plan and Bayfront Specific Plan)

The LCP Land Use Plan requires mitigation for all disturbance of wetland areas be provided at the ratio of 4:1 of new wetland areas created to areas disturbed, and for riparian resources, 3:1 replacement for impacted area or as indicated by the resource agencies. Lastly, the LCP Land Use Plan states that diking, dredging, or filling of wetlands or other wet environmentally sensitive habitat areas shall not be permitted without prior CCC approval through the LCP amendment process. As discussed in Section D.5.3.1 (c), construction of the Proposed Project would permanently impact ~~approximately 2.45 acres of~~ wetlands, and mitigation for permanent impacts would be provided at a ratio agreed to in consultation with the jurisdictional agencies, including ACOE, RWQCB, CDFG, CCC, USFWS, and the City. Therefore, because the wetland mitigation ratio proposed (Mitigation Measure BIO-3) would be consistent with the requirements of the LCP Land Use Plan, the Proposed Project would not conflict with this policy.

The LCP also provides for buffers around sensitive habitat areas. Buffer zones of 100 feet in width are required around all identified wetland areas, and buffer zones of 50 feet in width are required around all identified riparian areas (buffer zones are mandatory unless project applicants are able to demonstrate that a buffer of lesser width can protect the identified resources). Although the proposed substation site is planned for industrial uses (per the LCP Land Use Plan amendment), development of the substation would permanently impact wetlands occurring within the bermed area. The mitigation areas provided for the proposed impacts will include adequate buffers for the wetland areas that will equal or exceed 100 feet. In addition, wetlands that are not impacted will be provided buffers that provide adequate protection for the wetland areas. In most cases, the buffers will equal or exceed 100 feet except where the project component crosses the wetland area for which protection of wetlands will be provided as required by the resource agencies. Therefore, the Proposed Project would be consistent with this policy.

SDG&E Subregional NCCP

Provisions established in the SDG&E Subregional NCCP and the City of Chula Vista MSCP Subarea Plan would be applicable to the Proposed Project. While the San Diego Bay NWR Comprehensive Conservation Plan (CCP) would not be applicable to the Proposed Project (the project components would not be within the management authority of the refuge), consistency with the CCP is considered due to proximity. A discussion regarding the Proposed Project's consistency with adopted conservation plans is provided as follows.

Temporary and permanent impacts to biological resources resulting from the Proposed Project would be restored and/or mitigated in accordance with the mitigation requirements established by SDG&E in its NCCP. Where appropriate (for permanent impacts to disturbed coyote brush scrub for example), habitat credits would be deducted from NCCP credits. In addition, during construction SDG&E would implement APM-BIO-01, which would ensure that construction activities are conducted in accordance with NCCP operational protocols to avoid, minimize, or mitigate impacts to biological resources. Therefore, because the provision of mitigation for impacts to special-status species and sensitive habitat would be consistent with the required ratios established in the NCCP, and because construction activities would be conducted in accordance with NCCP operational protocols, construction of the Proposed Project would be consistent with the provisions of the SDG&E Subregional NCCP and no impact would occur.

City of Chula Vista Multiple Species Conservation Program Subarea Plan

Provisions of the MSCP Subarea Plan applicable to the Proposed Project include mitigation ratios for impacts to upland habitat communities established by the Habitat Loss and Incidental Take regulations (City of Chula Vista 2005b). Although the MSCP Subarea Plan states that the Proposed Project site is located within the jurisdictional authority of the Port District and that the Port District is responsible for preserve planning within its jurisdictional lands, mitigation for permanent impacts to disturbed coyote scrub brush and non-native grasslands resulting from construction of the proposed Bay Boulevard Substation improvements would be consistent with the mitigation ratios established by the City's Habitat Loss and Incidental Take regulations (Mitigation Measure BIO-3 assumes mitigation would be provided outside, rather than inside) of a City Preserve Planning Area and is the more conservative ratio of the two). In addition, to mitigate for permanent impacts to wetlands, SDG&E would provide mitigation in ratios consistent with those established by the City's WPP. As discussed in the WPP, as part of the environmental review process, applicants shall demonstrate that impacts to wetland are avoided or minimized to the greatest extent feasible, and mitigation for vernal pools (as proposed the construction of the Bay Boulevard Substation would result in permanent impacts to seasonal ponds) shall be provided at a ratio of 4:1 (the provisions of Mitigation Measure BIO-3 will be consistent with these ratios). Therefore, because proposed mitigation ratio for permanent impacts to sensitive habitat will be consistent with the ratios established in the MSCP Subarea Plan, the Proposed Project would not conflict with the MSCP Subarea Plan and no impact would occur.

Adjacency management issues have been identified in the City of Chula Vista Subarea Plan for projects that are located adjacent to a preserve portion of the City such as the Proposed Project site. These adjacency management issues include the following:

- Enforce, prevent, and remove illegal intrusions
- Install barriers and/or signage where necessary

- Require all new development to adhere to the following:
    - Drainage: prevent the release of toxins, chemicals, etc., that might degrade or harm the preserve
        - Develop and implement urban runoff and drainage plans
        - Implement site design, source control, and treatment control BMPs
    - Toxic Substances: incorporate methods to reduce impacts caused by the application and/or drainage of chemical or by-products into the preserve
    - Lighting: direct lighting away from the preserve
    - Noise: minimize noise impacts
    - Invasives: no invasive non-native plant species shall be introduced into areas immediately adjacent to the preserve
    - Buffers: there will be no requirements for buffers outside the preserve except as required pursuant to permits
    - Disseminate educational information to residents and landowners adjacent to the preserve.

The Proposed Project is consistent with the MSCP Subarea Plan because of a number of project features or mitigation measures. The existing perimeter fence at the SBPP property would remain in its current location and SDG&E has no plans at this time to remove it. Segments of the fence (along the western limits and a portion of the eastern limits) will remain on SDG&E-owned land once the property exchange with the California State Lands Commission is finalized, and SDG&E will maintain those segments of the fence. The fence segments along the east side and north side will not be on SDG&E-owned land and, therefore, will not be affected by the Proposed Project. Therefore, the project area will remain fenced to prevent illegal intrusions and provide a barrier to the adjacent preserve lands. Drainage, including runoff and BMPs, and toxic substances are addressed, and toxic substances will be prevented from entering into the groundwater or into preserve areas (Section D.8, Public Health and Safety). Lighting will be directed down and thus away from the preserve (Section D.2, Aesthetics). Noise will be minimized specifically during the breeding season and with respect to the special-status species located within preserve areas (BIO-9). Invasive species and noxious weeds will be addressed and controlled to prevent intrusion into preserve areas (BIO-4). Buffers will be provided as required by the wetland permitting agencies (BIO-3). Educational and safety information is provided to all SDG&E, contractor, and subcontractor project personnel (Section D.8).

San Diego Bay NWR Comprehensive Conservation Plan, Sweetwater Marsh and South San Diego Bay Units

The Proposed Project would not be within the management authority of the San Diego Bay NWR (South San Diego Bay Unit), and construction and operational activities would not conflict with the conservation measures and goals identified for the San Diego Bay NWR in the CCP (USFWS 2006). The CCP generally provides direction regarding the creation, restoration, and protection of habitat areas (as well as conservation efforts for avian species using the refuge) for lands within the South San Diego Bay Unit. The CCP does not address indirect impacts (i.e., noise) to management authority lands generated by activities outside of the refuge boundary. Therefore, because the Proposed Project would not be located within or traverse refuge areas and because the refuge conservation plan does not address indirect impacts from off-site areas, the Proposed Project would not conflict with the CCP and no impact would occur.

The CCP is addressed as preserve lands in the MSCP, and as such, indirect impacts are addressed in that document and not within the CCP. Thus, consistency with the adjacency management issues described previously under the MSCP Subarea Plan also results in consistency with the CCP.

D.5.3.4 South Bay Substation Dismantling

Impact BIO-1: Construction activities would result in temporary and permanent loss of native vegetation.

As shown on Figure D.5-1, the vegetation communities surrounding the existing South Bay Substation consist of disturbed habitat and developed land. Upon completion of construction of the South Bay Substation would be de-energized, aboveground structures and equipment would be removed, and the substation footprint would be graded to blend in with the surrounding topography. Because the site is developed and has been previously disturbed, and because the use of additional temporary workspace areas (all substation demolition work would occur within the existing substation fence line and, subject to further coordination with the Port District, a temporary 50-foot-wide work area (approximately 1.7 acres) established around the existing fence line) would not result in impacts to sensitive natural communities, impacts would be less than significant (Class III).

Impact BIO-2: Construction activities would result in substantial adverse effects to jurisdictional waters, including wetlands, through vegetation removal, placement, or fill; erosion; sedimentation; and degradation of water quality.

The dismantling and removal of aboveground equipment at the South Bay Substation is not anticipated to result in impacts to wetlands or other waters of the United States. The existing substation site is located on developed land and is primarily surrounded by disturbed habitat (eucalyptus woodlands occur east and outside of the substation fence). Therefore, because wetlands do not occur within the fenced boundary of the substation or within temporary workspaces occurring outside of the substation fenced boundary, no impacts to wetlands would result from dismantling the South Bay Substation.

Impact BIO-3: Construction and operation/maintenance activities would result in the introduction of invasive, non-native, or noxious plant species.

As seen under Impact BIO-3 in Section D.5.3.3, ~~the area within~~ the project study area includes ~~un~~disturbed ~~native~~ vegetation communities located with a former liquefied natural gas site and an existing transmission corridor~~with low levels of invasive or noxious plant species and disturbed vegetation~~. However, ~~T~~ the introduction and spread of invasive, non-native, or noxious plant species from proposed construction activities has the potential to degrade plant and species habitat through changes in species composition and habitat type conversion, including areas known to support special-status species and sensitive natural communities. Impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure BIO-4.

Impact BIO-4: Construction activities would create dust that would result in degradation of vegetation.

Dismantling of the South Bay Substation has the potential to generate dust that could cover plants within vegetation communities adjacent to construction areas. Dust cover on plants can cause reduced plant vigor and degraded plant and wildlife habitat through burial of plants or interruption of photosynthesis and other processes, including areas known to support special-status species and sensitive natural communities. Potential impacts would be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure BIO-5.

Impact BIO-5: Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat listed for sensitive plants.

The dismantling and removal of aboveground equipment at the South Bay Substation is not anticipated to result in impacts to sensitive plants or direct loss of habitat listed for sensitive plants. The existing substation site is located on developed land and is primarily surrounded by disturbed habitat (eucalyptus woodlands occur east and outside of the substation fence). Therefore, because sensitive plants do not occur within the fenced boundary of the substation or

within temporary workspaces occurring outside of the substation fenced boundary, no impacts to sensitive plants would result from dismantling the South Bay Substation.

Impact BIO-6: Construction, including the use of access roads, would result in disturbance to wildlife and result in wildlife mortality.

The dismantling and removal of the South Bay Substation is located in an area characterized by disturbed and developed land and does not provide any substantial wildlife habitat. The disturbance to wildlife, including wildlife mortality, from dismantling of the South Bay Substation would be less than significant (Class III).

Impact BIO-7: Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife.

The dismantling and removal of aboveground equipment at the South Bay Substation is not anticipated to result in impacts to sensitive wildlife or direct loss of habitat listed for sensitive wildlife. The existing substation site is located on developed land and is primarily surrounded by disturbed habitat (eucalyptus woodlands occur east and outside of the substation fence). Therefore, because sensitive habitats do not occur within the fenced boundary of the substation or within temporary workspaces occurring outside of the substation fenced boundary, no impacts to sensitive wildlife would result from dismantling of the South Bay Substation.

Impact BIO-8: Construction activities would result in a potential loss of nesting birds (violation of the MBTA).

As seen under Impact BIO-8 in Section D.5.3.3, many raptor species use structures as nesting and perching locations during the raptor breeding season from January through June. Impacts to an active nest of any raptor species during removal of substation components would be considered potentially significant. In addition, any impacts to nests of any raptor species occurring within eucalyptus woodlands (located southeast of the existing South Bay Substation fence line) or within the ornamental vegetation occurring within the SDG&E transmission easement (located in the eastern extent of the project site) would be considered a significant impact. To minimize the potential for direct effects on raptors, the applicant will implement APM-BIO-03, which states that if a raptor nest is observed during pre-construction surveys, a qualified biologist would determine if it is active, and if deemed inactive, SDG&E, under the supervision of a biological monitor, would remove and dismantle the nest (outside of the raptor breeding season) promptly from existing structures that would be affected by Proposed Project construction (see Table D.5-3 for additional detail).~~which requires that a qualified biologist conduct a nesting survey prior to the start of construction and, if identified nests are determined~~

~~to be active, make recommendations to reduce construction disturbances occurring in the vicinity of the nest (if the nest is determined to be inactive, it would be removed immediately).~~ Implementation of this measure would reduce potentially significant impacts to a less-than-significant level (Class III).

A number of non-raptor bird species use scrub and grassland habitats or wetlands, if sufficient cover is available, for nesting during the bird breeding season. The breeding season for non-raptor bird species, as well as some raptor species, is defined as February 15 through September 1~~5~~. Impacts to an active nest of any bird species addressed under the MBTA during construction activities would be considered potentially significant. Direct impacts to nesting bird species including raptors and non-raptors would be considered significant (Class II). Implementation of Mitigation Measure BIO-7 will ensure that impacts to nesting birds are reduced to less than significant.

Impact BIO-9: Construction or operational activities would adversely affect linkages or wildlife movement corridors, the movement of fish, and/or native wildlife nursery sites.

As seen under Impact BIO-9 in Section D.5.3.3., construction activities would result in minimal alterations to existing habitats and would encompass a relatively small development footprint that would not substantially block movement between existing open space areas in the project vicinity; animals that currently use these areas west of the Proposed Project site within the San Diego NWR are expected to continue to move through the landscape after construction is complete. Exposed trenches and excavations could trap small mammals, amphibians, or reptiles moving through the area. Nocturnal animals would be particularly vulnerable to falling into the exposed trenches. If animals cannot escape from the trench or bore, the risk of exposure to predators or the lack of food and cover could result in mortality. This temporary barrier represents a potentially significant impact to movement of terrestrial wildlife species in the project vicinity. Implementation of APM-BIO-01, which requires SDG&E to conduct construction activities in coordination with NCCP operational protocols (including inspecting all trenches and excavations twice daily for wildlife entrapment and requiring excavations to be sloped on one end to provide an escape route), will reduce this impact to less-than-significant levels (Class III).

Impact BIO-10: Presence of transmission lines may result in electrocution of, and/or collisions by, listed or sensitive bird or bat species.

The dismantling and removal of the South Bay Substation includes the removal of all above-grade components and does not propose the introduction of any new vertical elements that could

result in electrocution and/or collisions by listed or sensitive bird or bat species. No impacts would result from dismantling the South Bay Substation.

Impact BIO-11: Maintenance activities would result in disturbance to wildlife and could result in wildlife mortality.

The dismantling and removal of the South Bay Substation will not require any maintenance activities to be completed following dismantling activities. No impacts to wildlife during maintenance activities would result from dismantling the South Bay Substation.

Impact BIO-12: Impacts to Regional Plans, NCCPs, HCPs, Conservation Plans, and Critical Habitat.

As seen under Impact BIO-12 in Section D.5.3.3, the project would not conflict with any regional plans, NCCPs, HCPs, conservation plans, and/or critical habitat designations.

D.5.3.5 Transmission Interconnections

Impact BIO-1: Construction activities would result in temporary and permanent loss of native vegetation.

The transmission line component of the Proposed Project would include the removal and replacement of existing transmission structures, the introduction of new transmission structures, and underground activities to facilitate interconnections to the proposed Bay Boulevard Substation and to cross up to five existing water features. Including pole work areas, pull sites, and jack and bore construction areas (jack and bore operations would require approximate 150-foot by 150-foot temporary work areas around each boring and receiving pit), construction of the 230 kV loop-in, 138 kV extension, and 69 kV relocation would require approximately 46.2 acres of temporary workspace. As shown in Figure D.5-1, the vegetation communities located within the SDG&E transmission easements primarily consist of disturbed habitat, non-native grasslands, and ornamental vegetation, and less than 0.01 acre of permanent impacts are anticipated to occur to non-native grasslands. In addition to permanent impacts to non-native grasslands, temporary impacts would also occur as a result of construction work (see Section B, Table B-4, Temporary Workspace Required, for approximate dimensions of temporary work areas associated with transmission line components). ~~Non-native grasslands are considered a Tier III upland habitat according to the City of Chula Vista MSCP Subarea Plan, and because impacts to this community must be mitigated, temporary and permanent impacts would be considered significant.~~ In addition, because the transmission line components would cross several on-site water features (namely, Telegraph Creek), drainages could also be impacted by construction of the transmission line components.

With implementation of APMs BIO-01 and BIO-02, which result in avoidance of impacts to sensitive resources or requires mitigation for unavoidable impacts, as well as Mitigation Measure BIO-10, temporary and permanent impacts to sensitive vegetation communities would be less than significant (Class II).

BIO-10 Prior to construction, a qualified biologist shall review all proposed temporary work areas that will be utilized during construction. The review of all temporary work areas shall be used to determine if sensitive biological resources are present. To the maximum extent feasible, Ttemporary work areas (cable pull sites, jack-and-bore operations, etc.) shall be esited in locations that do not contain any sensitive habitat. A qualified biologist shall review all proposed temporary work areas for presence of sensitive biological resources, and submit a A letter signed by athe qualified biologist shall be submitted to the CPUC 30 days prior to construction in any temporary work area (cable pull sites, jack-and-bore operations, etc.)to the CPUC 30 days prior to construction that identifies whether any sensitive resources are present. Erosion control measures shall be implemented both during and following construction in accordance with the stormwater pollution prevention plan. All areas of temporary disturbance shall be returned to pre-construction conditions immediately following construction.

Impact BIO-2: Construction activities would result in substantial adverse effects to jurisdictional waters, including wetlands, through vegetation removal, placement, or fill; erosion; sedimentation; and degradation of water quality.

As seen under Impact BIO-2 in Section D.5.3.3, impacts to wetlands and waters are considered significant, and mitigation would be required to reduce this impact to a less-than-significant level. Implementation of Mitigation Measure BIO-3 will reduce impacts to wetlands to a less-than-significant level (Class II).

Impact BIO-3: Construction and operation/maintenance activities would result in the introduction of invasive, non-native, or noxious plant species.

As seen in Impact BIO-3 in Section D.5.3.3, the area within the project study area includes undisturbed native vegetation communities located with a former liquefied natural gas site and an existing transmission corridorwith low levels of invasive or noxious plant species and disturbed vegetation. However, Tthe introduction and spread of invasive, non-native, or noxious plant species from proposed construction activities has the potential to degrade plant and species habitat through changes in species composition and habitat type conversion, including areas known to support special-status species and sensitive natural communities. Impacts would be

significant but will be mitigated to a level that is considered less than significant (Class II) with implementation of Mitigation Measure BIO-4.

Impact BIO-4: Construction activities would create dust that would result in degradation of vegetation.

Construction activities associated with the proposed transmission interconnections to the Bay Boulevard Substation would have the potential to generate dust that would cover plants within vegetation communities adjacent to construction areas. Dust cover on plants can cause reduced plant vigor and degraded plant and wildlife habitat through burial of plants or interruption of photosynthesis and other processes, including areas known to support special-status species and sensitive natural communities. Dust generated during construction could result in the degradation of vegetation. Impacts would be significant but can be mitigated to a level that is considered less than significant (Class II) with the implementation of Mitigation Measure BIO-5.

Impact BIO-5: Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat listed for sensitive plants.

As seen in Impact BIO-5 in Section D.5.3.3, construction could result in temporary disturbance to and/or permanent loss of rare plant communities and special-status plant species. As described in the project description (Section B) and APM-BIO-01, SDG&E would conduct activities in accordance with NCCP operational protocols (including protocols 7, 11, 13–17, 20, 24, 25, 28, 29, 30, 33, 35, 36, 39, 41–44, 48, and 57) to avoid, minimize, or mitigate impacts to biological resources by restricting vehicles to existing roads when feasible, minimizing impacts by defining the disturbance areas, designing the Proposed Project to avoid or minimize new disturbance and erosion, and adjusting access roads to avoid sensitive habitats. In addition, APM-BIO-02 requires a biological monitor to be present during all vegetation removal activities to prevent impacts to special-status species. Therefore, with implementation of APMs BIO-01, BIO-02, and BIO-06, temporary and permanent impacts to special-status plant species would be less than significant (Class III).

Impact BIO-6: Construction, including the use of access roads, would result in disturbance to wildlife and result in wildlife mortality.

As seen in Impact BIO-6 in Section D.5.3.3, construction of the proposed 230 kV loop-in, 138 kV extension, and 69 kV pole relocations has the potential to disturb wildlife in and adjacent to the construction areas. Wildlife would be displaced within the construction areas and may avoid the area immediately surrounding the construction areas due to human presence and noise. Except where such construction-related disturbance or direct mortality affects special-status

wildlife, which is addressed under Impact BIO-7, the construction-related impacts on wildlife disturbance and direct mortality would be less than significant (Class III).

Impact BIO-7: Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife.

See discussion under Impact BIO-7 in Section D.5.3.3. Potential direct or indirect impacts to sensitive wildlife or habitat resulting from proposed construction activities would be reduced to a less-than-significant level (Class III) per the following measures: APMs BIO-01 and BIO-02, NCCP protocols, and Mitigation Measure BIO-6.

Helicopter activities associated with transmission line ~~pole replacement and installation~~sock line and stringing could, however, result in indirect noise impacts to avian species potentially nesting on site~~the California horned lark (observed on site during the March 2010 general survey)~~ and special-status avian species nesting within the San Diego NWR (located west of the project site). Known nesting bird and special-status species located in the refuge include but are not limited to California least tern, western snowy plover, Belding's savannah sparrow, light-footed clapper rail, Caspian tern, and gull-billed tern (*Gelochelidon nilotica*), in addition to other colony nesting birds. Impacts to nesting birds would be considered significant should noise levels exceed 60 dBA Leq(h) during the breeding season between February 15 and September 1~~5~~. To reduce impacts to avian species during construction activities, including ground disturbance, SDG&E will implement APM-BIO-01 and APM-BIO-03 as well as Mitigation Measures BIO-7, BIO-8, and BIO-11. Implementation of these measures will ensure impacts remain at a less-than-significant level during pole construction (Class II).

BIO-11 Helicopter activity during construction shall be restricted to the avian non-breeding season defined as between September 1~~56~~ ~~through~~ and February 15~~4~~. Should helicopter activity be deemed necessary during the breeding season, a nesting bird ~~preconstruction~~ surveys~~s~~ shall be conducted by a qualified avian biologist to determine whether any nesting birds and/or active nests are present within the boundaries of the project. ~~within 4,500 feet of the proposed helicopter operation.~~ If nesting birds are present and/or an active nest is discovered, helicopter activity shall be postponed until a qualified avian biologist confirms that nesting is complete and the young have fledged. Additionally, SDG&E shall coordinate with USFWS representative of the Sweetwater Marsh NWR and South San Diego Bay NWR (collectively, the San Diego Bay NWR), as well as the CDFG, to determine whether helicopter activities may potentially impact nesting birds within the reserves. Should helicopter activity be deemed necessary in the presence of known or potentially nesting birds following surveys, the applicant shall coordinate with

USFWS to determine whether the occurrence of helicopter activity is acceptable during the breeding season at the proposed locations. Documentation of USFWS-approved helicopter use shall be provided to CPUC prior to helicopter activities occurring in the event that USFWS determines helicopter activities are permitted between February 15 ~~September 16~~ and ~~February 28~~ August 31.

Impact BIO-8: Construction activities would result in a potential loss of nesting birds (violation of the MBTA).

Many raptor species use transmission line structures as nesting and perching locations during the raptor breeding season from January through June. Impacts to an active nest of any raptor species during transmission pole removal and replacement activities would be considered potentially significant. In addition, any impacts to nests of any raptor species occurring within eucalyptus woodlands (located southeast of the existing South Bay Substation fence line) or within the ornamental vegetation occurring within the SDG&E transmission easement (located in the eastern extent of the project site) would be considered a significant impact. To minimize the potential for direct effects on raptors, the applicant will implement Mitigation Measure BIO-7, which addresses nesting for all bird species including raptors, and APM-BIO-03, which states that if a raptor nest is observed during pre-construction surveys, a qualified avian biologist would determine if it is active, and if deemed inactive, SDG&E, under the supervision of a biological monitor, would remove and dismantle the nest (outside of the raptor breeding season) promptly from existing structures that would be affected by Proposed Project construction (see Table D.5-3 for additional detail).~~which requires that a qualified biologist conduct a nesting survey prior to the start of construction and, if identified nests are determined to be active, make recommendations to reduce construction disturbances occurring in the vicinity of the nest (if the nest is determined to be inactive, it would be removed immediately).~~ Implementation of this measure would reduce potentially significant impacts to a less-than-significant level (Class III).

A number of non-raptor bird species use scrub and grassland habitats or wetlands if sufficient cover is available for nesting during the bird breeding season. The breeding season for non-raptor bird species, as well as some raptor species, is defined as February 15 through September 1~~5~~. Impacts to an active nest of any bird species addressed under the MBTA during construction activities would be considered potentially significant. Direct impacts to nesting bird species would be considered significant (Class II). Implementation of Mitigation Measure BIO-7 will ensure that impacts to nesting birds, including raptors and non-raptors, are reduced to less than significant.

Impact BIO-9: Construction or operational activities would adversely affect linkages or wildlife movement corridors, the movement of fish, and/or native wildlife nursery sites.

Construction

The presence of the San Diego NWR and the San Diego Bay to the west of the Proposed Project site routinely attracts migrating birds using the Pacific Flyway. The presence of large construction equipment (including a helicopter during transmission line improvement activities) could ~~directly~~ indirectly interfere with the movement of avian species if activities were to occur within the migration season. However, construction equipment, including small mobile cranes, large cranes, boom and trucks, and bucket lifts, would be similar in vertical profile to existing transmission structures located on site, and potential impacts associated with helicopter activities will be minimized through implementation of Mitigation Measures BIO-7, BIO-8, and BIO-11. Therefore, the presence of construction equipment is not anticipated to result in significant impacts to avian migration corridors (Class II).

Because construction of the proposed transmission poles would be located in an area with little cover for wildlife movement and ~~result in minimal alterations to existing habitats and would encompass a relatively small development footprint that~~ would not substantially block movement between existing open space areas in the project vicinity that are located west of the Proposed Project site,~~,~~ animals that currently use these areas within the San Diego NWR are expected to continue to move through the landscape west of the project area after construction is complete. Exposed trenches and excavations could trap small mammals, amphibians, or reptiles moving through the area. Nocturnal animals would be particularly vulnerable to falling into the exposed trenches. If animals cannot escape from the trench or bore, the risk of exposure to predators or the lack of food and cover could result in mortality. This temporary barrier represents a potentially significant impact to movement of terrestrial wildlife species in the project vicinity. Implementation of APM-BIO-01, which requires SDG&E to conduct construction activities in coordination with NCCP operational protocols (including inspecting all trenches and excavations twice daily for wildlife entrapment and requiring excavations to be sloped on one end to provide an escape route), will reduce this impact to less-than-significant levels (Class III).

Operations

Operation of the proposed 230 kV loop-in, 138 kV extension, and 69 kV relocation is expected to result in limited disturbance on home range and dispersal movements of native wildlife using wildlife corridors located within the San Diego NWR~~on-site habitats~~. Potential impacts would primarily result from vehicular traffic during routine maintenance activities. However, due to the temporary and sporadic nature of maintenance activities and because these activities are similar to current traffic activities in the project area, disturbances associated with vehicular travel are anticipated to result in minimal disturbance. In addition, the proposed transmission line structures would be similar in size and character to the existing substation and transmission line

structures located on site in the study area. Species that currently move through the natural areas west of the site are likely to do so following construction and during operation and maintenance activities. Therefore, operation and maintenance activities would not result in significant impacts to wildlife movement or established movement corridors or nursery sites (Class III).

Raptors may be attracted to the project transmission structures for use as hunting vantage points. Structures in the Proposed Project area that may provide hunting perches for raptors include the steel pole structures and the lattice communications tower. These structures can give raptors a competitive advantage over sage scrub, grassland, mudflat, and other low-stature habitat prey species. This is of greatest concern where special-status bird species are present and constitute prey. This artificially provided perch advantage can lead to higher than normal raptor numbers in the area, resulting in increased predation pressure (Oles 2007). Large structures also enable the encroachment of traditional tree-nesting and perch-hunting raptors, such as the red-tailed hawk. Because of these effects, projects that provide such additional perch features can fragment the habitat and possibly contribute to lower populations of special-status prey species (Oles 2007).

The Proposed Project is located adjacent to the San Diego NWR, which is occupied by a number of special-status species. Because of the proximity of the Proposed Project and associated poles and towers, there is a potential for impact to special-status bird species, which could result from the potential perch site for raptors that could prey on bird species native to the preserve habitat. Although predation of these species by raptors is a naturally occurring event, the artificial increase in available perches for predators has the potential to alter the community relationships of the species. Increased predation of special-status bird species as a result of creating perch sites in areas that do not naturally contain such vantage points is a significant impact.

To reduce impacts to special-status avian species, especially those nesting on the refuge, SDG&E will implement Mitigation Measure BIO-9. Implementation of this measure will ensure impacts remain at a less-than-significant level (Class II).

Impact BIO-10: Presence of transmission lines may result in electrocution of, and/or collisions by, listed or sensitive bird or bat species.

Towers can result in collisions and mortality as birds move from ~~one area to another within~~ the Refuge to other areas to forage. According to the USFWS (Kerlinger 2000), between 5 million and 50 million birds die each year when they collide with towers that are used to power cellular telephones, pagers, televisions, and radios, For the most part, this mortality is documented for migrating birds that crash into towers because they are lighted at night and attract birds. The towers and poles for the Proposed Project would not be lighted at night. For daytime migrants, little evidence has been found that towers less than about 300 to 450 feet result in collisions that involved anything greater than a few birds (Kerlinger 2000). However,

due to the proximity of the Proposed Project transmission lines, towers, and poles, to the nesting, foraging, and wintering habitat for numerous avian species at the San Diego Bay NWR, there is a potential for impact to bird species that could result from the collision of these species with the transmission lines and structures.

The Proposed Project includes the removal of five lattice steel structures (110 feet), three 138 kV wood cable pole structures (100 feet), and one 230 kV transition pole (165 feet). The project includes construction of seven new poles including one 230 kV steel angle tower (110 feet), one 138 kV riser (165 feet), and five 69 kV pole risers (85 feet). In addition, the project includes construction of eighteen 69 kV wood poles, removal of twenty-three 69 kV wood poles, and replacement of twenty-two 69 kV wood transmission poles. Therefore, the project would result in overall reduction of five 69 kV wood poles and introduction of two new steel poles. As identified previously, the project would include the removal of five lattice steel structures, three 138 kV wood cable pole structures, and one 230 kV transition pole to reroute existing overhead utilities to the proposed Bay Boulevard Substation. The removal of the steel poles and the proposed undergrounding of these utilities result in an overall reduction of 4,300 feet of 138 kV and 230 kV conductor currently present in the project area. In addition, the visibility of existing overhead conductors will be enhanced because the Proposed Project includes replacing most of the existing 4/0 size copper overhead conductor to at least 636 aluminum-clad steel reinforced/aluminum wire (ACSR/AW) along the segment of transmission line from the existing South Bay Substation to the proposed Bay Boulevard Substation. Because the 636 ACSR/AW conductor is a larger diameter conductor, it is more visible to avian species and, therefore, reduces the potential for a collision.

A number of measures are provided in the analysis of collisions of birds with transmission structures (APLIC 1994). As identified in APM-BIO-04, SDG&E designs and constructs its facilities in compliance with Avian Power Line Interaction Committee standards for transmission towers to reduce potential electrocution and collision impacts to avian species. The new facilities associated with the Proposed Project will conform to these APLIC standards. Implementation of APM-BIO-04, which requires SDG&E to construct structures to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors, will reduce this potential for electrocution and collision impact to less-than-significant levels (Class III).

Impact BIO-11: Maintenance activities would result in disturbance to wildlife and could result in wildlife mortality.

Maintenance of the proposed transmission line interconnections is expected to result in limited disturbance to existing special-status resources within or adjacent to these project features.

Proposed maintenance activities are expected to result in disturbances that are similar to current industrial and traffic activities in the project area. Consequently, maintenance activities would not result in significant impacts to any sensitive natural communities (Class III).

Impact BIO-12: Impacts to Regional Plans, NCCPs, HCPs, Conservation Plans, and Critical Habitat

As seen under Impact BIO-12 in Section D.5.3.3, the project would not conflict with any regional plans, NCCPs, HCPs, conservation plans, and/or critical habitat designations.

D.5.4 Project Alternatives

D.5.4.1 Gas Insulated Substation Technology Alternative

Existing Setting

Section D.5.1 describes the biological resources setting within the Proposed Project area. Because the SDG&E Gas Insulated Substation Technology Alternative would occur within the same 12.42-acre parcel as the proposed Bay Boulevard Substation, the existing biological resources conditions would be the same as described in Section D.5.1.

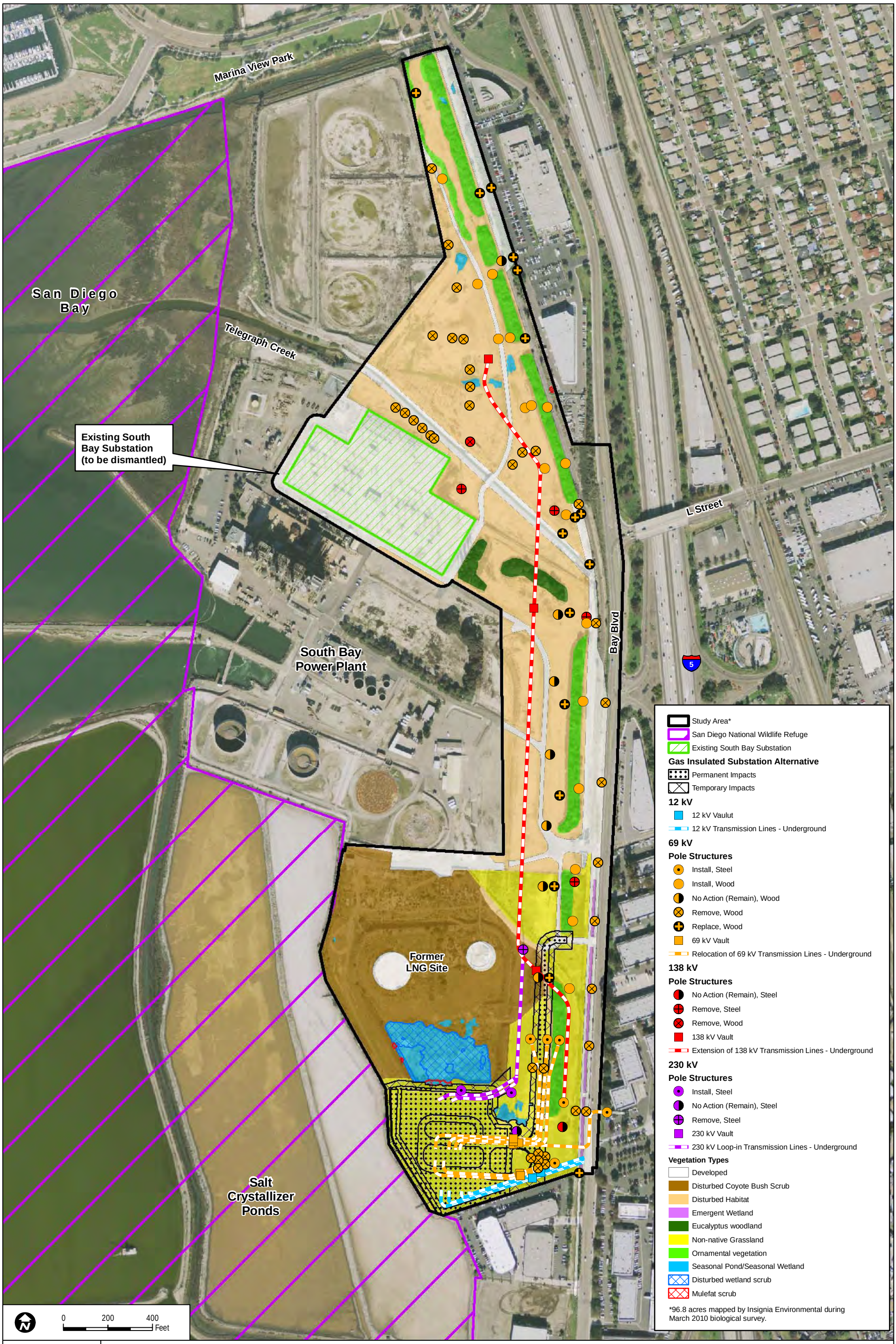
Environmental Impacts and Mitigation Measures

Under this alternative, use of Gas Insulated Substation Technology Alternative would result in a more compact design (and thus a smaller development footprint) when compared to the Proposed Project as a result of the reduction of A-frame structures needed for the air insulated technology associated with the proposed Bay Boulevard Substation. With the Gas Insulated Substation Technology Alternative, the total footprint of the Bay Boulevard Substation would measure approximately 4.4 acres, which is approximately 8 acres smaller that the Proposed Project. When compared to the Proposed Project, the smaller development footprint of the Gas Insulated Substation Technology Alternative would result in fewer impacts to vegetation communities within the 12.42-acre parcel. Table D.5-6, Gas Insulated Substation Technology Alternative – Vegetation Community Impacts within the 12.42-Acre Parcel, provides the impacts to vegetation communities that would result from the construction of the Gas Insulated Substation Technology Alternative. As shown in Figures D.5-4 and D.5-5, construction of this alternative would avoid permanent and temporary impacts to seasonal ponds and disturbed coyote brush scrub within the 12.42-acre parcel area.

Table D.5-6
Gas Insulated Substation Technology Alternative – Vegetation Community Impacts

Vegetation Community	Impact Type	
	Permanent	Temporary
Seasonal Pond/Seasonal Wetland	0.00	0.00
Disturbed Coyote Brush Scrub	0.00	0.00
Non-Native Grassland	5.39	0.59
Total	5.39	0.59

Source: Insignia Environmental 2011b



DUDEK

6652-01

SOURCE: Digital Globe 2008
SDG&E PEA 2010

FIGURE D.5-4

Vegetation Communities Map - Gas Insulated Substation Technology Alternative

South Bay Substation Relocation Project Draft EIR

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6652-01

SOURCE: Digital Globe 2008
SDG&E PEA 2010

FIGURE D.5-5

Wetlands and Waters of the U.S./State - Gas Insulated Substation Technology Alternative

South Bay Substation Relocation Project Draft EIR

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While construction of the Gas Insulated Substation would avoid impacts to seasonal pond/seasonal wetlands and disturbed coyote brush scrub, the alternative substation would result in approximately 5.39 acres of permanent impacts and 0.59 acre of temporary impacts to non-native grasslands. ~~As discussed in Section D.5.3 for the Proposed Project, non-native grassland is considered a sensitive natural community (a Tier III upland habitat) in the City of Chula Vista's MSCP Subarea Plan, and therefore, impacts to this community are considered significant.~~ In addition to the project APMs (in particular, APM-BIO-01 and APM-BIO-02), implementation of Mitigation Measures BIO-1 and BIO-2 (as well as Mitigation Measure BIO-10, which addresses potential impacts associated with the transmission interconnections) would ensure that impacts to sensitive vegetation communities would be mitigated to less than significant (Class II). Although construction and operation of the Gas Insulated Substation Technology Alternative would not impact seasonal ponds/seasonal wetlands, construction of the transmission line components could result in impacts to waters of the United States. While wetland impacts would be reduced under this alternative~~; therefore~~, overall project impacts to wetlands would be similar to those described in Section D.5.3.5 for the transmission interconnections component of the Proposed Project ~~(~~in that implementation of Mitigation Measure BIO-3 impacts would be required to reduce impacts to less-than-significant (Class II) levels~~)~~.

Removal of vegetation during construction of the Gas Insulated Substation (as well as during dismantling of the South Bay Substation and construction of transmission interconnections) would expose soils and allow invasive and non-native species to become established (Impact BIO-3), and maintenance activities during operations would have the potential to introduce invasive and non-native species seeds into the area through regular access of the area by humans and vehicles. This impact is considered significant; therefore, Mitigation Measure BIO-4 would be implemented to reduce the impact to less-than-significant levels (Class II). In addition to the dismantling of the South Bay Substation and construction activities associated with the transmission interconnections, construction activities associated with the Gas Insulated Substation would generate dust that could cover plants and vegetation communities in the area and subsequently degrade plant and wildlife habitat. Implementation of Mitigation Measure BIO-5 would reduce this impact (Impact BIO-4) to less-than-significant levels (Class II).

Similar to the Proposed Project, construction of the Gas Insulated Substation Alternative would impact the individual decumbent ~~goldenrod~~ goldenbush plant identified during the March 2011 rare plant survey; however, with implementation of APMs BIO-01, BIO-02, and BIO-06, impacts would be less than significant (Class III). Based on on-site habitat and the project location, construction activities could result in impacts to suitable habitat (Impact BIO-7) for a number of special-status wildlife species that have the potential to occur. Impacts to SDG&E NCCP covered special-status wildlife species that have been recorded for the project study area (including but not limited to two-striped garter snake, orange-throated whiptail, San Diego horned

lizard, western spadefoot, northern harrier) would be reduced to less-than-significant (Class III) levels with implementation of APMs BIO-01 and BIO-02. Grading and trenching activities could also result in the disturbance and/or removal of foraging habitat for several avian species known (or assumed) to forage in the area; however, given the large range over which these species forage and because construction activities would not impact nesting of these species, impacts are anticipated to be less than significant (Class III). While nesting opportunities would not be impacted by construction activities at the Gas Insulated Substation site, impacts to western burrowing owl could potentially occur if owls elect to use man-made or other nontraditional locations opportunistically (i.e., within pipes or other materials stored on site) either for nesting or during winter. Implementation of Mitigation Measure BIO-06 would reduce the impact to less-than-significant (Class II) levels. The addition of substation security lighting to the project area could impact breeding patterns of nearby avian species; however, impacts would be less than significant (Class III) because all facility lighting would be directed downward to minimize lighting trespass and glare on surrounding habitat, preserve areas, and open water, and non-specular conductors would be used to minimize glare. Indirect impacts (i.e., noise generated by helicopter activities associated with the transmission interconnections) to special-status species nesting within the San Diego NWR would be considered significant should noise levels exceed 60 dBA Leq(h) during the breeding season; however, implementation of Mitigation Measure BIO-11 (as well as Mitigation Measure BIO-7 and BIO-8) would reduce the impact to less than significant (Class II).

While generally not located in the immediate vicinity of the Gas Insulated Substation location, nesting opportunities (eucalyptus woodlands near the existing South Bay Substation and ornamental vegetation within the SDG&E transmission easement) occur within the project area, and any impacts to nests of raptor species due to construction activities (Impact BIO-8) would be considered a significant impact. To reduce the potential for impacts to less than significant (Class II), Mitigation Measure BIO-7 would be implemented during construction. The proximity of Gas Insulated Substation project components to the San Diego NWR and San Diego Bay could result in impacts to linkages and corridors used by avian species (Impact BIO-9) via conflicts with vertical construction equipment and indirect noise impacts due to operation of construction and maintenance equipment. In addition, increased predation of special-status bird species as a result of creating perch sites through installation of substation equipment and enclosures in areas that do not naturally contain such vantage points would also be a significant impact. Implementation of Mitigation Measures BIO-7, BIO-8, and BIO-9 would ensure that impacts are reduced to less-than-significant (Class II) levels.

Transmission lines could result in electrocution of and/or collisions of sensitive bird and bat species with transmission poles and structures. The Gas Insulated Substation Alternative includes the removal of thirty-six 69 kV wood poles, one 138 kV wood cable pole, four 138 kV steel

structures, and one 230 kV steel structure. The project includes construction of twenty-five new poles including six 69 kV steel poles, two 230 kV steel structures, and seventeen 69 kV wood poles. In addition, fifteen 69 kV wood poles would be replaced. Therefore, the Gas Insulated Substation Alternative would result in the overall reduction of nineteen 69 kV wood poles, one 138 kV wood pole, two 138 kV steel structures, and the addition of one 230 kV steel structure and six 69 kV steel poles (seven steel poles). Implementation of APM-BIO-04, which requires SDG&E to construct structures to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors, would reduce the potential for electrocution and collision impacts to less-than-significant levels (Class III).

Due to current industrial and commercial activity in the area, which includes the existing South Bay Substation, disturbances of wildlife by maintenance activities (Impact BIO-11) would be less than significant (Class III). Because this alternative would simply reduce the footprint of the proposed substation, conflicts with local plans, policies, and regulations established for the protection of biological resources would be similar to those characterized in Section D.5.3.3 for the proposed Bay Boulevard Substation (No Impact).

Comparison to the Proposed Project

The Gas Insulated Substation Alternative would reduce the development footprint of the proposed Bay Boulevard Substation and would avoid impacts to disturbed coyote brush scrub and seasonal ponds/seasonal wetlands. Therefore, compared to the Proposed Project, impacts to native vegetation (Impact BIO-1) and jurisdictional waters/wetlands (Impact BIO-2) would be reduced under this alternative. Overall projects impact would, however, remain less than significant (Class II) due to impacts associated with the transmission interconnections. Reducing the footprint of the substation would not substantially reduce impacts associated with the introduction of invasive plant species (Impact BIO-3) or degradation of vegetation due to construction-generated dust (Impact BIO-4); therefore, these impacts would be similar to those identified for the Proposed Project. Although the amount of disturbed area would be reduced under this alternative by virtue of a smaller substation footprint, this alternative would not substantially reduce the potential for construction activities to impact sensitive plants and/or their habitat; therefore, BIO-5 impacts would be similar to those of the Proposed Project and would remain less than significant (Class III) with implementation of APMs. All other impacts to biological resources (Impacts BIO-6 through BIO-12) resulting from construction and operation of this alternative would be similar to the impacts of the Proposed Project.

D.5.4.2 Tank Farm Site Alternative

Existing Setting

Vegetation at the 17~~9~~-acre Tank Farm site is primarily composed of two communities: disturbed habitat and seasonal ponds. Based on the vegetation mapping included in the Final EIR for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment (Port District 2010), approximately 6.8 acres of seasonal pond and 12.2 acres of disturbed habitat occur on site. Disturbed habitat occurs outside of the bermed area (erected for spill containment of previous tank structures), generally along the easternmost boundary of the site. Disturbed habitat also occurs between seasonal ponds within the bermed area and adjacent to the J Street Marsh. Three distinct seasonal ponds/seasonal wetlands occur within the bermed area and within depressed circular formations at which storage tanks were previously located. In addition, a linear seasonal pond occurs in the westernmost portion of the site, near the J Street Marsh.

The environmental setting for the Air Insulated Substation and Gas Insulated Substation Alternatives at the Tank Farm site would be the same, and therefore, environmental setting is not further discussed in Sections D.5.4.2.1 and D.5.4.2.2.

D.5.4.2.1 Tank Farm Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

To minimize impacts to on-site seasonal ponds/seasonal wetlands, it is assumed that SDG&E would locate the new substation adjacent to the eastern boundary of the Tank Farm site (primarily within disturbed habitat); however, given the land requirements of the Air Insulated Substation, impacts to seasonal ponds within the bermed area would result. Assuming placement of the substation along the eastern boundary of the Tank Farm site, construction would result in permanent impacts to approximately 3.6 acres of seasonal ponds and 7.3 acres of disturbed habitat. Although the extent of impacts is unknown at this time, the Air Insulated Substation Alternative is also anticipated to result in temporary and permanent impacts to natural vegetation as a result of transmission interconnection improvements, and impacts associated with the dismantling and removal of the existing South Bay Substation under this alternative would be similar to those previously identified in Section D.5.3.3 for the Proposed Project. As with the Proposed Project, SDG&E would conduct construction activities associated with this alternative in accordance with NCCP operational protocols to avoid, minimize, or mitigate impacts to biological resources. In addition to the project APMs to be implemented during construction (in particular, APM-BIO-02), which require a biological monitor to be present during all vegetation removal processes, Mitigation Measures BIO-1 and BIO-2 (as well as Mitigation Measure BIO-

10 for the transmission interconnections) would be implemented to ensure that impacts to sensitive vegetation communities (Impact BIO-1) are mitigated to less-than-significant levels (Class II).

Construction of the Tank Farm Site – Air Insulated Substation Alternative and transmission line components would result in temporary and permanent impacts to jurisdictional wetlands/waters. Similar to the seasonal ponds occurring within the bermed area at the proposed Bay Boulevard site, the seasonal ponds at the Tank Farm site are assumed to be under jurisdiction of the ACOE, RWQCB, and CCC, and as previously mentioned, development of the substation would result in permanent impacts to 3.6 acres of seasonal ponds. SDG&E would locate the Air Insulated Substation at the Tank Farm site to avoid wetland features to the extent possible; however, project impacts to wetlands and waters are considered significant; therefore, Mitigation Measure BIO-3 would be implemented to reduce impacts to wetlands (Impact BIO-2) to a less-than-significant level (Class II).

The removal of existing vegetation during construction of the substation at the Tank Farm site (as well as during dismantling of the South Bay Substation and construction of transmission interconnections) would expose soils and allow invasive and non-native species to become established, and during operations, human and vehicular activities associated with maintenance would have the potential to introduce invasive and non-native species seeds into the area. Because the establishment of invasive species could potentially degrade plant and animal habitat in the area, this impact is considered significant; therefore, Mitigation Measure BIO-4 would be implemented to reduce the impact to less-than-significant levels (Class II).

In addition to dismantling of the South Bay Substation and construction activities associated with the transmission interconnections, construction activities at the Tank Farm site would generate dust that could cover plants and vegetation communities in the area and degrade plant and wildlife habitat through burial or interruption of photosynthesis. Implementation of Mitigation Measure BIO-5 would reduce this impact (Impact BIO-4) to less-than-significant levels (Class II). Also, based on the 2011 rare plant survey conducted for the Proposed Project and based on proximity to the survey area, construction of the Air Insulated Substation Alternative at the Tank Farm site and associated transmission interconnections could potentially result in direct or indirect loss of sensitive plants (Impact BIO-5). While the Tank Farm site was not included in the rare plant survey conducted for the Proposed Project in May 2011, the Tank Farm site was included in rare plant surveys conducted in March and November 2005 for the Chula Vista Bayfront Master Plan Final EIR, and sensitive plant species were not detected at the Tank Farm site during the 2005 surveys (Port District 2010). However, because a rare plant survey covering the Tank Farm site has not been recently conducted, rare plants are assumed to have potential to occur on site. To minimize impacts, SDG&E would conduct activities in accordance with NCCP operational

protocols (APM-BIO-01) and would also implement APM-BIO-02 (APM-BIO-06 implemented for the Proposed Project is specific to the single, decumbent goldenbush plant occurring at the Bay Boulevard Substation site, and because this alternative would not impact the Bay Boulevard site, this APM would not be applicable). With implementation of applicable APMs, temporary and permanent impacts to rare plants would be less than significant (Class III).

The potential disturbance and mortality of common wildlife would not rise to a level of significance during construction, and mitigation measures implemented to avoid, minimize, and mitigate construction-related impacts to special-status wildlife species (Impact BIO-7) would also be protective of common wildlife species. Therefore, potential impacts associated with the disturbance of wildlife (Impact BIO-6) would be less than significant (Class III).

Similar to the Proposed Project, special-status wildlife species have the potential to occur within the Tank Farm site based on the habitat and location of the site. Given the proximity to the Proposed Project area, similar species are assumed to have potential to occur at the Tank Farm site; however, similar to the Proposed Project, impacts to species covered in the SDG&E NCCP including (but not limited to) two-striped garter snake, western spadefoot toad, orange-throated whiptail, and San Diego horned lizard would be minimized to less-than-significant levels (Class III) through implementation of APMs BIO-01 and BIO-02. Impacts to avian species known to occur in the area including the short-eared owl, northern harrier, white-tailed kite, Belding's savannah sparrow, light-footed clapper rail, American peregrine falcon, and the western burrowing owl would be less than significant (Class III), based upon the small area in which this alternative would occur and because construction would not impact nesting of these species. Although impacts to traditional nests would not occur, impacts to burrowing owls could occur if owls elect to use man-made or opportunistic, nontraditional locations created by construction activities and materials for nesting or during winter. Impacts to burrowing owls would be reduced to less-than-significant (Class II) levels through implementation of Mitigation Measure BIO-6. Lastly, implementation of Mitigation Measures BIO-7, BIO-8, and BIO-11 would ensure that impacts to sensitive wildlife nesting at the San Diego NWR due to transmission interconnection construction activities (including helicopter operations) would be reduced to less-than-significant (Class II) levels.

Lighting associated with construction and operation may indirectly impact wildlife located adjacent to the Tank Farm site; however, similar lighting schemes as those identified for the Proposed Project would be employed at the Air Insulated Substation Alternative at the Tank Farm site, and therefore, similar less-than-significant impacts (Class III) are anticipated.

Because this alternative would result in permanent impacts to seasonal ponds/seasonal wetlands and because sampling has not been conducted for the on-site ponds, impacts to San Diego fairy

shrimp are assumed to have potential to occur. Full protocol surveys~~In addition to wet season sampling, which~~ would be required by USFWS to determine the presence/absence of San Diego fairy shrimp~~, dry-seasonal sampling may also be required~~. Therefore, sampling of the on-site ponds would be required prior to development of the site (mitigation may also be required to minimize impacts to San Diego fairy shrimp to less-than-significant (Class II) levels). If ultimately required, mitigation may include a combination of ~~soil sampling of ponds anticipated to be impacted by the Air Insulated Substation,~~ establishment of protective buffers (if samples determine the presence of fairy shrimp), avoidance of buffered areas, and/or purchase of vernal pool land and/or restoration/enhancement at the ratio required by the USFWS (mitigation would be developed in consultation with the USFWS).

Although the Tank Farm site itself is primarily comprised of seasonal pond/seasonal wetlands and disturbed habitat, adjacent areas to the east would also be disturbed during dismantling of the South Bay substation and construction of the transmission interconnections and as stated in Section D.5.3.3, non-raptor birds as well as some raptor species use scrub and grassland habitats or wetlands if sufficient cover is available for nesting during the bird breeding season. Therefore, direct impacts to nesting bird species as a result of construction activities (Impact BIO-8) would be considered significant and Mitigation Measure BIO-7 would be implemented to ensure that impacts are reduced to less-than-significant (Class II) levels.

Given the proximity of the Tank Farm site to the Proposed Project and due to similarities associated with construction and substation operations, potential impacts to linkages or wildlife corridors (Impact BIO-9) would be similar. In particular, vertical construction equipment and noise generated by the project could interfere with avian movement within~~between~~ the San Diego NWR immediately west of the site ~~and San Diego Bay~~ and could affect species nesting in the San Diego NWR and the marsh areas adjacent to the Tank Farm site (disturbance of avian species would be considered a significant impact); therefore, Mitigation Measures BIO-7 and BIO-8 would be implemented to reduce impacts to less than significant (Class II). In addition, because the project would create perch sites by erecting transmission structures, potential impacts associated with increased predation of special-status avian species by predatory birds is considered significant. Mitigation Measure BIO-9 would be implemented to reduce impacts to less-than-significant (Class II) levels. Implementation of APM-BIO-04, which requires SDG&E to construct structures to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors, would reduce potential impacts associated with electrocution and collision of sensitive bird and bat species (Impact BIO-10) with transmission lines and structures to less than significant (Class III). Similar to the Proposed Project, impacts to wildlife resulting from maintenance activities would be less than significant (Class III), and no conflicts (No Impact) with regards to regional plans,

NCCPS, HCPs, and conservation plans ~~are anticipated to be less than significant~~would occur ~~(Class III)~~.

Comparison to the Proposed Project

While the Proposed Project would result in 0.61 acre of permanent impacts to seasonal ponds/seasonal wetlands, the Tank Farm Site – Air Insulated Substation Alternative is anticipated to result in approximately 3.6 acres of permanent seasonal pond impacts. Therefore, due to the greater amount of disturbance to seasonal ponds, the Tank Farm Site – Air Insulated Substation Alternative would result in greater impacts to native vegetation (in particular, seasonal ponds) (Impact BIO-1) and greater impacts to jurisdictional waters/wetlands (Impact BIO-2) than the Proposed Project. In addition, unlike the Proposed Project, this alternative may result in impacts to San Diego fairy shrimp, which could reside in the on-site seasonal ponds (unlike the seasonal ponds located on the Proposed Project site, the seasonal ponds at the Tank Farm site have not been sampled, and the presence of fairy shrimp cannot be confirmed or denied at this time); therefore, this alternative would result in greater BIO-7 impacts than the Proposed Project. All other impacts to biological resources (Impacts BIO-3 through BIO-6, and Impacts BIO-8 through BIO-12) under this alternative would be similar to those identified in Section D.5.3 for the Proposed Project.

D.5.4.2.2 Tank Farm Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Due to fewer overall land requirements (6 acres as opposed to 10 acres), the Tank Farm Site – Gas Insulated Substation Alternative would result in fewer impacts to native vegetation (Impact BIO-1) and jurisdictional waters/wetlands (Impact BIO-2) than those identified in Section D.5.4.2.1 for the Tank Farm Site – Air Insulated Substation Alternative. Assuming a similar substation location on the Tank Farm site (i.e., adjacent to the eastern boundary of the site), construction of the Gas Insulated Substation Alternative at the Tank Farm site would result in permanent impacts to approximately 1.6 acres of seasonal ponds and 4.3 acres of disturbed habitat. It is also assumed that the Gas Insulated Substation Alternative would result in 1.6 acres of impact to ACOE-jurisdictional resources; therefore, impacts to native vegetation and jurisdictional waters/wetlands are considered significant. However, with implementation of APMs (in particular, APM-BIO-02) and Mitigation Measures BIO-1, BIO-2, and BIO-3 (in addition to Mitigation Measure BIO-11 for transmission interconnections), Impact BIO-1 and Impact BIO-2 would be reduced to less than significant (Class II).

All other impacts would be similar to those previously identified in Section D.5.4.2.1 for the Tank Farm Site – Air Insulated Substation Alternative. Installing metallic buildings and placing

select substation equipment indoors is not anticipated to substantially alter potential impacts associated with the following:

- Introduction of non-native species (Impact BIO-3; less than significant (Class II)) with implementation of Mitigation Measure BIO-4)
- Degradation of vegetation (Impact BIO-4; less than significant (Class II) with implementation of Mitigation Measure BIO-5)
- Loss of nesting birds (Impact BIO-8; less than significant (Class II) with implementation of Mitigation Measure BIO-8)
- Adverse effects to linkages and corridors (Impact BIO-9; less than significant (Class II) with implementation of Mitigation Measure BIO-8 and BIO-9)
- Increased potential for electrocution and/or collision due the presence of a transmission line (Impact BIO-10; less than significant (Class III))
- Maintenance activities (Impact BIO-11; less than significant (Class III))
- Conflicts with regional plans (Impact BIO-12; no impact).

Due to reduced land requirements, Impacts BIO-5, BIO-6, and BIO-7 would be reduced when compared to the Air Insulated Substation Alternative; however, Impact BIO-5 would remain Class III, Impact BIO-6 would remain Class III, and Impact BIO-7 would remain Class II with implementation of Mitigation Measure BIO-6 (for the substation component) and Mitigation Measures BIO-7, BIO-8, and BIO-11 (for transmission interconnections), respectively. Sampling of seasonal ponds anticipated to be impacted by the Gas Insulated Substation Alternative would be required prior to construction, and if San Diego fairy shrimp are determined to occur, mitigation would be required (see Section D.5.4.2.1 for discussion of possible mitigation strategy).

Comparison to the Proposed Project

The Proposed Project would result in 0.61 acre of permanent impacts to seasonal ponds/seasonal wetlands, and the Tank Farm Site – Gas Insulated Substation Alternative is anticipated to result in approximately 1.6 acres of permanent seasonal pond impacts. Therefore, the Tank Farm Site – Gas Insulated Substation Alternative would result in greater impacts to native vegetation (in particular, seasonal ponds) (Impact BIO-1) and greater impacts to jurisdictional waters/wetlands (Impact BIO-2) than the Proposed Project due to the greater amount of disturbance to seasonal ponds. In addition, this alternative may result in impacts to San Diego fairy shrimp that could reside in the on-site seasonal ponds (unlike the seasonal ponds located on the Proposed Project site, the seasonal ponds at the Tank Farm site have not been sampled, and the presence of fairy shrimp cannot be confirmed or denied at this time); therefore, this alternative would result in

greater BIO-7 impacts than the Proposed Project. All other impacts to biological resources (Impacts BIO-3 through BIO-6, and Impacts BIO-8 through BIO-12) under this alternative would be similar to those identified in Section D.5.3 for the Proposed Project.

D.5.4.3 Existing South Bay Substation Site Alternative

Existing Setting

The existing South Bay Substation site is entirely developed and contains an operating electrical substation. No vegetation is present on site. The adjacent 3-acre area required for the Air Insulated Substation configuration is developed/disturbed.

D.5.4.3.1 Existing South Bay Substation – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Construction of the Air Insulated Substation Alternative at the South Bay Substation site and adjacent 3-acre area would not necessitate the removal of native vegetation or impacts to jurisdictional waters/or wetlands, and therefore, this alternative would result in fewer BIO-1 and BIO-2 impacts than those identified in Section D.5.3 for the Proposed Project. Development of the Air Insulated Substation Alternative at the existing South Bay Substation site would result in permanent impacts to approximately 7 acres of developed land and approximately 3 acres of disturbed habitat. In addition, since there are no jurisdictional resources/wetlands located on the existing substation site or the adjacent 3-acre area, no impacts to ACOE-jurisdictional resources would result from construction of the new substation. The construction of other project components (i.e., transmission interconnections) could, however, result in significant impacts to both native communities and jurisdictional resources; therefore, APMs, including project conformance with NCCP Operational Protocols (APM BIO-1), employment of a biological monitor during all vegetation removal activities (APM BIO-2), as well as Mitigation Measures BIO-10 and BIO-3, would be implemented to reduce overall BIO-1 and BIO-2 impacts to less-than-significant (Class II) levels.

Impacts to sensitive plants (Impact BIO-5) and sensitive wildlife and/or their habitat (Impact BIO-7) would be reduced due to the developed/disturbed nature of the existing substation site and adjacent 3-acre area and the low probability of encountering sensitive species in these areas. Overall BIO-5 impacts would remain less than significant (Class III) and would be reduced through implementation of APMs. Overall BIO-7 impacts would remain less than significant (Class II) with implementation of Mitigation Measure BIO-6 (for the substation component) and Mitigation Measures BIO-7, BIO-8, and BIO-11 (for transmission interconnections), respectively.

All other impacts would be similar to those previously identified in Section D.5.3 for the Proposed Project. The alternative is not anticipated to substantially alter potential impacts associated with the following:

- Introduction of non-native species (Impact BIO-3; less than significant (Class II)) with implementation of Mitigation Measure BIO-4)
- Degradation of vegetation (Impact BIO-4; less than significant (Class II) with implementation of Mitigation Measure BIO-5)
- Disturbance of wildlife (Impact BIO-5; less than significant (Class III))
- Loss of nesting birds (Impact BIO-8; less than significant (Class II) with implementation of Mitigation Measure ~~BIO-8~~BIO-7)
- Adverse effects to linkages and corridors (Impact BIO-9; less than significant (Class II) with implementation of Mitigation Measure BIO-8 and BIO-9)
- Increased potential for electrocution and/or collision due to the presence of a transmission line (Impact BIO-10; less than significant (Class III))
- Maintenance activities (Impact BIO-11; less than significant (Class III))
- Conflicts with regional plans (Impact BIO-12; no impact).

Comparison to the Proposed Project

The developed/disturbed condition of the existing substation site and adjacent 3-acre area would result in an overall reduction in project impacts to native vegetation (Impact BIO-1) and jurisdictional waters/wetlands (Impact BIO-2) when compared to the Proposed Project. Impacts would, however, remain Class II due to impacts associated with the transmission interconnections. While the developed/disturbed condition of the substation site and adjacent 3-acre area would reduce impacts to sensitive plants (Impact BIO-5) and sensitive wildlife or habitat (Impact BIO-7), overall impacts (with consideration given to the transmission interconnection component of the project) would be similar to those of the Proposed Project. All other impacts (Impact BIO-3, BIO-4, BIO-6, and BIO-8 through BIO-12) are anticipated to be similar to impacts identified in Section D.5.3 for the Proposed Project.

D.5.4.3.2 Existing South Bay Substation – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

The existing South Bay Substation site is developed, and therefore, construction of a new substation would not require the removal of native vegetation or encroachment into

jurisdictional waters/wetlands. However, native vegetation communities occur in areas adjacent to the existing substation site, and as discussed in Section D.5.3 for the Proposed Project, the construction of transmission interconnections may result in impacts to native vegetation and wetlands. As such, Impacts BIO-1 and BIO-2 are considered significant, and therefore, APMs BIO-01 and BIO-02, as well as Mitigation Measures BIO-10 and BIO-3, would be implemented to reduce impacts to less-than-significant (Class II) levels. Ground disturbance at the existing substation site (as well as at transmission interconnection work areas) may also result in the introduction of non-native species (Impact BIO-3) and degradation of vegetation associated with an increased level of dust (Impact BIO-4). The impacts are considered significant, and therefore, Mitigation Measures BIO-4 and BIO-5 would be implemented to reduce the impacts to less-than-significant (Class II) levels. While the developed nature of the existing substation site would result in less-than-significant impacts associated with the loss of sensitive plants, as discussed in Section D.5.3, the transmission interconnections may result in temporary disturbance and/or permanent loss of rare plant communities (Impact BIO-5) (implementation of APMs BIO-01, BIO-02, and BIO-06 would reduce the impact to less-than-significant (Class III) levels). Impact BIO-6 would be less than significant (Class III) due the developed nature of the existing substation site and because wildlife may avoid construction areas as a result of increased noise and human presence. Similarly, the new substation at the developed site would not result in significant impacts to sensitive wildlife or habitat; however, helicopter activities associated with transmission line ~~pole replacement and installation~~sock line and stringing could impact special-status avian species nesting within the San Diego NWR; therefore, APMs BIO-01 and BIO-02, as well as Mitigation Measures BIO-7, BIO-8 and BIO-11, would be implemented to reduce BIO-7 impacts to less-than-significant (Class II) levels. Western burrowing owls could elect to use construction materials brought on site as nesting locations, and impacts to the species would be considered significant. To reduce the impact to less than significant (Class II), Mitigation Measure BIO-6 would be implemented.

Both non-raptor and raptor species may use the project area for nesting, and any disturbance of nesting birds is considered a significant impact. Mitigation Measure BIO-7 would be implemented to reduce impacts to nesting birds (Impact BIO-8) to less than significant (Class II). Construction of the project could interfere with the movement of avian species to the San Diego NWR and/or San Diego Bay by introducing vertical construction equipment to the area, and construction and operational noise could affect nesting opportunities and movement patterns. In addition, movement corridors could be affected by the introduction of new perch opportunities on the project site, which could be advantageous for predatory species. Construction impacts to linkages and wildlife movement corridors (Impact BIO-9) would be reduced to less-than-significant (Class II) levels through implementation of Mitigation Measures BIO-7, BIO-8, and BIO-11. Operational impacts to linkages and corridor (Impact BIO-9) would be reduced to less

than significant (Class II) through implementation of Mitigation Measure BIO-9. Implementation of APM-BIO-04, which requires SDG&E to construct structures to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors, would reduce potential impacts associated with electrocution and collision of sensitive bird and bat species (Impact BIO-10) with transmission lines and structures to less than significant (Class III). Lastly, because maintenance activities associated with the project are expected to result in disturbances that are similar to current industrial and traffic activities in the project area, BIO-11 impacts would be less than significant, and because local plans are not applicable to the project (CPUC has jurisdiction over the entirety of the project), no conflicts with regional plans (Impact BIO-12) would occur.

Comparison to the Proposed Project

Due to the developed nature and lack of seasonal ponds at the existing substation site, impacts to native vegetation (Impact BIO-1) and jurisdictional waters/wetlands (Impact BIO-2) would be reduced when compared to the Proposed Project. Impacts would, however, remain Class II due to impacts associated with the transmission interconnections. While the overall land requirement would be less than that of the Proposed Project and the developed nature of the site would reduce impacts to sensitive plants (Impact BIO-5) and loss of sensitive wildlife or habitat (Impact BIO-7), considering all project components, overall impacts would be similar to those of the Proposed Project. All other impacts (Impact BIO-3, BIO-4, BIO-6, and BIO-8 through BIO-12) are anticipated to be similar to impacts identified in Section D.5.3 for the Proposed Project.

D.5.4.4 Power Plant Site Alternative

Existing Setting

The 22-acre Power Plant site is almost entirely developed, consisting of approximately 19 acres of developed/urban land and approximately 3 acres of disturbed habitat. Irregular clumps of ornamental plantings are located around existing buildings to provide visual relief from surrounding land uses. Disturbed habitat occurs along the easternmost edge of the site and is isolated from the remainder of the site by access roads to the north, west, and south and railroad tracks to the east.

The environmental setting for the Air Insulated Substation and Gas Insulated Substation Alternatives at the Power Plant site would be the same, and therefore, environmental setting is not further discussed in Sections D.5.4.4.1 and D.5.4.4.2.

D.5.4.4.1 Power Plant Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

The site is composed of developed/urban lands and disturbed habitat (the Air Insulated Substation Alternative would permanently impact 10 acres of developed/urban lands); therefore, construction activities would not impact native vegetation or jurisdictional waters/wetlands. However, native vegetation and jurisdictional waters/wetlands occur on adjacent lands, and the extension and interconnection of transmission lines to the site could potentially impact these resources. Because impacts to native vegetation and jurisdictional waters/wetlands would be considered significant, SDG&E would implement APMs (APM-BIO-01 and APM-BIO-02 in particular) as well as Mitigation Measures BIO-2, BIO-3, and BIO-10 (applicable to the transmission interconnections) to reduce Impacts BIO-1 and BIO-2 to less-than-significant (Class II) levels. Because development of the substation would not impact coyote brush scrub or non-native grasslands, Mitigation Measure BIO-1 would not be applicable to this alternative. Ground disturbance and increased human and vehicle presence at the site (and in the project area) could result in the introduction of non-native species and subsequent degradation of nearby habitat (Impact BIO-3); therefore, Mitigation Measure BIO-4 would be implemented and would reduce the impact to less-than-significant (Class II) levels. Grading and excavation at the Power Plant site (as well as at the existing South Bay Substation during dismantling and at transmission interconnection work areas) could also generate dust, which could settle on nearby plants and vegetation in the area and result in degraded habitat (impact BIO-4); therefore, Mitigation Measure BIO-5 would be implemented to reduce the impact to less than significant (Class II). Although the Power Plant site was not included in the rare plant survey conducted for the Proposed Project, implementation of standard SDG&E operational protocols (see APM-BIO-01) would reduce potential impacts to sensitive plants to less than significant (Class III). Disturbance of common wildlife during construction activities would be minimized through measures implemented to address sensitive species under Impact BIO-7, and therefore, impacts would be less than significant (Class III).

Impacts to sensitive species (Impact BIO-7) with potential to occur on site would be less than significant with implementation of APM-BIO-01 (SDG&E operational protocols (including protocols 7, 11, 13, 14, 16, 17, 20, 21, 24, 25, 33–37, 41, 44, 48, and 57)) and APM-BIO-02; however, because the site would be graded and equipment would be stored on site, burrowing owls may inhabit nontraditional locations (i.e., substation equipment or any materials providing cover) for nesting or during the winter. Impacts to burrowing owls would be considered significant; therefore, SDG&E would implement Mitigation Measure BIO-6 to reduce the impact to less than significant (Class II). In addition, project helicopter activities associated with transmission interconnections in close proximity to the San Diego NWR could impact sensitive wildlife;

therefore, Mitigation Measure BIO-11 (in addition to Mitigation Measure BIO-7 and BIO-8) would be implemented to reduce the impact to less than significant (Class II). Overall, BIO-7 impacts would be less than significant (Class II) with implementation of mitigation.

The presence of ornamental trees on site and in adjacent areas suggests the potential for nesting birds in the project area. Any impacts to nests of raptor species (Impact BIO-8) resulting from construction activities would be significant, and therefore, Mitigation Measure BIO-7 would be implemented to reduce the impact to less-than-significant (Class II) levels. Similarly, the proximity of the Power Plant site to the San Diego NWR could result in interference with bird movement and disturbance of nesting (Impact BIO-9) during construction and operations due to the presence of tall, vertical construction equipment and noise generated by equipment. Impacts are considered significant; therefore, Mitigation Measures BIO-7, BIO-8, and BIO-11 (for construction) and BIO-9 (for operations) would be implemented to reduce the impact to less than significant (Class II). Impacts associated with the presence of transmission lines and increased occurrences of avian electrocution and/or collision (Impact BIO-10) would be reduced through implementation of mitigation associated with Impact BIO-9. Implementation of APM-BIO-04, which requires SDG&E to construct structures to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors, would reduce potential impacts associated with electrocution and collision of sensitive bird and bat species (Impact BIO-10) with transmission lines and structures to less than significant (Class III). Current industrial and traffic activities in the project area would render the potential for maintenance activities to disturb wildlife life a less-than-significant (Class III) impact. No impacts concerning conflicts with local and regional plans and policies established for the protection of biological resources (Impact BIO-12) are anticipated because local plans, policies, or regulations are not applicable to the Proposed Project. Pursuant to General Order No. 131-D, the CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project, and therefore, the project would not be subject to the policies and plans of local jurisdictions.

Comparison to the Proposed Project

The substation component of the Power Plant Site – Air Insulated Substation Alternative would result in permanent impacts to developed urban/lands (impacts to native vegetation and jurisdictional wetlands/waters would not occur), and therefore, Impacts BIO-1 and BIO-2 would be reduced when compared to the Proposed Project (the Proposed Project would result in permanent impacts to native vegetation and seasonal ponds). Therefore, with the exception of impacts to native vegetation and jurisdictional waters/wetlands (Impacts BIO-1 and BIO-2), which would be reduced under this alternative, all impacts associated with biological resources (Impacts BIO-3 through BIO-12) would be similar to those of the Proposed Project.

D.5.4.4.2 Power Plant Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

With the exception of reduced impacts to developed/urban lands (6 acres for the Gas Insulated Substation Alternative compared to 10 acres for the Air Insulated Substation Alternative), impacts to biological resources associated with the Power Plant Site – Gas Insulated Substation Alternative would be similar to those characterized in Section D.5.4.4.1 for the Air Insulated Substation Alternative. The installation and use of metallic buildings at the Power Plant site would not substantially alter the severity of impacts associated with introduction of non-native species (Impact BIO-3), generation of dust and subsequent degradation of surrounding habitat (Impact BIO-4), loss of sensitive plants and disturbance to wildlife (Impact BIO-5 and BIO-6), loss of wildlife (Impact BIO-7), loss of nesting birds (Impact BIO-8), or impacts associated with increased instances of electrocution and/or collision by birds and bats caused by transmission lines (Impact BIO-10) or maintenance activities (Impact BIO-11), and conflicts with local plans (Impact BIO-12). While the construction of metallic buildings may increase perching opportunities at the site and result in greater impacts to linkages and wildlife movement corridors (Impact BIO-9), select substation equipment would be placed inside the metallic buildings, and the installation of perch deterrents on project components (including buildings) is included in Mitigation Measure BIO-9; therefore, operational impacts to linkages or wildlife movement corridors would be reduced to less-than-significant (Class II) levels.

Comparison to the Proposed Project

As discussed in Section D.5.3, construction of the Proposed Project would result in impacts to both native vegetation and jurisdictional wetlands/waters. As discussed previously, construction of the substation at the Power Plant site would result in impacts to urban/developed lands; therefore, due to the developed nature of the alternative site, impacts to native vegetation (Impact BIO-1) and jurisdictional waters/wetlands (Impact BIO-2) would be reduced under this alternative (overall impacts would, however, remain less than significant (Class II)) due to impacts associated with the transmission interconnections). All other impacts associated with biological resources (Impacts BIO-3 through BIO-12) under this alternative would be similar to those of the Proposed Project.

D.5.4.5 Broadway and Palomar Site Alternative

Existing Setting

With the exception of several tall, tubular and steel lattice transmission towers, the 9-acre Broadway and Palomar site is vacant. An SDG&E transmission line traverses the site, and

because of ongoing maintenance activities associated with the corridor, the entirety of the 9-acre site is disturbed and surrounded by roadways on the east and west and development on the north and south. Furthermore, the EIR for the Otay Mesa Power Purchase Agreement (OMPPA) Transmission Project designates the site as disturbed/developed (CPUC 2005). Several irregular clumps of low-growing shrubs/weeds are present throughout the site; however, these are routinely disturbed as a result on maintenance activities.

The environmental setting for the Air Insulated Substation and Gas Insulated Substation Alternatives at the Broadway and Palomar site would be the same, and therefore, environmental setting is not further discussed in Sections D.5.4.5.1 and D.5.4.5.2.

D.5.4.5.1 Broadway and Palomar Site – Air Insulated Substation Alternative

The 9-acre Broadway and Palomar site is not physically large enough to accommodate the 10-acre Air Insulated Substation Alternative. As such, the Air Insulated Substation Alternative is not technically feasible at this site.

D.5.4.5.2 Broadway and Palomar Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

Although the Broadway and Palomar site is developed and the construction of a new substation would not require the removal of native vegetation or disturbance of jurisdictional waters/wetlands, these resources occur along the transmission line alignment (in the vicinity of the South Bay Power Plant and existing South Bay Substation); therefore, the construction of transmission interconnections may result in permanent and temporary impacts to native vegetation and wetlands. Impacts BIO-1 and BIO-2 are considered significant; therefore, APMs BIO-01 and BIO-02, as well as Mitigation Measures BIO-10 and BIO-3, would be implemented to reduce impacts to less-than-significant (Class II) levels. Grading and other ground disturbance at the ~~Broadway and Palomar site (and at the~~ existing South Bay Substation and at pole locations associated with the transmission interconnections~~)~~ may result in the introduction of non-native species (Impact BIO-3) as a result of exposure of soils and increased human and vehicular presence in the area. In addition, degradation of vegetation associated with an increased level of dust (Impact BIO-4) generated during construction may also occur. These potential impacts are considered significant, and therefore, Mitigation Measures BIO-4 and BIO-5 would be implemented to reduce Impacts BIO-3 and BIO-4 to less-than-significant (Class II) levels.

Although a detailed rare plant survey has not been conducted, the developed/disturbed state of the Broadway and Palomar site would likely result in less-than-significant impacts associated with the loss of sensitive plants; however, the transmission interconnections may result in

temporary disturbance and/or permanent loss of rare plant communities (Impact BIO-5) during construction activities in the vicinity of the South Bay Power Plant (implementation of APMs BIO-01, BIO-02, and BIO-06 would reduce Impact BIO-5 to less-than-significant (Class III) levels). Impact BIO-6 (construction would result in disturbance to wildlife and in wildlife mortality) would be less than significant (Class III) due the developed nature of the substation site and because wildlife would likely avoid all construction areas as a result of increased noise and human presence at the construction site(s). Similarly, construction of a substation at the disturbed Broadway and Palomar site is not anticipated to result in significant impacts to sensitive wildlife; however, the introduction of construction materials to the site may increase the potential for burrowing owl nesting, and therefore, Mitigation Measure BIO-6 would be implemented to reduce potential impacts to less-than-significant (Class II) levels. Also, helicopter activities associated with transmission line ~~pole replacement and installation~~sock line and stringing ~~west of Bay Boulevard and near the South Bay Power Plant~~ could impact special-status avian species nesting within the San Diego NWR; therefore, APMs BIO-01 and BIO-02, as well as Mitigation Measures BIO-7, BIO-8 and BIO-11, would be implemented to reduce impacts to less-than-significant (Class II) levels. Therefore, with implementation of the measures discussed previously (Mitigation Measures BIO-6, BIO-7, BIO-8, and BIO-11, as well as APMs BIO-01 and BIO-02), BIO-7 impacts would be less than significant (Class II).

Nesting bird species may use ornamental trees in the project area (trees are located north and west of the Broadway and Palomar site and in the vicinity of the South Bay Power Plant and existing South Bay Substation) during the breeding season, and the loss of nesting birds due to construction activities would be considered a significant impact. Therefore, Mitigation Measure BIO-7 would be implemented and would reduce impacts to nesting birds (Impact BIO-8) to less-than-significant (Class II) levels. Similarly, noise generated by construction equipment at the existing South Bay Substation during dismantling activities could indirectly impact sensitive avian species nesting in the San Diego NWR as well as avian species accessing the NWR by way of the Pacific Flyway. Potential impacts to nesting birds as well as impacts to linkages and wildlife movement corridors (Impact BIO-9) are considered significant but would be reduced to less-than-significant (Class II) levels with implementation of Mitigation Measures BIO-7 through BIO-9 and Mitigation Measure BIO-11. Implementation of APM-BIO-04, which requires SDG&E to construct structures to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors, would reduce potential impacts associated with electrocution and collision of sensitive bird and bat species (Impact BIO-10) with transmission lines and structures to less than significant (Class III). Lastly, because maintenance activities associated with the project are expected to result in disturbances that are similar to current industrial and traffic activities in the project area, BIO-11 impacts would be less than significant (Class III), and because local plans

are not applicable to the project (CPUC has jurisdiction over the entirety of the project), no conflicts with regional plans (Impact BIO-12) would occur.

Comparison to the Proposed Project

Because the entirety of the Broadway and Palomar site is disturbed/developed, impacts to native vegetation communities (Impact BIO-1) and jurisdictional waters/wetlands (Impact BIO-2) would be less than those of the Proposed Project (overall impacts would, however, remain less than significant (Class II)). Because similar construction activities would be required and because both projects would generate an increase in the amount of construction vehicles and workers on the project sites, BIO-3 impacts associated with this alternative would be similar to those of the Proposed Project. As mentioned previously, the Broadway and Palomar site lacks sensitive vegetation, and therefore, impacts regarding the degradation of vegetation due to dust (Impact BIO-4) and the direct loss of listed or sensitive plants/direct loss of habitat for listed or sensitive plants (Impact BIO-5) would be reduced when compared to the Proposed Project; however, overall impacts (with consideration given to the dismantling of the South Bay Substation and construction of transmission interconnections) would remain less than significant (Class II) with implementation of mitigation. Impacts associated with disturbance of wildlife/wildlife mortality (Impact BIO-6) would be similar to the Proposed Project (Class III). Due to the developed nature of the Broadway and Palomar site, BIO-7 impacts associated with sensitive wildlife species/habitat would be reduced; however, similar to the Proposed Project, overall impacts would be less than significant (Class II) with mitigation. Impacts to nesting birds (Impact BIO-8) would be slightly reduced at the Broadway and Palomar site due to fewer overall nesting locations (fewer trees); however, this alternative would still involve project components in the vicinity of the San Diego NWR; therefore, overall impacts will remain similar to the Proposed Project (Class II) with implementation of mitigation. Because this alternative would not involve the construction of a substation in the immediate vicinity of the San Diego NWR (and would not generate associated construction noises) impacts to linkage and corridors (Impact BIO-9) would be less than those of the Proposed Project; however, construction activities associated with the transmission interconnections and South Bay Substation demolition would still cause BIO-9 to be considered less than significant (Class II) with mitigation. Because similar transmission interconnection components are anticipated, BIO-10 impacts associated with the presence of transmission lines and increased potential for electrocution and collisions by bats and birds under this alternative would be similar to those of the Proposed Project. Although the overall length of transmission interconnection would be longer under this alternative, overall impacts would be similar to the Proposed Project, assuming implementation of mitigation. In addition to current industrial and traffic activities in the vicinity of the existing South Bay Substation and South Bay Power Plant, current commercial activity and development near the Broadway and Palomar site suggests that impacts to wildlife generated by maintenance activities

(Impact BIO-11) would be less than significant (Class III) and similar to the Proposed Project. As with the Proposed Project, the construction of a new substation would not be subject to local plans, and therefore, BIO-12 impacts under this alternative would be similar to those identified for the Proposed Project.

D.5.4.6 Goodrich South Campus Site Alternative

Existing Setting

The approximately 31-acre Goodrich South Campus site is composed of three vegetation communities. The eastern 14-acre portion of the site is visibly disturbed as a result of past industrial development and is mapped as urban/developed. The western 16-acre portion of the site is undeveloped and consists of tan and brown grasses and low-growing shrubs and is mapped as non-native grasslands. An approximately 0.65-acre vegetated channel (mapped as southern coastal salt marsh) bisects the site and is also located along portions of the northern boundary of the site (Port District 2010).

The environmental setting for the Air Insulated Substation and Gas Insulated Substation Alternatives at the Goodrich South Campus site would be the same, and therefore, environmental setting is not further discussed in Sections D.5.4.6.1 and D.5.4.6.2.

D.5.4.6.1 Goodrich South Campus Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

To avoid impacts to on-site southern coastal salt marsh and non-native grasslands (both of which would require habitat compensation for permanent disturbance), it is assumed that SDG&E would site the new substation adjacent to the eastern boundary of the Goodrich South Campus site (generally within the paved, developed portion of the site). Under this assumption, construction of the Air Insulated Substation Alternative at the Goodrich South Campus site would avoid impacts to both southern coastal salt marsh and non-native grasslands and instead would permanently impact approximately 10 acres of urban/developed land. In addition, although the extent of impacts is unknown at this time, the Air Insulated Substation Alternative would also result in temporary and permanent impacts to natural vegetation as a result of transmission interconnection work. As with the Proposed Project, SDG&E would conduct construction activities associated with this alternative in accordance with NCCP operational protocols to avoid, minimize, or mitigate impacts to biological resources. In addition to project APMs to be implemented during construction (in particular, APM-BIO-02, which requires a biological monitor to be present during all vegetation removal processes), Mitigation Measures BIO-1 and BIO-2 would be implemented to ensure that impacts to sensitive vegetation

communities (Impact BIO-1) are mitigated to less-than-significant levels (Class II). Also, implementation of Mitigation Measure BIO-10 would ensure that impacts to sensitive vegetation as a result of transmission interconnection construction activities would be reduced to less-than-significant (Class II) levels.

While construction of the Goodrich South Campus Site – Air Insulated Substation Alternative substation would not impact on-site southern coastal salt marsh (wetlands) (the substation would be sited to avoid on-site jurisdictional resources), construction of the transmission line components could result in temporary and permanent impacts to jurisdictional wetlands/waters. Although the extent of impacts is unknown at this time, the presence of jurisdictional waters/wetlands south of the site (specifically, in the vicinity of the proposed Bay Boulevard Substation site and the South Bay Power Plant) suggests there is potential pole replacement/work areas to disturb wetland resources. Although SDG&E would avoid wetland features to the extent possible, impacts are considered significant, and therefore, Mitigation Measure BIO-3 would be implemented to reduce impacts to wetlands (Impact BIO-2) to a less-than-significant level (Class II).

In addition to construction activities at the existing South Bay Substation and at transmission alignment work areas, ground disturbance during construction at the Goodrich South Campus site (the removal of existing concrete/pavement is assumed) would expose soils and potentially allow invasive and non-native species to become established (increased human and vehicular activities in the area would also have the potential to introduce invasive and non-native species seeds into the area). The establishment of invasive species could potentially degrade plant and animal habitat in the area. This impact is considered significant, and therefore, Mitigation Measure BIO -4 would be implemented to reduce the impact to less-than-significant levels (Class II).

In addition to dismantling of the South Bay Substation and construction activities associated with the transmission interconnections, construction activities at the Goodrich South Campus site would generate dust that could cover plants and vegetation communities in the area and degrade plant and wildlife habitat through burial or interruption of photosynthesis. Implementation of Mitigation Measure BIO-5 would reduce this impact (Impact BIO-4) to less-than-significant levels (Class II). The potential disturbance and mortality of common wildlife would not rise to a level of significance during construction, and mitigation measures implemented to avoid, minimize, and mitigate construction-related impacts to special-status wildlife species (Impact BIO-7) would also be protective of common wildlife species. Therefore, potential impacts associated with the disturbance of wildlife (Impact BIO-6) would be less than significant (Class III).

Because the portion of the site identified for development is urban/developed, construction of the substation at the Goodrich South Campus site is not anticipated to result in impacts to sensitive wildlife or direct loss of habitat for listed or sensitive wildlife. Although impacts to traditional

nests would not occur, impacts to burrowing owls could occur if owls elect to use man-made or opportunistic, non-traditional locations created by construction activities and materials for nesting. Impacts to sensitive wildlife (Impact BIO-7) including burrowing owls would be reduced to less-than-significant (Class II) levels through implementation of Mitigation Measure BIO-6. Construction of the transmission interconnections could impact sensitive wildlife in the San Diego NWR; therefore, Mitigation Measures BIO-7, BIO-8, and BIO-11 would be implemented to reduce impacts to less than significant (Class II).

Nesting opportunities are generally located along the on-site southern coastal salt marsh (west of the potential substation site) as well as in the vicinity of the transmission interconnections, and impact to nesting birds due to construction activities would be considered a significant impact. Mitigation Measure BIO-7 would be implemented to ensure that impacts to nesting birds (Impact BIO-8) are reduced to less-than-significant (Class II) levels. Also, construction of the transmission interconnection component of the project would involve helicopter activities in close proximity to the San Diego NWR and San Diego Bay and could, therefore, impact special-status avian movement and nesting within the refuge. If construction noise levels were to exceed 60 dBA Leq(h) during the breeding season between February 15 and September 1~~5~~, impacts would be significant; therefore, SDG&E would implement APM-BIO-01 and APM-BIO-03 as well as Mitigation Measures BIO-7, BIO-8, and BIO-11 to reduce the impact to less-than-significant (Class II) levels. Operational impacts to linkages and corridors (Impact BIO-9) would be reduced to less-than-significant (Class II) levels through implementation of Mitigation Measure BIO-9. Implementation of APM-BIO-04, which requires SDG&E to construct structures to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors, would reduce potential impacts associated with electrocution and collision of sensitive bird and bat species (Impact BIO-10) with transmission lines and structures to less than significant (Class III). Similar to the Proposed Project, impacts to wildlife resulting from maintenance activities (Impact BIO-11) would be less than significant (Class III) due to existing commercial and industrial traffic and activity (existing activity reduces the potential for wildlife to use the site and surrounding areas). No impacts with regional plans, NCCPS, HCPs, and conservation plans (Impact BIO-12) are anticipated because the project would not be subject to local plans and policies (CPUC has full jurisdiction over the project).

Comparison to the Proposed Project

The identified portion of the site on which the new substation would be located is designated urban/developed, and therefore, impacts to native vegetation communities (Impact BIO-1) and jurisdictional waters/wetlands (Impact BIO-2) would be less than those of the Proposed Project (overall impacts would, however, remain less than significant (Class II) with mitigation).

Because similar construction activities would be required and because this alternative would generate a similar increase in the amount of construction vehicles and workers on the project site, BIO-3 impacts associated with this alternative would be similar to those of the Proposed Project (Class II (less than significant) with mitigation). As mentioned previously, the urban/developed portion of the Goodrich South Campus site lacks sensitive vegetation, and therefore, impacts including degradation of vegetation due to construction-generated dust (Impact BIO-4) as well as the direct loss of listed or sensitive plants/direct loss of habitat for listed or sensitive plants (Impact BIO-5) would be reduced when compared to the Proposed Project; however, overall impacts (with consideration given to dismantling of the South Bay Substation and construction of transmission interconnections) would remain less than significant (Class II) with implementation of mitigation. Impacts associated with disturbance of wildlife/wildlife mortality (Impact BIO-6) would be similar to the Proposed Project (Class III). Due to the urban/developed nature of the Goodrich South Campus site, BIO-7 impacts associated with sensitive wildlife species/habitat would be reduced when compared to those of the Proposed Project; however, similar to the Proposed Project, overall impacts would be less than significant (Class II) with mitigation. Due to fewer overall nesting locations (fewer trees) impacts to nesting birds (Impact BIO-8) would be slightly reduced at the Goodrich South Campus site; however, this alternative would still involve project components in the vicinity of the San Diego NWR; therefore, overall impacts will remain similar to the Proposed Project (less than significant (Class II) with implementation of mitigation).

Compared to the proposed Bay Boulevard Substation, the new substation at the Goodrich South Campus site would be located a greater distance from the San Diego NWR, and therefore, construction noise and potential impacts to nesting birds at the refuge and conflicts with linkages and corridors (Impact BIO-9) would be less than those of the Proposed Project. However, construction activities associated with the transmission interconnections and South Bay Substation dismantling would occur in locations similar to those previously analyzed in Section D.5.3 for the Proposed Project; therefore, overall BIO-9 impacts would be similar to those of the Proposed Project (less than significant (Class II) with implementation of mitigation). Because similar transmission interconnection components are anticipated, BIO-10 impacts associated with the presence of transmission lines and increased potential for electrocution and collisions by bats and birds under this alternative would similar as those of the Proposed Project. Current industrial and commercial activity in the vicinity of the Goodrich South Campus site suggests that impacts to wildlife generated by maintenance activities (Impact BIO-11) would be less than significant (Class III) and due to the developed nature of the site impacts would be slightly less than those of the Proposed Project. As with the Proposed Project, the construction of a new substation would not be subject to local plans; therefore, BIO-12 impacts under this alternative would be similar to those identified for the Proposed Project.

D.5.4.6.2 Goodrich South Campus Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

With the exception of reduced impacts to urban/developed lands (6 acres for the Gas Insulated Substation Alternative compared to 10 acres for the Air Insulated Substation Alternative), impacts to biological resources associated with the Goodrich South Campus Site – Gas Insulated Substation Alternative would be similar to those characterized in Section D.5.4.6.1 for the Air Insulated Substation Alternative. The installation and use of metallic buildings at the Goodrich South Campus site would not substantially alter the severity of impacts associated with introduction of non-native species (Impact BIO-3), generation of dust and subsequent degradation of surrounding habitat (Impact BIO-4), loss of sensitive plants and disturbance to wildlife (Impact BIO-5 and BIO-6), loss of wildlife (Impact BIO-7), loss of nesting birds (Impact BIO-8), or impacts associated with increased instances of electrocution and/or collision by birds and bats caused by transmission lines (Impact BIO-10) or maintenance activities (Impact BIO-11), and conflicts with local plans (Impact BIO-12). While the construction of metallic buildings may increase perching opportunities at the site, the installation of perch deterrents on project components (including buildings) is included in Mitigation Measure BIO-10, and therefore, operational impacts to linkages or wildlife movement corridors (Impact BIO-9) would be reduced to less-than-significant (Class II) levels.

Comparison to the Proposed Project

As mentioned previously, impacts to biological resources associated with the Goodrich South Campus Site – Gas Insulated Substation Alternative would be similar those identified in Section D.5.4.6.1 for the Air Insulated Substation Alternative. Therefore, comparison of impacts associated with the Goodrich South Campus Site – Gas Insulated Substation Alternative to the Proposed Project would be similar to comparison of impacts presented in Section D.5.4.6.1 for the Goodrich South Campus Site – Air Insulated Substation Alternative to the Proposed Project.

D.5.4.7 H Street Yard Site Alternative

Existing Setting

While the approximately 47-acre H Street Yard site is primarily composed of urban/developed lands (37.4 acres) and disturbed habitat (9.1 acres), sensitive vegetation (0.38 acres of southern coastal salt marsh and 0.4 acres of non-native grasslands) is also present on site. Disturbed habitat occurs in the easternmost portion of the site, between Walnut Avenue and Bay Boulevard, and consists of an isolated swath of land dotted with irregular clumps of low-growing shrubs/weeds. With the exception of sensitive vegetation (southern coastal salt marsh and non-

native grasslands) located along a portion of the southern border of the site, the remainder of the site is characterized as urban/developed and is a paved industrial lot, portions of which are currently used for outdoor storage of boats and gravel.

The environmental setting for the Air Insulated Substation and Gas Insulated Substation Alternatives at the H Street Yard Site would be the same, and therefore, environmental setting is not further discussed in Sections D.5.4.7.1 and D.5.4.7.2.

D.5.4.7.1 H Street Yard Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

It is assumed that SDG&E would site the new substation along the northern boundary of the site, south of H Street and adjacent to the existing SDG&E transmission corridor, to both avoid impacts to on-site southern coastal salt marsh and non-native grasslands (both of which would require habitat compensation for permanent disturbance) and to reduce the length of necessary interconnections between the new substation and transmission facilities in the existing transmission corridor to the east. Therefore, assuming this general location, construction of the Air Insulated Substation Alternative at the H Street Yard site would avoid impacts to both southern coastal salt marsh and non-native grasslands and would instead permanently impact approximately 10 acres of urban/developed land. While the substation component of this alternative is not anticipated to impact sensitive native vegetation, the Air Insulated Substation Alternative may result in temporary impacts to native vegetation as a result of transmission interconnection work (the dismantling and removal of the existing South Bay Substation under this alternative would generate similar impacts as previously identified in Section D.5.3.3 for the Proposed Project), and impacts to sensitive native vegetation would be considered a significant impact. To reduce impacts to native vegetation, SDG&E would conduct construction activities in accordance with NCCP operational protocols (APM-BIO-01), would require a biological monitor to be present during all vegetation removal processes (APM-BIO-02), and would implement Mitigation Measure BIO-11. Implementation of the measures identified previously would ensure that impacts to sensitive native vegetation would be reduced to less-than-significant (Class II) levels.

While the H Street Yard Site – Air Insulated Substation Alternative would be sited to avoid impacts to on-site southern coastal salt marsh, construction of the transmission interconnection component of the project could result in temporary and permanent impacts to jurisdictional wetlands/waters. Although the extent of impacts is unknown at this time, the presence of jurisdictional waters/wetlands south of the site (specifically, in the vicinity of the South Bay Power Plant) suggests there is potential for pole replacement/work areas and water crossings to disturb wetland resources. Although SDG&E would avoid wetland features to the extent

possible, impacts would be considered significant; therefore, Mitigation Measure BIO-3 would be implemented to reduce impacts to wetlands (Impact BIO-2) to a less-than-significant level (Class II).

Ground-disturbing activities during construction at the H Street Yard site (the removal of existing concrete/pavement at the substation site would be required), as well during construction associated with other project components (i.e., dismantling of the existing South Bay Substation, transmission alignment work areas), could expose soils and allow invasive and non-native species to become established (increased human and vehicular activities in the area would also have the potential to introduce invasive and non-native species seeds into the area). The establishment of invasive species in the project area would potentially degrade plant and animal habitat, which would be considered a significant impact. Implementation of Mitigation Measure BIO-4 would reduce the impact to less than significant (Class II).

In addition to dismantling the South Bay Substation and construction activities associated with the transmission interconnections, construction activities at the H Street Yard site may generate dust that could cover plants and vegetation communities in the area, which could degrade plant and wildlife habitat through burial or interruption of photosynthesis. Implementation of Mitigation Measure BIO-5 would reduce this impact (Impact BIO-4) to less-than-significant levels (Class II). Although the H Street Yard site is composed of urban/developed lands that are not anticipated to support sensitive plants or habitat for listed or sensitive plants, construction of transmission interconnections could result in temporary and permanent impacts. Implementation of APM-BIO-01 and APM-BIO-02 would ensure that impacts associated with the direct or indirect loss of sensitive plants (Impact BIO-5) are less than significant (Class III). Lastly, during construction, the potential for disturbance of common wildlife would not rise to a level of significance, and mitigation measures implemented under Impact BIO-7 to avoid, minimize, and mitigate construction-related impacts to special-status wildlife would also be protective of common wildlife species. Therefore, potential impacts associated with the disturbance of wildlife (Impact BIO-6) would be less than significant (Class III).

The portion of the site on which the new substation would be located is mapped as urban/developed, and therefore, construction activities at the H Street Yard site would not result in impacts to sensitive wildlife or direct loss of habitat for listed or sensitive wildlife. Although direct impacts to traditional nests would not occur (there are no trees at the identified portion of the site), impacts to burrowing owls could occur if owls elect to use man-made or opportunistic, non-traditional locations created by construction activities and materials for nesting or during winter. Impacts to sensitive wildlife (Impact BIO-7) including burrowing owls would be reduced to less-than-significant (Class II) levels through implementation of Mitigation Measure BIO-6. Construction of this alternative (in particular, construction of the transmission interconnections)

could also potentially impact sensitive wildlife at the San Diego NWR; therefore, Mitigation Measures BIO-7, BIO-8, and BIO-11 would be implemented to reduce impacts to less-than-significant (Class II) levels.

Nesting opportunities are generally located along the on-site southern coastal salt marsh vegetation (along the southern border of the site) as well as in the vicinity of the transmission interconnections, and indirect impacts to nesting birds are considered significant. Therefore, Mitigation Measure BIO-7 would be implemented to ensure that impacts to nesting birds (Impact BIO-8) are reduced to less-than-significant (Class II) levels. Additionally, construction of the transmission interconnection component of the project would involve helicopter activities in close proximity to the San Diego NWR, which could impact special-status avian species nesting within the refuge (Impact BIO-9). If construction noise levels were to exceed 60 dBA Leq(h) during the breeding season between February 15 and September 1~~5~~, impacts would be considered significant. SDG&E would implement APMs (APM-BIO-01 and APM-BIO-03) and mitigation measures (Mitigation Measures BIO-7, BIO-8, and BIO-11) to reduce construction impacts to less-than-significant (Class II) levels. Operational impacts to linkages and corridors (Impact BIO-9) would be reduced to less than significant (Class II) through implementation of Mitigation Measure BIO-9. Implementation of APM-BIO-04, which requires SDG&E to construct structures to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors, would reduce potential impacts associated with electrocution and collision of sensitive bird and bat species (Impact BIO-10) with transmission lines and structures to less than significant (Class III). Current industrial activity in the vicinity of the H Street Yard site suggests that impacts to wildlife generated by maintenance activities (Impact BIO-11) would be less than significant (Class III). Lastly, as with the Proposed Project, the construction of a new substation would not be subject to local plans, and therefore, no impacts with local plans or regulations established for the protection of biological resources (Impact BIO-12) would occur.

Comparison to the Proposed Project

Because temporary and permanent impacts associated with the new substation at the H Street Yard site would be limited to urban/developed lands, impacts to native vegetation communities (Impact BIO-1) and jurisdictional waters/wetlands (Impact BIO-2) would be less than those of the Proposed Project (overall impacts would, however, remain less than significant (Class II) with mitigation due to impacts associated with transmission interconnections). Because similar construction activities would be required, BIO-3 impacts associated with this alternative would be similar to those of the Proposed Project (less than significant (Class II) with mitigation). The urban/developed portion of the H Street Yard site lacks sensitive vegetation, and therefore, impacts including degradation of vegetation due to construction-generated dust (Impact BIO-4)

as well as the direct loss of listed or sensitive plants/direct loss of habitat for listed or sensitive plants (Impact BIO-5) would be reduced when compared to the Proposed Project; however, overall impacts (considering all other project components) would remain less than significant (Class II) with implementation of mitigation. Impacts associated with disturbance of wildlife/wildlife mortality (Impact BIO-6) would be similar to the Proposed Project (Class III). Due to the urban/developed nature of the H Street Yard site, BIO-7 impacts (impacts to sensitive wildlife species/habitat) under this alternative would be reduced when compared to those of the Proposed Project; however, similar to the Proposed Project, overall impacts would be less than significant (Class II) with mitigation. Due to fewer overall nesting locations (the H Street Yard site contains fewer nesting opportunities (trees) than the proposed Bay Boulevard Substation site) impacts to nesting birds (Impact BIO-8) would be reduced; however, this alternative would still involve project components in the vicinity of the San Diego NWR; therefore, overall impacts will remain similar to the Proposed Project (less than significant (Class II) with implementation of mitigation).

Compared to the proposed Bay Boulevard Substation, the new substation at the H Street Yard site would be located farther from the San Diego NWR; therefore, potential impacts to nesting birds at the refuge, as well as conflicts with linkages and corridors (Impact BIO-9), would be less than those of the Proposed Project. However, this alternative would still include construction activities (i.e., transmission interconnection work and dismantling of the South Bay Substation), which would occur in locations similar to those previously analyzed in Section D.5.3 for the Proposed Project; therefore, overall BIO-9 impacts would be similar to those of the Proposed Project (less than significant (Class II) with implementation of mitigation). Because similar transmission interconnection components are anticipated, BIO-10 impacts associated with the presence of transmission lines and increased potential for electrocution and collisions by bats and birds under this alternative would be similar to those of the Proposed Project. Current industrial and commercial activity near the H Street Yard site would reduce the potential for impacts to wildlife during maintenance activities (Impact BIO-11), and impacts would, therefore, be similar (less than significant (Class III)) to those of the Proposed Project. Finally, as with the Proposed Project, the construction of a new substation at the H Street Yard site would not be subject to local plans, and therefore, BIO-12 impacts under this alternative would be similar to those identified for the Proposed Project (No Impact).

D.5.4.7.2 H Street Yard Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

With the exception of reduced impacts to urban/developed lands (6 acres for the Gas Insulated Substation Alternative compared to 10 acres for the Air Insulated Substation Alternative),

impacts to biological resources associated with the H Street Yard Site – Gas Insulated Substation Alternative would be similar to those characterized in Section D.5.4.7.1 for the Air Insulated Substation Alternative. The installation and use of metallic buildings (and placement of select substation equipment within the buildings) would not substantially alter the severity of impacts associated with the introduction of non-native species (Impact BIO-3), generation of dust and subsequent degradation of surrounding habitat (Impact BIO-4), loss of sensitive plants and disturbance to wildlife (Impact BIO-5 and BIO-6), loss of sensitive wildlife or habitat of sensitive wildlife (Impact BIO-7), loss of nesting birds (Impact BIO-8), affects to linkages or corridors during construction (Impact BIO-9), or impacts associated with increased instances of electrocution and/or collision by birds and bats caused by transmission lines (Impact BIO-10) or maintenance activities (Impact BIO-11), and conflicts with local plans (Impact BIO-12). While the construction of metallic buildings may introduce additional perching opportunities at the site, select substation equipment normally located outdoors would instead be placed indoors, and the installation of perch deterrents on project components (including buildings) is included in Mitigation Measure BIO-10. Therefore, with implementation of Mitigation Measure BIO-10, operational impacts to linkages or wildlife movement corridors (Impact BIO-9) would be reduced to less-than-significant (Class II) levels.

Comparison to the Proposed Project

As mentioned previously, impacts to biological resources associated with the H Street Yard Site – Gas Insulated Substation Alternative would be similar those identified in Section D.5.4.7.1 for the Air Insulated Substation alternative. Therefore, comparison of impacts associated with the H Street Yard Site – Gas Insulated Substation Alternative to the Proposed Project would be similar to comparison of impacts presented in Section D.5.4.7.1 for the H Street Yard Site – Air Insulated Substation Alternative to the Proposed Project.

D.5.4.8 Bayside Site Alternative

Existing Setting

The approximately 38-acre Bayside site is composed of three vegetation communities (disturbed habitat and non-native grassland) and urban/developed lands. Non-native grassland (approximately 8.7 acres of the site) occurs in the northwestern portion of the site at two locations. The larger area (approximately 7.6 acres) is a rectangular lot located between Sandpiper Way on the east and Quay Avenue on the west; the smaller area (approximately 1.1 acres) is located in the northwestern-most corner of the Bayside site and is immediately adjacent to Bayside Park. Disturbed habitat (approximately 1.4 acres) also occurs immediately adjacent to the Bayside Park, west of Quay Avenue, and immediately north of Plover Way. The remainder

of the site (the approximate 27.9-acre portion of the site located east of Sandpiper Way) is paved and mapped as urban/developed lands.

D.5.4.8.1 Bayside Site – Air Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

This discussion assumes that SDG&E would locate the new substation along the northern boundary of the site, near the intersection of G Street and Marina Parkway, to avoid impacts to non-native grasslands. Therefore, assuming this general location, construction of the Air Insulated Substation Alternative at the Bayside site would avoid impacts to non-native grasslands, and instead permanent impacts to 10 acres of urban/developed land would occur. Therefore, the substation component of this alternative would not impact sensitive native vegetation; however, the Air Insulated Substation Alternative may result in temporary impacts to native vegetation as a result of transmission interconnection work (the dismantling and removal of the existing South Bay Substation under this alternative would generate similar impacts as previously identified in Section D.5.3.3 for the Proposed Project) occurring elsewhere in the project area, and impacts to sensitive native vegetation would be considered a significant impact. To reduce impacts to native vegetation, SDG&E would conduct construction activities in accordance with NCCP operational protocols (APM-BIO-01), require a biological monitor to be present during all vegetation removal processes (APM-BIO-02), and would implement Mitigation Measure BIO-11. Implementation of these measures would ensure that impacts to sensitive native vegetation would be reduced to less-than-significant (Class II) levels.

While jurisdictional waters/wetlands do not occur at the Bayside site and substation construction activities would not impact wetlands, construction of the transmission interconnection component of the project could result in temporary and permanent impacts to jurisdictional waters/wetlands. Although the extent of impacts is unknown at this time, the presence of jurisdictional waters/wetlands in the project area (specifically, in the vicinity of the South Bay Power Plant) could result in impacts to wetland resources during pole replacements and water crossings. While wetland features would be avoided to the extent possible, impacts would be considered significant; therefore, Mitigation Measure BIO-3 would be implemented to reduce impacts to wetlands (Impact BIO-2) to a less-than-significant level (Class II).

In addition to construction activities associated with dismantling of the existing South Bay Substation and transmission interconnections, excavation and other ground disturbance at the Bayside site (the removal of existing concrete/pavement at the identified portion of the site that would be required) would expose soils and allow invasive and non-native species to become established. In addition, increased human and vehicular activity would also have the potential to introduce invasive and non-native species seeds into the area. The establishment of invasive

species in the project area could potentially degrade plant and animal habitat in the area, which would be considered a significant impact. Implementation of Mitigation Measure BIO-4 would reduce the impact to less than significant (Class II).

Similarly, construction of a substation at the Bayside site (in addition to dismantling of the South Bay Substation and construction activities associated with the transmission interconnections) would generate dust that could cover plants and vegetation communities in the area and degrade plant and wildlife habitat. Implementation of Mitigation Measure BIO-5 would reduce this impact (Impact BIO-4) to less than significant (Class II). While the identified portion of the Bayside site (the area on which the substation would be located) consists of urban/developed lands that do not support sensitive plants, construction of the transmission interconnection would occur in both developed and natural areas; therefore, construction of this component has the potential to impact sensitive plants and their habitat. Implementation of APM-BIO-01 and APM-BIO-02 would ensure that impacts associated with the direct or indirect loss of sensitive plants (Impact BIO-5) are less than significant (Class III). Lastly, during construction, the potential for disturbance of common wildlife would not rise to a level of significance, and mitigation measures implemented under Impact BIO-7 to avoid, minimize, and mitigate construction-related impacts to special-status wildlife would also be protective of common wildlife species. Therefore, potential impacts associated with the disturbance of wildlife (Impact BIO-6) would be less than significant (Class III).

Impacts to sensitive wildlife or direct loss of habitat for sensitive wildlife are not anticipated to occur at the Bayside site due to the developed nature of the location on which the new substation would be located. Although direct impacts to traditional nests would not occur (there are no trees at the identified portion of the site), impacts to burrowing owls could occur if owls elect to use man-made or opportunistic, non-traditional locations created by construction activities and materials for nesting (or during winter). Impacts to sensitive wildlife (Impact BIO-7) including burrowing owls would be reduced to less-than-significant (Class II) levels through implementation of Mitigation Measure BIO-6. Construction of this alternative (in particular, construction of the transmission interconnections) could also potentially impact sensitive wildlife at the San Diego NWR, and therefore, Mitigation Measures BIO-7, BIO-8, and BIO-11 would be implemented to reduce impacts to less-than-significant (Class II) levels.

Although nesting opportunities are generally not located where the substation would potentially be sited, opportunities are generally located along Sandpiper Way as well as within ornamental vegetation in the SDG&E transmission corridor, and impacts to nesting birds are considered a significant impact. Therefore, Mitigation Measure BIO-7 would be implemented to ensure that impacts to nesting birds (Impact BIO-8) are reduced to less-than-significant (Class II) levels. Additionally, construction of the transmission interconnection component of the project would

involve helicopter activities in close proximity to the San Diego NWR and San Diego Bay, which could impact special-status avian species movement and nesting within the area (Impact BIO-9). If construction noise levels were to exceed 60 dBA Leq(h) during the breeding season, impacts would be considered significant. SDG&E would implement APMs (APM-BIO-01 and APM-BIO-03) and mitigation measures (Mitigation Measures BIO-7, BIO-8, and BIO-11) to reduce the impact to less-than-significant (Class II) levels. Operational impacts to linkages and corridors (Impact BIO-9) would be reduced to less than significant (Class II) through implementation of Mitigation Measure BIO-9. Construction of this alternative (in particular, construction of the transmission interconnections) could also potentially impact sensitive wildlife at the San Diego NWR; therefore, Mitigation Measures BIO-7, BIO-8, and BIO-11 would be implemented to reduce impacts to less-than-significant (Class II) levels. Existing industrial activity near the Bayside site would reduce the potential for impacts to wildlife during maintenance activities (Impact BIO-11), and impacts are considered less than significant (Class III). Finally, as with the Proposed Project, the construction of a new substation at the Bayside site would not be subject to local plans; therefore, BIO-12 impacts under this alternative would be similar to those identified for the Proposed Project (No Impact).

Comparison to the Proposed Project

Construction of the Air Insulated Substation at the Bayside site would result in temporary and permanent impacts to urban/developed lands and is not anticipated to impact native vegetation; therefore, impacts to native vegetation communities (Impact BIO-1) and jurisdictional waters/wetlands (Impact BIO-2) would be less than those of the Proposed Project (overall impacts would, however, remain less than significant (Class II) with mitigation due to impacts associated with transmission interconnections). Due to the developed nature of the alternative site, BIO-3 impacts associated with this alternative would be less than those of the Proposed Project; however, impacts would remain less than significant (Class II) with implementation of mitigation. The area identified for substation construction at the Bayside site lacks sensitive vegetation, and therefore, impacts including degradation of vegetation due to construction-generated dust (Impact BIO-4) as well as the direct loss of listed or sensitive plants/direct loss of habitat for listed or sensitive plants (Impact BIO-5) would be reduced when compared to the Proposed Project. However, overall impacts (considering all other project components) would remain less than significant (Class II) with implementation of mitigation. Impacts associated with disturbance of wildlife/wildlife mortality (Impact BIO-6) would be similar to the Proposed Project (Class III). Due to the urban/developed nature of the Bayside site substation location, BIO-7 impacts (impacts to sensitive wildlife species/habitat) under this alternative would be reduced when compared to those of the Proposed Project; however, similar to the Proposed Project, overall impacts would be less than significant (Class II) with mitigation. Due to fewer overall nesting locations (the Bayside site contains fewer nesting opportunities (trees) than the

proposed Bay Boulevard Substation site), impacts to nesting birds (Impact BIO-8) would be reduced; however, this alternative would still involve project components in the vicinity of the San Diego NWR; therefore, overall impacts will remain similar to the Proposed Project (less than significant (Class II) with implementation of mitigation).

Compared to the proposed Bay Boulevard Substation, the new substation at the Bayside site would be located farther from the San Diego NWR, and therefore, potential impacts to nesting birds at the refuge, as well as conflicts with linkages and corridors (Impact BIO-9), would be less than those of the Proposed Project. However, this alternative would still include construction activities (i.e., transmission interconnection work and dismantling of the South Bay Substation), which would occur in locations similar to those previously analyzed in Section D.5.3 for the Proposed Project; therefore, overall BIO-9 impacts would be similar to those of the Proposed Project (less than significant (Class II) with implementation of mitigation). Because similar transmission interconnection components are anticipated, BIO-10 impacts associated with the presence of transmission lines and increased potential for electrocution and collisions by bats and birds under this alternative would similar as those of the Proposed Project. Current industrial activity near the Bayside site would reduce the potential for impacts to wildlife during maintenance activities (Impact BIO-11), and impacts would, therefore, be similar (less than significant (Class III)) to those of the Proposed Project. Finally, as with the Proposed Project, the construction of a new substation at the Bayside site would not be subject to local plans, and therefore, BIO-12 impacts under this alternative would be similar to those identified for the Proposed Project (No Impact).

D.5.4.8.2 Bayside Site – Gas Insulated Substation Alternative

Environmental Impacts and Mitigation Measures

With the exception of reduced impacts to urban/developed lands (6 acres for the Gas Insulated Substation Alternative compared to 10 acres for the Air Insulated Substation Alternative), impacts to biological resources associated with the Bayside Site – Gas Insulated Substation Alternative would be similar to those characterized in Section D.5.4.8.1 for the Air Insulated Substation Alternative. The Gas Insulated Substation alternative (installation of metallic buildings, placement of select substation equipment within buildings, etc.) would not substantially alter the severity of impacts associated with introduction of non-native species (Impact BIO-3), generation of dust and subsequent degradation of surrounding habitat (Impact BIO-4), loss of sensitive plants and disturbance to wildlife (Impact BIO-5 and BIO-6), loss of sensitive wildlife or habitat of sensitive wildlife (Impact BIO-7), loss of nesting birds (Impact BIO-8), affects to linkages or corridors during construction (Impact BIO-9), or impacts associated with increased instances of electrocution and/or collision by birds and bats caused by

transmission lines (Impact BIO-10) or maintenance activities (Impact BIO-11), and conflicts with local plans (Impact BIO-12). While the construction of metallic buildings may introduce additional perching opportunities at the site, select substation equipment normally located outdoors would instead be placed indoors, and the installation of perch deterrents on project components (including buildings) is included in Mitigation Measure BIO-9. Therefore, with implementation of Mitigation Measure BIO-9, operational impacts to linkages or wildlife movement corridors (Impact BIO-9) would be reduced to less-than-significant (Class II) levels.

Comparison to the Proposed Project

As mentioned previously, impacts to biological resources associated with the Bayside Site – Gas Insulated Substation Alternative would be similar those identified in Section D.5.4.8.1 for the Air Insulated Substation Alternative. Therefore, comparison of impacts associated with the Bayside Site – Gas Insulated Substation Alternative to the Proposed Project would be similar to comparison of impacts presented in Section D.5.4.8.1 for the Bayside Site – Air Insulated Substation Alternative to the Proposed Project.

D.5.4.9 Environmental Impacts of the No Project Alternative

Under the No Project Alternative, none of the facilities associated with the project or alternatives evaluated in this EIR would be constructed, and therefore, none of the impacts discussed in this section would occur. However, under the No Project Alternative, SDG&E may be required to develop additional transmission upgrades. The anticipated upgrades, described in Section C.7 of this EIR, would primarily be located within developed areas, and therefore, it is anticipated that overall impacts to biological resources would be less than significant and would be reduced due to the elimination of construction activities associated with the proposed Bay Boulevard Substation and transmission interconnections.

D.5.5 Mitigation Monitoring, Compliance, and Reporting

Table D.5-7 shows the mitigation monitoring, compliance, and reporting program (MMCRP) for biological resources. CPUC is responsible for ensuring compliance with provisions of the monitoring program. The agency mitigation measures as well as the APMs that SDG&E has made part of the Proposed Project are listed.

Table D.5-7
MMCRP for Biological Resources

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Impact BIO-1 Construction activities would result in temporary and permanent loss of native vegetation. Impact BIO-5 Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants. Impact BIO-7 Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife	—	APM-BIO-01	SDG&E would conduct activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources.	SDG&E to implement NCCP Operational Protocols as defined and incorporate commitments into construction contracts.	CPUC to inspect periodically during construction to ensure SDG&E is conducting activities in accordance with NCCP Operational Protocols.	Prior to and during construction at all locations.
Impact BIO-5 Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants. Impact BIO-7 Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife	—	APM-BIO-02	A biological monitor would be present during all vegetation removal activities. Within 14 days prior to vegetation removal, the biological monitor would survey the site to ensure that no sensitive species would be impacted.	SDG&E to implement measure are defined.	CPUC to inspect periodically during construction to ensure on-site monitor presence and successful avoidance of sensitive species. SDG&E to provide survey documentation to CPUC regarding avoidance of sensitive species.	Prior to and during construction at all locations where vegetation removal is proposed.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Impact BIO-8 Construction activities would result in a potential loss of nesting birds (violation of the MBTA)	—	APM-BIO-03	If a raptor nest is observed during preconstruction surveys, a qualified biologist would determine if it is active. If the nest is deemed inactive, SDG&E, under the supervision of a biological monitor, would remove and dismantle the nest promptly from existing structures that would be affected by Proposed Project construction. Removal of nests would occur outside of the raptor breeding season (January to July). If the nest is determined to be active, it would not be removed and the biological monitor would monitor the nest to ensure nesting activities and/or breeding activities are not disrupted. If the biological monitor determines that Proposed Project activities are disturbing or disrupting nesting activities, the monitor would make recommendations to reduce the noise and/or disturbance in the vicinity of the nest.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide survey report documentation to CPUC regarding avoidance and USFWS/CDFG concurrence as necessary. CPUC to inspect periodically during construction in order to ensure successful avoidance if possible/or if not possible implementation of USFWS/CDFG approved measures deemed necessary.	Prior to and during construction for all areas identified as having suitable habitat for raptor species.
Impact BIO-10: Presence of transmission lines may result in electrocution of, and/or collisions by, listed or sensitive bird or bat species.	—	APM-BIO-04	Structures would be constructed to conform to the Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to help minimize impacts to raptors.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify through review of preconstruction plans. Effectiveness criteria: transmission structures conform to Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines*.	Prior to construction. This measure applies to all transmission structures.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Impact BIO-2: Construction activities would result in substantial adverse effects to jurisdictional waters, including wetlands, through vegetation removal, placement, or fill; erosion; sedimentation; and degradation of water quality.	—	APM-BIO-05 (replaced and superseded by Mitigation Measure BIO-3)	Permanent impacts to all jurisdictional resources would be compensated through ~~a combination of habitat restoration (i.e., establishment) and~~ habitat restoration at a minimum of a one-to-one ratio or as required by the permitting agencies.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide verification to CPUC of measure including authorizations from the appropriate jurisdictional agencies.	Prior to construction where impacts to potentially jurisdictional waters would occur.
Impact 5: Construction activities would result in direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants.		APM-BIO-06	Impacts to decumbent goldenbush would be minimized by avoiding impacts to individual plants to the maximum extent practical. If avoidance is not feasible, individual plants would be transplanted and relocated to an appropriate site (as determined by a qualified biologist) within the Proposed Project area. The plants would be located as close as possible to their original location and in the same orientation (e.g., with the west-facing side of the plant facing west when relocated). If relocation of decumbent goldenbush is not feasible, or if transplanted individuals are unsuccessful, seeds would be collected and used in restoration efforts following construction of the Proposed Project.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide verification to CPUC of measure including authorizations from the appropriate jurisdictional agencies.	Prior to and during construction for the Bay Boulevard Substation.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Impact BIO-1: Construction activities would result in temporary and permanent loss of native vegetation.	BIO-1	—	**Provide Habitat Compensation or Restoration for Permanent Impacts to Native Vegetation Communities.** Where impacts to disturbed coyote brush scrub and non-native grasslands cannot be avoided, SDG&E shall restore temporarily disturbed areas to pre-construction conditions following construction and deduct credits from the SDG&E Mitigation Credits for permanent impacts to sensitive communities, as stated in the SDG&E NCCP. Where on-site restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the applicant shall identify a habitat restoration specialist to be approved by the CPUC or that the resource agencies have indicated is acceptable to determine the most appropriate method of restoration. Restoration techniques can include hydroseeding, hand-seeding, imprinting, and soil and plant salvage, as discussed in Section 7.2.1 of the NCCP. Monitoring will include visual inspection of restored areas after 1 year. A second application may be made. If, after the second year, restoration is deemed unsuccessful, the USFWS and CDFG, in cooperation with SDG&E, shall determine whether the remaining loss shall be mitigated through a deduction from the	SDG&E to implement measures as defined and incorporate commitments into construction contracts.	SDG&E to provide documentation of habitat credit deductions to CPUC. CPUC to ensure that commitments have been incorporated into contract specifications. CPUC to inspect periodically to ensure that disturbed areas have been restored to pre-construction conditions. SDG&E to provide documentation to CPUC regarding revegetation status and USFWS/CDFG concurrence as necessary. Effectiveness criteria: temporarily disturbed areas are revegetated and meet identified success criteria. Permanent impacts to sensitive natural communities are mitigated through deduction of habitat credits.	Prior to, during, and following construction. This measure applies to all area where impacts to sensitive natural communities are unavoidable.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			SDG&E Mitigation Credits, or whether a third application would better achieve the intended purpose. The mitigation objective for impacted sensitive vegetation communities shall be restoration to pre-construction conditions as measured by species cover, species diversity, and exotic species cover. The cover of native species should increase while the cover of non-native or invasive species should decrease. Success criteria shall be established by comparison with reference sites. If, however, roots are not grubbed during temporary impacts, restoration/ hydroseeding may not be necessary. This applies to impacts greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E's mitigation credits at a 1:1 ratio. In addition, SDG&E shall mitigate for permanent impacts to disturbed coyote brush scrub at a ratio of 1.5:1 and non-native grasslands at a ratio of 1:1 for all permanent impacts that would result from construction activities. <u>These habitats require mitigation because they are considered sensitive habitats by the resource agencies, are potential habitat for sensitive species, and</u>			

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			provide foraging habitat for raptors. Evidence shall be provided to the CPUC that 7.55 acres of coastal sage scrub and 9.46 acres of non-native grasslands have been deducted from NCCP credits.			
Impact BIO-1: Construction activities would result in temporary and permanent loss of native vegetation.	BIO-2	—	**Topsoil Salvaging.** During construction, the upper 12 inches of topsoil (or less depending on existing depth of topsoil) shall be salvaged and replaced wherever open trenching ~~occurs~~ activities are required through open land with native vegetation (not including graded roads and road shoulders) for the installation of the underground banks.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify measure through review of preconstruction plans. CPUC to inspect periodically during construction in order to ensure that topsoil is salvaged and replaced. Effectiveness criteria: Topsoil is visibly salvaged and replaced at trench locations.	During construction where trenching occurs through open land.
Impact BIO-2: Construction activities would result in substantial adverse effects to jurisdictional waters, including wetlands, through vegetation removal, placement, or fill; erosion; sedimentation; and degradation of water quality.	BIO-3 (replaces and supersedes APM-BIO-05)	—	**Provide Habitat Compensation or Restoration for Permanent Impacts to Jurisdictional Resources**. Permanent impacts to all jurisdictional resources shall be compensated through a combination habitat creation (i.e., establishment) and habitat restoration at a minimum of a 4:1 ratio with at least 1:1 creation of new jurisdictional areas or as required by the permitting agencies. The creation/restoration effort shall be implemented pursuant to a habitat restoration plan, which shall include success	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide documentation of jurisdictional permit issuance and Habitat Restoration Plan to CPUC. Effectiveness criteria: Permanent impacts to jurisdictional resources are mitigated through habitat creation and habitat restoration. SDG&E obtains permits from agencies for impacts	Prior to construction. This measure applies to all areas where permanent impacts to jurisdictional resources are anticipated.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			criteria and monitoring specifications and shall be approved by the permitting agencies prior to construction of the project. A habitat restoration specialist will be designated and approved by the permitting agencies and will determine the most appropriate method of restoration. Restoration techniques may include hydroseeding, hand-seeding, imprinting, and soil and plant salvage. All habitat creation and restoration used as mitigation on public lands shall be located in areas designated for resource protection and management. All habitat creation and restoration used as mitigation on private lands shall include long-term management and legal protection assurances. Appropriate permits from the wetland resource agencies including ACOE, CDFG, RWQCB, and CCC for the impacts to wetlands and jurisdictional waters shall be provided to the CPUC prior to construction. Buffers for wetland areas shall be included as required by the wetland resource agencies.		to jurisdictional resources.	
Impact BIO-3: Construction and operation/ maintenance activities would result in the introduction of invasive, non-native, or	BIO-4	—	**Prepare and implement a Noxious Weeds and Invasive Species Control Plan.** A Noxious Weeds and Invasive Species Control Plan shall be prepared and reviewed by the California Department of Fish and Game and California Public Utilities	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to ensure that commitments have been incorporated into contract specifications. CPUC to inspect periodically to ensure that revegated	Prior to construction, during construction and after construction for all project areas.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
noxious plant species			Commission~~applicable permitting agencies~~. The plan shall be submitted to the CPUC at least 30 days prior to ground-disturbance activities. The plan shall be implemented during all phases of project construction ~~and operation~~. The plan shall include best management practices (BMPs) to avoid and minimize the direct or indirect effect of the establishment and spread of invasive plant species during construction that were not present prior to construction. Implementation of specific protective measures shall be required during construction, such as ~~cleaning vehicles prior to off-road use,~~ using weed-free imported soil/material and~~,~~ restricting vegetation removal~~, and requiring topsoil storage~~. Development and implementation of weed management procedures shall be used to monitor and control the spread of weed populations that were not present along the construction access and transmission line rights-of-way. ~~Vehicles used during construction shall be cleaned prior to operation off maintained roads. Existing vegetation shall be cleared only from areas scheduled for immediate construction work and only for the width needed for active construction activities.~~ Noxious weed management shall be conducted annually for 2 years to ~~prevent establishment and~~ limit the spread of		areas have been successfully protected from the introduction or establishment of invasive species in post-construction areas.	

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			localized invasive plant species. This shall include weed abatement efforts targeted at plants listed as invasive exotics by the California Exotic Plant Pest Council in its most recent "A" or "Red Alert" list. Pesticide/ herbicide use shall be limited to pre-emergent ~~non-persistent~~ pesticides and shall only be applied in accordance with label and application permit directions and restrictions for terrestrial and aquatic applications.			
Impact BIO-4: Construction activities would create dust that would result in degradation of vegetation	BIO-5	—	**Prepare and Implement a Dust Control Plan**. A Dust Control Plan shall be prepared and submitted to the California Public Utilities Commission. The project proponent shall (a) pave, apply water ~~three times~~ daily, as needed to control fugitive dust, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas if construction activity causes persistent visible emissions of fugitive dust beyond the work area; (b) pre-water sites as appropriate up to 48 hours in advance of clearing; (c) reduce the amount of disturbed area where feasible; (d) spray all dirt stock-pile areas daily as needed; (e) cover loads in haul trucks or maintain at least 6 inches of free-board when traveling on public roads; (f) pre-moisten prior to transport and import and export of dirt, sand, or loose materials; (g) sweep streets daily (with water	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to ensure that commitments have been incorporated into contract specifications. CPUC to inspect periodically to ensure dust control measure are being implemented as defined.	During construction for all project areas.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			sweepers) if visible soil material is carried onto adjacent public streets or wash trucks and equipment before entering public streets; (h) plant vegetative ground cover in disturbed areas as soon as possible following construction or in accordance with the landscape plan, taking into account the appropriate planting season; and (i) apply chemical soil stabilizers or apply water to form and maintain a crust on inactive construction areas (disturbed lands that are unused for 14 consecutive days); and (j) prepare and file with the CPUC a Dust Control Plan that describes how these measures would be implemented and monitored throughout construction.			
Impact BIO-7: Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife.	BIO-6	—	A survey shall be conducted within 30 days prior to initiation of construction by a qualified biologist in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) to determine the presence or absence of the burrowing owl in the Proposed Project site limits, plus 250 feet beyond. The survey results shall be provided to the CPUC within 14 days following completion of the surveys. In addition, the burrowing owl shall be looked for opportunistically as part of other surveys and the monitoring required during project construction. If the burrowing owl is	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide survey report documentation CPUC regarding avoidance and CDFG concurrence as necessary. CPUC to inspect periodically during construction in order to ensure successful avoidance if possible/or if not possible implementation of CDFG approved measures	Prior to and during construction for all areas in the Proposed Project site limits plus 250 feet beyond.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			absent, then no mitigation is required. If the burrowing owl is present, no disturbance shall occur within 160 feet of occupied burrows from ~~September 1 through January 31~~October 16 through March 31 or within ~~250~~ 660 feet of occupied burrows from April 1 through October 15 ~~February 1 through August 31~~ (CDFG ~~1995~~2012). During construction, any pipe or similar construction material that is stored on site for one or more nights shall be inspected for burrowing owls by a qualified biologist before the material is moved, buried, or capped. Passive relocation of owls shall be implemented prior to construction only at the direction of CDFG and only if the previously described occupied burrow disturbance absolutely cannot be avoided (e.g., due to physical or safety constraints). Relocation of owls shall only be implemented during the nonbreeding season (October 16 through March 31~~September 1 through January 31~~; CDFG ~~1995~~2012). Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows that are beyond 160 feet from the impact zone and that are within or		deemed necessary.	

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			contiguous to a minimum of 6.5 acres of preserved (or acquired and preserved, if not already preserved) foraging habitat for each relocated owl (single owl or owl pair). Passive relocation is accomplished by first creating two artificial burrows in contiguous, preserved foraging habitat (if no natural burrows exist) for each occupied burrow that would be impacted; and second, installing one-way doors on occupied burrow entrances so owls can leave the burrow but not reenter it. Following passive relocation, the area of impact and the preserved foraging habitat with alternate burrows are surveyed daily for 1 week to confirm owl use of alternate burrows before excavating burrows in the impact zone. All passive relocation shall be conducted by a biologist approved by CDFG. If the alternate burrows are not used by the relocated owls, then the applicant shall work with CDFG to provide alternate mitigation for burrowing owls. If the alternate burrows are used, no other mitigation shall be required. If it is not possible to preserve contiguous habitat on which to provide alternate burrows (e.g., on private land), and occupied owl burrows would be directly impacted, then the owls shall be passively			

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			relocated without the creation of alternate burrows prior to construction (relocation should only be implemented during the nonbreeding season (September 1 through January 31)). The loss of occupied owl habitat shall be mitigated by acquiring and preserving other occupied habitat elsewhere per the *Staff Report on Burrowing Owl Mitigation* (CDFG 1995~~2012~~) ~~and the *Burrowing Owl Survey Protocol and Mitigation Guidelines* (The Burrowing Owl Consortium 1993)~~, or as otherwise determined in consultation with the CDFG.			
Impact BIO-7: Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife. Impact BIO-8: Construction activities would result in a potential loss of nesting birds (violation of the MBTA).	BIO-7		If construction activities including but not limited to grading or site disturbance are to occur between February 15 and September 15, a nesting bird survey shall be conducted by a qualified avian biologist to determine the presence of nests or nesting birds within 500 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species such as but not limited to California horned lark, California least tern, western snowy plover, Caspian tern, gull-billed tern, and other nesting birds that may be disturbed by human activity. All ground-disturbance activity within 500 feet	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide survey report documentation to CPUC regarding avoidance and CDFG concurrence as necessary. CPUC to inspect periodically during construction in order to ensure successful avoidance if possible/or if not possible implementation of additional mitigation shall occur.	Prior to and during construction for all areas within 500 feet of construction activities.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			of an active nest will be halted until that nesting effort is finished. The on-site biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Work can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to CPUC. ~~If grading or site disturbance must occur within 500 feet of an active nest, Mitigation Measure BIO-8 shall be implemented.~~			
Impact BIO-7: Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife.	BIO-8		Prior to commencing any construction activity including ground disturbance, ~~Prior to completing any construction activity,~~ SDG&E shall provide a noise report to CPUC from a certified acoustician to document the noise levels that would result from proposed construction activities at the active nests identified under BIO-~~1~~7. In the event the report prepared by a certified acoustician indicates construction noise levels may exceed 60 dBA Leq(h) at nearby sensitive habitat areas and/or active nests, a temporary noise barrier shall be constructed to reduce noise levels to below 60 dBA Leq(h) where feasible or otherwise approved by the CDFG, to attenuate noise from construction	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide noise report documentation to CPUC. If noise walls are required, CPUC to verify construction of walls in the field. Effectiveness criteria – construction noise is attenuated to below the 60 dBA (Leq(h) threshold.	Prior to and during construction. This measure applies to construction activities that would generate noise in excess of established thresholds at active nests.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			equipment. The height and materials of the noise barrier would depend on several factors, including the construction noise level as well as distance from sensitive habitat areas and active nests. Depending on various geometric and design factors, a temporary noise barrier could attenuate construction noise by approximately 5 to 15 dB. If the installation of a temporary noise barrier is infeasible for specific construction activities, or if noise levels cannot be reduced below 60 dBA Leq(h), mufflers or other noise-suppression devices that exceed the original manufacturer's specifications shall be utilized to help reduce noise levels. Noise-monitoring equipment would be installed near active nests for areas where noise walls are infeasible to monitor noise levels during construction, and equipment would be turned off when not required for active construction activities. If noise levels still exceed 60 dBA Leq(h) at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged unless otherwise approved by the CDFG.~~In the event the report prepared by a certified acoustician indicates construction noise levels may exceed a 60 dBA Leq(h) at nearby~~			

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			~~sensitive habitat areas and/or active nests, a temporary noise barrier shall be constructed to reduce noise levels to below 60 dBA Leq(h). The height and materials of the noise barrier would depend on several factors, including the construction noise level as well as distance from sensitive habitat areas and active nests. Depending on various geometric and design factors, a temporary noise barrier could attenuate construction noise by approximately 5 to 15 dB.~~			

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Impact BIO-9: Construction or operational activities would adversely affect linkages or wildlife movement corridors, the movement of fish, and/or native wildlife nursery sites. Impact BIO-10: Presence of transmission lines may result in electrocution of, and/or collisions by, listed or sensitive bird or bat species.	BIO-9	—	SDG&E shall install ~~several rows of~~sufficient raptor perch deterrent devices (~~such as but not limited to using spikes available from Mission Environmental)~~ on the top of project components including buildings, structures, steel poles, and the lattice communication tower~~. These devices are intended~~ to discourage raptors~~birds~~ from landing on the surface and potentially preying on special-status ~~avian~~ wildlife species in the area. The condition of the raptor perch deterrent devices will be monitored on at least an annual basis and replaced if missing or showing signs of wear. ~~The installation of the raptor perch deterrent devices will reduce or avoid potential impacts from perching raptors on special-status birds nesting and foraging in the open habitat and especially within the refuge.~~	SDG&E to implement measures as defined and incorporate commitments into construction contracts.	SDG&E to provide deterrent plan to CPUC for review. CPUC to verify installation in the field. Effectiveness criteria: Perch deterrent devices are installed and raptors deterred from landing on vertical project components. Perching opportunities effectively minimized.	Prior to and during construction. This measure applies to all vertical project components including transmission poles, substation equipment, and communications tower.
Impact BIO-1 Construction activities would result in temporary and permanent loss of native vegetation.	BIO-10		~~Prior to construction, a qualified biologist shall review all proposed temporary work areas that will be utilized during construction. The review of all temporary work areas shall be used to determine if sensitive biological resources are present.~~ To the maximum extent feasible, ~~T~~temporary work areas (cable pull sites, jack-and-bore operations, etc.) shall be ~~c~~sited in locations that do not contain any sensitive habitat. A qualified biologist shall	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide documentation of review to CPUC. CPUC to verify erosion control measures through review of pre-construction plans. CPUC to verify implementation of erosion control measures and revegetation of temporarily disturbed areas in field.	Prior to, during, and immediately following construction. This measure applies to all temporary work areas.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			review all proposed temporary work areas for presence of sensitive biological resources, and submit a ~~A~~ letter signed by ~~a~~the qualified biologist ~~shall be submitted to the CPUC 30 days prior to construction in any temporary work area (cable pull sites, jack-and-bore operations, etc.)~~to the CPUC 30 days prior to construction that identifies whether any sensitive resources are present. Erosion control measures shall be implemented both during and following construction in accordance with the stormwater pollution prevention plan. All areas of temporary disturbance shall be returned to pre-construction conditions immediately following construction.		Effectiveness criteria: temporary work areas avoided sensitive habitat or, if not possible, temporarily disturbed areas are pre-construction conditions.	
Impact BIO-7: Construction activities would result in direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife. Impact BIO-9: Construction or operational activities would adversely affect linkages or wildlife movement corridors, the movement of fish, and/or	BIO-11		Helicopter activity during construction shall be restricted to the avian non-breeding season defined as between September 1~~56 through~~ and February 15~~4~~. Should helicopter activity be deemed necessary during the breeding season, a nesting bird ~~preconstruction~~ surveys~~s~~ shall be conducted by a qualified avian biologist to determine whether any nesting birds and/or active nests are present within the boundaries of the project. If nesting birds are present and/or an active nest is discovered, helicopter activity shall be postponed until a qualified avian biologist confirms that nesting is complete and the	SDG&E to implement measures as defined and incorporate commitments into construction contracts.	SDG&E to provide survey report documentation to CPUC regarding presence of nesting birds and USFWS/CDFG concurrence as necessary. Effectiveness criteria: In the event that helicopter activities must occur during the breeding season (February 28 through September 16), SDG&E receives approvals for activities	Prior to construction. This measure applies to helicopter activities associated with transmission pole/structure removal and overhead conductor installation.

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
native wildlife nursery sites.			young have fledged. Additionally, SDG&E shall coordinate with USFWS representative of the Sweetwater Marsh NWR and South San Diego Bay NWR (collectively, the San Diego Bay NWR), as well as the CDFG, to determine whether helicopter activities may potentially impact nesting birds within the reserves. Should helicopter activity be deemed necessary in the presence of known or potentially nesting birds following surveys, the applicant shall coordinate with USFWS to determine whether the occurrence of helicopter activity is acceptable during the breeding season at the proposed locations. Documentation of USFWS–approved helicopter use shall be provided to CPUC prior to helicopter activities occurring in the event that USFWS determines helicopter activities are permitted between February 15 and August 31.~~within 4,500 feet of the proposed helicopter operation. If nesting birds are present and/or an active nest is discovered, helicopter activity shall be postponed until nesting is complete and the young have fledged. Should helicopter activity be deemed necessary in the presence of known nesting birds following surveys, the applicant shall coordinate with USFWS to determine whether the occurrence of helicopter activity is acceptable during the breeding season at the proposed locations.~~		from USFWS and CDFG.	

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Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			~~Documentation shall be provided to CPUC prior to helicopter activities occurring in the event that USFWS determines helicopter activities are permitted between September 16 and February 28.~~			

D.5.6 References

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

16 U.S.C. 703–712. Migratory Bird Treaty Act, as amended.

16 U.S.C. 1531–1544. Endangered Species Act of 1973, as amended.

40 CFR 232.2. 404 Program Definitions; Exempt Activities Not Requiring 404 Permits: Definitions.

50 CFR 10.13. List of Migratory Birds.

ACOE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetland Delineation Manual.* Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1 (online edition). Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987.

ACOE. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008.

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

APLIC (Avian Power Line Interaction Committee). 1994. *Mitigating Bird collisions with Power Lines: The State of the Art in 1994*. Washington, D.C.: Edison Electric Institute/Raptor Research Foundation.

Bauder, E.T., and S. McMillan. 1998. "Current Distribution and Historical Extent of Vernal Pools in Southern California and Northern Baja California, Mexico." In *Ecology, Conservation, and Management of Vernal Pool Ecosystems – Proceedings from a 1996 Conference*, edited by C.W. Witham, E.T. Bauder, D. Belk, W.R. Ferren Jr., and R. Ornduff, 56–70. Sacramento, California: California Native Plant Society.

Boarman, W.–I. 1992. ;—"Problems with Management of a Native Predator on a Threatened Species:

Raven Predation on Desert Tortoises." In *Proceedings of the Fifteenth Vertebrate Pest Conference 1992*. Accessed October 2012. http://digitalcommons.unl.edu/ vpc15/8.

Bosler, A. 2011. "Perching Preference of Raptors in Three Urban Southern California Salt Marshes." Master's thesis;. California State University, Long Beach.

~~The California Burrowing Owl Consortium. 1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines*. April 1993.~~

California Public Resources Code, Section 30000–30900. The California Coastal Act of 1976, as amended.

California Water Code, Section 13000–16104. Porter-Cologne Water Quality Control Act, as amended.

CCC (California Coastal Commission). 2010. *Staff Recommendations on Consistency Determination*. Consistency Determination No. CD-033-10. Determination regarding the Department of the Navy's Silver Strand Training Complex expansion. June 7, 2010.

~~CDFG (California Department of Fish and Game). 1995. *Staff Report on Burrowing Owl Mitigation.* October 17, 1995.~~

CDFG (California Department of Fish and Game), California Natural Diversity Datab~~-B~~ase. 2011a. Special Animals. Biannual publication, mimeo. July. 59 pp.

CDFG, California Natural Diversity Datab~~-B~~ase. 2011b. State and Federally Listed Endangered and Threatened Animals of California. Biannual publication, mimeo. January. ~~13 pp.~~

CDFG, California Natural Diversity Data Base. 2011c. Special Vascular Plants, Bryophytes, and Lichens List. Biannual publication, mimeo. January. 85 pp.

CDFG, California Natural Diversity Data Base. 2011d. Rarefind Version 4. On-line database.

CDFG. 2012. *Staff Report on Burrowing Owl Mitigation*. Unpublished report. Sacramento, California: CDFG.

City of Chula Vista. 1995. Chula Vista Municipal Code, Title 19, Zoning and Specific Plans, Chapter 19.81–19.86, Bayfront Specific Plan.

City of Chula Vista. 2003. *City of Chula Vista Subarea Plan*. February 2003.

City of Chula Vista. 2004. City of Chula Vista Subarea and Planning Area Map. January 26, 2004.

City of Chula Vista. 2005a. *City of Chula Vista Vision 2020 General Plan*, Chapter 9, ~~"~~Environmental Element.~~"~~ Adopted December 13, 2005.

City of Chula Vista. 2005b. Chula Vista Municipal Code, Title 17, Environmental Quality, Chapter 17.35, Habitat Loss and Incidental Take. January 2005.

CNDDB (California Natural Diversity Database). 2010. GIS data.

CNPS (California Native Plant Society). 2001. *Inventory of Rare and Endangered Vascular Plants of California*. Sixth edition. Sacramento, California: CNPS.

CNPS. 2011. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, C~~A~~alifornia. Accessed on Tuesday, January 18, 2011.

CPUC (California Public Utilities Commission). 2005. Final Environmental Impact Report for SDG&E Otay Mesa Power Purchase Agreement Transmission Project. Prepared by Dudek. May 2005.

Digital Globe. 2008. GIS data.

Dudek. 2010a. Early consultation meeting with U.S. Fish and Wildlife Service, California Department of Fish and Game, and Army Corps of Engineers. December 16, 2010.

Dudek. 2010b. GIS analysis of files provided by SDG&E used in preparation of the June 2010 PEA. November 2010.

Erickson, W., G. Johnson, and D.P. Young~~,~~ Jr. 2005. *A Summary and Comparison of Bird M ortality from Anthropogenic Causes with an Emphasis on Collisions*. USDA Forest Service Gen. Tech. Rep. PSW-GTR-191, 1029–1042.

Insignia Environmental. 2011a. Biological Resources Technical Report for the South Bay Substation Relocation Project. May 2011.

Insignia Environmental. 2011b. Gas Insulated Substation Technology Alternative Description and Preliminary Impact Analysis for the South Bay Substation Relocation Project . May 2011.

Kerlinger, P. 2000. *Avian Mortality at Communication Towers: A review of Recent Literature, Research, and Methodology*. Prepared for USFWS Office of Migratory Bird Management. Accessed on 9/7/2011. http://library.fws.gov/Pubs9/avian_mortality00.pdf.

Longcore, T., and C. Rich. 2004. "Ecological Light Pollution." *Frontiers in Ecology and the Environment*. 2(-4)5:191–198.

Merkel & Associates *Inc. 2010. South Bay Substation Relocation Project, City of Chula Vista California, Preliminary Jurisdictional Wetland Delineation Report*. June 11, 2010.

Merkel & Associates. 2011. "90-Day Letter Report of Dry Season Survey Sampling for Federally Listed Brachiopods on the South Bay Substation Relocation Project, Located in Chula Vista, San Diego County." November 30, 2011.

Oles, L. 2007. "Effectiveness of Raptor Perch-Deterrent Devices on Power Poles for Reducing Secondary Effects on Prey Species." Accessed 9/21/2009. http://www.blm.gov/nstc/resourcenotes/respdf/RN84.pdf. Resource Note No. 84:-1–2.

Port District. 2010. *Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan*. SCH no. 2005081077. Prepared by Dudek. Encinitas, California: Dudek. April 2010.

SDG&E (San Diego Gas & Electric Company). 1995. *Subregional Natural Community Conservation Plan*. Prepared by the Real Estate Operations Department. December 15, 1995.

SDG&E. 2010a. *Proponent's Environmental Assessment (PEA) for the South Bay Substation Relocation Project*. Prepared by Insignia Environmental. June 2010.

SDG&E. 2010b. SDG&E Response to Data Request No. 3.Provided October 29, 2010.

SDG&E PEA. 2010. GIS data.

SDG&E. 2011. *South Bay Substation Relocation Project – Revised Table 1: Summary of Wetlands and Waters (Description of Water Features and Basis for Jurisdictional Determination).* September 2011.

Port District (Unified Port District of San Diego). 2009. *Port Master Plan.*

Port District. 2010. *Chula Vista Bayfront Master Plan and Port Master Plan Amendment.* April 2010.

USFWS (U.S. Fish and Wildlife Service). 2006. *San Diego Bay National Wildlife Refuge – Sweetwater Marsh and South San Diego Bay Units. Final Comprehensive Conservation Plan and Environmental Impact Statement.* August 2006.

USFWS and CDFG. 2011. "Comments on the Notice of Preparation of an Environmental Impact Report for the SDG&E South Bay Substation Relocation Project, Chula Vista, San Diego County, California (SCH #2011071031)." August 15, 2011.

ATTACHMENT D.5-1

Special-Status Plant and Wildlife Species with the Potential to Occur

Table 1
Special-Status Plant Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
San Diego thorn-mint (*Acanthomintha ilicifolia*)	1B.1 CE FT	Yes	Occurs in coastal scrub, valley and foothill grasslands, and vernal pools. Found at elevations between 30 and 3,000 feet in elevation. Blooms from April to June.	Marginal habitat is located within the southern portion of the Proposed Project area; however, suitable soils for this species are not present. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
California adolphia (*Adolphia californica*)	2.1	No	Occurs in chaparral, coastal scrub, and valley and foothill grasslands. Often occurs in clay substrate. Found at elevations from 150 to 2,500 feet. Blooms from December to May.	The Proposed Project area is outside of the known elevation range for the species. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Shaw's agave (*Agave shawii*)	2.1	Yes	Occurs in chaparral, coastal scrub, and valley and foothill grasslands. Primarily occurs in clay substrates. Found at elevations from 150 to 2,500 feet. Blooms from December to May.	No suitable habitat is present within the Proposed Project area, and the Proposed Project area is outside of the known elevation range for the species. Three CNDDB occurrences have been documented between 1 and 5 miles of the Proposed Project area, the most recent of which dates from 1998. However, this species was not observed during the May 2011 rare plant survey. **Low Potential**
San Diego bur-sage (*Ambrosia chenopodiifolia*)	2.1	No	Occurs in coastal scrubs. Found at elevations between 180 to 500 feet. Blooms from April to June.	The Proposed Project area is outside of the known elevation range for the species. No CNDDB occurrences are within 1 mile of the Proposed Project area however several records are within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Singlewhorl borrobrush (*Ambrosia monogyra*)	2.2	No	Occurs in chaparral and Sonoran desert scrub. Typically found in sandy substrate. Found at elevations less than 1,600 feet. Blooms from August to November.	Marginal habitat is located within the southern portion of the Proposed Project area; however, soils are not suitable. CNDDB occurrences are within 1 mile of the Proposed Project area. This species was not observed during the May 2011 rare plant survey. **Low Potential**
San Diego ambrosia (*Ambrosia pumila*)	1B.1 FE	Yes	Occurs in coastal scrub, valley and foothill grassland, and vernal pools. Often occurs in disturbed areas and sometimes occurs in alkaline areas. Found at elevations less than 1,400 feet. Blooms from April to October.	Marginal habitat is located within the southern portion of the Proposed Project area and within the seasonal ponds. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Moderate Potential**
Aphanisma (*Aphanisma blitoides*)	1B.2	Yes	Occurs in coastal bluff scrub, coastal dunes, and coastal scrub. Often found in sandy substrate. Found at elevations less than 1,000 feet. Blooms from March to June.	Very marginal habitat is located within the southern portion of the Proposed Project area. There is no coastal bluff scrub or coastal dunes present on site. No CNDDB occurrences are within 1 mile of the Proposed Project area; however there are old occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **No Potential**

[1] Explanation of state and federal listing codes:

Federal listing codes:
-FE: Federally Endangered Species
-FT: Federally Threatened Species
-FC: Candidate for Federal listing

California listing codes:
-CE: State-listed as Endangered
-CR: State-listed as Rare

CNPS lists:
-1B.1: Rare, threatened, or endangered in California or elsewhere; seriously threatened in California
-1B.2: Rare, threatened, or endangered in California or elsewhere; fairly threatened in California
-1B.3: Rare, threatened, or endangered in California or elsewhere; not very threatened in California
-2.1: Rare, threatened, or endangered in California only; seriously threatened in California
-2.2: Rare, threatened, or endangered in California only; fairly threatened in California

Table 1
Special-Status Plant Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
Dean's milk-vetch (*Astragalus deanei*)	1B.1	No	Occurs in cismontane woodland, coastal scrub, and riparian forest between 250 and 2,200 feet in elevation. Blooms from February to May.	The Proposed Project area is well outside of the known elevation range for the species. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there is one old record from 1963 within 5 miles. This species was not observed during the May 2011 rare plant survey. **No Potential**
Coastal dunes milk-vetch (*Astragalus tener* var. *titi*)	1B.1 FE CE	Yes	Occurs in coastal dunes and coastal prairie. Often found in vernally mesic areas. Found at elevations less than 165 feet. Blooms from March to May.	Marginal habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however there is one record within 5 miles that CNDDB considers to likely be extirpated. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Coulter's saltbush (*Atriplex coulteri*)	1B.2	No	Occurs in coastal dunes, coastal scrub, vernal pools, and valley and foothill grasslands but sea bluff is preferred. Typically found in alkaline or clay substrate. Found at elevations less than 1,500 feet. Blooms from March to October.	Marginal habitat is located within the southern portion of the Proposed Project area and seasonal ponds however there is no suitable sea bluff. No CNDDB occurrences are within 1 mile of the Proposed Project area; there are two records within 5 miles, however the records are over 60 years old. This species was not observed during the May 2011 rare plant survey. **Low Potential**
South coast saltscale (*Atriplex pacifica*)	1B.2	No	Occurs in coastal dunes, coastal scrub, and playas, often in disturbed conditions. Soils types include Huerhuero-Urban land and Linne clay. Usually the surrounding vegetation is open coastal sage scrub. Found at elevations less than 500 feet. Blooms from March to October.	Marginal habitat is located within the southern portion of the Proposed Project area however soils are appropriate for the species and the species often occurs in disturbed locations. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Moderate Potential**
Golden-spined cereus (*Bergerocactus emoryi*)	2.2	No	Occurs in chaparral, coastal scrub, and closed-cone coniferous forests. Often found in sandy substrate. Found at elevations less than 1,300 feet. Blooms from May to June.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
San Diego goldenstar (*Bloomeria clevelandii*)	1B.1	No	Occurs in chaparral, coastal scrub, valley and foothill grasslands, and vernal pool habitats. May occur in association with clay soils. Found at elevations from 165 to 1,525 feet. Blooms from April to May.	The Proposed Project site is outside of the species' known elevation range and no CNDDB occurrences have been documented within 5 miles of the Proposed Project area. Also, this species was not observed during the May 2011 rare plant survey. **No Potential**
Orcutt's brodiaea (*Brodiaea orcutti*)	1B.1	Yes	Occurs in closed-cone coniferous forests, chaparral, cismontane woodlands, meadows and seeps, alley and foothill grasslands, and vernal pools. Associated with mesic, clay, and sometimes serpentine soils. Found at elevations from 95 to 5,550 feet. Blooms from May to July.	Marginal habitat is present within the southern portion of the Proposed Project area where seasonal wetlands are present. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Round-leaved filaree (*California macrophylla*)	1B.1	No	Occurs in cismontane woodlands and valley and foothill grasslands. Associated with clay soils. Found at elevations from 45 to 3,935 feet. Blooms from March to May.	No suitable habitat is present within the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area this species was not observed during the May 2011 rare plant survey. **No Potential**
Lewis' evening primrose (*Camissonia lewisii*)	3	No	Occurs in coastal bluff scrub, cismontane woodlands, coastal dunes, coastal scrub, and valley and grasslands. Associated with sandy or clay soils. Found at elevations from sea level to 980 feet. Blooms from March to May (and occasionally into June).	No suitable habitat is present in the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **No Potential**
Wart-stemmed ceanothus (*Ceanothus verrucosus*)	2.2	Yes	Occurs in chaparral. Found at elevations less than 1,300 feet. Blooms from December to May.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles that are 30 to 60 years old. This species was not observed during the May 2011 rare plant survey. **Low Potential**

Table 1
Special-Status Plant Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*)	1B.1	No	Occurs in coastal dunes and coastal bluff scrub under 330 feet in elevation. Blooms from January to August.	Marginal habitat is located within the southern portion of the Proposed Project area however there is no coastal dune or coastal bluff on site. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are old occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **No Potential**
Orcutt's spineflower (*Chorizanthe orcuttiana*)	1B.1 FE CE	Yes	Occurs in maritime chaparral, closed-cone coniferous forest, and coastal sage scrub. Typically found in sandy openings. Found at elevations less than 400 feet. Blooms from March to May.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 5 miles of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **No Potential**
Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)	1B.2	No	Occurs in coastal scrub, chaparral, meadows and seeps, valley and foothill grasslands, and vernal pools. Often found in clay substrate. Found at elevations less than 5,000 feet. Blooms from April to July.	Marginal habitat is located within the southern portion of the Proposed Project area however there are no suitable soils for the species and it typically requires a clay lens formation. No CNDDB occurrences are within 1 mile of the Proposed Project area however there is an occurrence within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Salt marsh bird's-beak (*Cordylanthus maritimus* ssp. *maritimus*)	1B.2 FE CE	Yes	Occurs in coastal dunes, salt marshes, and swamps. Often found in slightly raised hummocks in salt marsh habitat. Also known to occupy the edge of salt pans. Found at elevations less than 100 feet. Blooms from May to October.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Summer holly (Comarostaphylis diversifolia spp. *diversifolia*)	1B.2	No	Occurs in chaparral and cismontane woodlands. Found at elevations from 95 to 2,590 feet. Blooms from April to June.	No suitable habitat is present in the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **No Potential**
San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*)	1B.1	No	Occurs in coastal scrub and chaparral at elevations less than 350 feet. Blooms from June to September.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area however there are two occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Orcutt's bird's-beak (*Dicranostegia* [*Cordylanthus] orcuttianus*)	2.1	Yes	Occurs in coastal scrub. Often found in seasonally dry drainages and upland adjacent to riparian habitat. Found at elevations less than 1,200 feet. Blooms from April to July. Can have rare blooms in March and September.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Otay tarplant (*Deinandra conjugens*)	1B.1 FT CE	No	Occurs in coastal scrub, valley grasslands, and foothill grasslands. Often found in clay substrate. Found in elevations less than 1,000 feet. Blooms from May to June.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Orcutt's dudleya (*Dudleya attenuate ssp. orcuttii)*	2.1	No	Occurs in coastal bluff scrub, chaparral, and coastal scrub and is associated with rocky or gravelly soils at elevations between 10 and 165 feet. It is a perennial herb that blooms from May to July.	No suitable habitat is present in the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **No Potential**
Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*)	1B.1	No	Occurs in coastal scrub, chaparral, and valley and foothill grassland. Often found in clay or serpentine substrate. Found at elevations less than 1,500 feet. Blooms from April to June.	Very marginal habitat is located within the southern portion of the Proposed Project area however soils are not appropriate. The species is concentrated in the northern portion of the county. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there is a single old occurrence within 5 miles. This species was not observed during the May 2011 rare plant survey. **No Potential**

Table 1
Special-Status Plant Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
Variegated dudleya (*Dudleya variegata*)	1B.2	Yes	Occurs in cismontane woodland, coastal scrub, chaparral, valley and foothill grassland, and vernal pools. Usually grows in small areas quite devoid of shrub cover even though scrub elements may occur nearby. Often found in clay substrate. Found at elevations less than 2,000 feet. Blooms from April to June.	Marginal habitat is located within the southern portion of the Proposed Project area however seasonal ponds are present. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Moderate Potential**
Sticky dudleya (*Dudleya viscida*)	1B.2	Yes	Occurs in coastal bluff scrub, chaparral, cismontane woodlands, and coastal scrub. Associated with rocky soils. Found at elevations between 35 and 1,804 feet. Blooms from May to June.	No suitable habitat is present in the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **No Potential**
Palmer's goldenbush (*Ericameria palmeri* var. *palmeri*)	1B.1	Yes	Occurs in coastal shrub typically in mesic areas. Found at elevations less than 2,000 feet. Blooms from July to November. July blooms are uncommon.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
San Diego button-celery (*Eryngium aristulatum* var. *parishii*)	1B.1 FE CE	Yes	Occurs in coastal scrub, valley and foothill grassland, and vernal pools. Typically in mesic areas. Found in elevations less than 2,000 feet. Blooms from April to June.	Marginal habitat is located within the southern portion of the Proposed Project area however the site does not contain suitable soils for the species. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Sand-loving wallflower (*Eryngium ammophilum*)	1B.2	Yes	Occurs in maritime chaparral, coastal dunes, and sandy openings in coastal scrub. Found at elevations between sea level and 200 feet. Blooms from February to June.	No suitable habitat is present in the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area. **No Potential**
Cliff spurge (*Euphorbia misera*)	2.2	No	Occurs in coastal bluff scrub, coastal scrub, and Mojavean desert scrub. Often found in rocky substrate. Found at elevations less than 1,700 feet. Blooms from December to August.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
San Diego barrel cactus (*Ferocactus viridescens*)	2.1	Yes	Occurs in chaparral, coastal scrub, valley and foothill grasslands, and vernal pools. Optimal habitat appears to be Diegan sage scrub hillsides, often at the crest of slopes and growing among cobble. Prefers xeric situations. Found at elevations less than 1,500 feet. Blooms from May to June.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Palmer's frankenia (*Frankenia palmeri*)	2.1	No	Occurs in coastal dunes, coastal salt marshes and swamps, and playas. Found at elevations less than 50 feet. Blooms from May to July.	Marginal habitat is located within the southern portion of the Proposed Project area; however, suitable dune and salt marsh habitat is not present. CNDDB occurrences are within 1 mile of the Proposed Project area. This species was not observed during the May 2011 rare plant survey. **Moderate Potential**
Mexican flannelbush (*Fremontodendron mexicanum*)	1B.1 FE CR	No	Occurs in chaparral, cismontane woodland, and closed-cone coniferous forests. Often occurs in gabbroic, metavolcanic, or serpentinite areas. Found at elevations less than 2,500 feet. Blooms from March to June.	Marginal habitat is located in the Proposed Project area however soils are not suitable. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there is one old occurrence within 5 miles. This species was not observed during the May 2011 rare plant survey. **No Potential**
Campbell's liverwort (*Geothallus tuberosus*)	1B.1	No	Occurs in coastal scrub and vernal pools. Found at elevations between 30 and 1,965 feet. The species is a bryophyte, meaning it is not a flowering plant; thus, there is no blooming period.	No suitable habitat is present in the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **No Potential**

Table 1
Special-Status Plant Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
Beach goldenaster (*Heterotheca sessiliflora* ssp. *sessiliflora*)	1B.2	No	Occurs in coastal chaparral, coastal dunes, and coastal scrub. Found at elevations below 4,000 feet. Blooms from March to December.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)	1B.2	No	Occurs in coastal scrub and chaparral. Often found in sandy substrate and disturbed areas. Found at elevations less than 450 feet. Blooms from April to November.	Marginal habitat is located within the southern portion of the Proposed Project area. CNDDB occurrences are within 1 mile of the Proposed Project area. This species was observed on the Proposed Project site during the May 2011 rare plant surveys. **Present**
San Diego marsh-elder (*Iva hayesiana*)	2.2		Occurs in marshes, swamps, and playas. Found at elevations between 35 and 1,700 feet. Blooms from April to October.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	1B.1	No	Occurs in coastal salt marshes and swamps, playas, and vernal pools. Found at elevations below 4,000 feet. Blooms from February to June.	Marginal habitat is located within the southern portion of the Proposed Project area, and potential vernal pools are present in the form of seasonal ponds. CNDDB occurrences are within 1 mile of the Proposed Project. This species was not observed during the May 2011 rare plant survey. **Moderate Potential**
Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*)	1B.2	No	Occurs in coastal scrub and chaparral below 2,900 feet in elevation. Blooms from January to July.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Sea Dahlia (*Leptosyne* [*Coreopsis] maritima*)	2.2	No	Occurs in coastal bluff scrub and coastal scrub. Found at elevations less than 500 feet. Blooms from March to May.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Nuttall's lotus (*Lotus nuttallianus*)	1B.1	Yes	Occurs in coastal dunes and coastal scrub. Usually occurs in sandy substrate. Found at elevations less than 100 feet. Blooms from March to June.	Marginal habitat is located within the southern portion of the Proposed Project area; however, suitable sandy soil is not present. CNDDB occurrences are immediately adjacent to the site, so although soils are not appropriate, the record means there is some potential to occur. This species was not observed during the May 2011 rare plant survey. **Moderate Potential**
Jennifer's monardella (*Monardellas stoneana*)	1B.2	No	Occurs in closed-cone coniferous forests, chaparral, coastal scrub, and riparian scrub. Often associated with rocky, intermittent streambeds. Found at elevations from 30 to 2,590 feet. Blooms from June to September.	No suitable habitat is present in the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **No Potential**
Willowy monardella (*Monardella viminea*)	1B.1 FE CE	No	Occurs within alluvial ephemeral washes in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodlands. Found at elevations from 160 to 735 feet. Blooms from June to August.	No suitable habitat is present in the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **No Potential**
Little mousetail (*Myosurus minimus* spp. *apus)*	3.1	Yes	Occurs in vernal pools and valley and foothill grasslands. Found at elevations between 65 and 2,100 feet. Blooms from March to June.	Marginal habitat is located within the seasonal basins in the Proposed Project area. One CNDDB occurrence has been documented within 5 miles of the Proposed Project area. This species was not observed during the May 2011 rare plant survey. **Low Potential**

Table 1
Special-Status Plant Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
Mud nama (*Nama stenocarpum*)	2.2	No	Occurs along lake margins and riverbanks associated with marshes and swamps. Found at elevations less than 1,700 feet. Blooms from January to July.	Marginal habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Spreading navarretia (*Navarretia fossalis*)	1B.1 FT	Yes	Occurs in chenopod scrub, playas, vernal pools, and marshes and swamps. Typically found in assorted shallow freshwater marshes and swamps. Found at elevations less than 4,300 feet. Blooms from April to June.	Marginal habitat is located along the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are recent occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Moderate Potential**
Prostrate vernal pool navarretia (*Navarretia prostrata*)	1B.1	No	Occurs in coastal scrub, meadows and seeps, vernal pools, and valley and foothill grasslands. Typically found in alkaline grasslands and mesic areas. Found at elevations less than 2,300 feet. Blooms from April to July.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles and the site contains seasonal pools. This species was not observed during the May 2011 rare plant survey. **Moderate Potential**
Coast woolly-heads (*Nemacaulis denudata* var. *denudata*)	1B.2	No	Occurs in coastal dunes. Found at elevations less than 350 feet. Blooms from April to September.	Marginal habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Slender cottonheads (*Nemacaulis denudata* var. *gracilis*)	2.2	No	Occurs in coastal dunes, desert dunes, and Sonoran desert scrub. Found at elevations between 165 and 1,400 feet. Blooms from April to May. Can have rare blooms in March.	The Proposed Project area is outside of the known elevation range for the species and no suitable dune habitat is present. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **No Potential**
Snake cholla (*Opuntia californica* var. *californica*)	1B.1	Yes	Occurs in chaparral and coastal scrub. Prefers xeric hillsides. Found at elevations between 100 and 500 feet. Blooms from April to May.	The Proposed Project area is outside of the known elevation range for the species. CNDDB occurrences are within 1 mile of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **Low Potential**
California Orcutt grass (*Orcuttia californica*)	1B.1 CE FE	Yes	Occurs in vernal pools. Found at elevations from 50 to 2,165 feet. Blooms April to August.	No suitable habitat is present in the Proposed Project area. No CNDDB occurrences have been documented within 5 miles of the Proposed Project area and this species was not observed during the May 2011 rare plant survey. **No Potential**
Baja California birdbush (*Ornithostaphylos oppositifolia*)	2.1 CE	No	Occurs in chaparral. Found in elevations between 180 and 2,700 feet. Blooms from January to April.	The Proposed Project area is outside of the known elevation range for the species. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Brand's star phacelia (*Phacelia stellaris*)	1B.1 FC	No	Occurs in coastal dunes and coastal scrub. Found at elevations less than 1,500 meters. Blooms from March to June.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Otay Mesa mint (*Pogogyne nudiuscula*)	1B.1 FE CE	Yes	Occurs in vernal pools, chaparral, and open grasslands. Often associated with gravelly or clay-loam substrates. The species only occurs in the Otay Mesa, northern Baja California, and Mexico. Blooms from May to June.	Marginal habitat is present in the Proposed Project area in the seasonal pools however there are no suitable soils. There is one CNDDB occurrence that has been documented between 1 and 5 miles of the Proposed Project area that was recorded in 2003. However, according to the CNDDB record, the occurrence is presumed to be a transplant from outside of the species' native habitat and range. This species was not observed during the May 2011 rare plant survey. **Low Potential**

Table 1
Special-Status Plant Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
Nuttall's scrub oak (*Quercus dumosa*)	1B.1	No	Occurs in chaparral, coastal scrub, and closed-cone coniferous forest. Often found in sandy or clay loam substrate. Found at elevations between 50 to 1,300 feet. Blooms from February to April.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Santa Catalina Island current (*Ribes viburnifolium*)	1B.2	No	Occurs in chaparral and cismontane woodland. Found at elevations between 100 to 1,000 feet. Blooms from February to April.	The Proposed Project area is outside of the known elevation range for the species. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Small-leaved rose (*Rosa minutifolia*)	2.1 CE	Yes	Occurs in chaparral and coastal scrub. Found at elevations between 450 and 550 feet. Blooms from January to June.	The Proposed Project area is outside of the known elevation range for the species. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **No Potential**
Chaparral ragwort (*Senecio aphanactis*)	2.2	No	Occurs in chaparral, cismontane woodland, and coastal scrub. Sometimes occurs in alkaline substrate. Found at elevations below 2,700 feet. Blooms from January to April.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Purple stemodia (*Stemodia durantifolia*)	2.1	No	Occurs in Sonoran desert scrub. Often found in mesic and sandy areas. Found at elevations between 550 and 1,000 feet. Blooms from January to December.	Marginal habitat is located within the southern portion of the Proposed Project area; however, suitable sandy soil is not present. CNDDB occurrences are within 1 mile of the Proposed Project area however they are 60 years old. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Oil neststraw (*Stylocline citroleum*)	1B.1	No	Occurs in chenopod scrub, coastal scrub, and valley and foothill grassland. Often found in clay substrate. Found at elevations between 160 and 1,300 feet. Blooms from March to April.	The Proposed Project area is outside of the known elevation range for the species. No CNDDB occurrences are within 1 mile of the Proposed Project area however, there are occurrences within 5 miles that are over 60 years old. This species was not observed during the May 2011 rare plant survey. **No Potential**
Estuary seablite (*Suaeda esteroa*)	1B.2	No	Occurs in coastal salt marshes and swamps. Found at elevations less than 20 feet. Blooms from May to October. Can have rare blooms in January.	Marginal habitat is located within the southern portion of the Proposed Project area; however, there is no permanent swamp or salt marsh habitat. CNDDB occurrences are within 1 mile of the Proposed Project area. This species was not observed during the May 2011 rare plant survey. **Low Potential**
Parry's tetracoccus (*Tetracoccus dioicus*)	1B.2	Yes	Occurs in coastal scrub and chaparral. Found at elevations between 540 and 3,300 feet. Blooms from April to May.	Marginal habitat is located within the southern portion of the Proposed Project area. One CNDDB occurrences is within 1 mile of the Proposed Project area however it is over 60 years old. This species was not observed during the May 2011 rare plant survey. **Low Potential**

Table 2
Special-Status Wildlife Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
Invertebrates				
Aquatic Invertebrate				
San Diego fairy shrimp (*Branchinecta sandiegonensis*)	FE	Yes	Inhabit fresh or saltwater vernal pools, pot holes, and other ephemeral pools. No individuals have been found in riverine waters, marine waters, or other permanent bodies of water. Well adapted to living in arid areas where water is present for only part of the year.	Suitable seasonal pool habitat is located in the Proposed Project area. Suitable Huerhuero soils at low slopes are present within the Proposed Project area. Several CNDDB occurrences are within 1.5 miles of the Proposed Project area within the Silver Strand area. Protocol wet season and dry season surveys were negative. ~~Protocol dry season surveys are underway.~~Therefore, although the species has high potential to occur, it is concluded to not be present onsite. **High Potential**
Riverside fairy shrimp (*Streptocephalus woottoni*)	FE	Yes	Inhabit lowland vernal pools that retain water through late spring. It can be considered a warm-water species and requires water with a pH range of approximately six to seven. Once eggs are hydrated, it usually takes between seven to 12 days for the shrimp to hatch.	Marginal habitat is present at the larger seasonal wetlands within the Proposed Project area; however, the pH within the seasonal wetlands is higher than would typically support the species and the ponds maybe be of unsuitable duration for the species. One CNDDB occurrence, which was recorded in 2001, has been documented for the species and is located within 5 miles of the Proposed Project area. Protocol wet season surveys were negative. Protocol dry season surveys are underway. **Moderate ǃPotential**
Butterflies				
Quino checkerspot butterfly (*Euphydryas editha quino*)	FE	No	Found from sea level to 3,000 feet in elevation. Requires open canopy scrub habitat with low-growing herbaceous annuals that include populations of the larval host plants, preferably dwarf plantain (*Plantago erecta*). Timing and abundance of rainfall affect host plant germination, growth, and senescence, which in turn affect survivorship of butterfly larvae. Typically requires a year to complete a life cycle, but the larvae can undergo long periods, possibly lasting years, in a dormant stage during especially dry winters or drought years. Cool, wet weather and winter rainfall stimulate host plant germination and feeding activities. Larval stage may be present in areas where the host plants are not in bloom.	Marginal habitat for host plants is located in the Proposed Project area. CNDDB occurrences are within 1.5 miles of the Proposed Project area; however, the records are no longer extant. Not observed during 2010 field surveys. In addition, the Proposed Project site is not located within the survey area recommended by the USFWS. **No Potential**
Wandering skipper (*Panoquina errans*)	Regionally Sensitive[2]	Yes	Found in salt marshes in coastal Southern California, coastal Baja California, and western Mexico. Utilizes saltgrass (*Distichlis spicata*), as well as other plant species, as a host plant during the larval stage.	Marginal habitat for this species is found on site, but saltgrass was not observed during the 2010 surveys or the wetland delineation, and no salt marsh habitat is present within the project area. There are no known occurrences within 1 mile of the project area; however, there are occurrences within 4 miles. It was not observed during 2010 field surveys. **Low Potential**
Vertebrates				
Reptiles				
Silvery legless lizard (*Anniella pulchra pulchra*)	CSC	No	Occurs in moist warm loose soil with plant cover. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often found under surface objects such as rocks, boards, driftwood, and logs. Can also be found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens in Southern California.	Marginal habitat is located in southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. Not observed during 2010 field surveys. **Low Potential**

[1] Explanation of state and federal listing codes:

Federal listing codes:
-FE: Federally listed as Endangered
-FT: Federally listed as Threatened
-FC: Candidate for Federal listing

California listing codes:
-CE: State-listed as Endangered
-CT: State-listed as Threatened
-CSC: California State Species of Concern
-CFP: Fully Protected by the State of California

[2] Regionally sensitive is a listing status for narrow endemic species in SDG&E's Natural Community Conservation Plan (NCCP). Narrow endemic species should be avoided, with the exception of work relating to emergencies and repairs of existing facilities.

Table 2
Special-Status Wildlife Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
Belding's orange-throated whiptail (*Aspidoscelis* [*Cnemidophorus*] *hyperythra*)	CSC	Yes	Frequents dry, often rocky hillsides; ridges and valleys that support coastal sage scrub; open chaparral; dry washes; and sparse grasslands mixed with sage scrub species.	Marginal habitat is located in the southern portion of the Proposed Project area and within the coyote brush scrub habitat. Suitable open and sparse vegetation is present. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are recent occurrences within 5 miles. Not observed during 2010 field surveys. **Moderate Potential**
Green Turtle (*Chelonia mydas*)			Occurs near shores along bays and estuaries and in open ocean waters. Found throughout the world in tropical and subtropical waters and known to occur in the San Diego Bay, including within the warm water discharge channel of the South Bay Power Plant (SBPP; no nesting has been known to occur within the San Diego Bay area).	No suitable habitat for green turtle is present within the Proposed Project area. There is one CNDDB occurrence that documents the species within 0.25 mile, and recent occurrences that documents the species within 1 to 5 miles. Green turtle is unlikely to occur in the Proposed Project area due to lack of suitable habitat and significant physical barriers, such as berms, that would prevent the species from entering the Proposed Project site from the San Diego Bay. Suitable habitat is present within the San Diego Bay, immediately west of the Proposed Project area. The species has not been observed during any of the field surveys for the Proposed Project. **Low Potential**
Northern red-diamond rattlesnake (*Crotalus ruber ruber*)	CSC	Yes	Inhabits arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, and cultivated areas. On the desert slopes of the mountains, ranges into rocky desert flats.	Marginal habitat is located in the Proposed Project area however there are no rocky habitat areas. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 5 miles. Not observed during 2010 field surveys. **Low Potential**
Coronado skink (*Eumeces skiltonianus interparietalis*)	CSC	Yes	Inhabits grassland, woodlands, pine forests, and chaparral, especially in open sunny areas such as clearings and the edges of creeks and rivers. Prefers rocky areas near streams with lots of vegetation. Also found in areas away from water.	Marginal habitat is located in the southern portion of the Proposed Project area however there are no rocky habitat areas. No CNDDB occurrences are within 5 miles of the Proposed Project area. Not observed during 2010 field surveys. **Low Potential**
San Diego horned lizard (*Phrynosoma coronatum blainvillei population*)	CSC	Yes	Typically found in open coastal sage scrub, chaparral, grasslands, and juniper and oak woodlands. It is more commonly found in open sandy washes with scattered shrubs used for cover. Typically require fine, loose, sandy soils where they can bury themselves, an abundance of native ants as a food source, and open areas for basking.	Marginal habitat is located in the Proposed Project area and includes grassland and coyote brush scrub. CNDDB occurrences are within 1 mile of the Proposed Project area and numerous locations are within 5 miles. Not observed during 2010 field surveys. **Moderate Potential**
Two-striped garter snake (*Thamnophis hammondii*)	CSC	Yes	Generally found around pools, creeks, cattle tanks, and other water sources. Often in rocky areas, oak woodland, chaparral, brushland, and coniferous forest.	Suitable habitat is located throughout the Proposed Project area within the seasonal pond and emergent vegetation. However, no CNDDB occurrences are within 5 miles of the Proposed Project area. Not observed during 2010 field surveys. **Moderate Potential**
Amphibians				
Western spadefoot (*Spea hammondii*)	CSC	Yes	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Requires rain pools that do not contain bullfrogs, fish, or crayfish.	Suitable habitat is located in the southern portion of the Proposed Project area within the seasonal pond habitat. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, occurrences are present within 5 miles. Not observed during 2010 field surveys. **Moderate Potential**
Birds				
Cooper's Hawk (*Accipiter cooperi*)	WL	Yes	Numerous in lowland and foothill canyons and in urban areas. Sparser in the mountains than in lower elevation. Found in coastal slopes wherever there are trees. Uses Eucalyptus (*Eucalyptus* spp.) and Oak (*Quercus* spp.) to nest.	Marginal habitat is located within the Proposed Project area within the small stands of eucalyptus trees. No riparian habitat is present within the Proposed Project area. No CNDDB occurrences are within 5 miles of the Proposed Project area. Not observed during 2010 field surveys. **Low Potential**
Southern rufous-crowned sparrow (*Aimophila ruficeps*)	WL	Yes	Prefers coastal lowlands and foothills with sage scrub, broken chaparral, and grassland scattered with shrubs. Avoids flat valley floors and floodplains, impenetrable chaparral, woodland, and developed areas. Rare above 4,000 feet.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 5 miles of the Proposed Project area. Not observed during 2010 field surveys. **Low Potential**
Short-eared owl (*Asio flammeus*)	CSC	No	Require broad expanses of open land with low vegetation such as grasslands or low-structured open shrublands for hunting and for nesting.	Suitable habitat is located within the southern portion of the Potential Project area. No CNDDB occurrences within 5 miles of the Proposed Project area. Not observed during 2010 field surveys; however, an owl pellet from an unidentified species was found within the Proposed Project site and the species has been recently

Table 2
Special-Status Wildlife Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
				observed south of the Proposed Project site. **Moderate Potential**
Western burrowing owl (*Athene cunicularia hypugaea*)	CSC	Yes	Lives in dry, open areas with no trees and short grass. Found on golf courses, cemeteries, airports, vacant lots, university campuses, pastures, and prairie dog towns. Nests in burrows, often dug by a mammal. Burrow can be several meters long, with numerous twists and turns. Often lined with horse or cow manure.	Potential foraging habitat is scattered throughout the Proposed Project area. No small mammal burrows were observed within the Proposed Project area, therefore; no suitable breeding habitat is present in the Proposed Project area. The species are known to occur in the Proposed Project area; there are no CNDDB occurrences are within a mile of Proposed Project area; however, there are occurrences within 5 miles. During previous SDG&E field surveys of the Proposed Project area, one western burrowing owl was observed in 2005. Not observed during 2010 field surveys. **Moderate Potential**
San Diego cactus wren (*Campylorhynchus brunneicapillus sandiegensis*)	CSC	Yes	Typically found on arid slopes with stands of cactus. Nests in cholla (*Opuntia* spp.) or other large branching cactus, yucca, or thorny shrubs and trees.	No suitable cactus habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area. **No Potential**
Western snowy plover (*Charadrius alexandrinus nivosus*)	FT; CSC	Yes	Winters in California on sparsely vegetated sand beaches, dry salt flats, dredge spoils, and salt evaporation ponds. Breeding occurs on dune-backed beaches, barrier beaches, and salt evaporation ponds. Breeding may begin as early as February.	No suitable salt flat or sparsely vegetated habitat is located in the Proposed Project area. Habitat is dominated by grassland which is not the preferred sparse condition. However, CNDDB occurrences are within 1 mile of the Proposed Project area. May forage directly outside the Proposed Project area. Not observed during 2010 field surveys. **Low Potential**
Northern harrier (*Circus cyaneus*)	CSC	Yes	Forages over meadows, grasslands, rangelands, desert sinks, and freshwater emergent wetlands. Nests in meadows and in both fresh and salt open marshlands.	Suitable foraging habitat is located within the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area. The species is known to occur in the Proposed Project area; however, it was not observed during 2010 field surveys. **Moderate Potential**
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FC CE	No	Prefers open woodlands with clearings and dense scrubby vegetation, often along water.	No suitable riparian habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there is a record within 5 miles. **No Potential**
White-tailed kite (*Elanus leucurus*)	CFP	No	Favor agricultural areas, grasslands, marshes, savannas, and other open land or sparsely wooded areas. Nests in riparian woodland, oaks, and sycamores. Forage in open, grassy areas.	Suitable foraging habitat is located within the southern portion of the Proposed Project area. Marginal nesting habitat in the form of the eucalyptus trees is also present within the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area. Not observed during 2010 field surveys. The species has been recently observed within the National Wildlife Refuge lands south of the Proposed Project area. **Moderate Potential**
~~California horned lark (*Eremophila alpestris*)~~	~~WL~~	~~No~~	~~Sometimes found in areas that are sparsely vegetated naturally, but usually found where some disturbance has thinned the vegetation or created openings. Grazing, maintenance of firebreaks, and grading preceding development are all factors.~~	~~Suitable foraging habitat and nesting habitat is located within the Proposed Project area. This species is known to occur in the Proposed Project area; however, no CNDDB occurrences are within 1 mile of the Proposed Project area. Two flocks of approximately fifteen individuals were observed during the 2010 field surveys in the central portion of the Proposed Project area near the north gated entrance.~~ ~~**Present**~~
American peregrine falcon (*Falco peregrinus*)	Delisted CFP; CE/CFP	Yes	Found in a variety of habitats, most with cliffs for nesting and open areas for foraging. Uses large cities and nests on buildings.	Marginal foraging habitat is located within the Proposed Project area. The species tends to forage over wetlands and is often observed foraging on ducks and shorebirds which are not present on the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, this species is known to nest in the salt ponds and likely forages within the entire region. No nesting opportunities are present on site. Not observed during 2010 field surveys. **Moderate Potential**
California black rail (*Laterallus jamaicensis coturniculus*)	CT	No	Breed in salt or freshwater marshes, where the ground is moist but not entirely submerged, and in grassy wet meadows. Migration and wintering habitats have not yet been observed with the exception of the resident California Black Rail, which occupies similar territories year round.	Although emergent vegetation habitat is located in the Proposed Project area; it is relatively small and narrow in configuration and hence unsuitable. In addition, the species is considered to be extirpated from San Diego County. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 2 miles. **No Potential**

Table 2
Special-Status Wildlife Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
Osprey (*Pandion haliaetus*)	CSC	No	Inhabits coastal areas and lowland lakes. Rarely found in foothill and mountain lakes. Tend to nest in man-made structures, generally found over water. Found mainly along the coast and coastal lowlands during the non-breeding season.	No foraging and marginal breeding habitat is located within the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, it is known to forage within the Sweetwater Marsh National Wildlife Refuge. Not observed during 2010 field surveys. **Low Potential**
Belding's savannah sparrow (*Passerculus sandwichensis beldingi*)	CE	Yes	Year-round resident that nests in tidal salt marshes or around lagoons in low vegetation dominated by pickleweed (*Salicornia* spp.). Foraging occurs in nearby mud flats, beaches, rocks, and low coastal strand vegetation.	Suitable foraging habitat is located within the Proposed Project area; however, no suitable nesting habitat in the form of pickleweed exists within the Proposed Project area. CNDDB occurrences are within 1 mile of the Proposed Project area. Not observed during 2010 field surveys. **Moderate Potential**
California brown pelican (*Pelecanus occidentalis californicus*)	Delisted CFP	Yes	Nests in colonies on offshore islands that are free of mammalian predators and human disturbance, are of sufficient elevation to prevent flooding of nests, and are associated with an adequate and consistent food supply. Roost communally, generally in areas that are near adequate food supplies, have some type of physical barrier to predation and disturbance, and provide some protection from environmental stresses such as wind and high surf. Uses breakwaters, jetties, sand spits and offshore sandbars extensively as daily loafing and nocturnal roost areas. Rarely found away from saltwater and does not normally venture more than 20 miles out to sea.	No suitable foraging or nesting habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, it is known to forage in the region. 1 California brown pelican was observed to the west of the Proposed Project area during the 2010 field survey. **Low Potential**
Coastal California gnatcatcher (*Polioptila californica californica*)	FT	Yes	Obligate, permanent resident of coastal sage scrub vegetation. Makes limited use of adjacent habitats outside of the breeding season.	Marginal habitat is located in the Proposed Project area; the coyote brush scrub, although a subtype of coastal sage scrub is isolated and small. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within four miles. **Low Potential**
Light-footed clapper rail (*Rallus longirostris levipes*)	FE CE	Yes	Very localized resident found primarily in lower salt marsh habitat, especially in areas dominated by cordgrass (*Spartina* spp.). Has also been found in virtually all marshlike habitats, including pickleweed (*Salicornia* ssp.) stands and freshwater marsh dominated by cattails (*Typha* spp.).	No suitable cordgrass or pickleweed habitat is located in the Proposed Project area. Although some freshwater marsh is present, the habitat area is small and very narrow and contains little cover. Clapper rails have been known to use emergent vegetation to move between other areas of habitat. However, CNDDB occurrences are within 1 mile of the Proposed Project area. Not observed during 2010 field surveys. **Moderate Potential**
Black skimmer (*Rynchops niger*)	CSC	No	Most breeding colonies are found on beaches or sand islands, particularly in coastal Southern California. In other parts of their range, they utilize sandbars, dredge spoil islands, or salt marshes where they will nest on mats of dead vegetation.	No suitable mudflat or beach habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area. May forage directly outside the Proposed Project area. Not observed during 2010 field surveys. **Low Potential**
California least tern (*Sterna antillarum browni*)	FE CE	Yes	Nest mainly in colonies along the coast. Historically, preferred colony sites were located on barrier dunes at river mouths, lagoon entrances, and along sandy strips of sparse coastal strand vegetation.	No suitable dunes or sandy strips of sparse vegetation are located in the Proposed Project area. However, CNDDB occurrences are within 1 mile of the Proposed Project area. May forage directly outside the Proposed Project area. Not observed during 2010 field surveys. **Low Potential**
Elegant tern (*Sterna elegans*)	CSC	Yes	Highly colonial nesters. Diverse nesting habitats include sandy and marshy coastal islands, and sandy islets in salt lakes. During the winter, found foraging in most bays and protected areas of north San Diego County, including, but not limited to, the mouth of the Santa Margarita River, Oceanside Harbor, Buena Vista Lagoon, Agua Hedionda Lagoon, and San Elijo Lagoon, and south to La Jolla Cove and Mission Bay. Typically found foraging singly or in groups of two or three. At times, found foraging in the outer salt crystallizer ponds of the San Diego Bay Salt Works.	No suitable dune or mudflat habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, it is known to occur within the area. May forage directly outside the Proposed Project area. Not observed during 2010 field surveys. **Low Potential**
Gull-billed tern (*Gelochelidon nilotica*)	CSC	No	Breeds on gravelly or sandy beaches. Winters in salt marshes, estuaries, lagoons and plowed fields. In winter, less frequently observed along rivers, around lakes, and in freshwater marshes.	No suitable mudflat or sandy beach habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, it is known to nest on North Island. May forage directly outside the Proposed Project area. Not observed during 2010 field surveys. **Low Potential**
Least Bell's vireo (*Vireo bellii pusillus*)	FE CE	Yes	Breed locally in willow riparian thickets with good overstory and understory vegetation. Critical habitat for the Bell's vireo has been designated along portions of the San Diego River and Sweetwater River.	No suitable riparian habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 4 miles. **No Potential**

Table 2
Special-Status Wildlife Species with the Potential to Occur

Species Name	Listing Status[1]	Covered under the NCCP (Yes/No)	Habitat Requirements	Potential to Occur
			Mammals	
Pallid bat (*Antrozous pallidus*)	CSC	No	Inhabits deserts, grasslands, shrublands, woodlands, and forests. Most commonly found in open, dry habitats with rocky areas. Roosts in rocky outcrops, snags, and abandoned manmade structures.	Marginal foraging habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area. Not observed during 2010 field surveys. **Low Potential**
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	CSC	Yes	Inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. Inhabits open, sandy areas of both the Upper and Lower Sonoran life zones of southwestern California and northern Baja California.	Marginal habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 4 miles. Not observed during the 2010 field surveys. **Low Potential**
Mexican long-tongued bat (*Choeronycteris mexicana*)	CSC	No	Occurs in a wide variety of habitats from arid thorn scrub to tropical deciduous forest and mixed oak-conifer forest. Preferred roosting sites appear to be mines, caves, and rock fissures.	No suitable roosting habitat is located in the Proposed Project area but the species could forage over the area. No CNDDB occurrences are within 1 mile of the Proposed Project area; however, there are occurrences within 2 miles. Not observed during the 2010 field surveys. **Low Potential**
Western mastiff bat (*Eumops perotis californicus*)	CSC	No	Inhabits arid and semiarid lowlands in the Lower Sonoran life zone of California. Primarily roosts in crevices in vertical cliffs, usually granite or consolidated sandstone, and in broken terrain with exposed rock faces. Also found occasionally in high buildings, trees, and tunnels. Roost sites may change from season to season. Due to its large size, needs vertical faces to drop from in order to take flight. Nursery roosts are found in tight rock crevices.	No suitable roosting habitat is located in the Proposed Project area but the species could forage over the area. No CNDDB occurrences are within 1 mile of the Proposed Project area. Not observed during the 2010 field surveys. **Low Potential**
San Diego black-tailed jackrabbit (*Lepus californicus bennetti*)	CSC	Yes	Generally occurs in open areas or semi-open country, typically in grasslands, agricultural fields, or sparse coastal sage scrub. Generally not found in chaparral or woodland habitats.	Suitable habitat is located throughout the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area. Not observed during 2010 field surveys. **Moderate Potential**
San Diego wood rat (*Neotoma lepida intermedia*)	CSC	Yes	Found in a variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Associated with cholla cactus (*Opuntia* spp.), used for water and dens.	Marginal habitat is located throughout the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area. No rocky or cactus dominated areas are present. Not observed during 2010 field surveys. **Low Potential**
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	CSC	No	Confined primarily to arid lowland areas. In California has been located only in the Lower and Upper Sonoran life zones, associated primarily with creosote bush and chaparral habitats. Found primarily in association with prominent rock features—very large boulder jumbles or rocky canyons. Crevice-dwelling species, usually associated with high cliffs and rugged rock outcroppings, also has been found in caves and buildings.	No suitable roosting habitat is located in the Proposed Project area but could forage over the site. No CNDDB occurrences are within 1 mile of the Proposed Project area. Not observed during the 2010 field surveys. **Low Potential**
Pacific pocket mouse (*Perognathus longimembris pacificus*)	FE CSC	Yes	Occur on fine-grain, sandy or gravelly substrates in the immediate vicinity of the Pacific Ocean. Known to occur on coastal strand, coastal dunes, river alluvium, and coastal sage scrub habitats on marine terraces. Occupied habitats for the three known populations are coastal sage scrub dominated by sagebrush (*Artemisia californica*) (Dana Point Headlands); mixed sage scrub and maritime chaparral sagebrush dominated by sagebrush and white sage (*Salvia apiana*) (San Mateo Creek), and the ecotone of coastal sage scrub and non-native grassland, white sage and slender buckwheat (*Eriogonum elongatum*) (Santa Margarita). Sandy soil comprises 10% to 20% of occupied habitat, and the understory includes the California croton (*Croton californicus*), an indicator species of sandy soils.	Marginal habitat is located in the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area. There is one CNDDB occurrence between 1 and 5 miles of the site however the record is over 60 years old. Not observed during the 2010 field surveys. **Low Potential**
American badger (*Taxidea taxus*)	CSC	Yes	Occurs primarily in grasslands, parklands, farms, and other treeless areas with friable soil and a supply of rodent prey. Also found in forest glades and meadows, marshes, brushy areas, hot deserts, and mountain meadows. Sometimes found at elevations up to 12,000 feet (3,600 meters) but are usually found in the Sonoran and Transition life zones (elevations lower and warmer than those characterized by coniferous forests). Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones. Not usually found in mature chaparral.	Marginal habitat is located within the southern portion of the Proposed Project area. No CNDDB occurrences are within 1 mile of the Proposed Project area; there is 1 record between 1 and 5 miles of the site. Not observed during 2010 field surveys. **Low Potential**