

TABLE OF CONTENTS

4.4 BIOLOGICAL RESOURCES..... 4.4-1
4.4.0 Introduction..... 4.4-2
4.4.1 Methodology..... 4.4-2
4.4.2 Existing Conditions..... 4.4-8
4.4.3 Impacts..... 4.4-58
4.4.4 Applicant-Proposed Measures 4.4-78
4.4.5 References..... 4.4-80

LIST OF TABLES

Table 4.4-1: Natural Communities and Other Land Covers within the BSA 4.4-17
Table 4.4-2: Special-Status Plants with the Potential to Occur in the BSA 4.4-23
Table 4.4-3: Special-Status Wildlife with the Potential to Occur in the BSA 4.4-37
Table 4.4-4: Summary of Jurisdictional Waters and Wetlands 4.4-58
Table 4.4-5: Anticipated Impacts on Sensitive Natural Communities in the Proposed Project
Construction Areas..... 4.4-72

LIST OF ATTACHMENTS

- Attachment 4.4-A: Natural Communities Map
- Attachment 4.4-B: Hydrological Features Map
- Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols

4.4 BIOLOGICAL RESOURCES

Will the Proposed Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States (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, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			✓	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			✓	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			✓	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

4.4.0 Introduction

This section of the Proponent’s Environmental Assessment describes the existing conditions related to biological resources within the TL674A Reconfiguration & TL666D Removal Project (Proposed Project) area¹ and the potential impacts that may result from the construction or the operation and maintenance (O&M) of the Proposed Project. The Proposed Project’s potential effects on biological resources were evaluated using the significance criteria set forth in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. Potential impacts to special-status species, sensitive natural communities, jurisdictional wetlands and waters, and migratory wildlife corridors are addressed herein. The Proposed Project is located within the planning areas of San Diego Gas & Electric Company’s (SDG&E’s) Subregional Natural Community Conservation Plan (NCCP), San Diego County’s Multiple Species Conservation Program (MSCP) (San Diego County 1997), San Diego County Water Authority’s (SDCWA’s) NCCP/Habitat Conservation Plan (HCP) (SDCWA 2010), and City of San Diego MSCP Subarea Plan (City of San Diego 1997). These plans were reviewed to confirm that the construction of the Proposed Project will not conflict with the aforementioned plans’ goals, objectives, and policies. With the implementation of SDG&E’s Subregional NCCP and the applicant-proposed measures (APMs) listed in Section 4.4.4 Applicant-Proposed Measures, impacts to biological resources from the Proposed Project will be reduced to a less-than-significant level.

4.4.1 Methodology

Biological resources data were obtained through a literature review of applicable reference materials and the following biological field surveys:

- jurisdictional waters assessments (2013 and 2016)
- natural community mapping (2013 and 2016)
- rare plant surveys (2014, 2016, and 2017)
- focused and protocol-level wildlife surveys for the following species (2014 and 2017):
 - wandering skipper (*Panoquina errans*)
 - light-footed Ridgway’s rail (*Rallus obsoletus levipes*)
 - western snowy plover (*Charadrius nivosus nivosus*)
 - California least tern (*Sternula antillarum browni*)
 - Belding’s savannah sparrow (*Passerculus sandwichensis beldingi*)
 - least Bell’s vireo (*Vireo bellii pusillus*)
 - coastal California gnatcatcher (*Polioptila californica californica*)
 - Pacific pocket mouse (*Perognathus longimembris pacificus*)

Additional wandering skipper surveys will be conducted in 2017.

¹ The Proposed Project area includes temporary work areas (e.g., stringing sites, pole work areas, underground construction areas, guard structure work areas, staging areas/fly yards), access areas, and permanent work areas, as described in Chapter 3 – Project Description.

Definitions

Special-Status Species

Species are considered to be special-status, and therefore subject to analysis in this section, if they meet one or more of the following criteria:

Federal

- Plant and wildlife species listed as endangered (FE), threatened (FT), or candidates for listing under the Federal Endangered Species Act (FESA)

State

- Plant and wildlife species listed as endangered, threatened, or candidates for listing under the California Endangered Species Act (CESA)
- Wildlife species designated as fully protected (FP), as defined in California Fish and Game Code Sections 3511, 4700, 5050, and 5515
- Plants that are state-listed as rare²
- Wildlife species designated as Species of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW)
- Plant species ranked by the California Native Plant Society (CNPS) as having a California Rare Plant Rank (CRPR) listing of 1 or 2³
- SDG&E's 1995 Subregional NCCP covered species

Local

- Narrow Endemic Species, as defined by the City of San Diego Biology Guidelines (City of San Diego 2012)

Sensitive Natural Communities

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

- Natural communities listed in the California Natural Diversity Database (CNDDDB)
- Communities listed in the Natural Communities List with a rarity rank of S1 (Critically Imperiled), S2 (Imperiled), or S3 (Vulnerable)
- Tier I or Tier II vegetation communities, as defined by the City of San Diego Biology Guidelines (City of San Diego 2012)

² Plants that were previously state listed as rare have been redesignated as state threatened.

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

- Environmentally Sensitive Habitat Areas (ESHAs), as defined in the California Coastal Act
- Wetlands and riparian areas under the jurisdiction of the CDFW, the United States (U.S.) Army Corps of Engineers (USACE), and/or the Regional Water Quality Control Board (RWQCB)

Literature Review

AECOM conducted a background literature/database review and desktop analysis to assess the potential for biological resources to occur within the Proposed Project area. Sources reviewed included the following:

- the CNPS's Inventory of Rare, Threatened, and Endangered Plants of California (CNPS Inventory);
- the U.S. Fish and Wildlife Service's (USFWS's) species occurrence and critical habitat database; and
- reports from studies conducted for the Proposed Project by RECON and Konecny Biological Services, Inc. (Konecny Biological).

Additionally, the CNDDDB was queried for special-status species occurrences and sensitive natural communities located within one mile of the Proposed Project area. The results of the CNDDDB search are included in the Proposed Project's Biological Technical Report (BTR).

Field Surveys

Surveys and assessments to inventory and evaluate biological resources were conducted within the Biological Survey Area (BSA) during 2016 and 2017. The BSA is composed of an approximately eight-mile-long existing utility corridor and a 150-foot buffer on either side of the center line of linear features (e.g., power lines and access roads), and a 100-foot buffer around nonlinear features (e.g., stringing sites, staging areas/fly yards). The BSA encompasses approximately 325 acres.

Evaluation of Potential for Occurrence

Using information from the literature review and the results of the field surveys, specific criteria were developed to evaluate special-status plant and wildlife species' potential for occurrence, and the criteria were applied to evaluate target plant and wildlife species. The specific criteria are described as follows:

- Detected: Species detected during AECOM's 2016/2017 biological surveys.
- High: Species with known recent (i.e., within the last 25 years) recorded occurrences/populations nearby (e.g., within one mile of the BSA) and for which high-quality, suitable habitat occurs within the BSA. Suitable habitat includes all necessary habitat elements to support the species (e.g., habitat type, soils, cover, food resources).

- **Moderate:** Species with known recent (i.e., in the last 25 years) recorded occurrences/populations nearby (e.g., within one mile of the BSA); however, suitable habitat within the BSA is moderately disturbed. When considered moderately disturbed, suitable habitat for the species is fragmented or small/limited in size. Conversely, a “moderate” assessment would be made for species for which suitable habitat occurs within the BSA, but the BSA is near the edge of the species’ range or there are no reported occurrences/populations from surveys of nearby areas.
- **Low:** Species with few known recent (i.e., in the last 25 years) recorded occurrences/populations nearby (e.g., within one mile of the BSA), but suitable habitat within the BSA is highly disturbed or extremely limited in area. Also, species with known historic (i.e., more than 25 years) recorded occurrences/populations from the site or nearby; however, the suitable habitat within the BSA has been severely reduced or disturbed since past documentation. Additionally, species for which potentially suitable habitat is present within the BSA, but the reported extant range is far outside the BSA. For plant species only, a low potential would be assigned to annual or perennial species that would have been detectable during a focused survey in the appropriate blooming period but were not found; however, small populations or scattered individuals are still considered to have low potential to occur.
- **Absent:** Species with no potential to occur within the BSA because there are no historical records within the last 25 years and there is no suitable habitat for the species within the BSA.

Jurisdictional Waters Assessment

In 2016 and 2017, an AECOM wetland ecologist conducted a jurisdictional waters assessment of the BSA. All accessible areas within the BSA were qualitatively evaluated to determine whether potential waters, including wetlands, subject to USACE San Diego RWQCB, CDFW, and California Coastal Commission (CCC) regulation were present. Non-jurisdictional waters, such as brow ditches and erosion features, were also evaluated. RECON’s 2013 jurisdictional waters assessment of the BSA was reviewed prior to conducting surveys.

Potentially jurisdictional wetlands and water features were mapped on hard copy field maps and using a handheld, submeter-accurate global positioning system (GPS) unit during the field assessment. In addition, wetland ecologists also recorded non-jurisdictional ditches and erosional features that were evaluated during the assessment. Detailed survey methods and results of the wetland assessment are presented in the BTR for the Proposed Project (AECOM 2017).

Natural Community Mapping

In 2016, AECOM biologists mapped natural communities in the BSA to provide a baseline of biological resources that occur or have the potential to occur. Previous mapping efforts for the Proposed Project were reviewed and incorporated into the natural community map after the field verification. Follow up field visits occurred in January 2017 to refine the data.

Natural communities were delineated and attributed through a combination of photo-interpretation and field reconnaissance. Three-band 30-centimeter resolution imagery (San Diego Association of Governments [SANDAG] 2014) served as the base image for photo-interpretation. Natural communities were classified based on the presence of dominant and/or characteristic plant species in accordance with natural community classifications following Holland’s Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), as modified by Oberbauer in Draft Vegetation Communities of San Diego County (Oberbauer et al. 2008). Features were typically mapped using a minimum mapping unit of 0.5 acre, except within work areas or where features shared a hardline boundary, such as paved surfaces or the limits of the BSA.

Rare Plant Surveys

In 2016 and 2017, AECOM botanists conducted rare plant surveys of the BSA in accordance with the following protocols:

- Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 2000);
- Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (California Department of Fish and Game [CDFG] 2009);⁴ and
- CNPS Botanical Survey Guidelines (CNPS 2001).

Surveys were timed according to the blooming periods of the rare plant species with the potential to occur. Surveyors walked meandering transects through the BSA and recorded the location of any rare plants using a hand-held GPS unit. Botanists recorded the phenology of each rare plant species observed and estimated the number of individuals present. Further information on the rare plant survey methods is presented in the Proposed Project’s BTR (AECOM 2017).

Wildlife Surveys

In 2014, 2016, and 2017 biologists from RECON, Busby Biological Services, Inc., Konecny Biological, and Blackhawk Environmental conducted focused and protocol-level wildlife surveys within the BSA. Detailed survey methods can be found in the wildlife survey reports included as appendices to the BTR (AECOM 2017). Survey methods for the aforementioned species are briefly described as follows.

Light-footed Ridgway’s Rail

In 2017, Blackhawk Environmental biologists conducted focused surveys within suitable habitat in the BSA to determine the presence or absence of light-footed Ridgway’s rail. The surveys were conducted in accordance with the recommendations provided to the USFWS by the Ridgway’s Rail Study Team. The surveyors listened for vocalizing light-footed Ridgway’s rails.

⁴ This document replaced the CDFG’s Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened and Endangered Plants and Natural Communities.

If the species was not detected passively, a digital call-prompt of the light-footed Ridgway's rail "dueting" was played with an iPod and amplified speakers at 30-second intervals. Observers listened for a response for approximately 10 minutes before proceeding to the next survey area. Additional light-footed Ridgway's rail surveys were conducted in the BSA in 2014 and are discussed further in the BTR (AECOM 2017).

Western Snowy Plover

In 2014, Konecny Biological biologists conducted focused surveys within suitable habitat in the BSA to determine the presence or absence of western snowy plover. The surveyors used binoculars to scan the suitable habitat for western snowy plover. No western snowy plover call prompting was conducted.

California Least Tern

In 2014, Konecny Biological biologists conducted focused surveys within suitable habitat in the BSA to determine the presence or absence of California least tern. The surveyors used binoculars to scan the suitable habitat for California least tern. No California least tern call prompting was conducted.

Belding's Savannah Sparrow

In 2017, Blackhawk Environmental conducted focused surveys within suitable habitat in the BSA to determine the presence or absence of Belding's savannah sparrow. The surveyors used binoculars to scan the suitable habitat for Belding's savannah sparrow. No Belding's savannah sparrow call prompting was conducted. Additional Belding's savannah sparrow surveys were conducted in the BSA in 2014 and are discussed further in the BTR (AECOM 2017).

Least Bell's Vireo

In 2014, RECON, Busby Biological Services, Inc., and Konecny Biological biologists conducted protocol-level surveys within suitable habitat in the BSA to determine the presence or absence of least Bell's vireo. The surveys were conducted in accordance with the current USFWS survey protocol for least Bell's vireo (USFWS 2001). The surveyors walked through the suitable habitat and conducted passive surveillance (i.e., listening and looking for the species).

Coastal California Gnatcatcher

In 2017, Blackhawk Environmental conducted protocol-level surveys for coastal California gnatcatcher within suitable habitat in the BSA to determine the presence or absence the species. The surveys were conducted in accordance with the current USFWS survey protocol for coastal California gnatcatcher (USFWS 1997). Surveyors walked slowly through accessible portions of the suitable habitat and used recorded coastal California gnatcatcher vocalizations to locate coastal California gnatcatcher. The observers recorded the locations of all detected coastal California gnatcatcher.

Wandering Skipper

In 2014, RECON biologists conducted focused wandering skipper surveys to determine the extent of suitable habitat and the presence or absence of wandering skipper in the BSA. The surveyors slowly walked meandering transects and paused occasionally to observe skippers with the aid of binoculars and cameras. Additional protocol surveys for wandering skipper are in progress in 2017.

Pacific Pocket Mouse

In 2014, RECON biologists conducted a focused survey within suitable habitat in the BSA to determine the presence or absence of Pacific pocket mouse sign and to determine the need for further focused surveys, including trapping. Based on the 2014 survey results, RECON determined that additional surveys were not required due to the lack sign and low-quality habitat. The survey was conducted on foot and specifically focused on areas where potentially suitable Pacific pocket mouse habitat overlapped with the areas of anticipated Proposed Project-related ground disturbance (e.g., stringing sites, staging areas, guard structures, work areas, and pole installation sites).

4.4.2 Existing Conditions

Regulatory Setting

The following subsections describe federal, state, and local regulations regarding biological resources that are relevant to the Proposed Project.

Federal

Federal Endangered Species Act

The FESA protects plants and wildlife that are listed as endangered or threatened by the USFWS and the National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service. The FESA prohibits take of endangered wildlife, where "take" is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (16 United States Code [U.S.C.] § 1532[19]; 16 U.S.C. § 1538). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging up, damaging, or destroying any listed plant on non-federal land in knowing violation of any law (16 U.S.C. § 1538[a][2][B]).

Under Section 7 of the FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, may adversely affect a listed species (including plants) or its critical habitat. Through consultation and the issuance of a Biological Opinion, the USFWS may issue an incidental take statement, allowing take of the species that is incidental to another authorized activity, provided that the action will not jeopardize the continued existence of the species. Section 10 of the FESA provides for issuance of incidental take permits (ITPs) to private parties with the development of an HCP. As of December 2015, as a part of the SDG&E Subregional NCCP, SDG&E has been issued ITPs (Permit PRT-809637) by the USFWS and CDFW for 110 covered species.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. § 703[a]) first enacted in 1916, prohibits any person, unless permitted by regulation, to:

“...pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport, cause to be transported, carry, or cause to be carried or receive for shipment, transportation, carriage, or export any migratory bird, any part, nest, or egg of any such bird, or any product...composed in whole or part, of any such bird or any part, nest, or egg thereof...”

The list of migratory birds includes nearly all migratory bird species native to the U.S. The Migratory Bird Treaty Reform Act of 2004 further defined species protected under the act and excluded all non-native species. The statute was extended in 1974 to include parts of birds, as well as eggs and nests.

Clean Water Act

The purpose of the Clean Water Act (CWA) is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” (33 U.S.C. § 1251[a]). Section 404 of the CWA prohibits the discharge of dredge or fill material into waters of the U.S. without a permit from the USACE. The definition of waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands (33 Code of Federal Regulations [CFR] § 328.3[a]). Wetlands are defined as 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” (33 CFR § 328.3[b]). The U.S. Environmental Protection Agency has veto authority over the USACE’s administration of the Section 404 program and may override a USACE decision with respect to permitting.

When a project may create impacts on waters of the U.S., the project requires a permit or a waiver. Substantial impacts on waters of the U.S. may require an Individual Permit. Projects that only minimally affect waters of the U.S. may meet the conditions of one of the existing Nationwide Permits, provided the permit’s other respective conditions are satisfied. A Water Quality Certification or waiver (pursuant to Section 401 of the CWA) is required for Section 404 permit actions, and any federal action affecting waters.

Section 10 of the Rivers and Harbors Act

Pursuant to Section 10 of the Rivers and Harbors Act of 1899, USACE regulates work in navigable waters of the U.S. The term “navigable waters of the U.S.” generally describes those waters that are subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce. The term “work” typically includes any dredging or disposal of dredged material, excavation, filling, or other modification of navigable waters of the U.S. “Structure” typically refers to any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial reef, permanent mooring structure, power transmission line, or any other obstacle or obstruction.

This act prohibits the unauthorized obstruction or alteration of any navigable waters of the U.S. and requires approval prior to the accomplishment of any work in or over navigable waters of the U.S., or work that affects the course, location, condition, or capacity of such waters.

Fish and Wildlife Conservation Act

The 1988 amendment to the Fish and Wildlife Conservation Act of 1980 requires the USFWS to “identify species, subspecies, and populations of all migratory non-game birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973” (16 U.S.C. § 2912[a][3]). The Birds of Conservation Concern (BCC) list is the result of this mandate. BCC species are given the highest conservation priority to prevent or remove the need for additional bird listings under the FESA by implementing proactive management and conservation actions.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. § 668) provides protection for both the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting the “take” of either of these species, including their parts, nests or eggs. The BGEPA defines take as to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb” any bald or golden eagle. The BGEPA is administered by the USFWS, and limited take authorizations are granted for qualifying activities. Persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner any bald eagle... [or golden eagle], alive or dead, or any part, nest, or egg thereof” without prior approval are subject to criminal penalties.

Coastal Zone Management Act of 1972

The Coastal Zone Management Act of 1972 (CZMA) (16 U.S.C. §§ 1451-1464) is administered by NOAA’s Office of Ocean and Resource Management, and was established as a national policy to preserve, protect, develop, and enhance or restore the coastal zone in the U.S. where possible. The federal consistency provision (16 U.S.C. § 1456) encourages states to join the Coastal Zone Management Program (CZMP), which takes a comprehensive approach to coastal resource management by balancing the competing and/or conflicting demands of coastal resource use, economic development, and conservation, and allows states to issue the applicable permits. California has a federally approved CZMP, and the CZMA is administered by the CCC. A description of the California Coastal Act (CCA) is provided in the following section.

State

California Environmental Quality Act

CEQA was enacted in 1970 to provide for full disclosure of environmental impacts to the public before issuance of a discretionary permit by a public agency. The CEQA analysis includes review of species that are listed under the FESA or CESA or are designated as sensitive. Sensitive species include, but are not limited to, wildlife SSC listed by the CDFW, and plant species in the CNPS’s CRPR List 1A (presumed extirpated in California and either rare or extinct elsewhere), List 1B (rare, threatened, or endangered in California and elsewhere; eligible for state listing) or List 2A (presumed extirpated in California, but common elsewhere), and 2B

(rare, threatened or endangered in California but more common elsewhere; eligible for state listing).

California Endangered Species Act

The CESA prohibits the take, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The CESA allows for take incidental to otherwise lawful projects. The CDFW administers the CESA and authorizes take through permits issued under Section 2081 of the California Fish and Game Code, or through a consistency determination issued under Section 2080.1 for projects with federal take authorizations.

California Fish and Game Code Sections 3511, 4700, 5050 and 5515

California Fish and Game Code Sections 3511, 4700, 5050, and 5515 designate species as FP. Each of these statutes does the following:

- prohibits take or possession “at any time” of the species listed in the statute, with few exceptions,
- states that no provision of the code or any other law shall be construed to authorize the issuance of permits or licenses to “take” the species, and
- states that no previously issued permits or licenses for take of the species "shall have any force or effect" for authorizing take or possession.

The CDFW is the regulatory authority for these California Fish and Game Code sections.

California Species of Special Concern

In addition to formal listing under the FESA and CESA, certain species receive additional consideration by the CDFW and lead agencies during the CEQA process. Species that may be considered for review are included on a list of SSCs developed by the CDFW. The list tracks species in California whose numbers, reproductive success, or habitat may be in decline.

Sections 1600 – 1616 of the California Fish and Game Code

Pursuant to California Fish and Game Code Sections 1600 to 1616, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. The California Fish and Game Commission (CFGC) defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR § 1.72). The CFGC’s definition of “lake” includes “natural lakes or man-made reservoirs.” (14 CCR § 1.56). The CDFW limits of jurisdiction include the maximum extents of the uppermost bank-to-bank distance or riparian vegetation dripline. The CDFW’s jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife.

Sections 3503, 3503.5, 3513, and 3800 of the California Fish and Game Code

The State of California has incorporated the protection of birds in Sections 3503, 3503.5, 3513, and 3800 of the California Fish and Game Code.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (California Fish and Game Code §§ 1900-1913) includes provisions that prohibit the take of endangered or rare native plants. The CDFW administers the law and generally regards as rare many plant species included on CRPR List 1A, 1B, 2A, and 2B of the CNPS Inventory. In addition, sometimes CRPR List 3 and 4 plants are considered rare if the population has local significance in the area and is impacted by the project.

Section 1913(b) allows for the incidental removal of endangered or rare plant species within a right-of-way (ROW) to allow a public utility to fulfill its obligation to provide service to the public. The CDFW must be given 10 days of prior notice to salvage the plants.

Porter-Cologne Water Quality Control Act of 1966

The Porter-Cologne Water Quality Control Act (California Water Code § 13000 et seq.) mandates that activities that may affect waters of the State will be regulated to attain the highest water quality. The State Water Resources Control Board (SWRCB) and the local RWQCB are the relevant permitting agencies. The RWQCB provides regulations for a “non-degradation policy” that are especially protective of waters with high quality. The Porter-Cologne Water Quality Control Act reserves the right for the State of California to regulate activities that may affect the quantity and/or quality of surface and/or groundwater, including isolated wetlands, within the state. Waters of the State include isolated waters that are no longer regulated by the USACE. If a project is proposed to discharge into waters of the State, a Waste Discharge Report must be filed.

California Coastal Act

The CCA is the primary legislation that provides the standards for balancing development and conservation of resources within the coastal zone, which includes approximately 1.5 million acres along the Pacific Coast of the U.S. The CCA is administered by the CCC to regulate the short- and long-term conservation and use of coastal resources through responsible development. Under the CCA, authority to issue Coastal Development Permits (CDP) is delegated to local permitting agencies (e.g., cities and counties) for which the CCC has certified a Local Coastal Program (LCP). LCPs guide the implementation of conservation, development, and regulatory policies within the local coastal zone, as required by the CCA. The City of San Diego and the City of Del Mar have certified LCPs applying to different areas of the Proposed Project.

The CCA (Public Resources Code [PRC] § 30107.5) defines an ESHA 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 may be easily disturbed or degraded by human activities and developments.” Pursuant to Section 30240 of the PRC, ESHAs “shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.” In addition, development adjacent to ESHAs must be located and designed to prevent significant impacts on the functions and values of the ESHA.

Natural Community Conservation Planning Act of 1991

The NCCP Act of 1991 is designed to conserve natural communities at the ecosystem scale while accommodating compatible land uses. In September 2011, the NCCP Act was amended to permit the incidental take of 36 FP species pursuant to an NCCP approved by the CDFW (California Fish and Game Code § 2835). The amendment gives FP species the same level of protection as endangered and threatened species under the NCCP Act (California Fish and Game Code § 2835). The NCCP Act authorizes the incidental take of species “whose conservation and management” is provided for in a conservation plan approved by the CDFW, which is the principal state agency implementing the NCCP program.

Section 10 of the FESA provides for issuance of ITPs to private parties with the development of an HCP. As of December 2015, as a part of the SDG&E Subregional NCCP, SDG&E has been issued ITPs (Permit PRT-809637) by the USFWS and CDFW for 110 covered species.

California Natural Community Conservation Planning Program

The California Natural Community Conservation Planning program was initiated in 1991 to implement the NCCP Act. It takes a broad-scale ecosystem approach to planning for the protection and perpetuation of the biological diversity throughout California by protecting both habitats and the species within these habitats, while also accommodating compatible land use. and is a cooperative effort by the CDFW and numerous public and private partners.

An NCCP identifies and provides for the regional protection of plants, wildlife, and their habitats, while allowing compatible and appropriate economic activities in the region. By including key interests in the process and by working with landowners, environmental organizations, and other interested parties, an NCCP provides the framework for a local agency to oversee the numerous activities that compose the development of a conservation plan. The CDFW and USFWS provide the necessary support, direction, and guidance to NCCP participants during the NCCP development and implementation. Within California, there are currently 23 active NCCPs covering more than 11 million acres, and several draft NCCP plans are pending approval.

SDG&E has its current, agency-approved Subregional NCCP. This plan is discussed in detail in the following section.

Local

Within the jurisdictions that the Proposed Project crosses, local policies or ordinances, often protect biological resources. Regional plans, policies, and regulations can identify candidate, sensitive, or special-status species. In addition, any adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan can provide localized guidance for the protection of biological resources. The Proposed Project is not subject to local discretionary regulations related to biological resources because the California Public Utilities Commission (CPUC) has exclusive jurisdiction over the siting, design, and construction of the Proposed Project. The following analysis of local regulations relating to biological resources is provided for informational purposes.

San Diego Gas & Electric Company Subregional Natural Community Conservation Plan

In December 1995, the USFWS and CDFW approved the SDG&E Subregional NCCP, developed in coordination with such agencies that address potential impacts on species and habitat associated with SDG&E's ongoing installation, use, maintenance, and repair of its gas and electric systems, and typical expansion to those systems throughout much of SDG&E's existing service territory. As a part of the SDG&E Subregional NCCP, SDG&E has been issued ITPs (Permit PRT-809637) by the USFWS and CDFW for 110 covered species. The SDG&E Subregional NCCP was developed by following the multiple species and habitat conservation planning approach. The SDG&E Subregional NCCP includes operational protocols that apply to construction and O&M activities. In approving the NCCP, the USFWS and CDFW determined that compliance with the NCCP avoids potential impacts, provides appropriate mitigation where such impacts are unavoidable, and ensures the protection and conservation of covered species. The Proposed Project falls within the area governed by the SDG&E 1995 Subregional NCCP, and the NCCP will be applied to the Proposed Project. As such, the NCCP fully addresses all of the potential construction and O&M impacts of the Proposed Project on covered species. Compliance with the NCCP, including the operational protocols, has been incorporated as part of the Proposed Project description.⁵

SDG&E is a public utility regulated by the CPUC. As described in the SDG&E Subregional NCCP Implementing Agreement, local governments are precluded from regulating public utilities through their zoning laws, land use laws, ordinances, and other police powers (including other NCCPs or HCPs) by the exclusive jurisdiction of the CPUC. Therefore, as stated in the SDG&E Subregional NCCP Implementing Agreement, the SDG&E Subregional NCCP "is independent of other NCCP/HCPs and the covered species for which incidental take is authorized under the take authorizations is not dependent upon the implementation of such plans."

San Diego County Water Authority Natural Community Conservation Plan/Habitat Conservation Plan

The SDCWA prepared an NCCP/HCP with the purpose of fulfilling the requirements for issuance of incidental take authorization under Section 2835 of the Natural Community Conservation Planning Act and an ITP under Section 10 of the FESA. The SDCWA's NCCP/HCP identifies the types of activities proposed for coverage and an assessment of expected impacts, and covers 26 plant species and 37 wildlife species. Approximately 6.24 miles of the TL666D removal, 1.28 miles of the TL674A reconfiguration, 1.06 miles of the C510 conversion, and 0.1 mile of the C738 conversion will be located within the SDCWA's NCCP/HCP area (AECOM 2016).

⁵ On March 2, 2017, the USFWS issued SDG&E a Native Endangered and Threatened Species HCP (Permit Number TE26660C-1) permitting the take of up to 15 individual covered species due to the clearing, grading, or destruction of up to 60 acres of habitat within the 1995 SDG&E Subregional NCCP Plan Area between March 2017 and March 2022. SDG&E may elect to utilize this HCP, or a combination of this HCP and the 1995 SDG&E Subregional NCCP, to permit Proposed Project impacts to covered species and their habitat.

San Diego County Multiple Species Conservation Plan

Under the Natural Community Conservation Planning Act of 1991, an MSCP has been developed for southwestern San Diego County to protect 85 species in the area. The MSCP is one of three subregional habitat planning efforts in San Diego County. The San Diego County MSCP was approved in 1997 and is the result of a joint planning effort between the County of San Diego and the cities in the southwestern part of the county, including San Diego. The County of San Diego and the City of San Diego have each adopted subarea plans that conform to and implement the MSCP requirements, as described in the following subsections.

County of San Diego MSCP Subarea Plan

The County of San Diego MSCP Subarea Plan was adopted in 1997 and applies to unincorporated lands in the BSA. The total study area encompasses 12 jurisdictions and consists of 582,243 acres, of which 43 percent (252,132 acres) is in unincorporated areas in County of San Diego. The NCCP Conservation Guidelines, the San Diego County MSCP, and the biological information from the MSCP's Multiple Habitat Planning Area (MHPA) preserve alternatives were used to establish conservation goals and criteria for habitat and individual species for the San Diego County MSCP Subarea Plan.

City of San Diego MSCP Subarea Plan

The City of San Diego has adopted its own Subarea Plan to implement the San Diego County MSCP (City of San Diego 1997). The land covered under the City of San Diego MSCP Subarea Plan is characterized by urban land uses comprised of areas that are either built out or retained as open space/park systems. New development must comply with the boundaries established within the plan, and guidelines for development include restoration of and/or mitigation for habitat of MSCP-covered species when disturbed. In addition, the MSCP Subarea Plan includes the policies and design guidelines regarding utilities. Approximately 1.28 miles of the TL674A reconfiguration, 6.24 miles of the TL666D removal, 1.06 miles of the C510 conversion, and 0.1 mile of the C738 conversion will be located within the San Diego City MSCP area.

City of San Diego Municipal Code

The City of San Diego Municipal Code contains Biology Guidelines that include regulations for the protection of sensitive biological resources, procedures for biological impact analysis, and mitigation program requirements for impacts to sensitive biological resources.

City of Del Mar Municipal Code

The City of Del Mar Municipal Code includes provisions for the protection of the biodiversity, natural heritage, and unique aquatic and upland ecosystems of the San Dieguito Lagoon and San Dieguito River and for the sustention, conservation, and protection of natural habitats, wildlife populations, and marine life populations.

Biological Resources Setting

The Proposed Project is located in a coastal area within the limits of the cities of San Diego and Del Mar. Over 50 percent of the BSA is located within general agriculture, disturbed, or developed habitat. It also passes through 14 natural community types,⁶ which provide habitat to numerous special-status plant and wildlife species, and three environmentally sensitive areas—San Dieguito Lagoon, Los Peñasquitos Lagoon, and the Torrey Pines State Natural Reserve Extension Area. Other development features present include the Del Mar Thoroughbred Club, major transportation corridors (e.g., Interstate 5 [I-5]), and asphalt roads. Native vegetation communities that provide habitat to numerous special-status plant and wildlife species occupy isolated pockets of land within this high-density commercial and residential area.

Within the previously disturbed and urban/developed areas the BSA, the utility corridor is located on flat to minor slopes. Within San Dieguito Lagoon, Los Peñasquitos Lagoon, and the Torrey Pines State Natural Reserve Extension Area, the utility corridor is located on flat to extremely steep slopes, with the steepest slopes located in the Torrey Pines State Natural Reserve Extension Area of the BSA. The staging areas/fly yards are located in flat, highly disturbed areas. Elevations range from four feet above mean sea level (MSL) where the BSA crosses San Dieguito Lagoon along Jimmy Durante Boulevard to approximately 400 feet above MSL at the Torrey Pines State Natural Reserve Extension Area in the center of the BSA.

Natural Communities and Other Land Covers

Natural communities are distinctive assemblages of plant species that reflect a distinct set of environmental conditions (e.g., climate, soil, water, and disturbance). The classification of natural communities is based upon the dominant species within that community and the associated flora. The natural community present in an area is a key factor in determining the habitat suitability for other plant species and wildlife species. The vegetation classification systems used in this document follow those of Holland (1986), as modified by Oberbauer et al. (2008)⁷ with the exception of “Landscaped/Ornamental.” Fourteen natural communities and other land cover types (e.g., General Agriculture, Disturbed Habitat, and Urban/Developed) occur within the BSA. The approximate area of each natural community and other land covers within the BSA are summarized in Table 4.4-1: Natural Communities and Other Land Covers within the BSA. Maps depicting the different natural communities and other land cover types within the BSA are provided as Attachment 4.4-A: Natural Communities Map. The following discussion provides a description of each natural community or other land cover type and its location within the BSA.

⁶ As defined by Holland (1986), as modified by Oberbauer et al. (2008) and AECOM (2017)

⁷ In order to effectively classify the wide variety of vegetation communities found in San Diego County, Oberbauer et al. customized the vegetation descriptions in Holland (1986) to account for unique habitats found in San Diego and for artificial features. This also included the addition of non-vegetated land cover types, like Disturbed Habitat and Urban/Developed.

Table 4.4-1: Natural Communities and Other Land Covers within the BSA

NCCP Natural Community or Other Land Cover	Holland Natural Community⁸	Sensitive Natural Community	Approximate Area within the BSA (acres)
<i>Uplands</i>			
Torrey Pine Forest	Torrey Pine Forest	Yes	6.9
Chaparral	Scrub Oak Chaparral	Yes	1.7
Southern Maritime Chaparral	Southern Maritime Chaparral	Yes	12.2
Chaparral	Southern Mixed Chaparral	Yes	13.7
Coastal Sage Scrub	Diegan Coastal Sage Scrub	Yes	13.0
	Diegan Coastal Sage Scrub – Coastal Form	Yes	14.2
<i>Riparian, Waters, and Wetlands</i>			
Riparian Forest	Southern Arroyo Willow Riparian Forest	Yes	0.9
Freshwater Marsh	Coastal and Valley Freshwater Marsh	Yes	13.6
Southern Coastal Salt Marsh	Southern Coastal Salt Marsh	Yes	34.7
Inland Water, Beach-Saltpan	Open Water/Beach/Salt Pan/Mudflat	No	12.6
<i>Other Land Covers</i>			
Agricultural	General Agriculture	No	2.0
Disturbed Habitat	Disturbed Habitat	No	27.1
	Urban/Developed ⁹	No	155.2
Not Available	Landscape/Ornamental	No	16.7
Total	--	--	324.5

⁸ As modified by Oberbauer et al. (2008) and AECOM (2016)

⁹ The Urban/Developed land cover type, as defined in Oberbauer et al. 2008, includes landscaping and ornamental vegetation. However, in this document, Landscaped/Ornamental is listed in a separate category.

Uplands

Torrey Pine Forest

Torrey pine forest is open to dense forest dominated by Torrey pine (CRPR 1B.2) typically supporting an understory of chaparral, coastal scrub, or grassland. This species and vegetation community are restricted to coastal San Diego County within the Del Mar region and Santa Rosa Island.

In the BSA, Torrey pine forest occurs in two areas and covers approximately 6.9 acres within the Torrey Pines State Natural Reserve Extension Area, located on the south-facing slopes above Los Peñasquitos Lagoon near the center of the BSA.

Scrub Oak Chaparral

Within the coastal environments of San Diego County, scrub oak chaparral is a dense shrub community dominated by evergreen oak species, including inland scrub oak (*Quercus berberidifolia*), Torrey's hybrid oak (*Quercus acutidens*), and/or Nuttall's scrub oak (*Quercus dumosa*) (CRPR 1B.1).

Approximately 1.7 acres of scrub oak chaparral are present within the southern portion of the BSA, east of Los Peñasquitos Lagoon, directly between Sorrento Valley Road and I-5, across from the City of San Diego Pump Station 65. This area is dominated by Nuttall's scrub oak.

Southern Maritime Chaparral

Southern maritime chaparral is typically a fairly open and low-growing form of chaparral found on weathered sandstones within the coastal fog belt. Within the BSA, this community supports a number of rare species, including Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*) (FE and CRPR 1B.1), wart-stemmed Ceanothus (*Ceanothus verrucosus*) (CRPR 2B.2), San Diego barrel cactus (*Ferocactus viridescens*) (CRPR 2B.2), Torrey pine, and Nuttall's scrub oak.

Southern maritime chaparral covers approximately 12.2 acres in the central portion of the BSA, within the Torrey Pines State Natural Reserve Extension Area.

Southern Mixed Chaparral

Southern mixed chaparral is composed of a large mix of broad-leaved sclerophyllous (leathery) shrubs. This community is typically found on steep north-facing slopes. Characteristic species include chamise (*Adenostoma fasciculatum*), toyon (*Heteromeles arbutifolia*), manzanitas (*Arctostaphylos* spp.), western lilacs (*Ceanothus* spp.), and mountain mahoganies (*Cercocarpus* spp.).

Approximately 13.7 acres of southern mixed chaparral are present within the central portion of the BSA, just south of San Dieguito Lagoon and west of I-5.

Diegan Coastal Sage Scrub

Diegan coastal sage scrub is composed of mixed drought-deciduous and sclerophyllous shrubs. This community is typically dominated by California sagebrush (*Artemisia californica*) and/or flattop buckwheat (*Eriogonum fasciculatum*), but may also include a number of other soft-wooded shrubs, including sages (*Salvia* spp.), laurel sumac (*Malosma laurina*), and lemonade berry (*Rhus integrifolia*).

Diegan coastal sage scrub covers approximately 13.0 acres of the BSA in large patches along the southern perimeter of the San Dieguito Lagoon area. One additional small area of this natural community exists east of Los Peñasquitos Lagoon between Sorrento Valley Road and I-5.

Diegan Coastal Sage Scrub – Coastal Form

The coastal form of Diegan coastal sage scrub is similar to the Diegan coastal sage scrub community. However, the coastal form typically shows a greater dominance of California sagebrush and includes a number of species typically restricted to the coastal bluffs and slopes such as California sunflower (*Encelia californica*).

Four areas of Diegan coastal sage scrub – coastal form exists within the BSA and covers approximately 14.2 acres. The largest area is located along the easternmost portion of the BSA, just north of Via De La Valle. Two smaller areas of this natural community exist just south of San Dieguito Lagoon and just east of San Dieguito Drive. One additional, as well as the smallest, area of this community within the BSA is located just north of Los Peñasquitos Lagoon and just west of Portofino Drive.

Riparian, Waters, and Wetlands

Southern Arroyo Willow Riparian Forest

This community is a winter-deciduous forest found along seasonally wet riparian corridors. The overstory canopy is dominated by arroyo willow (*Salix lasiolepis*). Understory species include mulefat (*Baccharis salicifolia*), mugwort (*Artemisia douglasiana*), and many other native and non-native forbs and grasses. Approximately 0.9 acre of this natural community occurs within the BSA, southwest of San Dieguito Lagoon along Racetrack View Drive.

Coastal and Valley Freshwater Marsh

Within the BSA, coastal and valley freshwater marsh consists of monotypic stands of cattails (*Typha domingensis* and *T. angustifolia*). Coastal and valley freshwater marsh occurs within San Dieguito and Los Peñasquitos lagoons within the BSA. Large scattered areas of this community are located in the Los Peñasquitos Lagoon portion of the BSA, while one small area is located in San Dieguito Lagoon. The small area within San Dieguito Lagoon is located just southeast of where Jimmy Durante Boulevard crosses over San Dieguito Lagoon. At this site, a small patch of alkali seep supporting southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*) was observed within the marsh habitat. This patch was much smaller than the minimum mapping unit, so it was included as part of the coastal and valley freshwater marsh community. Approximately 13.6 acres of this natural community occur within the BSA.

Southern Coastal Salt Marsh

Salt marsh habitats occur at the upper tidal limits along the margins of bays, lagoons, and estuaries. Plant species that occur in this community are tolerant of regular inundation by saltwater and the heavy mud and peat soils that occur in this habitat. Characteristic species for this community include Parish's pickleweed (*Arthrocnemum subterminale*), Pacific pickleweed (*Salicornia pacifica*), salt grass (*Distichlis spicata*), salty Susan (*Jaumea carnosa*), shore grass (*Monanthochloe littoralis*), and saltwort (*Batis maritima*). Approximately 34.7 acres of southern coastal salt marsh exist within the San Dieguito Lagoon and Los Peñasquitos Lagoon areas of the BSA.

Open Water/Beach/Salt Pan/Mudflat

Within the BSA, several unvegetated habitats occur in the tidal and supratidal zones. Open waters consist primarily of the estuarine channels of San Dieguito and Los Peñasquitos lagoons. Beach habitat is the flat, sandy or rocky area along the immediate coastline that occurs between mean tide and foredunes. Mudflats occur along tidal margins of estuarine channels, and salt pans are areas where occasional tidal actions and seeps coupled with evaporation create unvegetated soils with salt crusts. Within the BSA, salt pan habitat occurs in the inland portions of Los Peñasquitos Lagoon. Combined, these natural community types occur in approximately 12.6 acres within the BSA.

Other Land Covers

General Agriculture

As a land cover type, general agriculture is land that supports an active agricultural operation. This includes orchards, vineyards, dairies, nurseries, and where row crops are produced, or animals are reared to provide food, wool, and other products. A small agricultural area consisting of a grove of olive trees covers approximately 2.0 acres within the BSA. This grove is located south of San Dieguito Lagoon and just south of San Dieguito Drive.

Disturbed Habitat

Disturbed habitat is any land that has been physically disturbed (by previous legal human activity) and is no longer recognizable as a native or naturalized vegetation association, but continues to retain a soil substrate. Typically, vegetation, if present, is nearly exclusively composed of nonnative plant species such as ornamentals or ruderal exotic species that take advantage of disturbance, or show signs of past or present animal usage that removes any capability of providing viable natural habitat for uses other than dispersal. Examples of disturbed land include areas that have been graded, repeatedly cleared for fuel management purposes, and/or experienced repeated use that prevents natural revegetation. Disturbed habitat within the BSA covers approximately 27.1 acres and predominantly exists along busy roadways within the BSA and the Pumpkin Patch staging area/fly yard.

Urban/Developed

The urban and developed cover type includes all aspects of the human-built environment and consists of paved roads, parking lots, buildings, and associated landscaping. This cover type typically supports little or no sensitive biological resources. Approximately 155.2 acres of urban/developed land occur throughout the BSA.

Landscaped/Ornamental

Landscape/ornamental is defined for this document as areas planted with native species or ornamental plant species. It is distinguished from habitat due to the presence of irrigation and the ornamental placement of plants. Within the BSA, this habitat is located along road margins and graded slopes. This land cover type covers approximately 16.7 acres within the BSA.

Preserve Areas

Under the SDG&E Subregional NCCP, designated preserves are considered areas for sensitive habitat. Within San Diego County, preserves are defined and delineated using existing preserve areas from local and regional planning documents such as the City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan (City of San Diego 1997), County of San Diego MSCP Subarea Plan (County of San Diego 1997), and the North County Multiple Habitat Conservation Plan (SANDAG 2003). Preserve areas in these planning documents include the Multi-Habitat Planning Area (MHPA)(City of San Diego 1997), Preapproved Mitigation Areas (County of San Diego 1997), Biological Resource Core Areas (County of San Diego 1997), and Focused Planning Areas (SANDAG 2003). The Preserve designation is assigned to areas that are either currently habitat or through local and regional planning will eventually become habitat.

The portions of the BSA that are located within San Dieguito Lagoon, Los Peñasquitos Lagoon, and the Torrey Pines State Natural Reserve Extension Area are located within the MHPA.

Environmentally Sensitive Habitat Area

The ESHAs identified within the BSA are all areas containing suitable habitat for special-status species within the coastal zone, coastal sage scrub, maritime chaparral, and wetlands.

Critical Habitat

The Proposed Project is not located within critical habitat for any federally listed species. However, designated critical habitat for western snowy plover occurs approximately 300 feet northeast of the BSA (west of I-5) in San Dieguito Lagoon (USFWS 2012). Additionally, designated critical habitat for San Diego fairy shrimp (*Branchinecta sandiegonensis*) occurs approximately 1.1 miles east of the southern portion of the BSA (USFWS 2007).

Special-Status Plants

Special-status plant species include those species listed by the USFWS or CDFW as Endangered, Threatened, Proposed, or Candidate Species; species covered under SDG&E's Subregional NCCP; and species with a CRPR rank of 1A, 1B, 2A, or 2B. Special-status plant species with the potential to occur in the BSA are listed in Table 4.4-2: Special-Status Plants with the Potential to Occur in the BSA.

Based on the preliminary database searches, a preliminary literature review, and observations during botanical surveys, 37 special-status plant species occur or have the potential to occur in the BSA as follows:

- 15 plant species that were detected
- five plant species with a high potential to occur
- five plant species with a moderate potential to occur
- 12 plant species with a low potential to occur

Two special-status plant species were determined to have no potential to occur within the BSA and are not discussed further in this document. The 25 special-status plant species that were detected or have a high or moderate potential to occur in the BSA are discussed in detail in the subsections that follow.

Detected

The following 15 special-status plant species were observed in the BSA during the rare plant surveys conducted in 2016 and 2017.

Del Mar Manzanita

Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*) is listed as endangered by USFWS (USFWS 1996), is a CRPR 1B.1 species (CNPS 2016), and is a covered species under SDG&E's Subregional NCCP. This evergreen shrub in the heath family (Ericaceae) blooms from December through June. In San Diego County, it is found in the coastal area of Carlsbad and the Torrey Pines State Natural Reserve Extension Area, and inland to Rancho Santa Fe, Del Mar Mesa, and near Lake Hodges (USFWS 1996). Along the coast, Del Mar manzanita occurs in open, low-growing southern maritime chaparral vegetation; farther inland it grows in denser mixed chaparral. This species appears to be restricted to exposed sandstone soils, including terrace escarpments and loamy alluvial land soil types (Reiser 2001).

AECOM observed approximately 465 Del Mar manzanita plants in the BSA in Crest Canyon Open Space Park and the Torrey Pines State Natural Reserve Extension Area. The species was found growing in the Diegan coastal sage scrub, southern maritime chaparral, southern mixed chaparral, Torrey pine forest natural communities. It was also detected in areas of urban/developed land cover.¹⁰

South Coast Saltscale

South coast saltscale (*Atriplex pacifica*) is a CRPR 1B.2 species (CNPS 2016). This mat-forming annual herb in the goosefoot family (Chenopodiace) is native to the coastline of Southern California and flowers from March through October. It grows in habitat on the immediate coastline, such as coastal dunes, coastal scrub, coastal bluff scrub, and playas (CNPS 2016).

AECOM observed two plants within an existing access road at the northeast end of the BSA.

¹⁰ Occurrences in urban/developed habitats are likely to have been planted or are relics.

Table 4.4-2: Special-Status Plants with the Potential to Occur in the BSA

Common Name	Scientific Name	Listing Status	General Habitat Description (CNPS 2016)	Flowering Period	Findings	Probability of Occurrence
Nuttall's acmispon (previously Nuttall's lotus)	<i>Acmispon prostrates</i> (previously <i>Lotus nuttallianus</i>)	CRPR: 1B.1 NCCP: Covered	Coastal dunes and sandy coastal scrub. Elevation 0–33 feet.	Annual/perennial herb, blooms March–July	High Potential	Suitable habitat present in upland habitat types – particularly Diegan coastal sage scrub located along the coast. The closest known occurrence of this species is immediately adjacent to the BSA on the south side of the Torrey Pines State Beach parking lot. Could possibly be found in sandy areas throughout BSA, but more likely closer to the coast. This species would likely be undetectable during a fall survey. This species was most recently detected in 2014 in the Torrey Pines State Natural Reserve Extension Area, approximately 0.85 mile west of the BSA.
spineshrub	<i>Adolphia californica</i>	CRPR: 2B.1	Chaparral, coastal scrub, and valley and foothill grassland/clay soils. Elevation 147–2,430 feet.	Deciduous shrub, blooms December–May	Moderate Potential	Suitable habitat is limited in the BSA. Habitat present north of Via De La Valle and scattered areas of short shrubs throughout upland areas in BSA outside of the actual project footprint. This species was most recently detected in 2008 on the south side of Gonzales Canyon, approximately one mile southeast of the BSA.
Shaw's agave	<i>Agave shawii</i> var. <i>shawii</i>	CRPR: 2B.1 NCCP: Covered, NE	Coastal bluff scrub, coastal scrub, and maritime succulent scrub. Elevation 10–395 feet.	Evergreen shrub, blooms September–May	Low Potential	Four individuals were identified as this species during 2014 survey in a restoration area north of Carmel Mountain Road (RECON 2014b). These plants have too narrow of leaves and too small of teeth to be <i>Agave shawii</i> . These were found planted in a restoration area and appear to be some species of horticultural agave, possibly <i>Agave americana</i> . This species is not known to naturally occur near the BSA and is more common in southern San Diego County along the coast. The most recent detection for this species was in 2008, 0.75 mile southwest of the BSA in Torrey Pines State Natural Reserve Extension Area.
aphanisma	<i>Aphanisma blitoides</i>	CRPR: 1B.2 NCCP: Covered, NE	Coastal bluff scrub, coastal dunes, and coastal scrub/sandy. Elevation 3–920 feet.	Annual herb, blooms March–June	Low Potential	Minimal suitable habitat present in the upland habitat BSA; however, the most recent detection of this species was in 1973 in Torrey Pines State Natural Reserve Extension Area outside of the BSA.
Del Mar manzanita	<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	ESA: Endangered CRPR: 1B.1 NCCP: Covered	Chaparral/maritime, sandy. Elevation 0–1,200 feet.	Evergreen shrub, blooms December–June	Detected	Approximately 465 plants were detected within maritime chaparral in the BSA between the lagoons. This species was also detected in the 2014 RECON survey (RECON 2014b).
coastal dunes milkvetch	<i>Astragalus tener</i> var. <i>titi</i>	ESA: Endangered CESA: Endangered CRPR: 1B.1 NCCP: Covered, NE	Coastal bluff scrub, coastal dunes, coastal prairie. Elevation 0–150 feet.	Annual herb, blooms March–May	Low Potential	Minimal suitable habitat present. Suitable habitat types are not represented in the BSA. This species would not likely be detected during a fall survey. This species could possibly occur within upland areas in the BSA. The most recent detection of this species was in 1975 in Soledad Valley about 1 mile southwest of the BSA.
Coulter's saltbush	<i>Atriplex coulteri</i>	CRPR: 1B.2	Coastal bluff scrub, coastal dunes, and coastal scrub, valley and foothill grassland. Elevation 3–1,300 feet.	Perennial herb, blooms March–October	Low Potential	Minimal suitable habitat present in the BSA and preferred habitat types are not present in the BSA. This species is most likely to be found in upland areas of the BSA. There are no recent detections of this species in the vicinity of the BSA.

Common Name	Scientific Name	Listing Status	General Habitat Description (CNPS 2016)	Flowering Period	Findings	Probability of Occurrence
south coast saltscale	<i>Atriplex pacifica</i>	CRPR: 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, and playas. Elevation 0–450 feet.	Annual herb, blooms March–October	Detected	Two plants were detected within an existing access road at the northeast end of the BSA.
Encinitas baccharis	<i>Baccharis vanessae</i>	ESA: Threatened CESA: Endangered CRPR: 1B.1 NCCP: Covered, NE	Maritime chaparral and cismontane woodland Elevation 200–2,360 feet.	Deciduous shrub, blooms August–November	Low Potential	Suitable habitat present in the BSA, located west of I-5 between Carmel Valley Road and Del Mar Heights Road. The most recent detection for this species was a single plant in the 1990s, located on the south side of Carmel Valley, 0.9 mile east of the BSA.
golden-spined cereus	<i>Bergerocactus emoryi</i>	CRPR: 2B.2	Closed-cone coniferous forest, chaparral, coastal scrub. Elevation: 10–1,300 feet.	Perennial, stem succulent, blooms May–June	Moderate Potential	Suitable habitat present throughout the BSA in upland areas west of I-5. This species is most likely to be found in upland areas of the BSA. The most recent detection for this species was in 1998 in the Torrey Pines State Natural Reserve Extension Area approximately 0.75 mile southwest of the BSA.
San Diego goldenstar	<i>Bloomeria clevelandii</i>	CRPR: 1B.1 NCCP: Covered	Chaparral, coastal scrub, valley and foothill grasslands, vernal pools. Elevation 165–1,525 feet.	Perennial bulbiferous herb, blooms April–May	Moderate Potential	Suitable habitat present in the BSA, particularly along coastal and wetland habitat types. This species would not likely be detected during a fall survey. It also has potential to occur throughout much of the upland habitat types of the BSA. This species was last detected in 2001, approximately one mile east-northeast of the BSA, south of Carmel Mountain Road.
wart-stemmed ceanothus	<i>Ceanothus verrucosus</i>	CRPR: 2B.2 NCCP: Covered	Chaparral. Elevation 3–1,200 feet.	Evergreen shrub, blooms December–May	Detected	Approximately 333 plants detected within maritime chaparral in the BSA south of San Dieguito Lagoon. This species was also detected in the 2014 RECON survey (RECON 2014b).
southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	CRPR: 1B.1	Marshes and swamps, valley and foothill grassland, and vernal pools. Elevation 0–1,300 feet.	Annual herb, blooms May–November	High Potential	Suitable habitat present in the BSA along wetland habitat types and coastal valleys. This species is most likely to be found in flats and roadsides adjacent to lagoons. This species was most recently detected in 2005 in San Dieguito Lagoon, less than 0.1 mile northeast of the BSA.
Orcutt's pincushion	<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	CRPR: 1B.1	Coastal bluff scrub and coastal dunes. Elevation 0–328 feet.	Annual herb, blooms January–August	Detected	Approximately 350 individuals of Orcutt's pincushion were detected within the BSA where it grows in southern maritime chaparral and Diegan coastal sage scrub in Torrey Pines State Natural Reserve Extension Area and south of Los Peñasquitos Lagoon. The 2014 RECON survey found approximately 100 plants (RECON 2014b). These are intermediates to var. <i>glabriuscula</i> . Flora of North America notes that it appears to intergrade with var. <i>glabriuscula</i> shortly inland (Flora of North America 1993).
Orcutt's spineflower	<i>Chorizanthe orcuttiana</i>	ESA: Endangered CESA: Endangered CRPR: 1B.1 NCCP: Covered, NE	Sandy openings in closed-cone coniferous forest, maritime chaparral, and coastal scrub. Elevation 10–410 feet.	Annual herb, blooms March–May	High Potential	Suitable habitat present west of I-5 in southern maritime chaparral and Diegan coastal sage scrub. This species was most recently detected in 2011, in the Torrey Pines State Natural Reserve Extension Area, along Gully Trail less than 0.2 mile west of the BSA.
long-spined spineflower	<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	CRPR: 1B.2	Often on clay in chaparral, coastal scrub, meadows, seeps, grasslands, and vernal pools. Elevation 100–5,000 feet.	Annual herb, blooms April–July	High Potential	Suitable habitat present throughout the BSA, particularly west of I-5. This species was most recently detected in 2010, along the gated dirt road south of restrooms and open area between road and north branch of Broken Hill Trail in Torrey Pines State Natural Reserve Extension Area; 0.75 mile southwest of the BSA.

Common Name	Scientific Name	Listing Status	General Habitat Description (CNPS 2016)	Flowering Period	Findings	Probability of Occurrence
summer holly	<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	CRPR: 1B.2	Chaparral and cismontane woodland. Elevation 90–1,700 feet.	Evergreen shrub, blooms April–June	Detected	Approximately 50 plants present within chaparral in Crest Canyon Open Space Park. This species was also detected in the 2014 RECON survey (RECON 2014b).
Del Mar Mesa sand aster	<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	CRPR: 1B.1 NCCP: Covered	Coastal bluff and coastal scrub. Elevation 20–500 feet.	Perennial herb, blooms May–September	Detected	Approximately 585 plants present in both disturbed and natural openings south of San Dieguito Lagoon. There is also good potential for it to occur along Via De La Valle. <i>C. filaginifolia</i> var. <i>linifolia</i> has been lumped with the more common <i>C. filaginifolia</i> var. <i>filaginifolia</i> in the most recent <i>Jepson Manual</i> (JFP 2016). This change is controversial and, pending ongoing research, <i>C. filaginifolia</i> var. <i>linifolia</i> retains its CNPS ranking as a sensitive species. This species was also detected in the 2014 RECON survey (RECON 2014b).
short-leaved dudleya	<i>Dudleya brevifolia</i>	CESA: Endangered CRPR: 1B.1 NCCP: Covered, NE	Torrey sandstone in openings of maritime chaparral and coastal scrub. Elevation 100–820 feet.	Perennial herb, blooms April–May	Moderate Potential	Minimal suitable habitat present west of I-5 in southern maritime chaparral and Diegan coastal sage scrub. Could possibly be found in sandstone areas south of San Dieguito Lagoon. This species was most recently detected in 2011, in Torrey Pines State Reserve, approximately 0.75 mile southwest of the BSA.
Palmer's goldenbush	<i>Ericameria palmeri</i> var. <i>palmeri</i>	CRPR: 1B.1 NCCP: Covered, NE	Mesic chaparral and coastal scrub. Elevation 100–1,970 feet.	Evergreen shrub, blooms July–November	Low Potential	Although suitable habitat present; this species' most recent occurrence in the vicinity of the BSA was in 1990, in Carmel Valley approximately one mile southwest of the BSA.
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	ESA: Endangered CESA: Endangered CRPR: 1B.1 NCCP: Covered	Mesic coastal scrub, grasslands, and vernal pools.	Annual/perennial herb, blooms April–June	Low Potential	Suitable habitat is minimal and of marginal quality within the BSA. The best suitable habitat for this species occurs along seasonally wet areas near Via De La Valle. This species was most recently detected in 2009 along East Ocean Air Drive, about 0.8 mile east-northeast of the BSA.
cliff spurge	<i>Euphorbia misera</i>	CRPR: 2B.2	Coastal bluff scrub, coastal scrub, and Mojavean desert scrub. Elevation 30–150 feet.	Deciduous shrub, blooms December–October	Detected	Approximately 14 individuals were found adjacent to the Torrey Pines State Beach parking lot.
coast wallflower	<i>Erysimum ammophilum</i>	CRPR 1B.2 NCCP: Covered, NE	Chaparral (maritime), coastal dunes, coastal scrub. Elevation 0–197 feet.	Perennial herb, blooms February–June	Low Potential	Plants mapped during 2014 RECON survey (RECON 2014b); however, CNPS notes: "Occurrences from SDG Co. previously included in this species are <i>E. capitatum</i> ssp. <i>capitatum</i> " as opposed to <i>Erysimum ammophilum</i> (CNPS 2016). Jepson notes "Plants intermediate to <i>Erysimum capitatum</i> were formerly in southern coast." The two species can be distinguished based on fruit with <i>E. ammophilum</i> having seeds winged all around and <i>E. capitatum</i> having seeds winged only at tip or not winged (JFP 2016). Plants mapped by RECON in 2014 were in fruit during the 2016 fall survey. The seeds of these plants were not winged and thus are more appropriately considered <i>E. capitatum</i> .
coast barrel cactus	<i>Ferocactus viridescens</i> var. <i>viridescens</i>	CRPR: 2B.1 NCCP: Covered	Chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Elevation 33–493 feet.	Stem succulent, blooms May–June	Detected	Approximately 95 individuals present in the coastal scrub and maritime chaparral communities from the Torrey Pines Reserve Extension Area southward in the BSA. This species was also detected in the 2014 RECON survey (RECON 2014b).
Palmer's frankenia	<i>Frankenia palmeri</i>	CRPR: 2B.1	Coastal dunes, marshes and swamps (coastal salt), and playas. Elevation 0–33 feet.	Perennial herb, blooms May–June	High Potential	Suitable habitat present for this species around the lagoons. The most recent detection for this species is 2010 record located along San Dieguito Lagoon about 0.75 mile east of the BSA.

Common Name	Scientific Name	Listing Status	General Habitat Description (CNPS 2016)	Flowering Period	Findings	Probability of Occurrence
beach goldenaster	<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>	CRPR: 1B.1	Chaparral (coastal), coastal dunes and coastal scrub. Elevation 0–197 feet.	Perennial herb, blooms March–December	Detected	Approximately 85 individuals detected in the coastal scrub and maritime chaparral communities between the lagoons in the BSA. This species was also detected in the 2014 RECON survey (RECON 2014b).
decumbent goldenbush	<i>Isocoma menziesii</i> var. <i>decumbens</i>	CRPR: 1B.1	Chaparral and coastal scrub (sandy, often disturbed areas). Elevation 33–443 feet.	Perennial shrub, blooms April–November	Moderate Potential	Suitable habitat present in upland areas that contain sandy habitat. The closest and most recent record of this species is a 2004 occurrence along the north shore of Los Peñasquitos Lagoon about 0.2 mile west of the BSA. Varieties within this species are taxonomically problematic. Populations are extremely variable and many plants don't clearly fit under any one variety. Plants in the BSA fit most closely with the non-special-status variety <i>vernonoides</i> .
San Diego marsh-elder	<i>Iva hayesiana</i>	CRPR: 2B.2	Marshes, swamps, and playas. Elevation 33–1,640 feet.	Perennial herb, blooms April–October	Detected	Approximately 85 individuals detected within the brackish marsh and salt marsh communities in the Los Peñasquitos Lagoon portion of the BSA. This species was also detected in the 2014 RECON survey (RECON 2014b).
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	CRPR: 1B.1	Marshes and swamps, playas, and vernal pools. Elevation 3–4,000 feet.	Annual herb, blooms February–June	Low Potential	Minimal low-quality habitat present. The most recent detection for this species was in 1969 in the Sorrento Slough on the edge of the BSA.
sea dahlia	<i>Leptosyne maritima</i>	CRPR: 2B.2	Coastal bluff and coastal scrub. Elevation 20–500 feet.	Perennial herb, blooms March–May	Detected	Approximately 602 individuals of sea dahlia were mapped within the BSA. Detections were primarily located in southern maritime chaparral and Torrey pine forest in the south part of Torrey Pines State Natural Reserve Extension Area. Approximately 140 individuals found during 2014 RECON survey from the Torrey Pines State Natural Reserve Extension Area to Carmel Valley Road (RECON 2014b).
coast woolly-heads	<i>Nemacaulis denudata</i> var. <i>denudata</i>	CRPR: 1B.1	Coastal dunes. Elevation 0–300 feet.	Annual herb, blooms April–September	Detected	Approximately 14 individuals were found adjacent to the Torrey Pines State Beach parking lot.
California orcutt grass	<i>Orcuttia californica</i>	CRPR: 1B.1 NCCP: Covered	Vernal pools. Elevation 50–2,165 feet.	Annual herb, blooms April–August	Low Potential	Moderately disturbed habitat occurs in ditch along Via De La Valle. The most recent detection for this species was in 2009 in the Peñasquitos Substation, about 0.8 mile east-northeast of the BSA; south of intersection of Carmel Mountain Road and Ocean Air Drive.
Brand's star phacelia	<i>Phacelia stellaris</i>	CRPR: 1B.1	Coastal dunes and coastal scrub. Elevation 10–3,440 feet.	Annual herb, blooms March–June	Low Potential	Suitable habitat occurs in the upland coastal sage scrub habitat types of the BSA. A known historical location for this species occurs in Torrey Pines State Natural Reserve Extension Area approximately 0.5 mile southwest of the BSA, but the date of detection is unknown. Given the missing date, it's assumed that this point is more than 25 years old.
Torrey pine	<i>Pinus torreyana</i> var. <i>torreyana</i>	CRPR: 1B.2 NCCP: Covered	Closed-cone coniferous forest and chaparral/ sandstone. Elevation 98–525 feet.	Evergreen coniferous tree	Detected	Approximately 276 individuals are scattered throughout the BSA south of San Dieguito Lagoon. This species was also detected in the 2014 RECON survey (RECON 2014b).
Nuttall's scrub oak	<i>Quercus dumosa</i>	CRPR: 1B.1	Closed-cone coniferous forest, chaparral, and coastal scrub. Elevation 49–1,312 feet.	Evergreen shrub, blooms February–April	Detected	Approximately 88 individuals were detected and are scattered throughout the BSA in upland areas south of San Dieguito Lagoon. This species was also detected in the 2014 RECON survey (RECON 2014b).

Common Name	Scientific Name	Listing Status	General Habitat Description (CNPS 2016)	Flowering Period	Findings	Probability of Occurrence
chaparral ragwort	<i>Senecio aphanactis</i>	CRPR: 2B.2	Chaparral, cismontane woodland and coastal scrub. Elevation 50–2,625 feet.	Annual herb, blooms January–May	Low Potential	Minimal suitable habitat is present in the upland coastal scrub habitat types of the BSA. The most recent detection for this species was in 1894 in Del Mar, approximately 0.75 mile west-southwest of the BSA.
estuary sea-blite	<i>Suaeda esteroa</i>	CRPR: 1B.2	Marshes and swamps. Elevation 0–16 feet.	Perennial herb, blooms May–January	Detected	Approximately 1,004 individuals are scattered throughout the southern edge of San Dieguito Lagoon.

Note: Listing statuses are as follows:

USFWS: Federal listing status

FE: Federally listed as endangered

FT: Federally listed as threatened

CDFW: State listing status

SE: State listed as endangered

CRPR: CNPS California Rare Plant Rank

1B: Plants rare, threatened, or endangered in California and elsewhere

2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Ranks:

0.1 – Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

0.2 – Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

0.3 – Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

NCCP: SDG&E Subregional NCCP

Covered: Species protected under the SDG&E NCCP

NE: Narrow Endemic in SDG&E NCCP

Wart-Stemmed Ceanothus

Wart-stemmed ceanothus (*Ceanothus verrucosus*) is a CRPR 2B.2 species (CNPS 2016) and is a covered species under SDG&E's Subregional NCCP. This rounded evergreen shrub in the buckthorn family (Rhamnaceae) grows up to 10 feet tall and flowers from December through May (Munz 1974). This species occurs in coastal San Diego County and northern Baja California, Mexico, with sizeable populations on Point Loma, at the Torrey Pines State Natural Reserve Extension Area, in San Clemente Canyon, and above Escondido Creek (Reiser 2001). Wart-stemmed ceanothus is typically found on north-facing slopes as a component of southern mixed chaparral or southern maritime chaparral plant communities (Oberbauer et al. 2008), but it can occur in drier areas. The preferred habitat is intermixed with chamise and mission manzanita (*Xylococcus bicolor*) (Reiser 2001).

AECOM detected approximately 330 wart-stemmed ceanothus plants in the BSA, growing in southern mixed chaparral, southern maritime chaparral, Torrey pine forest, and landscaped/ornamental areas south of San Dieguito Lagoon.

Orcutt's Pincushion

Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*) is a CRPR 1B.1 species (CNPS 2016). It is a small annual herb in the sunflower family (Asteraceae) that grows from four to 12 inches tall and has yellow flowers from January through August. This variety ranges from Los Angeles County south to San Diego County and into Baja California, Mexico below 328 feet in elevation (CNPS 2016). The habitat of Orcutt's pincushion is Diegan coastal sage scrub, typically in proximity to moist ocean breezes (Reiser 2001).

AECOM detected approximately 350 Orcutt's pincushion plants in the BSA growing in southern maritime chaparral and Diegan coastal sage scrub in Torrey Pines State Natural Reserve Extension Area and south of Los Peñasquitos Lagoon.

Summer Holly

Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*) is a CRPR 1B.2 species (CNPS 2016). This evergreen shrub in the heath family (Ericaceae) reaches heights of 15 feet and produces small white flowers from April through June (Munz 1974). Summer holly is found in chaparral in Orange, Riverside, and San Diego counties, as well as Baja California, Mexico. In San Diego County, it occurs at low elevations near the coast, generally in relatively moist areas such as north-facing slopes and steep drainages (Reiser 2001).

AECOM observed approximately 50 summer holly plants in the BSA, growing in southern mixed chaparral habitat within Crest Canyon Open Space Park.

Del Mar Mesa Sand Aster

Del Mar mesa sand aster (*Corethrogyne filaginifolia* var. *linifolia*) is a CRPR 1B.1 species (CNPS 2016) and is a covered species under SDG&E's Subregional NCCP. This perennial herbaceous subshrub in the sunflower family (Asteraceae) grows from 8 to 16 inches tall and flowers from May through September (Munz 1974). Del Mar mesa sand aster is endemic to San Diego County, and is found only from Del Mar to Encinitas (Reiser 2001). This variety is

commonly found on bluffs and brushy slopes near the sea (Munz 1974), but may occur in openings in maritime chaparral and coastal scrub on sandy soils between 50 feet and 500 feet in elevation (CNPS 2016).

AECOM observed approximately 585 Del Mar sand aster plants in the BSA, between San Dieguito Lagoon and Los Peñasquitos Lagoon. They were scattered in openings in southern mixed chaparral, southern maritime chaparral, Diegan coastal sage scrub, landscaped/ornamental and Torrey pine forest.

Cliff Spurge

Cliff spurge (*Euphorbia misera*) is a CRPR 2B.2 species (CNPS 2016). This perennial succulent is in the spurge (Euphorbiaceae) family and grows up to three feet tall. It blooms in December through August. It is native to Southern California, where it is known from the Sonoran Desert and the coastline (CNPS 2016). It grows in proximity to the coast in coastal sage scrub and maritime succulent scrub vegetation (CNPS 2016).

AECOM observed approximately 14 cliff spurge plants adjacent to the Torrey Pines State Beach parking lot.

Coast Barrel Cactus

Coast barrel cactus (*Ferocactus viridescens* var. *viridescens*) is a CRPR 2B.1 species (CNPS 2016) and is a covered species under SDG&E's Subregional NCCP. This globular succulent in the cactus family (Cactaceae) grows up to eight inches tall and flowers in May and June (Baldwin et al. 2012). This species is found only in coastal San Diego County and Baja California, Mexico. Although found coastally as far north as Oceanside and inland as far east as Poway, the largest populations of coast barrel cactus occur in Otay Mesa and Otay Valley, Point Loma, and Marine Corps Air Station Miramar (Reiser 2001). This species generally occurs in sandy, rocky, or dry hills of Diegan coastal sage scrub, grassland, chaparral, and vernal pool habitats below 493 feet in elevation (Baldwin et al. 2012; Munz 1974) and is the only barrel cactus found in coastal areas. This species is typically found in soil types such as San Miguel–Exchequer rocky silt loams and Redding gravelly loams, and is associated with species such as variegated dudleya (*Dudleya variegata*), foothill needlegrass (*Stipa lepida*), and California sagebrush (Reiser 2001).

AECOM observed approximately 95 coast barrel cactus plants in the BSA, growing in openings in southern maritime chaparral, Torrey pine forest, and Diegan coastal scrub from the Torrey Pines State Natural Reserve Extension Area southward.

Beach Goldenaster

Beach goldenaster (*Heterotheca sessiliflora* ssp. *sessiliflora*) is a CRPR 1B.1 species (CNPS 2016). This herbaceous perennial in the sunflower family (Asteraceae) grows from seven to 50 inches in height and ranges from decumbent to erect in habit (Baldwin et al. 2012). This species is found along the coast, mostly in San Diego County and Baja California, Mexico below 196 feet in elevation, with a presumed extant population also occurring in Los Angeles County (CNPS 2016). This species is found on coastal dunes and in sandy locales of Diegan coastal sage scrub, and occurs on soils mapped as terrace escarpments in Del Mar (Reiser 2001).

AECOM observed approximately 85 beach goldenaster plants in the BSA, growing in openings in southern mixed chaparral in Crest Canyon Open Space Park. Most plants were flowering during the 2016 fall survey making them easy to see and map.

San Diego Marsh-Elder

San Diego marsh-elder (*Iva hayesiana*) is a CRPR 2B.2 species (CNPS 2016). It is a subshrub in the sunflower family (Asteraceae) with multiple stems and relatively fleshy leaves that grows to three feet tall and produces nodding clusters of inconspicuous flowers April through October (Munz 1974). This species is distributed in San Diego County and northern Baja California, Mexico below 1,640 feet in elevation. Its habitat is identified as marshes, swamps, and playas (CNPS 2016); alkaline sinks and flats (Baldwin et al. 2012; Munz 1974); and creeks of intermittent streambeds (Reiser 2001). In San Diego County, it has been reported from the Tijuana Estuary to near Lake Hodges, with populations becoming smaller and more localized in the northern part of its range. San Diego marsh-elder is found on sandy alluvial embankments with cobbles on Riverwash, San Miguel-Exchequer, or Huerhuero loam soils (Reiser 2001).

AECOM observed approximately 85 San Diego marsh-elder plants in the BSA, growing in southern coastal salt marsh, coastal and valley freshwater marsh, a Diegan coastal sage scrub restoration area in Los Peñasquitos Lagoon, and adjacent to the road on the east edge of the lagoon.

Sea Dahlia

Sea dahlia (*Leptosyne maritima*) is a CRPR 2B.2 species (CNPS 2016). This robust perennial herb in the sunflower family (Asteraceae) grows one or two feet tall and produces yellow flower heads (inflorescences) about three inches wide from March through May (Munz 1974). Sea dahlia occurs only in coastal San Diego County and Baja California, Mexico. It grows in coastal bluffs, dunes, coastal strand vegetation, and Diegan coastal sage scrub below 200 feet in elevation. In San Diego, this species occurs mainly on eroding sandstone cliffs near the ocean.

AECOM observed approximately 600 sea dahlia plants growing primarily in southern maritime chaparral and Torrey pine forest in the southern part of Torrey Pines State Natural Reserve Extension Area.

Coast Woolly-Heads

Coast woolly-heads (*Nemacaulis denudata* var. *denudata*) is a CRPR 1B.1 species (CNPS 2016). This annual herb in the buckwheat (Polygonaceae) family prefers coastal dunes and beaches, especially those that are protected from human disturbance. This species blooms from April through September and occurs along the coast of southern California and northern Baja California, Mexico.

AECOM observed approximately 14 coast woolly-heads plants adjacent to the Torrey Pines State Beach parking lot.

Torrey Pine

Torrey pine (*Pinus torreyana*) is a CRPR 1B.2 species (CNPS 2016) and a covered species under SDG&E's Subregional NCCP. This tree in the pine family (Pinaceae) may reach 75 feet in height and has an open, round crown and bark with red-brown plates and irregular furrows (Baldwin et al. 2012). Torrey pine is endemic to coastal San Diego County near Del Mar. This species is widely planted in the region as an ornamental. Planted stands occasionally generate seedlings, as on the northwestern slope of Carmel Mountain and near Oak Crest Park in Encinitas (Reiser 2001). Torrey pine's native habitat is at elevations between 98 and 525 feet on sandstone substrates in chaparral and closed-cone coniferous forest communities.

AECOM observed approximately 276 Torrey pines throughout the BSA growing in Diegan coastal sage scrub, southern maritime chaparral, southern mixed chaparral, Torrey pine forest, and developed areas.

Nuttall's Scrub Oak

Nuttall's scrub oak is a CRPR 1B.1 species (CNPS 2016). This evergreen shrub in the oak family (Fagaceae) grows less than 10 feet tall and blooms from February through April. This species is found near the coast in Santa Barbara, Orange, and San Diego counties and in Baja California, Mexico, at elevations below 1,312 feet. It grows in chaparral, Diegan coastal sage scrub, and closed-cone coniferous forest habitats (CNPS 2016), preferring coastal chaparral with a relatively open canopy in flat areas, but is also found growing in dense stands on north-facing slopes (Reiser 2001). In San Diego County, Nuttall's scrub oak is known to grow as far inland as Camp Elliott and Otay Mesa (Reiser 2001).

AECOM observed approximately 88 Nuttall's scrub oaks in the BSA growing in Diegan coastal sage scrub, scrub oak chaparral, southern maritime chaparral, southern mixed chaparral, and Torrey pine forest, from Crest Canyon Open Space Park southward.

Estuary Sea-Blite

Estuary sea-blite (*Suaeda esteroa*) is a CRPR 1B.2 species (CNPS 2016). This glabrous annual/perennial herb in the goose-foot family (Chenopodiaceae) occurs from Santa Barbara County southward into Baja California, Mexico at elevations below 16 feet (CNPS 2016). This species grows in coastal salt marshes and swamps and blooms from May to October.

AECOM observed approximately 1,000 estuary sea-blite plants in the BSA growing in coastal salt marsh habitat in San Dieguito Lagoon.

High

The following five special-status plant species have a high potential to occur in the BSA, based on habitat suitability, species range, and previous occurrence records.

Nuttall's Acmispon

Nuttall's acmispon (*Acmispon prostrates*) is a CRPR 1B.1 species (CNPS 2016). This annual herb in the legume family (Fabaceae) occurs in San Diego County and Baja California, Mexico.

This species inhabits coastal strand, coastal sage scrub, and coastal dunes in San Diego County and blooms from March through June.

Suitable habitat for Nuttall's acmispon is present in Diegan coastal sage scrub habitat in the BSA. The closest known occurrence of this species is immediately adjacent to the BSA on the south side of the Torrey Pines State Beach parking lot. Due to the suitable habitat and known occurrence of this species it has a high potential to occur.

Southern Tarplant

Southern tarplant (*Centromadia parryi* ssp. *australis*) is a CRPR 1B.1 species (CNPS 2016). This annual herb in the sunflower family (Asteraceae) occurs along the coast of southern California and northwestern Baja California, Mexico. This species inhabits salt marsh margins, grassland, vernal pools, and coastal scrub and blooms from May through November.

Suitable habitat for southern tarplant is present in the BSA along wetland areas and coastal valleys. This species is most likely to be found in flats and roadsides adjacent to lagoons. This species was most recently detected in 2005 in San Dieguito Lagoon, less than 0.1 mile northeast of the BSA.

Orcutt's Spineflower

Orcutt's spineflower (*Chorizanthe orcuttiana*) is listed as federally and state endangered, is a CRPR 1B.1 species (CNPS 2016), and is a covered species and narrow endemic under SDG&E's Subregional NCCP. This annual herb in the Polygonaceae family is endemic to California. This species inhabits chaparral, coastal sage scrub, and closed-cone pine forest communities throughout openings and coastal areas and blooms from March through May.

Suitable habitat for Orcutt's spineflower is present west of I-5 in southern maritime chaparral and Diegan coastal sage scrub. This species was most recently detected in 2011, in the Torrey Pines State Natural Reserve Extension Area, along Gully Trail less than 0.2 mile west of the BSA.

Long-Spined Spineflower

Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*) is a CRPR 1B.2 species (CNPS 2016). This annual herb in the buckwheat family (Polygonaceae) occurs in the Peninsular Ranges in California and northern Baja California, Mexico. This species inhabits clay or sandy soils in meadows, chaparral, and coastal scrub and blooms from April through July.

Suitable habitat for long-spined spineflower is present throughout the BSA, particularly west of I-5. This species was most recently detected in 2010, along the gated dirt road in Torrey Pines State Natural Reserve Extension Area, approximately 0.75 mile southwest of the BSA.

Palmer's Frankenia

Palmer's frankenia (*Frankenia palmeri*) is a CRPR 2B.1 species (CNPS 2016). This perennial herb in the frankenia family (Frankeniaceae) occurs along the southern coast of California and in

northern Baja California, Mexico. This species inhabits alkali flats, playas, coastal salt marshes, and coastal dunes and blooms from May through June.

Suitable habitat for Palmer's frankenia is present in the marsh habitat at San Dieguito and Los Peñasquitos Lagoons. The most recent detection for this species is 2010 record located along San Dieguito Lagoon, approximately 0.75 mile east of the BSA.

Moderate

The following five special-status plant species have a moderate potential to occur in the BSA, based on habitat suitability, species range, and previous occurrence records.

Spineshrub

Spineshrub (*Adolphia californica*) is a CRPR 2B.1 species (CNPS 2016). This shrub in the buckthorn family (Rhamnaceae) occurs in San Diego County and Baja California, Mexico. This species occurs in clay soils in chaparral and coastal scrub and blooms from December through May.

Suitable habitat for spineshrub is present north of Via De La Valle and in scattered areas of shrubland throughout upland areas in BSA (outside of the actual project footprint). This species was most recently detected in 2008 on the south side of Gonzales Canyon, approximately 1 mile southeast of the BSA.

Golden-Spined Cereus

Golden-spined cereus (*Bergerocactus emoryi*) is a CRPR 2B.2 species (CNPS 2016). This perennial shrub (stem succulent) in the cactus family (Cactaceae) is known to occur only in the San Diego area, the Channel Islands, and Baja California, Mexico. This species inhabits sandy open hills in coastal scrub and chaparral and blooms from May through June.

Suitable habitat for golden-spined cereus is present throughout the BSA in upland areas west of I-5. The most recent detection for this species was in 1998 in the Torrey Pines State Natural Reserve Extension Area, approximately 0.75 mile southwest of the BSA.

San Diego goldenstar

San Diego goldenstar (*Bloomeria clevelandii*) is a CRPR 1B.1 species (CNPS 2016) and is a covered species under SDG&E's Subregional NCCP. This perennial herb in the brodiaea family (Themidaceae) occurs in southwestern San Diego County and northern Baja California, Mexico. This species inhabits coastal scrub, chaparral, mesa grassland, and vernal pools and blooms in April and May.

Suitable habitat for San Diego goldenstar is present in the BSA, along wetland and upland areas throughout the BSA. This species was last detected in 2001, approximately one mile east-northeast of the BSA, south of Carmel Mountain Road.

Short-Leaved Dudleya

Short-leaved dudleya (*Dudleya brevifolia*) is listed as state endangered, is a CRPR 1B.1 species (CNPS 2016), and is a narrow endemic under SDG&E's Subregional NCCP. This perennial herb in the stonecrop family (Crassulaceae) is endemic to southwestern San Diego County. This species inhabits bare Torrey sandstone terraces in maritime chaparral and coastal scrub and blooms in April and May.

A small amount of suitable habitat for short-leaved dudleyas is present west of I-5 in southern maritime chaparral and Diegan coastal sage scrub. This species may also be found in sandstone areas south of San Dieguito Lagoon. This species was most recently detected in 2011, in Torrey Pines State Reserve, about 0.75 mile southwest of the BSA.

Decumbent Goldenbush

Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*) is a CRPR 1B.1 species (CNPS 2016). This shrub in the sunflower family (Asteraceae) occurs along the coast of southern California, the Channel Islands, and Baja California, Mexico. This species occurs in sandy, often disturbed, areas in chaparral and coastal scrub and blooms from April through November.

Suitable habitat for decumbent goldenbush present in sandy upland areas of the BSA. The nearest and most recent record of this species is a 2004 occurrence along the north shore of Peñasquitos Lagoon, approximately 0.2 mile west of the BSA. Varieties within this species are taxonomically problematic. Populations are extremely variable and many plants don't clearly fit under any one variety. Plants in the BSA fit most closely with the non-special-status variety *vernonoides*.

Special-Status Wildlife

Special-status wildlife species include those species listed by the USFWS or CDFW as Endangered, Threatened, Proposed, or Candidate species; species listed by CDFW as FP or California SSC; and species covered under SDG&E's Subregional NCCP. Special-status wildlife species with the potential to occur in the BSA are listed in Table 4.4-3: Special-Status Wildlife with the Potential to Occur in the BSA.

Based on the preliminary database searches, a preliminary literature review, and observations during surveys, 66 special-status wildlife species occur or have the potential to occur in the BSA:

- 10 avian species, one reptile species, and one mammal species that were detected
- 14 avian species, one invertebrate species, four reptile species, and one mammal species with high potential to occur
- four avian species and two mammal species with moderate potential to occur
- 12 avian species, five reptile species, one amphibian species, and 10 mammal species with a low potential to occur

An additional two special-status avian species were determined to have no potential to occur within the BSA and are not discussed further in this document. The 38 special-status wildlife

species that were detected or have a high or moderate potential to occur in the BSA are discussed in detail as follows.

Detected

The following 10 special-status avian species, one special-status reptile species, and one special-status mammal species were detected in the BSA.

Light-footed Ridgway's Rail

Light-footed Ridgway's rail is federally and state listed as endangered and is a covered species under SDG&E's Subregional NCCP. This species is restricted to coastal salt marshes in Southern California, such as the San Dieguito and Los Peñasquitos lagoons, where vegetation is dominated by cordgrass (*Spartina foliosa*) and pickleweed (*Salicornia* sp.). This species can also be found in brackish and freshwater marshes with cattails and bulrushes. Light-footed Ridgway's rail forages in higher marsh vegetation and along tidal creeks and at the interface between vegetation and adjacent mudflats. Light-footed Ridgway's rail is a reclusive species and will nest and utilize relatively small patches of its preferred habitat when isolated from external anthropogenic disturbances (Zembal and Hoffman 2012; Zembal et al. 2011).

A single light-footed Ridgway's rail was detected approximately 400 feet to the east of the BSA during the 2017 focused light-footed Ridgway's rail surveys (Blackhawk 2017a). However, none were detected in within the BSA in either lagoon. Coastal salt marsh habitat within the BSA in San Dieguito Lagoon was not suitable for light-footed Ridgway's rail nesting in 2017. This species has been found within the BSA in San Dieguito Lagoon as recently as 2007 (CDFW 2016). It was also detected in 2012 in the upstream portion of the San Dieguito River, east of I-5, near the El Camino Real bridge (Konecny 2012).

Coastal California Gnatcatcher

Coastal California gnatcatcher is federally listed as threatened, is a California SSC, and is a covered species under SDG&E's Subregional NCCP. This species is found in the six southernmost California counties located within the coastal plain (San Bernardino, Ventura, Los Angeles, Orange, San Diego, and Riverside). Coastal California gnatcatcher generally inhabits Diegan coastal sage scrub and Riversidian coastal sage scrub dominated by California sagebrush and flat-topped buckwheat, generally below 1,500 feet in elevation along the coastal slope. When nesting, this species typically avoids slopes greater than 25 percent with dense, tall vegetation.

In 2017, Blackhawk Environmental detected three coastal California gnatcatcher pairs and their associated territories within the BSA. This species was detected at the northernmost portion of the BSA, along Racetrack View Drive near San Dieguito Drive, and within the Torrey Pines State Natural Reserve Extension (Blackhawk 2017b). Fledglings were also observed in the territories, indicating that successful nesting populations exist within the BSA. An additional three pairs and associated territories were observed within 100 feet of the BSA.

Table 4.4-3: Special-Status Wildlife with the Potential to Occur in the BSA

Common Name	Scientific Name	Listing Status	Habitat Requirements	Findings	Potential to Occur/Comments
Invertebrates					
wandering (saltmarsh) skipper	<i>Panoquina errans</i>	SDG&E NCCP: 2017 Covered, NE	Restricted to estuarine and tideland habitats where adults are often associated with salt grass (<i>Distichlis spicata</i>).	High Potential	Protocol-level surveys for wandering skipper are in progress in 2017. A minimum of 40 individuals were detected during protocol surveys in 2014 (RECON 2014d). Individuals were detected in patches of salt grass within Los Peñasquitos and San Dieguito Lagoons.
Reptiles and Amphibians					
western spadefoot	<i>Spea hammondi</i>	CDFW: SSC SDG&E NCCP: Covered	Occurs in grasslands, oak woodlands, coastal sage scrub, and chaparral vegetation where temporary pools exist for breeding (Thomson et al. 2016).	Low Potential	This species requires fresh water for breeding, and most of the water in the BSA is brackish or too salty for this species to reproduce. The species may be found aestivating in upland habitats such as Diegan coastal sage scrub and chaparral. Known to historically occur east of I-5 within suitable vernal pool habitat south of Torrey View Estates (CDFW 2016).
southwestern pond turtle	<i>Clemmys marmorata pallida</i>	CDFW: SSC SDG&E NCCP: Covered	Occurs in a broad range of aquatic water bodies, including rivers and streams, lakes, ponds, reservoirs, marshes, and other wetlands (Thomson et al. 2016).	Low Potential	This species requires fresh water for breeding, and most of the water in the BSA is brackish or too salty for this species to reproduce.
coast horned lizard	<i>Phrynosoma blainvillei</i>	CDFW: SSC SDG&E NCCP: Covered	A variety of habitats including sage scrub, chaparral, oak woodland, grassland, riparian woodland, Joshua tree woodland, coniferous forest, and saltbush scrub (Thomson et al. 2016; Stebbins 2003). Found on sandy or friable loose soils within open habitat areas (Thomson et al. 2016).	High Potential	Historically detected within the BSA in the Torrey Pines State Natural Reserve Extension Area in 1998 (CDFW 2016). The species may occur along Via De La Valle and other areas with Diegan coastal sage scrub.
Coronado skink	<i>Plestiodon skitonianus interparietalis</i>	SDG&E NCCP: Covered	Most commonly found in open areas, sparse brush, and oak woodlands, usually under rocks, leaf litter, and logs, debris, or in the shallow burrows it digs (CDFG 1988).	High Potential	This species has historically been detected within the BSA in the Torrey Pines State Natural Reserve Extension Area in 1998 (CDFW 2016). The species may occur along Via De La Valle and other areas with Diegan coastal sage scrub.
San Diegan tiger whiptail	<i>Aspidoscelis tigris stejnegeri</i>	CDFW: SSC	A variety of habitats including coastal sage scrub, chaparral, riparian areas, woodlands, and rocky areas (Lemm 2006).	Detected	Detected within Torrey Pines State Natural Reserve Extension Area during 2017 California gnatcatcher surveys (Blackhawk 2017b). The species may occur within the BSA in the Torrey Pines State Natural Reserve Extension Area and along Via De La Valle and other areas with Diegan coastal sage scrub.
Belding's orange-throated whiptail	<i>Aspidoscelis hyperythra beldingi</i>	SDG&E NCCP: Covered	A variety of habitats including sage scrub, chaparral, and coniferous and broadleaf woodlands (Stebbins 2003). Found on sandy or friable soils within open habitat areas. Requires open areas, bushes, and fine loose soil.	High Potential	This species was detected multiple times within the BSA at the north end along Via De La Valle during the California gnatcatcher and least Bell's vireo surveys in 2014 (RECON 2014c).

Common Name	Scientific Name	Listing Status	Habitat Requirements	Findings	Potential to Occur/Comments
southern California legless lizard	<i>Anniella stebbinsi</i>	CDFW: SSC	Inhabits loose or sandy substrates in a number of vegetation communities including coastal dunes, chaparral, pine-oak woodland, desert scrub, open grasslands, and riparian areas (Thomson et al. 2016).	Low Potential	This species has not been detected within the BSA according to CNDDDB (CDFW 2016); however, patches of friable soils south of San Dieguito Lagoon may contain suitable habitat.
coast patch-nosed snake	<i>Salvadora hexalepis virgultea</i>	CDFW: SSC SDG&E NCCP: Covered	A variety of habitats including coastal sage scrub, chaparral, riparian, grasslands, and agricultural fields (Thomson et al. 2016). Prefers open habitats with friable or sandy soils, burrowing rodents for food, and enough cover to escape predation.	Low Potential	There is suitable habitat for this species within the BSA in the Torrey Pines State Natural Reserve Extension Area; however, none have been detected based in the vicinity of the BSA according to CNDDDB (CDFW 2016).
two-striped gartersnake	<i>Thamnophis hammondi</i>	CDFW: SSC SDG&E NCCP: Covered	Permanent and intermittent freshwater streams, creeks, and ponds and associated vegetation types such as willow, oak woodlands, coastal sage scrub, scrub oak, and chaparral (Thomson et al. 2016).	Low Potential	There is limited suitable habitat for this species within the BSA in the Torrey Pines State Natural Reserve Extension Area although none have been detected based on CNDDDB (CDFW 2016).
red diamond rattlesnake	<i>Crotalus ruber</i>	CDFW: SSC SDG&E NCCP: Covered	Chaparral, coastal sage scrub, desert slope scrub, desert washes, grassy fields, cactus patches, or in rock outcrops (Thomson et al. 2016).	Low Potential	There is suitable habitat for this species within the BSA in the Torrey Pines State Natural Reserve Extension Area however, none have been detected in the vicinity of the BSA according to CNDDDB (CDFW 2016).
San Diego ringed-neck snake	<i>Diadophis punctatus similis</i>	SDG&E NCCP: Covered	Found mainly in San Diego County along the coast and into the Peninsular range, and in southwestern Riverside County in coastal sage scrub. Ranges south barely into northern Baja California, Mexico.	High Potential	There is suitable habitat for this species within the BSA in the Torrey Pines State Natural Reserve Extension Area and they have historically (1998) been detected based on CNDDDB (CDFW 2016).
Birds					
Canada goose	<i>Branta canadensis</i>	SDG&E NCCP: Covered	Primarily a winter visitor to San Diego County, preferring habitats that combine wetlands with low grass or succulent foliage for foraging.	High Potential	Documented annually wintering in small numbers in San Dieguito and Los Peñasquitos Lagoons. Recent breeding records have been in artificial habitats involving released birds (eBird 2016; Unitt 2004). Within the BSA, the species is only likely to winter.
redhead	<i>Aythya americana</i>	CDFW: SSC (nesting)	Breeding habitat is marshes and prairie potholes in western North America. Feeds primarily at night on aquatic plants. Winters in Mission Bay but has been recorded breeding in north coastal area of San Diego County.	Low Potential	Historically bred within the BSA in 1965 (Unitt 2004). Suitable breeding habitat is very sparse, but suitable wintering habitat is found within estuarine areas of the BSA.
reddish egret	<i>Egretta rufescens</i>	SDG&E NCCP: Covered	Forages in coastal wetlands with extensive shallow water for foraging.	High Potential	Multiple database records from San Dieguito Lagoon and at least one record from Los Peñasquitos Lagoon (eBird 2016; Unitt 2004). Only wintering habitat is present; the species does not breed in or around the BSA.

Common Name	Scientific Name	Listing Status	Habitat Requirements	Findings	Potential to Occur/Comments
wood stork	<i>Mycerterua americana</i>	CDFW: SSC	Freshwater marsh and mudflats.	Low Potential	Historically detected within the BSA at Los Peñasquitos Lagoon (Unitt 2004). Nesting has been attempted in San Diego County but has never been successful (Unitt 2004). This species is likely to only use the BSA for foraging.
American white pelican	<i>Pelecanus erythrorhynchos</i>	CDFW: SSC (nesting)	Breeds in northeastern California, winters throughout Central and Southern California. Rivers, lakes, estuaries, bays, marshes, and nests usually in brackish or freshwater lake islands.	Detected	This species was detected flying over the BSA during light-footed Ridgeway's rail and Belding's savannah sparrow surveys (Blackhawk 2017a). This species is a migrant visitor within the BSA.
California brown pelican	<i>Pelecanus occidentalis californicus</i>	CDFW: FP (nesting) SDG&E NCCP: Covered	Common along the coast where they dive for fish. Known to congregate in areas that provide secure roost sites such as coastal bluffs, or man-made structures near fertile fishing grounds. Breeds on dry, rocky offshore islands in northern Gulf of California and along Pacific coast of California and Baja California	Detected	California brown pelican also is not known to breed near the BSA and was observed flying along the coastline over the beach near the staging yard at Torrey Pines State Beach's North Beach parking lot. This species only forages in the vicinity of the BSA.
least bittern	<i>Ixobrychus exilis</i>	CDFW: SSC (nesting)	Marsh habitats or large emergent wetlands with cattails (<i>Typha</i> sp.) and tules.	High Potential	Multiple database records from Los Peñasquitos Lagoon and a few records from San Dieguito Lagoon over many years with the most recent being 2013 (eBird 2016). Potentially suitable breeding habitat exists within Los Peñasquitos Lagoon in the BSA.
white-faced ibis	<i>Plegadis chihi</i>	SDG&E NCCP: Covered	Found in shallow areas of freshwater marshes and wet grass. Colonial nesters, with two known colonies in San Diego County, along Guajome Lake and near a pond in San Luis Rey River Valley.	Detected	Detected in Los Peñasquitos Lagoon during 2017 California gnatcatcher surveys (Blackhawk 2017b). Multiple database records from Los Peñasquitos Lagoon and a few observations from San Dieguito Lagoon over many years with the most recent being 2016 (eBird 2016). Suitable foraging habitat exists within the BSA, but breeding is unlikely.
light-footed Ridgeway's rail	<i>Rallus obsoletus levipes</i>	USFWS: FE CDFW: SE, FP SDG&E NCCP: Covered	Found in Southern California in coastal salt marshes, especially those dominated by cordgrass. This species occurs year-round in many of the coastal estuaries in San Diego County.	Detected	Detected within the Los Peñasquitos Lagoon area of the BSA during 2014 and 2017 light-footed Ridgeway's rail surveys (Konecny 2014, Blackhawk 2017a). Species not detected within the San Dieguito Lagoon area of the BSA likely due to lack of habitat within the area (Konecny 2014, Blackhawk 2017a). Historically found within the BSA in San Dieguito Lagoon according to CNDDDB in 2007, but occurs more recently farther upstream near El Camino Real (CDFW 2016). The species occurs year-round, both breeding and wintering within the BSA.

Common Name	Scientific Name	Listing Status	Habitat Requirements	Findings	Potential to Occur/Comments
western snowy plover	<i>Charadrius nivosus nivosus</i>	USFWS: FT CDFW: SSC SDG&E NCCP: Covered	Nests on beaches, dunes, and salt flats in San Diego County, with the highest concentrations in two areas: Marine Corps Base Camp Pendleton and Silver Strand. Outside the breeding season, species is more widespread but not common along the County's coast.	Moderate Potential	Historically bred within the Los Peñasquitos Lagoon area of the BSA near the river mouth. Not detected during western snowy plover surveys (Konecny 2014). Species known to use coastal dunes by Los Peñasquitos Lagoon during the winter (Konecny 2014). Potential to breed within the BSA, with winter foraging habitat present.
California least tern	<i>Sterna antillarum browni</i>	USFWS: FE CDFW: SE, FP SDG&E NCCP: Covered	A ground-nesting bird that requires undisturbed stretches of beach and coastline. Adults are highly philopatric to natal colonies, and forage in bays and estuaries near their colonies.	High Potential	Detected foraging within San Dieguito Lagoon during 2014 California least tern surveys (Konecny 2014). This species historically nested in the BSA but has not nested within the areas in the past 10 years (Konecny 2014). Suitable foraging habitat is present within the BSA, but breeding is unlikely.
gull-billed tern	<i>Gelochelidon nilotica</i>	CDFW: SSC (nesting)	Most pairs nest on sandy beaches or on sandy barrier islands in coastal waters, especially near ocean inlets.	High Potential	Species has historically been detected within San Dieguito Lagoon, most recently in 2014, and also detected at the west end of Los Peñasquitos Lagoon near the confluence with the Pacific Ocean (eBird 2016). Suitable foraging habitat is present within the BSA, but breeding is unlikely.
black skimmer	<i>Rynchops niger</i>	CDFW: SSC (nesting)	Breeds in loose groups on sand banks or bare dirt areas near water sources. May utilize the same habitat as terns.	High Potential	Species has historically been detected within San Dieguito Lagoon, most recently in 2012, and also detected within Los Peñasquitos Lagoon in 2011 (eBird 2016). Suitable foraging habitat is present within the BSA, but breeding is unlikely.
long-billed curlew	<i>Numenius americanus</i>	SDG&E NCCP: Covered	A common winter resident within San Diego County along lagoons, estuaries, marshes, flooded fields, agricultural areas, and other moist areas where soft soil allows the species to probe into the ground for prey.	High Potential	Species is commonly recorded in both lagoons although the species does not breed within the lagoons (eBird 2016). Suitable foraging habitat is present within the BSA, but breeding is unlikely.
white-tailed kite	<i>Elanus leucurus</i>	CDFW: FP (nesting and wintering)	Widespread over the coastal slope of San Diego County preferring riparian woodlands, oak groves, or sycamore groves, adjacent to grasslands.	High Potential	Detected flying over the BSA during 2014 California gnatcatcher and least Bell's vireo surveys (RECON 2014c). Suitable foraging habitat occurs throughout the BSA, with limited breeding habitat in tall trees throughout the BSA.
northern harrier	<i>Circus cyaneus</i>	CDFW: SSC (nesting) SDG&E NCCP: Covered	Breeds predominantly in wetland habitats but will also use upland habitats. Prefers grasslands and agricultural fields during migration and in winter. The species occurs year-round in San Diego County.	Detected	Detected in Torrey Pines State Natural Reserve Extension Area during 2017 California gnatcatcher surveys (Blackhawk 2017b). Common species year-round within both San Dieguito and Los Peñasquitos Lagoons (eBird 2016). Both breeding and wintering habitat is present.
Cooper's hawk	<i>Accipiter cooperi</i>	SDG&E NCCP: Covered	Usually in oak woodlands, but occasionally in willow or eucalyptus woodlands. The species occurs year-round in San Diego County.	High Potential	Detected during the 2014 California gnatcatcher and least Bell's vireo surveys flying over the BSA. May forage and breed in tall trees within the BSA (RECON 2014c).

Common Name	Scientific Name	Listing Status	Habitat Requirements	Findings	Potential to Occur/Comments
ferruginous hawk	<i>Buteo regalis</i>	SDG&E NCCP: Covered	Open country, primarily plains, prairies, badlands, sagebrush, shrubland, and desert. The species does not nest in San Diego County, and only occurs as a winter visitor.	Low Potential	This species has not been detected in the BSA, and the habitat is generally not suitable for foraging. No breeding habitat is present.
golden eagle	<i>Aquila chrysaetos</i>	CDFW: FP (nesting and wintering) SDG&E NCCP: Covered	Nests on cliff ledges and trees on steep slopes. Hunts for prey in nearby grasslands, sage scrub, or broken chaparral. Requires very large territories. The species occurs year-round in San Diego County.	Low Potential	This species has not been detected in the BSA, and the habitat is generally not suitable. There is no nearby suitable breeding habitat, and there is very little suitable foraging habitat.
bald eagle	<i>Haliaeetus leucocephalus</i>	USFWS: DL CDFW: SE, FP (nesting and wintering) SDG&E NCCP: Covered	Nests in old growth trees near the coast or other bodies of water where fish or other prey sources are available. The species occurs year-round in San Diego County and there are a few nesting pairs near major lakes or food source-areas within San Diego County.	Moderate Potential	Uncommon resident and annual winter visitor to San Diego County. No suitable breeding habitat within the BSA, but suitable foraging habitat occurs within the various lagoons and estuarine areas. The most recent database record is a 2014 observation within the Torrey Pines State Natural Reserve Extension Area (eBird 2016).
burrowing owl	<i>Athene cunicularia</i>	CDFW: SSC (nesting and some wintering sites) SDG&E NCCP: Covered, NE	Found mainly in grassland and open scrub from the seashore to foothills. Strongly associated with California ground squirrel (<i>Spermophilus beecheyi</i>) burrows. The species occurs year-round in San Diego County, but there is an increase in numbers during the winter months.	Low Potential	This species has not been detected in the BSA, and the habitat is generally not suitable. Database records show that it has been detected along the Pacific Ocean near bluffs within the Torrey Pines State Natural Reserve Extension Area as recently as the winter of 2012 (eBird 2016). Only wintering habitat is present; the species does not breed in or around the BSA.
long-eared owl	<i>Asio otus</i>	CDFW: SSC (nesting)	Primarily in dense oak and riparian woodland and at the edges of coniferous forests. Typically nests in trees, often in the abandoned nests of corvids or other raptors.	Low Potential	This species has not been detected in the BSA, and the habitat is generally not suitable for foraging, but the species may occasionally roost within trees in the Torrey Pines State Natural Reserve Extension Area. Only wintering habitat is present; the species does not breed in or around the BSA.
short-eared owl	<i>Asio flammeus</i>	CDFW: SSC (nesting)	Primarily nests in marshes and grassland. This species is a winter resident within San Diego County.	Low Potential	This species has not been detected in the BSA, but may occasionally forage within the various lagoons in the BSA during the winter. Only wintering habitat is present; the species does not breed in or around the BSA.
American peregrine falcon	<i>Falco peregrinus anatum</i>	USFWS: DL CDFW: DL, FP SDG&E NCCP: Covered	Open areas from tundra, moorlands, steppe, and seacoasts to mountains and open forested regions, especially where there are suitable nesting cliffs. The species occurs year-round in San Diego County.	High Potential	Detected in flight during 2014 California gnatcatcher and least Bell's vireo 2014 surveys (RECON 2014c). No suitable breeding habitat occurs within the BSA; however, foraging habitat exists throughout the length of the BSA.
southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	USFWS: FE CDFW: SE (nesting) SDG&E NCCP: Covered	Restricted to a few colonies in riparian woodlands scattered throughout Southern California. Riparian forests are integral to this species' persistence.	Low Potential	This species does not breed in or near the BSA; however, multiple database records exist of willow flycatchers, where the specific subspecies is unknown, migrating outside, but adjacent to, the BSA (eBird 2016). No suitable breeding or wintering habitat exists.

Common Name	Scientific Name	Listing Status	Habitat Requirements	Findings	Potential to Occur/Comments
vermilion flycatcher	<i>Pyrocephalus rubinus</i>	CDFW: SSC (nesting)	Uncommon year-round resident of San Diego County. Prefers open riparian woodland, arid lands, golf courses, and mesquite bosques on desert floodplains. Nests in native trees such as willows and cottonwoods.	High Potential	This species has multiple database records along San Dieguito Lagoon, most recently during the winter in 2016, but there is generally no suitable breeding habitat within the BSA (eBird 2016).
loggerhead shrike	<i>Lanius ludovicianus</i>	CDFW: SSC (nesting)	Uncommon year-round resident of San Diego County. Found in grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation that it uses for concealing and protecting the nest.	High Potential	This species has multiple database records during the winter within San Dieguito and Los Peñasquitos Lagoons (most recently in 2015); however, the species generally does not have suitable breeding habitat within the BSA (eBird 2016).
least Bell's vireo	<i>Vireo bellii pusillus</i>	USFWS: FE CDFW: SE SDG&E NCCP: Covered	Riparian woodland with understory of dense young willows or mulefat and willow canopy. Nests often placed along internal or external edges of riparian thickets (USFWS 1986).	Low Potential	Small patches of least Bell's vireo habitat occur within the BSA; however, habitat is small and isolated, and no least Bell's vireo were detected during protocol least Bell's vireo surveys in 2014 (RECON 2014c). There are database records for the species within San Dieguito Lagoon just outside of the BSA in 2016 (eBird 2016). There is low potential for the species to breed within the BSA.
Clark's marsh wren	<i>Cistothorus palustris clarkae</i>	CDFW: SSC	Year-round resident in freshwater, brackish, and estuarine marshes in coastal Southern California.	Detected	Detected in Los Peñasquitos Lagoon during 2017 California gnatcatcher surveys (Blackhawk 2017b). The species has multiple database records throughout the year in suitable breeding habitat within San Dieguito and Los Peñasquitos Lagoons (eBird 2016). The species winters and breeds within the BSA.
coastal cactus wren	<i>Campylorhynchus brunneicapillus sandiegensis</i>	CDFW: SSC SDG&E NCCP: Covered, NE	Mature coastal sage scrub with extensive stands of tall prickly pear or cholla cacti (<i>Opuntia</i> sp.).	Low Potential	No suitable breeding or foraging habitat exists for this species within the BSA. The closest and most recent database record is a 2014 observation within the Torrey Pines State Natural Reserve Extension Area (eBird 2016).
coastal California gnatcatcher	<i>Polioptila californica californica</i>	USFWS: FT CDFW: SSC SDG&E NCCP: Covered	Diegan coastal sage scrub dominated by California sagebrush (<i>Artemisia californica</i>) and flat-topped buckwheat (<i>Eriogonum fasciculatum</i>). Generally avoids steep slopes above 25 percent and dense, tall vegetation for nesting.	Detected	Detected during the protocol California gnatcatcher wildlife surveys in 2014 and 2017 (RECON 2014, Blackhawk 2017). At least six California gnatcatcher pairs were mapped within the vicinity of the BSA in 2017, primarily north of Via De La Valle and in Torrey Pines State Natural Reserve Extension Area California gnatcatcher were also detected within the BSA in 2014 (RECON 2014c).
western bluebird	<i>Sialia mexicana</i>	SDG&E NCCP: Covered	Frequents open woodlands for foraging, but requires suitable roosting and nesting cavities usually in snags. Availability of snags may limit population density. Often occurs in coast live oak woodland with adjacent grasslands.	High Potential	Multiple database records exist for this species throughout the BSA, but particularly within the Torrey Pines State Natural Reserve Extension Area and within San Dieguito Lagoon in 2016 (eBird 2016). There is a potential for this species to breed and winter within the BSA.

Common Name	Scientific Name	Listing Status	Habitat Requirements	Findings	Potential to Occur/Comments
yellow warbler	<i>Setophaga petechia</i>	CDFW: SSC (nesting)	A fairly common summer breeding resident found along mature riparian woodlands consisting of cottonwood, willow, alder, and ash trees. Restricted to this increasingly patchy habitat.	Detected	Detected in Los Peñasquitos Lagoon during 2017 light-footed Ridgeway's rail and Belding's savannah sparrow surveys (Blackhawk 2017a). Multiple database records exist for this species throughout the BSA, but particularly within the Torrey Pines State Natural Reserve Extension Area and within San Dieguito Lagoon in 2016 (eBird 2016). There is a potential for this species to breed within the BSA.
yellow-breasted chat	<i>Icteria virens</i>	CDFW: SSC (nesting)	Riparian woodland, with a dense undergrowth.	High Potential	Multiple database records for this species exist throughout the BSA, particularly within Los Peñasquitos Lagoon and San Dieguito Lagoon in 2016 (eBird 2016). There is a potential for this species to breed within the BSA.
southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	SDG&E NCCP: Covered	Grassy or rocky slopes with open scrub. Occurs mainly in Diegan coastal sage scrub and within rocky chaparral areas. Often found in areas with topographical variation with small canyons, ridgelines, and rocky areas.	Detected	Detected within Diegan coastal sage scrub north of Via De La Valle during 2017 California gnatcatcher surveys (Blackhawk 2017b). This species was also detected during California gnatcatcher and least Bell's vireo surveys in 2014 (RECON 2014c). The species breeds and winters within the BSA.
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	CDFW: SE SDG&E NCCP: Covered	Restricted to coastal saltmarshes dominated by <i>Salicornia</i> . The species occurs year-round in San Diego County.	Detected	Detected within the BSA during Belding's savannah sparrow surveys in 2014 and 2017 within both San Dieguito and Los Peñasquitos Lagoons (Konecny 2014, Blackhawk 2017a). The species breeds and winters within the BSA.
large-billed savannah sparrow	<i>Passerculus sandwichensis rostratus</i>	CDFW: SSC (wintering) SDG&E NCCP: Covered	In San Diego County, occurs only in winter, and is found along beaches and shores with marsh habitat.	Moderate Potential	There are a few database records for this species within both lagoons during the winter, with the most recent in 2016. However, they have been outside of the BSA (eBird 2016). This species is primarily a winter visitor to the BSA.
grasshopper sparrow	<i>Ammodramus savannarum perpallidus</i>	CDFW: SSC (nesting) SDG&E NCCP: Covered	Diegan coastal sage scrub, native and nonnative grasslands growing on flat, or gently sloping topography.	Low Potential	There have been no records of this species from the BSA or nearby vicinity. The species is not likely to winter or breed within the BSA.
tricolored blackbird	<i>Agelaius tricolor</i>	CDFW: SSC (nesting) SDG&E NCCP: Covered	Breeds in freshwater marshes with cattails and other emergent vegetation.	Moderate Potential	This species has been documented within the BSA in both lagoons, most recently in 2016 (eBird 2016). The species does not breed in the vicinity. This species is primarily a migrant or winter visitor to the BSA.
yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	CDFW: SSC (nesting)	Freshwater marshes with cattails and other emergent vegetation. Nests in deeply flooded freshwater marshes.	Low Potential	This species has been documented sporadically at both lagoons; however, only one known nesting colony is documented in extreme eastern San Diego County at Tule Lake (Unitt 2004). This species is primarily a winter visitor to the BSA.

Common Name	Scientific Name	Listing Status	Habitat Requirements	Findings	Potential to Occur/Comments
Mammals					
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>	CDFW: SSC	In San Diego County, occurs primarily in urban areas. In Arizona and Mexico, found in deep canyons and in the mountains, foraging in riparian, desert scrub, and pinyon-juniper habitats, in particular on <i>Yucca</i> sp.	Low Potential	Limited potential to fly through the BSA while foraging, and there are few to no suitable roosting structures. No nearby CNDDDB records.
western mastiff bat	<i>Eumops perotis californicus</i>	CDFW: SSC	Chaparral; live oaks; and arid, rocky regions. Requires downward-opening crevices.	Low Potential	Limited potential to fly through the BSA while foraging, and there are few to no suitable roosting structures. No nearby CNDDDB records.
pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	CDFW: SSC	Rugged cliffs, rocky outcrops, and slopes in desert shrub and pine oak forests.	High Potential	This species was detected in 2000 roosting in the bridge over the railroad tracks at the intersection of Camino Del Mar and Jimmy Durante Boulevard (CDFW 2016). Therefore, the species has high potential to forage within the BSA and may roost in nearby bridges.
pallid bat	<i>Antrozous pallidus</i>	CDFW: SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect them from high temperatures.	Low Potential	Limited potential to fly through the BSA while foraging, and there are few to no suitable roosting structures. No nearby CNDDDB records.
Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	CDFW: CT, SSC	Coastal conifer and broad-leaf forests, oak and conifer woodlands, arid grasslands, and deserts. Most common in mesic sites with caves or other roost cavities.	Low Potential	Limited potential to fly through the BSA while foraging, and there are few to no suitable roosting structures. No nearby CNDDDB records.
western red bat	<i>Lasiurus blossevillii</i>	CDFW: SSC	Feeds over grasslands, shrublands, open woodlands, forests, and croplands. Roosts primarily in trees and sometimes shrubs, often in edge habitats along streams, fields, or urban areas.	Low Potential	Limited potential to fly through the BSA while foraging, and there are few to no suitable roosting structures. No nearby CNDDDB records.
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	CDFW: SSC SDG&E NCCP: Covered	Typical habitats include early stages of chaparral, open coastal sage scrub, and grasslands near the edges of brush.	Low Potential	Recorded within one mile outside of BSA in 1993 (CDFW 2016); however, moderate quality habitat type exists within the BSA.
Dulzura pocket mouse	<i>Chaetodipus californicus femoralis</i>	CDFW: SSC SDG&E NCCP: Covered	Inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities.	Low Potential	Potential to occur in Diegan coastal sage scrub and chaparral habitat in the Torrey Pines State Natural Reserve Extension Area and at the north end of Via De La Valle. However, there are no recent CNDDDB occurrences in the vicinity of the BSA.
northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	CDFW: SSC SDG&E NCCP: Covered	Inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities.	Moderate Potential	Historically recorded within BSA. Between 1994 and 2002, multiple individuals have been captured within and adjacent to the BSA according to CNDDDB (CDFW 2016). Suitable habitat is present within upland areas of the BSA and within the Torrey Pines State Natural Reserve Extension Area Extension Area.

Common Name	Scientific Name	Listing Status	Habitat Requirements	Findings	Potential to Occur/Comments
southern grasshopper mouse	<i>Onychomys torridus ramona</i>	CDFW: SSC SDG&E NCCP: Covered	This species inhabits a variety of low, open and semi-open scrub habitats, including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs.	Low Potential	This species has specific habitat requirements that are very limited within the BSA. No small mammal trapping has been recently conducted in the area and there are no nearby CNDDDB locations for this species.
San Diego desert woodrat	<i>Neotoma bryanti intermedia</i>	CDFW: SSC SDG&E NCCP: Covered	Sagebrush scrub, annual grassland, chaparral, and desert scrubs, often with cactus patches, rock outcrops, or rock piles.	Moderate Potential	Suitable habitat occurs within the Diegan coastal sage scrub habitat south of the San Dieguito Lagoon area within the BSA and along Via De La Valle and within the Torrey Pines State Natural Reserve Extension Area. Known to occur within the BSA in 1996 based on CNDDDB (CDFW 2016).
American badger	<i>Taxidea taxus</i>	CDFW: SSC	Shrub, forest, and herbaceous habitats, with friable soils, often associated with vast tracts of grassland areas but also occurs in grassy canyons. Needs sufficient food and friable soils. Preys on burrowing rodents, especially California ground squirrels (<i>Otospermophilus beecheyi</i>).	Low Potential	This species is unlikely to occur in such an urbanized area, especially since its primary habitat types (deserts, grasslands, and sage scrublands) do not occur in the BSA.
mountain lion	<i>Felis concolor</i>	SDG&E NCCP: Covered	Occupies a variety of habitats including rugged mountains, forests, deserts, riparian areas, chaparral, and locations with a prey base, primarily mule deer.	Low Potential	This species is unlikely to occur in such an urbanized area; however, it may occasionally follow riparian corridors such as Los Peñasquitos Canyon.
southern mule deer	<i>Odocoileus hemionus fuliginata</i>	SDG&E NCCP: Covered	Occupies a variety of forests, woodlands, riparian areas, and scrublands including coniferous forests, desert scrub, chaparral, and grassland with shrubs.	Detected	Detected in Los Peñasquitos Lagoon during light-footed Ridgeway's rail, Belding's savannah sparrow, and California gnatcatcher surveys in 2017 (Blackhawk 2017a, b). This species was also detected during the 2014 California gnatcatcher and least Bell's vireo surveys (RECON 2014c). Known to occur in Los Peñasquitos Canyon and surrounding areas.

Note: Listing statuses are as follows:

USFWS: Federal listing status

FE: Federally listed as endangered

FT: Federally listed as threatened

DL: Federally delisted

CDFW: State listing status

SE: State listed as endangered

CT: State listed as candidate threatened

DL: State delisted

FP: Fully Protected

SSC: Species of Special Concern

NCCP: SDG&E Subregional NCCP status

Covered: Species protected under the SDG&E NCCP

NE: Narrow Endemic in SDG&E NCCP

Belding's Savannah Sparrow

Belding's savannah sparrow is a state-listed endangered species and is a covered species under SDG&E's Subregional NCCP. Belding's savannah sparrow is a resident from Santa Barbara County to northern Baja California. In San Diego County, populations are known from the Tijuana Lagoon, San Diego Bay, Mission Bay, San Dieguito Lagoon, Los Peñasquitos Lagoon, San Elijo Lagoon, Batiquitos Lagoon, Agua Hedionda Lagoon, Santa Margarita River mouth, and Aliso Creek mouth (Unitt 2004). Belding's savannah sparrow's preferred habitat is pickleweed-dominated coastal salt marsh associations. This species forages and breeds in this habitat; however, it can also be found foraging on mudflats and beaches in the vicinity of its preferred habitat.

Blackhawk Environmental detected multiple individual Belding's savannah sparrows within San Dieguito and Los Peñasquitos Lagoons during 2017 focused BSS surveys (Blackhawk 2017a)

Northern Harrier

Northern harrier (*Circus cyaneus*) is a CDFW SSC (nesting) and is covered under SDG&E's Subregional NCCP. This species' breeding and foraging habitats include a variety of open areas that provide adequate vegetation for cover. Suitable habitat includes freshwater, brackish and saltwater marshes; wet meadows; annual and perennial grasslands, including those with vernal pools; some croplands; sagebrush flats; and desert sinks. Nests are usually located within patches of dense, tall vegetation in undisturbed areas, and the breeding season extends from March through August. The northern harrier is considerably more numerous in San Diego County in winter than in spring or summer.

Blackhawk Environmental detected this species in the BSA in Torrey Pines State Natural Reserve Extension Area during 2017 coastal California gnatcatcher surveys (Blackhawk 2017b). The northern harrier has a moderate potential to nest within marsh habitat in the BSA.

Clark's Marsh Wren

Clark's marsh wren (*Cistothorus palustris clarkae*) is a CDFW SSC. This small bird inhabits freshwater and brackish marshes dominated by bulrushes and cattails. Clark's marsh wren forages on the ground and builds nests in dense vegetation. Migrants from the north and northeast augment San Diego County's local population of marsh wrens in winter.

Blackhawk Environmental detected Clark's marsh wren in Los Peñasquitos Lagoon within the BSA during 2017 coastal California gnatcatcher surveys (Blackhawk 2017b). The species has multiple database records throughout the year in suitable breeding habitat within San Dieguito and Los Peñasquitos Lagoons (eBird 2016). Clark's marsh wren has a high potential to nest within the marsh habitat in the BSA.

Southern California Rufous-Crowned Sparrow

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) is a covered species under SDG&E's Subregional NCCP. This species' habitat consists of rocky hillsides and steep slopes in open grass and coastal sage scrub.

Blackhawk Environmental detected southern California rufous-crowned sparrow in the BSA within Diegan coastal sage scrub north of Via De La Valle during 2017 coastal California gnatcatcher surveys (Blackhawk 2017b). This species has a moderate potential to nest within open Diegan coastal sage scrub habitat in the BSA.

Yellow Warbler

Yellow warbler (*Setophaga petechia*) is a California SSC. This species nests in mature riparian woodland from coastal and desert lowlands up to 8,000 feet in elevation. Yellow warbler prefers to nest in mature cottonwood, willow, alder, and ash trees and it frequents open to medium-density woodlands and forests with a heavy brush understory in breeding season.

Blackhawk Environmental detected yellow warbler in Los Peñasquitos Lagoon during the 2017 light-footed Ridgeway's rail and Belding's savannah sparrow surveys (Blackhawk 2017a). This species has the potential to breed within riparian habitat present in the BSA.

White-Faced Ibis

White faced ibis (*Plegadis chihi*) is an SDG&E Subregional NCCP covered species that is found in freshwater marshes and irrigated lands. This species is a year-round resident in southern California. Nesting colonies have been documented in San Diego County at Guajome Lake and at San Luis Rey River valley near Keys Canyon. The San Pasqual Valley is the primary center for wintering white-faced ibises in San Diego County.

White-faced ibis was observed foraging in the BSA in Los Peñasquitos Lagoon. However, this species is presumed absent for nesting, as this species is not known to nest near the BSA.

American White Pelican

American white pelican (*Pelecanus erythrorhynchos*) is a CDFW SSC (nesting) that breeds in northeastern California; winters throughout Central and Southern California in rivers, lakes, estuaries, bays, marshes; and usually nests in brackish or freshwater lake islands. Common nesting sites in California include the ground on earthen, sandy, and rocky islands or rarely on peninsulas. This species forages in shallow water on inland marshes, along lake or river edges, and in wetlands.

During the light-footed Ridgeway's rail and Belding's savannah sparrow surveys, biologists observed American white pelican flying over the BSA (Blackhawk 2017a). Suitable foraging habitat for the American white pelican exists throughout the BSA. This species is a migrant visitor within the BSA.

California Brown Pelican

California brown pelican (*Pelecanus occidentalis californicus*) is a fully protected species (nesting) and SDG&E NCCP-covered species that lives along the coast and is rarely seen inland. It can be found foraging in marsh habitats or large emergent wetlands with cattails (*Typha* sp.) and tules. This species nests in colonies, usually on isolated islands.

The California brown pelican was observed flying along the coastline over the beach near the proposed yard at Torrey Pines State Beach’s North Beach parking lot. Multiple database records exist from San Dieguito Lagoon and Los Peñasquitos Lagoon, but this species is not known to breed near the BSA.

Coastal (San Diego Tiger) Whiptail

Coastal (San Diego tiger) whiptail (*Aspidoscelis tigris stejnegeri*) is a CDFW SSC. This species is a slim-bodied lizard that prefers hot and dry open areas with limited foliage including chaparral, woodland, and riparian areas. Coastal (San Diego tiger) whiptail is diurnal and very active commonly moving with abrupt stops and starts, side-to-side head movement, and tongue flicking. This species typically forages near cover and is capable of quick bursts of speed into heavy brush or holes.

Blackhawk Environmental detected coastal (San Diego tiger) whiptail in Torrey Pines State Natural Reserve Extension Area during the 2017 coastal California gnatcatcher surveys (Blackhawk 2017b). This species likely inhabits much of the habitat within this area.

Southern Mule Deer

Southern mule deer (*Odocoileus hemionus*) is an SDG&E Subregional NCCP covered species. Southern mule deer is widespread throughout undeveloped portions of San Diego County, ranging from Marine Corps Base Camp Pendleton to the Laguna Mountains, Sweetwater River, and Otay Lakes at elevations of 400 to 3,600 feet (Bleich and Holland 1982). Resident and migratory populations are present throughout California. This species requires relatively large, undisturbed tracts of chaparral, coastal sage scrub, and mixed grassland/shrub habitats. Breeding usually occurs between November and February, with the fawning period between June and August. The diet of the southern mule deer consists of forbs, grasses, and nuts.

During the 2017 surveys for light-footed Ridgeway’s rail, Belding’s savannah sparrow, and coastal California gnatcatcher, biologists incidentally observed southern mule deer in the BSA (Blackhawk 2017a, b). The species is known to occur in Los Peñasquitos Canyon and surrounding areas. Suitable habitat for southern mule deer occurs within both the upland and wetland habitats throughout the BSA.

High

The following 14 special-status avian species, four special-status reptile species, and one special-status mammal species have a high potential to occur in the BSA, based on habitat suitability, species range, and previous occurrence records.

Canada Goose

Canada goose (*Branta canadensis*) is an SDG&E Subregional NCCP covered species that is found throughout North America and winters in California. This large water bird is found near small and large bodies of water and forages in open fields. Mid-November to late February is the main season that the Canada Goose spends in San Diego County.

Suitable wintering habitat is present within the BSA and wintering Canada geese have been documented annually in San Dieguito and Los Peñasquitos Lagoons. Recent breeding records have been documented in artificial habitats involving released birds (eBird 2016; Unitt 2004). However, within the BSA, this species is only likely to winter.

Reddish Egret

Reddish egret (*Egretta rufescens*) is a CDFW SSC (nesting) and is covered under SDG&E's Subregional NCCP. This medium-sized heron is found primarily in brackish marshes and shallow coastal habitats. It feeds in calm shallow waters along the coast including coastal tidal flats, salt marshes, shores, lagoons, and bays.

Reddish egret occurs year-round in San Diego County but the population peaks during fall months. Multiple database records exist from San Dieguito Lagoon and at least one record exists from Los Peñasquitos Lagoon (eBird 2016; Unitt 2004). Only wintering habitat is present in the BSA, as this species is not known to breed in or around the BSA.

Yellow-Breasted Chat

Yellow-breasted chat (*Ictera virens*) is a CDFW SSC (nesting). This passerine has a large head and a long tail, and their coloration is olive green with a yellow breast. Yellow-breasted chat nests in low, dense vegetation and inhabit thickets and other dense areas, such as bramble bushes, clearcuts, powerline corridors, and shrubs along streams such as riparian woodlands. This species does not winter in San Diego County; it is migratory and returns to San Diego County between March and April to breed.

Suitable habitat is present and this species has a potential to breed within the BSA. Multiple database records exist for this species throughout the BSA, but particularly within San Dieguito and Los Peñasquitos lagoons in 2016 (eBird 2016).

Western Bluebird

Western bluebird (*Sialia mexicana*) is a covered species under SDG&E's Subregional NCCP. This species is a medium-sized passerine that occurs in montane coniferous forest, oak woodland, and open areas adjacent to those habitats. Western bluebird is a resident species within San Diego County's foothill and mountains especially where meadows meet groves of oak or pine. Western bluebirds remain throughout their breeding range in San Diego County year-round.

Suitable breeding and wintering habitat for this species is present within the BSA. Multiple database records exist for this species throughout the BSA, particularly within the Torrey Pines State Natural Reserve Extension Area and within San Dieguito Lagoon in 2016 (eBird 2016).

Vermillion Flycatcher

Vermillion flycatcher (*Pyrocephalus rubinus*) is a CDFW SSC (nesting). This small flycatcher inhabits scrub, desert, cultivated land, and riparian woodlands. Males have red or orange-red heads while females are greyish-brown. This species spends most of its time perched and takes

short periodic flights to feed. Nesting occurs in trees such as willows and cottonwoods one to 18 meters above the ground, usually placed in a horizontal fork of branches.

Although vermilion flycatcher has not been detected within the BSA, there are multiple database records along San Dieguito Lagoon, most recently during the winter in 2016. However, no suitable breeding habitat for this species exists within the BSA (eBird 2016).

Loggerhead Shrike

Loggerhead shrike (*Lanius ludovicianus*) is a CDFW SSC (nesting). This thick-bodied songbird with a large blocky head and a thick bill is an uncommon year-round resident of San Diego County. Loggerhead shrike inhabits grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation that it uses for concealing and protecting the nest. It prefers open country with short vegetation and well-spaced shrubs or low trees, and impales its prey on spines, thorns or barbed wire.

Although this species has multiple database records during the winter within San Dieguito and Los Peñasquitos Lagoons (most recently in 2015); the species generally does not have suitable breeding habitat within the BSA (eBird 2016).

American Peregrine Falcon

American peregrine falcon (*Falco peregrinus anatum*) was formerly listed as federally and state endangered, but is currently delisted from both lists. This species is also a California FP species and an SDG&E Subregional NCCP covered species. In San Diego County, American peregrine falcon is a winter visitor and breeding resident, most commonly observed October through May (Unitt 2004). During winter, American peregrine falcon has been observed at the Tijuana River Valley, San Diego Bay, San Diego River Valley, Mission Bay Park, Baticuitos Lagoon, Lake Hodges, San Pasqual Valley, San Vicente Reservoir, Mount Israel area, and Sweetwater Reservoir (Ogden 1995). American peregrine falcon is primarily found near large bodies of water, where it often feeds on waterfowl and shorebirds. Nest sites are usually located on rock ledges, escarpments, or bluffs.

Due to the presence of shorebirds and waterfowl, suitable foraging habitat for American peregrine falcon is assumed to be present within the BSA. However, suitable nesting habitat is absent from the BSA.

Cooper's Hawk

Cooper's hawk (*Accipiter cooperii*) is a covered species under SDG&E's Subregional NCCP. This species most frequently prefers dense stands of live oak, riparian deciduous or other forest habitat near water. Cooper's hawk nests primarily in oak woodlands, but occasionally in willows or eucalyptus. It usually nests and forages near open water or riparian vegetation, but can be found in urban and suburban areas where there are tall trees for nesting.

Suitable foraging habitat for Cooper's hawk occurs within the coastal sage scrub, chaparral, non-native grassland, and riparian habitats throughout the BSA. Nesting habitat for Cooper's hawk occurs within the riparian forest habitats and urban ornamental trees within the BSA.

Gull-Billed Tern

Gull-billed tern (*Gelochelidon nilotica*) is a CDFW SSC (nesting). It is a medium-sized shorebird that winters in salt marshes, estuaries, lagoons, and plowed fields. It breeds in small colonies and their nest placement is the ground or other gravel surfaces. Most pairs nest on sandy beaches or on sandy barrier islands in coastal waters, especially near ocean inlets.

Gull-billed tern has historically been detected within San Dieguito Lagoon, most recently in 2014, and also detected at the west end of Los Peñasquitos Lagoon near the confluence with the Pacific Ocean (eBird 2016). Suitable foraging habitat is present within the BSA, but suitable breeding habitat is absent.

Black Skimmer

Black skimmer (*Rynchops niger*) is a CDFW SSC (nesting). This species is a medium- to large-sized water bird with a long red and black bill, with the lower mandible being longer than the upper. This crepuscular bird can be found on sandy beaches, gravel or shell bars, and salt marshes. It is a colonial nester that lays eggs in saucer shaped depressions made from scraping the ground. Large colonies tend to occupy the same nesting location while smaller colonies relocate yearly.

Black skimmer has historically been detected within San Dieguito Lagoon, most recently in 2012, and also detected within Los Peñasquitos Lagoon in 2011 (eBird 2016). Suitable foraging habitat is present within the BSA, but suitable breeding habitat is absent.

Long-Billed Curlew

Long-billed curlew (*Numenius americanus*) is a covered species under SDG&E's Subregional NCCP. This large shorebird found along tidal flats, beaches, salt marshes, agricultural fields, and grass prairies. Long-billed curlew nests in short-growth grassland in western North America. The most consistent sites for wintering long-billed curlew in San Diego County are south San Diego Bay and the Tijuana River estuary. Fall migrants begin arriving in July and their numbers peak in August and September.

Suitable foraging habitat is present within the BSA, but breeding is unlikely. This species is commonly recorded in both lagoons although the species does not breed within the lagoons (eBird 2016).

White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is a California FP species and is a resident in San Diego County. This species nests in riparian or oak woodland adjacent to undisturbed, open fields and grasslands, meadows, farmlands, and emergent wetlands, where it hunts rodents.

Suitable foraging habitat for white-tailed kite occurs within the coastal sage scrub, grassland, and riparian habitats throughout the BSA. Limited suitable breeding habitat is present in the tall trees throughout the BSA.

California Least Tern

California least tern is federally and state-listed as endangered and is a covered species under SDG&E's Subregional NCCP. The species breeds from San Francisco Bay south to Baja California, Mexico. In San Diego County, it is a fairly common summer resident from early April to the end of September (Unitt 2004). This small migratory tern begins nesting in mid-May and is present at nesting colonies from April through August. Nesting occurs in loose colonies in areas relatively free of human or predatory disturbance. Nests are constructed on barren to sparsely vegetated sites near water, usually with a sandy or gravelly substrate. Adults roost primarily on the ground. This species typically forages in areas with water less than 60 feet in depth and within two miles of roosting sites, although they are considered opportunistic and often shift their behavior in response to local prey patterns (Atwood and Minsky 1983).

This species historically nested in the BSA but has not nested within the areas in the past 10 years (Konecny 2014). Suitable foraging habitat is present within the BSA, but breeding is unlikely.

Least Bittern

Least bittern (*Ixobrychus exilis*) is a CDFW SSC (nesting). It is a tiny heron with a long neck and a long bill that is extremely well camouflaged. It lives in freshwater or brackish marshes with tall emergent vegetation, where it stalks along reeds or climbs on reed stalks. This species nests close to the ground on a platform made of marsh vegetation placed in dense tall stands of vegetation.

Suitable foraging habitat is present in the BSA. Multiple database records exist from Los Peñasquitos Lagoon and San Dieguito Lagoon, with the most recent being in 2013 (eBird 2016). Potentially suitable breeding habitat exists within Los Peñasquitos Lagoon in the BSA

Wandering (Salt Marsh) Skipper

Wandering skipper is an SDG&E Subregional NCCP covered species. This species only occurs on the coast and is typically found in coastal salt marsh habitat close its larval host plant, salt grass. Adult wandering skippers usually emerge from July through September and are dull brown in color with a wingspan of about one inch. Larvae utilize salt grass as a food plant but females may deposit their eggs on other grass species. Larvae occasionally feed on other thin-bladed grasses such as cordgrass and Bermuda grass (Busnardo 1989; Emmel and Emmel 1973). Native nectar sources include deerweed (*Acmispon scoparius*), salty Susan, and frankenia (*Frankenia* spp.). Adults have also been observed using introduced species such as heliotrope (*Heliotropium curvassavicum*), sea rocket (*Cakile maritima*), sea-fig (*Carpobrotus* sp.), and crown daisy (*Chrysanthemum coronarium*) as nectar sources (Busnardo 1989).

Within the BSA, suitable habitat is present within the southern coastal salt marsh and coastal and valley freshwater marsh communities.

Blainville's [Coast] Horned Lizard

Blainville's [coast] horned lizard (*Phrynosoma blainvillii*) is a CDFW SSC and is covered under SDG&E's Subregional NCCP. This medium-sized lizard often buries itself in loose sand near its prey of choice, native harvester ants (*Pogonomyrmex* sp.). Blainville's [coast] horned lizard occurs in a variety of habitats including coastal sage scrub, chaparral, grassland, coniferous forest, and oak woodland. Within these habitats, it prefers areas that are open with loose, fine soils with access to native harvester ants.

Suitable habitat is present within the BSA and this species may occur along Via De La Valle and other areas with Diegan coastal sage scrub. Blainville's [coast] horned lizard was historically detected within the BSA in the Torrey Pines State Natural Reserve Extension Area (CDFW 2016).

Coronado Skink

Coronado skink (*Plestiodon skiltonianus interparietalis*) is an SDG&E's Subregional NCCP covered species. This small skink prefers grassland, dry oak woodlands, chaparral, and open areas bordering these habitats with ample cover from predators. Coronado skink is diurnal, but is not typically seen active; it is commonly found under bark and surface objects especially rocks where it lives and burrows.

Suitable habitat is present within the BSA and this species may occur along Via De La Valle and other areas with Diegan coastal sage scrub. Coronado skink was historically detected within the BSA in the Torrey Pines State Natural Reserve Extension Area (CDFW 2016).

Belding's Orange-Throated Whiptail

Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*) is an SDG&E Subregional NCCP covered species (Thomson et al. 2016). In California, this subspecies is found on the west side of the Peninsular Ranges between sea level and 3,000 feet, in the southernmost counties (CDFG 1988). Belding's orange-throated whiptail inhabits washes, streams, terraces, and other sandy areas associated with some perennial plants and open scrub.

This species was detected multiple times in 2014 at the north end of the BSA, along Via De La Valle and near San Dieguito Drive (RECON 2014c). Belding's orange-throated whiptail likely inhabits much of the open coastal sage scrub and chaparral habitat in the BSA.

San Diego Ring-Necked Snake

San Diego ring-necked snake (*Diadophis punctatus similis*) is a small, smooth snake that is covered under SDG&E's Subregional NCCP. This species occurs in oak woodlands, canyon bottoms, and less commonly in chaparral and coastal sage scrub habitats. San Diego ring-necked snake is extremely secretive and is usually found under the cover of rocks, wood, bark, boards, and other surface debris, but can be seen moving on cloudy days, at dusk, or at night.

Suitable habitat for this species exists within the BSA in the Torrey Pines State Natural Reserve Extension Area. San Diego ring-necked snake has been historically detected in the BSA (CDFW 2016).

Pocketed Free-Tailed Bat

Pocketed free-tailed bat (*Nyctinomops femorosaccus*) is a CDFW SSC. This bat is a swift and high-flying species that roosts in caves, rock crevices in cliff faces and man-made structures. The species' diet mainly consists of large moths but they will eat a variety of insects. The colonies consist of less than 100 individuals and it gives birth to only one young per year, starting in July, and the young are flying in mid- to late-August.

Suitable foraging habitat exists within the BSA, and this species may roost in nearby bridges. This species was detected in 2000 roosting in the bridge over the railroad tracks at the intersection of Camino Del Mar and Jimmy Durante Boulevard (CDFW 2016).

Moderate

The following four special-status avian species and two special-status mammal species have a moderate potential to occur in the BSA, based on habitat suitability, species range, and previous occurrence records.

Bald Eagle

Bald eagle (*Haliaeetus leucocephalus*) is a federally delisted species, is state endangered and fully protected, and is a SDG&E Subregional NCCP covered species. This eagle is most often found in mature forested habitat adjacent to lakes and rivers abundant with fish. This species primarily occurs in San Diego County during winter and migration season, but breeds in a few inland locations within San Diego County.

Bald eagle is an uncommon resident and annual winter visitor to San Diego County. Suitable breeding habitat is absent from the BSA, but suitable foraging habitat occurs within the various lagoons and estuarine areas. The most recent database record is an observation within the Torrey Pines State Natural Reserve Extension Area from 2014 (eBird 2016).

Western Snowy Plover

Western snowy plover (*Charadrius alexandrinus nivosus*) is listed as federally threatened, a CDFW SSC, and is a covered species under SDG&E's Subregional NCCP. This shorebird nests on coastal or estuarine sandy beaches; the eggs are laid on a shallow depression on dry ground or sand. Snowy plovers winter widely along San Diego County's coast, using not only their nesting sites but beaches and estuaries where they do not nest.

This species has historically bred within the Los Peñasquitos Lagoon area of the BSA near the river mouth. Suitable habitat and winter foraging habitat is present within the BSA. The potential to breed also exists within coastal dunes by Los Peñasquitos Lagoon during the winter (Konecny 2014).

Large-Billed Savannah Sparrow (Wintering)

Large-billed savannah sparrow (*Passerculus sandwichensis rostratus*) is a CDFW SSC (wintering) and is an SDG&E Subregional NCCP covered species. This medium-sized sparrow breeds in open areas with low vegetation. This species occurs in grasslands with few trees, including meadows, pastures, grassy roadsides, sedge wetlands, and cultivated fields. In coastal

areas, they inhabit tidal saltmarshes and estuaries. Breeding occurs around the head of the Gulf of California and they travel to the coast for fall and winter.

Several database records for large-billed savannah sparrow exist within both lagoons during the winter; the most recent record is from 2016. However, these records were located outside of the BSA (eBird 2016). Suitable habitat is present within the BSA, and this species is primarily a winter visitor to shores and marsh areas.

TriColored Blackbird

Tricolored blackbird (*Agelaius tricolor*) is a CDFW SSC (nesting) and is covered under SDG&E's Subregional NCCP. This species breeds near fresh water, often in emergent wetlands with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, or tall, dense forbs. Seeds and cultivated grains, such as rice and oats, comprise most of its fall and winter diet. Tricolored blackbird forages on the ground in croplands, grassy fields, flooded land, and along edges of ponds. Breeding season usually occurs from mid-April to late July.

This species has been documented within the BSA in both lagoons, most recently in 2016 (eBird 2016). This species is primarily a migrant or winter visitor to the BSA and is not known to breed in the vicinity.

San Diego Desert Woodrat

San Diego desert woodrat (*Neotoma lepida intermedia*) is a CDFW SSC and is a covered species under SDG&E's Subregional NCCP. This medium-sized rodent eats buds, fruits, seeds, bark, leaves, and young shoots of many plant species. This species occurs in Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats. San Diego desert woodrat is primarily nocturnal and is active year-round. Breeding occurs from October to May.

Suitable habitat occurs within the Diegan coastal sage scrub habitat south of the San Dieguito Lagoon area within the BSA and along Via De La Valle and within the Torrey Pines State Natural Reserve Extension Area. This species is known to occur within the BSA in 1996 based on CNDDDB (CDFW 2016).

Northwestern San Diego Pocket Mouse

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) is a CDFW SSC and is a covered species under SDG&E's Subregional NCCP. This nocturnal rodent occurs in coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland areas. Breeding occurs from March to May. Northwestern San Diego pocket mouse is active year-round, although surface activity is reduced during cold weather.

Suitable habitat is present within upland areas of the BSA and within the Torrey Pines State Natural Reserve Extension Area. Between 1994 and 2002, multiple individuals were captured within and adjacent to the BSA according to CNDDDB (CDFW 2016).

Wildlife Migration Corridors

In an urban context, a wildlife migration corridor is generally a linear landscape feature of sufficient width and buffer to allow wildlife movement between two patches of comparatively undisturbed habitat, or between a patch of habitat and some vital resources. Regional corridors are defined as those linking two or more large patches of habitat, and local corridors are defined as those allowing resident animals to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development. A viable wildlife migration corridor consists of more than an unobstructed path between habitat areas. Appropriate natural communities must be present to provide food and cover for both transient species and resident populations of less mobile animals. There must also be a sufficient lack of stressors and threats within and adjacent to the corridor for species to use it successfully.

Within the BSA, San Dieguito Lagoon, Los Peñasquitos Lagoon, and the Torrey Pines State Natural Reserve Extension Area serve as wildlife migration corridors.

San Dieguito Lagoon serves as a local linkage between the San Dieguito River valley and Gonzales Canyon to the south, and the San Dieguito River valley and Black Mountain Park to the east. San Dieguito Lagoon provides an important, large area of habitat for core populations of special-status wildlife and plant species. This importance is recognized in the San Dieguito River Park’s Master Plan for Coastal Areas, as the plan calls for restoration of habitats up and down the river corridor so that wildlife might move between different areas (San Dieguito River Park Joint Powers Authority 2000).

Los Peñasquitos Lagoon serves as a local linkage between Peñasquitos Canyon, Torrey Pines Natural Reserve, and Torrey Pines Natural Reserve Extension Area. Los Peñasquitos Lagoon is an important large wetland area that provides habitat for special-status wildlife and plant species.

The BSA is also located within the Pacific Flyway, a major north/south migration route for birds that travel between North and South America. Both San Dieguito Lagoon and Los Peñasquitos Lagoon serve as important migrant stopover locations, providing food and water to avian species (Audubon 2016). Both lagoons are designated as Audubon Important Bird Areas (Audubon 2016). Many avian species may pass through the BSA during migration and may use this area as migratory stopover habitat.

Jurisdictional Waters and Wetlands

The BSA contains approximately 61 acres of wetlands or water features that may be subject to regulation by USACE, RWQCB, CDFW, and/or CCC. Hydrology within the survey area includes ephemeral drainages, channelized concrete drainages, erosional scour, and features associated with the upper and lower tidal estuaries, including tidal inlets, salt pannes, and perennial marshlands. The BSA traverses three coastal watersheds: Poway Creek, San Dieguito River, and Mission Beach Frontal-Pacific Ocean.¹¹ The major riverine features within these watersheds form a direct hydrological connection with the Pacific Ocean (a traditional navigable water). The results of the jurisdictional waters and wetlands assessments are provided in Table

¹¹ 10-digit Hydrologic Unit Codes [HUC] 1807030404, 1807030403, and 1807030413, respectively

4.4-4: Summary of Jurisdictional Waters and Wetlands. These water features are depicted in Attachment 4.4-B: Hydrological Features Map.

Table 4.4-4: Summary of Jurisdictional Waters and Wetlands

Water Type	Vegetation Community/ Other Cover Type	Regulatory Authority	RECON 2014 Area (Acres)	AECOM 2017 Area (Acres)	Difference (Acres)
Wetland	Coastal and Valley Freshwater Marsh	USACE, CDFW, RWQCB, CCC	13.6	13.6	0.0
Wetland	Mudflat	USACE, CDFW, RWQCB, CCC	2.9	2.9	0.0
Wetland	Southern Arroyo Willow Riparian Forest	USACE, CDFW, RWQCB, CCC	0.2	0.9	0.8
Wetland	Southern Coastal Salt Marsh	USACE, CDFW, RWQCB, CCC	31.3	34.7	3.4
Nonwetland Waters	Open Water	USACE, CDFW, RWQCB, CCC	6.4	8.2	1.7
Nonwetland Waters	Salt Pan	USACE, CDFW, RWQCB, CCC	0.6	0.8	0.2
Nonwetland Waters	Bare Ground (RECON only)	USACE, CDFW, RWQCB, CCC	0.1	-	-0.1
Total	--	--	55.0	61.1	6.1

4.4.3 Impacts

The following discussion describes the potential of the Proposed Project to impact sensitive species and habitat that may occur as a result of construction and operation of the Proposed Project. SDG&E will be operating under its Subregional NCCP, which was established according to the FESA and CESA and the state's Natural Community Conservation Planning Act. The SDG&E Subregional NCCP includes operational protocols that apply to construction and O&M activities. These operational protocols are provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols. In addition, SDG&E will implement the project-specific Applicant-Proposed Measures (APMs) found in Section 4.4.4 Applicant-Proposed Measures to further minimize potential impacts to ensure the protection and conservation of listed and covered species and their habitats.

Significance Criteria

According to Section 15002(g) of the CEQA Guidelines, “a significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” The potential significance of Proposed Project-related impacts on biological resources was evaluated for the applicable criteria from Appendix G of the CEQA Guidelines, as discussed in the following sections.

Under the CEQA guidelines, the Proposed Project may have a potentially significant impact if it will:

- 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 CDFG or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, or other wetland areas) through direct removal, filling, hydrological interruption, or other means
- 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
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

Question 4.4a – Sensitive Species

Construction – Less-than-Significant Impact

Special-Status Plant Species

Of the 15 special-status plant species that were observed in the BSA in 2016 and 2017, south coast saltscallion was the only species documented within Proposed Project construction areas. One individual was detected within Stringing Site 28, along an existing unpaved access road. The remaining 14 special-status plant species that were observed in the BSA (but not in the Proposed Project construction areas) have a high or moderate potential to occur in the Proposed Project construction areas, along with the 10 other special-status plant species described in Section 4.4.2 Existing Conditions. The following discussion describes the potential direct and indirect impacts to special-status plant species that may occur as a result of the Proposed Project.

Direct Impacts

Based on the results of the rare plant surveys, SDG&E has designed the construction methods and work areas of the Proposed Project to avoid impacts to special-status plant species, to the extent feasible. In many locations, construction work areas were located in paved, developed, or disturbed locations, thereby reducing the potential to encounter special-status plant species during construction. Additionally, construction activities located within San Dieguito Lagoon, Torrey Pines State Natural Reserve Extension Area, and Los Peñasquitos Lagoon will avoid ground disturbance by accessing the pole bases by foot or helicopter; cutting the poles off at ground level; and removing the poles from the site using helicopters. As a result, direct impacts to special-status plant species in these locations are not expected either.

To further reduce the potential for impacts in these locations, SDG&E will also implement the applicable Operational Protocols and Habitat Enhancement Measures provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols. Vehicles will be restricted to existing and approved access roads and the approved workspaces so that they do not affect plants outside of these areas, per Operational Protocol #1. Operational Protocol #11 requires all Proposed Project personnel to attend an environmental training describing the special-status species present in the Proposed Project construction area and the measures listed herein to avoid or minimize impacts. Operational Protocol #14 establishes work limit boundaries for the avoidance of sensitive biological resources. Construction activities have been designed to avoid or minimize new disturbance, per Operational Protocol #16. Therefore, impacts to the seedbank will also be minimized. With these operational protocols, direct impacts to rare plants located adjacent to construction areas will be avoided.

As summarized previously, one construction area contains known populations of special-status plant species. To reduce the potential for direct impact to special-status plant species identified within or adjacent to construction areas, SDG&E will implement the previously described NCCP Operational protocols. In addition to the NCCP protocols, SDG&E will utilize Proposed Project-specific APMs, as presented in Section 4.4.4 Applicant-Proposed Measures. As required by APM-BIO-01, pre-construction surveys for special-status plant species will be conducted within one year of construction during the appropriate blooming period(s),¹² and all detected special-status plants within Proposed Project construction areas will be mapped and flagged for avoidance. Additionally, a biological monitor will be present during all project activities within sensitive areas to ensure that flagged areas are avoided and construction area boundaries are maintained, in accordance with APM-BIO-02.

While the Proposed Project has been designed to avoid impacts to special-status species, the limited amount of ground-disturbing activities (e.g., minor earth-moving/grading and the trenching in native vegetation associated with the underground conversion of C510 and C738) and the limited vegetation clearing required to prepare Proposed Project construction areas may

¹² Although special-status plant surveys were conducted in 2016 and 2017, an additional round of pre-construction special-status plant surveys is required per APM-BIO-03 because the abundance and distribution of annual special-status plants may have changed by the time construction is scheduled. Despite this, the less-than-significant conclusion drawn from the impact analysis presented in this document for special-status plant species is not expected to change as a result of these pre-construction surveys because the Proposed Project impacts are limited and the populations extend beyond the Proposed Project limits and BSA.

result in disturbance to a small quantity of special-status plants that are present in the vicinity of these activities. Direct impacts may result from crushing special-status plants and disturbing special-status plants' seed banks or individual plants due to topsoil movement or removal. In the locations where these direct impacts cannot be avoided, SDG&E will implement Habitat Enhancement Measure: *Soil and Plant Salvage*, which requires salvaging topsoil and native vegetation for post-construction restoration. Upon completion of the Proposed Project, SDG&E will restore temporarily impacted areas, per the Habitat Enhancement Measures provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols and as described in APM-BIO-05. Under these restoration measures, habitat for special-status plants will be replaced or enhanced, which will maintain or improve the habitat value for the species.

To avoid spreading invasive species/noxious weeds in Proposed Project construction areas, implementation of APM-BIO-03 will ensure that construction equipment arrives clean and free of weeds. Torrey pine and other native trees within the Proposed Project construction areas will be protected with the implementation of APM-BIO-04, which requires the protection of native trees.

In conclusion, implementation of SDG&E's Subregional NCCP Operational Protocols and Habitat Enhancement Measures, along with the APMs in Section 4.4.4 Applicant-Proposed Measures, will ensure that any potential direct impacts to special-status plant species will be less than significant.

Indirect Impacts

The alteration of special-status plant species' habitat due to runoff, sedimentation, and erosion will be avoided through the implementation of best management practices (BMPs) under the SWRCB's Construction General Permit, which will be outlined in more detail in the Proposed Project's Storm Water Pollution Prevention Plan (SWPPP). Indirect impacts due to fugitive dust will be minimized by implementing fugitive dust controls as described in Chapter 3 – Project Description, which states that unpaved construction surfaces will be stabilized using water or another approved tackifier to control dust emissions. Additionally, Operational Protocol #39 will limit construction vehicles and equipment speeds on all unpaved surfaces, in part, to reduce dust.

With the implementation of the Proposed Project-specific APMs, in conjunction with BMPs, indirect impacts to special-status plant species will be less than significant.

Special-Status Avian Species and Other Nesting Avian Species

The following 10 special-status avian species were documented within the BSA during 2016 and 2017 surveys:

- light-footed ridgeway's rail
- coastal California gnatcatcher
- Belding's savannah sparrow
- northern harrier
- Clark's marsh wren
- southern California rufous-crowned sparrow
- yellow warbler

- white-faced ibis
- American white pelican
- California brown pelican

Additionally, the following 18 special-status avian species have a high or moderate potential to occur in the Proposed Project construction areas:

- Canada goose
- reddish egret
- yellow-breasted chat
- western bluebird
- vermilion flycatcher
- loggerhead shrike
- American peregrine falcon
- Cooper's hawk
- gull-billed tern
- black skimmer
- long-billed curlew
- white-tailed kite
- California least tern
- least bittern
- bald eagle
- western snowy plover
- large-billed savannah sparrow
- tricolored blackbird

The following discussion describes the potential direct and indirect impacts to special-status avian species and other nesting avian species that may occur as a result of the Proposed Project.

Direct Impacts

SDG&E has planned to construct the Proposed Project in a manner that will avoid potential direct impacts to special-status avian species and other nesting avian species protected under the Migratory Bird Treaty Act, to the extent feasible. In many locations, construction work areas were located in paved, developed, or disturbed locations, thereby minimizing construction activities in locations containing suitable habitat for nesting and foraging avian species. In addition, no native vegetation will be cleared or removed in San Dieguito Lagoon, Los Peñasquitos Lagoon, or Torrey Pines State Natural Reserve Extension Area, thereby minimizing potential impacts to protected avian species' nesting and foraging habitat and food sources. In these locations, crews will access the pole bases on foot, cut the poles off at ground level, and remove the poles by helicopter.

SDG&E will also implement the applicable Operational Protocols provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols. Direct impacts to individual birds will be minimized by implementing Operational Protocol #1, in which Proposed-Project vehicles and equipment will be restricted to existing and approved access roads and approved workspaces and

a 15 mile-per-hour (mph) speed limit on unpaved surfaces, allowing birds the time to move out of harm's way. Operational Protocol #11 requires all Proposed Project personnel to attend an environmental training describing the special-status species present in the Proposed Project construction work area and the measures listed herein to avoid or minimize impacts. A biologist will conduct a pre-activity survey for all activities occurring off of access roads in natural areas, in accordance with Operational Protocol #13. Operational Protocol #14 establishes work limit boundaries for the avoidance of sensitive biological resources. Construction activities will be designed to avoid or minimize new disturbance, per Operational Protocol #16. Therefore, the risk of impacts to special-status species and sensitive habitat will be reduced.

SDG&E will further reduce the risk of impacts to avian species by implementing Proposed Project-specific APMs, as discussed in Section 4.4.4 Applicant-Proposed Measures. A biological monitor will be present during all Proposed Project activities within special-status avian species habitat, in accordance with APM-BIO-02. To avoid disruptions in nesting behavior and nest success, SDG&E will prepare and implement a Nesting Bird Management Plan, in accordance with APM-BIO-06. Additionally, APM-BIO-07 will require crews to temporarily stop work if a special-status species is observed on site. Work will not proceed in the immediate area until the animal has traveled off site on its own or has been relocated by a qualified biologist. If night work becomes necessary due to an emergency, agency requirements, or to restore power to customers, SDG&E will implement APM-BIO-08, which requires that night lighting be minimized and focused away from special-status species' habitats, as possible. This measure will minimize the temporary disruption of roosting and foraging behaviors due to nighttime construction activities.

While the Proposed Project has been designed to avoid impacts to special-status avian species and their habitats, the limited amount of ground-disturbing activities (e.g., minor earth-moving/grading and the trenching in vegetation associated with the underground conversion of C510 and C738) and the limited vegetation trimming/clearing required to prepare Proposed Project construction areas may result in temporary disturbance to special-status avian species and other nesting avian species that are present in the vicinity of this work. Disturbance to suitable habitat will be short in duration and most individual work areas will be less than 0.01 acre. Direct impacts to avian species from construction may include the temporary removal of nesting or foraging habitat and/or the removal of food sources within Proposed Project construction areas and injury or mortality to individual birds from collisions with helicopter blades.

In locations where removal or trimming of nesting and foraging habitat cannot be avoided, SDG&E will restore temporarily impacted areas upon completion of the Proposed Project, per the Habitat Enhancement Measures provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols and as described in APM-BIO-05. Under these restoration measures, habitat for special-status species will be replaced or enhanced, which will maintain or improve the habitat value for the species.

In summary, direct impacts to special-status avian species and other nesting avian species due to Proposed Project construction activities are expected to be limited in size and duration. Implementation of SDG&E's Subregional NCCP Operational Protocols and Habitat Enhancement Measures, along with the APMs in Section 4.4.4 Applicant-Proposed Measures,

will ensure that any potential direct impacts to special-status avian species and other nesting avian species will be less than significant.

Indirect Impacts

The overall effects of the Proposed Project will be beneficial to special-status avian species. By removing approximately 34 poles (and the conductors they support) from suitable special-status avian habitat, the need for future disturbance in these locations will be eliminated. This will create an additional benefit by removing a potential source of electrocution and collision for special-status avian species. As described in Chapter 3 – Project Description, the new power line structures will be constructed in compliance with the applicable Avian Power Line Interaction Committee’s Suggested Practices for Avian Protection on Power Lines, further reducing the potential for avian electrocution.

Indirect impacts from the degradation of special-status avian species’ habitat due to runoff, sedimentation, erosion, and the spread of noxious weeds will be avoided through the implementation of erosion control BMPs and APM-BIO-03, which ensures that construction equipment will arrive clean and free of weeds. To avoid attracting potential predators to the Proposed Project construction areas, all food waste and trash will be covered or hauled offsite on a daily basis, in accordance with Operational Protocol #8.

With the implementation of the Proposed Project-specific APMs, in conjunction with BMPs, indirect impacts to special-status avian species will be less than significant.

Special-Status Invertebrate Species

During the 2016 surveys, a minimum of 40 wandering skipper individuals were documented in the BSA in upland and wetland habitats near patches of salt grass that occur in the San Dieguito and Los Peñasquitos lagoons. Although it was not observed within the Proposed Project construction areas, wandering skipper is able to move freely and is likely to also be present within construction areas. Approximately 0.28 acre of suitable wandering skipper habitat (coastal salt marsh and adjacent areas containing salt grass) is present within the construction work areas in San Dieguito and Los Peñasquitos lagoons. The following discussion describes the potential direct and indirect impacts to wandering skipper that may occur as a result of the Proposed Project.

Direct Impacts

As described previously, the Proposed Project has been designed to avoid impacts to potential special-status species, including the wandering skipper, by placing construction areas in locations that are paved, developed, or disturbed. In addition, construction activities located within San Dieguito and Los Peñasquitos Lagoons—both contain suitable wandering skipper habitat—will avoid ground disturbance by accessing the pole bases by foot; cutting the poles off at ground level; and removing the poles from the site using helicopters. By avoiding vegetation removal and heavy construction equipment use within suitable wandering skipper habitat, the Proposed Project will greatly reduce the potential for direct impacts to this species. Furthermore, construction activities located within the lagoons are expected to occur outside of wandering

skipper's flight season (July to September), which will eliminate the risk of impacts to adult skippers caused by strong helicopter downdrafts and collisions with vehicles or equipment.

SDG&E will also implement the applicable Operational Protocols provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols. Direct impacts to individual wandering skippers will be minimized by implementing Operational Protocol #1, which will restrict Proposed-Project vehicles and equipment to existing and approved access roads and approved workspaces. Operational Protocol #11 will require all Proposed Project personnel to attend an environmental training describing the special-status species present in the Proposed Project construction areas and the measures listed herein to avoid or minimize impacts. A biologist will conduct a pre-activity survey for all activities occurring off of access roads in natural areas, in accordance with Operational Protocol #13. Operational Protocol #14 establishes work limit boundaries for the avoidance of sensitive biological resources. Furthermore, construction activities will be designed to avoid or minimize new disturbance, per Operational Protocol #16, thereby reducing the risk of impacts to special-status species and sensitive habitat. Additionally, SDG&E will implement Proposed Project-specific APMs, including APM-BIO-02, which will require a biological monitor to be present during all construction activities within special-status species habitat.

While the Proposed Project has been designed to avoid impacts to the wandering skipper to the extent feasible, a limited amount of vegetation clearing and ground-disturbing activities (e.g., minor earth-moving/grading and the trenching in native vegetation associated with the underground conversion of C510 and C738) in salt grass immediately adjacent to the lagoons may result in disturbance to wandering skipper larvae that are present in these work areas. As stated previously, construction activities located within the lagoons will occur outside of wandering skipper's flight season; therefore, direct impacts to adults are not anticipated. In addition, most individual construction areas within suitable wandering skipper habitat will be less than 0.01 acre each.

In the locations where impacts to wandering skipper habitat cannot be avoided, SDG&E will restore temporarily impacted areas upon completion of the Proposed Project, per the Habitat Enhancement Measures provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols and as described in APM-BIO-05. Under these restoration measures, habitat for special-status species will be replaced or enhanced, which will maintain or improve the habitat value for the species.

In summary, direct impacts to special-status invertebrate species due to Proposed Project construction activities are expected to be limited in size and duration. With the implementation of SDG&E's Subregional NCCP Operational Protocols and Habitat Enhancement Measures, along with the APMs in Section 4.4.4 Applicant-Proposed Measures, any direct impacts to special-status invertebrate species will be less than significant.

Indirect Impacts

Indirect impacts from the degradation of wandering skipper habitat due to the spread of noxious weed seeds during construction will be avoided by implementing APM-BIO-03. This APM will require construction vehicles and equipment to arrive to construction sites free of weeds. No

other indirect impacts to wandering skipper are anticipated. Therefore, indirect impacts to special-status invertebrate species will be less than significant.

Special-Status Amphibian Species

Special-status amphibian species were not observed in the BSA during biological surveys for the Proposed Project. Based on the background literature review conducted for the Proposed Project, no special-status amphibian species have high or moderate potential to occur in the BSA. Therefore, no impacts to sensitive amphibian species are anticipated during construction of the Proposed Project.

Special-Status Reptile Species

Coastal (San Diego tiger) whiptail was documented in the BSA during 2016 surveys. In addition, the following four special-status reptile species have a high or moderate potential to occur in the Proposed Project construction areas:

- Blainville's [coast] horned lizard
- Coronado skink
- Belding's orange-throated whiptail
- San Diego ring-necked snake

The following discussion describes the potential direct and indirect impacts to special-status reptile species that may occur as a result of the Proposed Project.

Direct Impacts

As described previously, the Proposed Project has been designed to avoid impacts to potential special-status species, including reptiles, by placing construction areas in locations that are paved, developed, or disturbed. This will reduce the potential for special-status species to be crushed during heavy equipment use, vegetation clearing or removal, and minor ground-disturbing activities. In addition, no native vegetation will be cleared or removed in San Dieguito Lagoon, Los Peñasquitos Lagoon, or Torrey Pines State Natural Reserve Extension Area, thereby minimizing potential direct impacts to special-status reptile species. In these locations, crews will access the pole bases on foot, cut the poles off at ground level, and remove the poles by helicopter.

To further reduce the potential for impacts, SDG&E will also implement the applicable Operational Protocols provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols. Direct impacts to individual reptiles will be minimized by implementing Operational Protocol #1, in which Proposed-Project vehicles and equipment will be restricted to existing and approved access roads and approved workspaces. It will also require that all construction vehicles and equipment be restricted to speeds of less than 15 mph on unpaved surfaces, allowing most reptiles the time to move out of harm's way. Operational Protocol #11 will require all Proposed Project personnel to attend an environmental training describing the special-status species present in the Proposed Project construction areas and the measures listed herein to avoid or minimize impacts. A biologist will conduct a pre-activity survey for all activities occurring off of access roads in natural areas, in accordance with Operational Protocol #13.

Operational Protocol #14 will require that work limit boundaries be demarcated for the avoidance of sensitive biological resources. Also, construction activities will be designed to avoid or minimize new disturbance, per Operational Protocol #16, thereby reducing the risk of impacts to special-status species and sensitive habitat. Additionally, the implementation of Operational Protocols #37 and #38 will minimize the potential for special-status reptile species to be trapped in excavations by ensuring that excavations are covered or filled at the end of each work day, or that an escape ramp is provided.

In addition to the NCCP protocols, SDG&E will utilize Proposed Project-specific APMs, as discussed in Section 4.4.4 Applicant-Proposed Measures. During initial ground-disturbing activities in special-status species habitat, a biological monitor will be present, in accordance with APM-BIO-02. The monitor will conduct a pre-construction survey of the project area and will have the authority to halt any work activity that might result in impacts to special-status reptiles. If a special-status reptile species is identified on site during construction, APM-BIO-07 requires that crews temporarily halt work and notify the biologist. Work will not proceed until the animal has moved out of harm's way on its own or has been relocated by a qualified biologist. If night work becomes necessary due to an emergency, agency requirements, or to restore power to customers, direct impacts in normal behaviors due to lighting will be minimized by implementing APM-BIO-08. This measure requires that night lighting be minimized and focused away from special-status species habitats, as possible.

While the Proposed Project will generally avoid impacts to special-status reptiles by avoiding heavy equipment use and vegetation removal/trimming in their suitable habitat, a limited amount of planned ground-disturbing activities (e.g., minor earth-moving/grading and trenching in vegetation associated with the underground conversion of C510 and C738) and the limited vegetation clearing required to prepare Proposed Project construction areas will occur in special-status reptile species suitable habitat. While these activities have the potential to directly impact special-status reptile species that may be present in the vicinity of this work, most individual construction areas within suitable habitat will be less than 0.01 acre each and work in these individual areas will not take place concurrently. Therefore, disruption to special-status reptile species habitat at any given time is expected to have minimal impact, due to the available adjacent habitat.

In locations where impacts to suitable habitat for special-status reptile species cannot be avoided, SDG&E will restore temporarily impacted areas upon completion of the Proposed Project, per the Habitat Enhancement Measures provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols and as described in APM-BIO-05. Under these restoration measures, habitat for special-status species will be replaced or enhanced, which will maintain or improve the habitat value for the species.

In summary, direct impacts to special-status reptile species due to Proposed Project construction activities are expected to be limited in size and duration. Implementation of SDG&E's Subregional NCCP Operational Protocols and Habitat Enhancement Measures, as well as the APMs in Section 4.4.4 Applicant-Proposed Measures, will ensure that any direct impacts to special-status reptile species will be less than significant.

Indirect Impacts

Indirect impacts from the degradation of special-status reptile species' habitat due to runoff, sedimentation, erosion, and the spread of noxious weeds will be avoided through the implementation of erosion control BMPs and APM-BIO-03, which ensures that construction equipment arrives to the Proposed Project clean and free of weeds. To avoid attracting potential predators to the Proposed Project construction area, all food waste and trash will be covered or hauled offsite on a daily basis, in accordance with Operational Protocol #8.

The overall effects of the Proposed Project will be beneficial to special-status reptile species. By removing approximately 17 poles from suitable special-status reptile habitat, avian predators will have fewer places to perch to hunt small reptiles. Additionally, the need for future disturbance to the Proposed Project construction area will be eliminated in the areas where the poles were removed.

With the implementation of the Proposed Project-specific APMs, in conjunction with BMPs, indirect impacts to special-status reptile species will be less than significant.

Special-Status Mammal Species

Southern mule deer was documented in the BSA during 2017 surveys. In addition, the following three special-status mammal species have a high or moderate potential to occur in the Proposed Project construction areas:

- pocketed free-tailed bat
- San Diego desert woodrat
- northwestern San Diego pocket mouse

The following discussion describes the potential direct and indirect impacts to special-status mammal species that may occur as a result of the Proposed Project.

Direct Impacts

As described previously, the Proposed Project has been designed to avoid impacts to potential special-status species, including mammals, by placing construction areas in locations that are paved, developed, or disturbed. This will reduce the potential for special-status species to be crushed during heavy equipment use, vegetation clearing or removal, and minor ground-disturbing activities. In addition, no native vegetation will be cleared or removed in San Dieguito Lagoon, Los Peñasquitos Lagoon, or Torrey Pines State Natural Reserve Extension Area, thereby minimizing potential direct impacts to special-status mammal species and habitat. In these locations, crews will access the pole bases on foot, cut the poles off at ground level, and remove the poles by helicopter.

To further reduce the potential for direct impacts to special-status mammal species, SDG&E will also implement the applicable Operational Protocols provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols. Direct impacts to individual mammals will be minimized by implementing Operational Protocol #1, in which Proposed-Project vehicles and equipment will be restricted to existing and approved access roads and approved workspaces. This protocol will also establish a 15-mph speed limit on unpaved surfaces, allowing mammals

the time to move out of harm's way. Operational Protocol #11 will require all Proposed Project personnel to attend an environmental training describing the special-status species present in the Proposed Project construction areas and the measures listed herein to avoid or minimize impacts. A biologist will conduct a pre-activity survey for all activities occurring off of access roads in natural areas, in accordance with Operational Protocol #13. Operational Protocol #14 establishes work limit boundaries for the avoidance of sensitive biological resources. Also, construction activities will be designed to avoid or minimize new disturbance, per Operational Protocol #16, thereby reducing the risk of impacts to special-status species and sensitive habitat. Additionally, the implementation of Operational Protocols #37 and #38 will minimize the potential for special-status mammals to be trapped in excavations by ensuring that excavations are covered or filled at the end of each work day, or that an escape ramp is provided.

In addition to the NCCP protocols, SDG&E will utilize Proposed Project-specific APMs, as discussed in Section 4.4.4 Applicant-Proposed Measures. During initial ground-disturbing activities in special-status species habitat, a biological monitor will be present, in accordance with APM-BIO-02. The monitor will conduct a pre-construction survey of the project area and will have the authority to halt any work activity that might result in impacts to special-status mammals. If a special-status mammal species is identified on site during construction, APM-BIO-07 requires that crews temporarily halt work and notify the biologist. Work will not proceed until the animal has moved out of harm's way on its own or has been relocated by a qualified biologist. If night work becomes necessary due to an emergency, agency requirements, or to restore power to customers, direct impacts to normal behaviors due to lighting will be minimized by implementing APM-BIO-08. This measure requires that night lighting be minimized and focused away from special-status species habitats, as possible. To avoid potential construction-related disturbance to the pocket free-tailed bat near roost sites—including the documented roost in the bridge over the railroad tracks at the intersection of Jimmy Durante and Boulevard and Camino Del Mar—pre-construction surveys will be conducted for bat roosts, under APM-BIO-09. If an active roost is detected, SDG&E will avoid conducting construction activities that may directly impact the roost.

While the Proposed Project has been designed to avoid impacts to special-status species and their habitats, a limited amount of planned ground-disturbing activities (e.g., minor earth-moving/grading and the trenching in vegetation associated with the underground conversion of C510 and C738) and the limited vegetation clearing required to prepare Proposed Project construction areas will occur and may result in disturbance to special-status mammal species that are present in the vicinity of this work. In these locations, SDG&E will restore temporarily impacted areas upon completion of the Proposed Project, per the Habitat Enhancement Measures provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols and as described in APM-BIO-05. Under these restoration measures, habitat for special-status species will be replaced or enhanced, which will maintain or improve the habitat value for the species.

In summary, direct impacts to special-status mammal species due to Proposed Project construction activities are expected to be limited in size and duration. With the implementation of the SDG&E Operational Protocols and Habitat Enhancement Measures, as well as the Proposed Project-specific APMs, direct impacts to special-status mammal species will be less than significant.

Indirect Impacts

The overall effects of the Proposed Project will be beneficial to special-status mammal species. By removing approximately 17 poles from suitable special-status mammal habitat, avian predators will have fewer places to perch to hunt small mammals. Additionally, the O&M activities associated with these poles will be eliminated, thus removing the potential for any future disturbance in these areas.

Indirect impacts from the degradation of special-status mammal species' habitat due to runoff, sedimentation, erosion, and the spread of noxious weeds will be avoided through the implementation of erosion control BMPs and APM-BIO-03, which ensures that construction equipment arrives clean and free of weeds. To avoid attracting potential predators to the Proposed Project construction area, all food waste and trash will be covered or hauled offsite on a daily basis, in accordance with Operational Protocol #8.

With the implementation of the Proposed Project-specific APMs, in conjunction with BMPs, indirect impacts to special-status mammal species will be less than significant.

Critical Habitat

The Proposed Project is not located within USFWS-designated critical habitat for any federally listed species. However, designated critical habitat for western snowy plover occurs approximately 300 feet east of the BSA in San Dieguito Lagoon, but is separated by water channels on three sides. In addition, designated critical habitat for San Diego fairy shrimp occurs approximately 1.1 miles east of the southern portion of the BSA. Because all construction activities associated with the Proposed Project will occur outside of USFWS-designated critical habitat, no impacts will occur.

Preserve Areas

As described previously, the construction areas within San Dieguito Lagoon, Los Peñasquitos Lagoon, and the Torrey Pines State Natural Reserve Extension are located within the City of San Diego's MHPA, which is a SDG&E-defined "Preserve" area. These areas within the MHPA are depicted on Figure 4.15-1: Recreational Areas Map. Proposed Project activities, such as minor earth-moving/grading and limited vegetation clearing, will result in temporary disturbance to a total of approximately 0.015 acre of the MHPA, spread out through the much larger Preserve area, which exceeds 50,000 acres.

Impacts to habitat within the MHPA will be minimized with the implementation of the applicable Operational Protocols provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols. In accordance with Operational Protocol #1, vehicles will be restricted to existing and approved access roads and the approved workspaces, so that they do not affect sensitive biological resources. Operational Protocol #14 will establish work limit boundaries for the avoidance of sensitive biological resources. Additionally, construction activities will be designed to avoid or minimize new disturbance, per Operational Protocol #16, which will reduce the risk of impacts to special-status species and sensitive habitat in preserve areas.

In addition to the NCCP protocols, SDG&E will utilize Proposed Project-specific APMs, as discussed in Section 4.4.4 Applicant-Proposed Measures. A biological monitor will be present during initial ground-disturbing activities within sensitive areas to ensure that flagged areas are avoided and work area boundaries are maintained, in accordance with APM-BIO-02. To avoid spreading invasive species/noxious weeds in the Proposed Project construction area, SDG&E will ensure that construction equipment arrives clean and free of weeds, per APM-BIO-03. Additionally, the Preserve area will be restored and compensated, in accordance with Section 7.4 of the SDG&E Subregional NCCP and APM-BIO-05.

Impacts to preserve areas due to Proposed Project construction activities will be limited in size and duration and will have an overall beneficial effect. By removing approximately 16 poles from the MHPA, the need for future disturbance in these locations will be eliminated.

With the implementation of SDG&E's Subregional NCCP Operational Protocols and Habitat Enhancement Measures, along with the APMs in Section 4.4.4 Applicant-Proposed Measures, potential impacts to preserve areas will be less than significant.

Operation and Maintenance – No Impact

O&M activities for the Proposed Project will be continue to be conducted in the same manner as they have been prior to construction of the Proposed Project. As described in Chapter 3 – Project Description, O&M of the proposed underground duct banks within Via De La Valle will be installed parallel to existing facilities where O&M activities are currently being conducted. The removal of an approximately six-mile segment of TL666D will eliminate all future O&M activities associated with these facilities. The C510 and C738 conversions will eliminate O&M requirements associated with approximately 4,200 feet of existing overhead distribution line. Although the C510 conversion will introduce approximately 3,100 feet of new underground duct bank, SDG&E currently owns and operates existing underground distribution facilities in the vicinity of this Proposed Project component. In addition, the C738 conversion will involve the installation of underground facilities in the same general location as the existing overhead facilities that will be removed. Based on the removal of existing overhead facilities and the installation of Proposed Project components in areas already covered by existing O&M activities, post-construction O&M requirements in the Proposed Project construction area will be reduced. This reduction will benefit special-status species by reducing vegetation clearing and construction equipment use in suitable habitat, reducing the potential for take.

Due to the continuation of existing ongoing O&M activities and the overall reduction in overhead conductors following construction of the Proposed Project, no new impacts will occur.

Question 4.4b – Sensitive Natural Communities

The following nine sensitive natural communities occur in the Proposed Project area:

- Torrey pine forest
- scrub oak chaparral
- southern maritime chaparral
- southern mixed chaparral
- Diegan coastal sage scrub

- Diegan coastal sage scrub – coastal form
- southern arroyo willow riparian forest
- coastal and valley freshwater marsh
- southern coastal salt marsh

The following discussion describes the potential direct and indirect impacts to sensitive natural communities that may occur as a result of the Proposed Project.

Construction – Less-than-Significant Impact

Direct Impacts

Due to the limited number and size of planned construction areas within sensitive natural communities where ground disturbance and vegetation trimming/removal is anticipated, direct impacts to these communities will be limited to small, discrete areas along the Proposed Project alignment. As previously discussed, ground disturbance within sensitive natural communities located in San Dieguito Lagoon, Torrey Pines State Natural Reserve Extension Area, and Los Peñasquitos Lagoon will be avoided. The Proposed Project is expected to impact approximately 0.05 acre of sensitive natural communities. Table 4.4-5: Anticipated Impacts on Sensitive Natural Communities in the Proposed Project Construction Areas quantifies the expected impacts to sensitive natural communities within and outside of the MHPA. Direct impacts may result from minor grading/ground disturbance and vegetation clearing during the preparation of construction areas.

Table 4.4-5: Anticipated Impacts on Sensitive Natural Communities in the Proposed Project Construction Areas

NCCP Vegetation Community	Holland Vegetation Community/Land Cover Type	Temporary Impacts (acres)		
		Outside MHPA Preserve Areas	Within MHPA Preserve Areas	Total
Torrey Pine Forest	Torrey Pine Forest	0.004	--	0.004
Chaparral	Southern Mixed Chaparral	0.001	0.015	0.016
Coastal Sage Scrub	Diegan Coastal Sage Scrub	0.032	--	0.032
	Diegan Coastal Sage Scrub – Coastal Form	0.001	--	0.001
Total	--	0.039	0.015	0.054

The SDG&E Subregional NCCP allows for impacts to sensitive habitats when incidental to otherwise lawful activities and when conducted in full compliance with the SDG&E Subregional NCCP. Compliance with the SDG&E Subregional NCCP is designed to avoid impacts whenever possible. When avoidance is not feasible, SDG&E will implement additional protection measures to avoid and minimize disturbance to sensitive biological resources, as described in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols.

In summary, implementation of the SDG&E Subregional NCCP and APMs in Section 4.4.4 Applicant-Proposed Measures will ensure potential impacts remain less than significant. In addition, the removal of TL666D and conversion of aboveground lines to underground will have long term permanent benefits to habitat within and adjacent to San Dieguito Lagoon and Peñasquitos Lagoon due to the elimination of future O&M activities within sensitive natural communities.

Indirect Impacts

Temporary indirect impacts to sensitive natural communities documented both within and adjacent to construction areas may result from construction-related runoff, sedimentation, and erosion, which have the potential to alter site conditions sufficiently to favor the establishment of other native and non-native species. As described previously, these impacts will be avoided and minimized through BMPs detailed in the Proposed Project's SWPPP.

Temporary indirect impacts to sensitive natural communities may result from construction activities that may deposit additional dust on plants, reducing the photosynthetic vigor of these sensitive natural communities. These impacts will be minimized by the implementation of Operational Protocol #39, which limits vehicles and equipment speeds to 15 mph on unpaved surfaces, and fugitive dust controls, as described in Chapter 3 – Project Description, which includes stabilizing unpaved construction surfaces to control dust emissions.

Impacts to sensitive natural communities may also occur if noxious weed seeds are spread within sensitive habitats during construction. If allowed to establish and spread, these weeds may alter the species composition of these sensitive natural communities. SDG&E will implement APM-BIO-03, which will reduce the threat from the spread of noxious weeds by ensuring all construction equipment arrives to construction areas clean and free of noxious weeds. Therefore, with the implementation of these measures, indirect impacts will be less than significant.

Operation and Maintenance – No Impact

As described previously, SDG&E will continue to operate and maintain their facilities in the same manner as they currently do. In addition, construction of the Proposed Project will eliminate all future O&M activities associated with TL666D within the San Dieguito and Los Peñasquitos lagoons, eliminating the potential for future impacts within these features. As a result, there will be no new impacts to sensitive natural communities as a result of O&M activities, and no impact will occur.

Question 4.4c – Effects on Jurisdictional Waters

The Proposed Project construction areas contain 28 jurisdictional wetlands or water features including ephemeral drainages, channelized concrete drainages, erosional scour, and features associated with the upper and lower tidal estuaries, including tidal inlets, salt pannes, and perennial marshlands. The following discussion describes the potential direct and indirect impacts to jurisdictional wetlands and waters that may occur as a result of the Proposed Project. Any potential impacts on water quality as a result of the Proposed Project are addressed in Section 4.9 Hydrology and Water Quality Section.

Construction – Less-than-significant Impact

Direct Impacts

Proposed Project activities located within San Dieguito and Los Peñasquitos lagoons have been designed to avoid impacts to jurisdictional wetlands and waters. Poles located within the lagoons will be cut off at ground level, and the pole bases will be left in place to reduce the potential for impacts to the lagoons. Helicopters will be used to haul off the poles after they are cut. Additionally, all work in the lagoons will be conducted during low tide conditions to avoid impacts to waters. All new Proposed Project structures will be installed outside of the boundaries of jurisdictional wetlands and waters. Therefore, no permanent impacts will occur.

To further avoid direct impacts to jurisdictional wetlands and waters, SDG&E will implement the applicable Operational Protocols provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols. In accordance with Operational Protocol #1, vehicles will be restricted to existing and approved access roads and the approved workspaces, so that they do not affect sensitive biological resources. Operational Protocol #11 will require all Proposed Project personnel to attend an environmental training describing sensitive habitats present in the Proposed Project construction area and the measures listed herein avoid or minimize impacts. Operational Protocol #14 will establish work limit boundaries for the avoidance of sensitive biological resources. Additionally, construction activities will be designed to avoid or minimize new disturbance, per Operational Protocol #16, which will reduce the risk of impacts to special-status species and sensitive habitat in preserve areas.

In addition to the NCCP protocols, SDG&E will utilize Proposed Project-specific APMs, as presented in Section 4.4.4 Applicant-Proposed Measures. Under APM-BIO-02, a biological monitor will be present during initial ground-disturbing activities within sensitive areas to ensure that work area boundaries are maintained. SDG&E also will implement APM-BIO-10, which requires that refueling and maintenance of vehicles and equipment occur a minimum of 100 feet from a water feature, to the maximum extent feasible. If this is unavoidable, appropriate secondary spill containment will be used to prevent spills in sensitive habitats.

The Proposed Project has been designed to avoid impacts to jurisdictional wetlands and waters. However, in the event of unexpected impacts, SDG&E will restore temporarily impacted areas per the Habitat Enhancement Measures provided in in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols and as described in APM-BIO-05. Under these restoration measures, sensitive habitat will be replaced or enhanced, which will maintain or improve the water quality and habitat value of the area.

With the implementation of SDG&E’s Subregional NCCP Operational Protocols and Habitat Enhancement Measures and the APMs in Section 4.4.4 Applicant-Proposed Measures, any potential direct impacts to jurisdictional wetlands and waters will be less than significant.

Indirect Impacts

Indirect impacts from Proposed Project construction will be beneficial to jurisdictional wetlands and waters. By removing approximately 27 poles from jurisdictional wetlands and waters, the need for future disturbance in these locations will be eliminated. As a result, indirect impacts to jurisdictional waters will be less than significant.

Operation and Maintenance – No Impact

As described previously, SDG&E will continue to operate and maintain their facilities in the same manner as they currently do. In addition, construction of the Proposed Project will eliminate all future O&M activities associated with TL666D within the San Dieguito and Los Peñasquitos lagoons, eliminating the potential for future impacts within these features. As a result, there will be no new impacts to wetlands and waters as a result of O&M activities, and no impact will occur.

Question 4.4d – Interfere with Native Wildlife Movement

Construction – Less-than-Significant Impact

As discussed in the Section 4.4.2 Existing Conditions, the Proposed Project is located within a number of wildlife corridors and preserve areas, including the San Dieguito Lagoon, Los Peñasquitos Lagoon, Torrey Pines State Natural Reserve Extension Area, MHPA areas, and the Pacific Flyway. The following discussion describes the potential impacts to native wildlife movement that may occur as a result of the Proposed Project.

Impacts to movement typically occur if a wildlife corridor is interrupted by a feature that physically blocks wildlife movement (i.e., roadway) or if habitat suitable to support wildlife in the movement corridor is directly removed during construction or indirectly affected by continual construction noise or dust. Construction activities within areas that serve as wildlife corridors may temporarily disrupt normal animal movement due to the staging of construction equipment and materials, and presence of excavations creating minor and temporary barriers to wildlife movement. In addition, increased human presence, noise levels, and vehicular traffic along access roads can also disrupt movement. However, work activities associated with the Proposed Project will be short in duration and small in size. These temporary restrictions or disruptions to wildlife movement will be localized to the immediate vicinity of active construction areas. Due to the linear nature of the Proposed Project, construction will be limited to a small number of construction areas dispersed along the approximately eight-mile alignment. As a result, these construction areas will represent only a small portion of the potential wildlife movement area available to animals at any given time. Furthermore, permanent features that physically block wildlife movement will not be constructed as part of the Proposed Project. Only seven new structures--poles ranging in diameter between 1.5 and four feet—will be constructed. While these poles are new features, they will be located within existing utility line corridors which are not fenced, and therefore will not impede the movement of wildlife. Furthermore, the Proposed Project involves removing approximately 41 existing poles and

topping approximately 57 existing poles. These activities will result in a net reduction of poles in the Proposed Project area, generating a net reduction in the potential for temporary divergence of wildlife movement due to construction activities or during the re-establishment of vegetation used for cover in wildlife movement corridors.

To further minimize the risk of impacts to native wildlife movements, SDG&E will implement the applicable Operational Protocols provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols. Temporary disruption of normal animal movement will be minimized through the implementation of Operational Protocol #1, which limits vehicle and equipment speeds on unpaved surfaces. This measure will reduce the potential for vehicle and equipment collisions with animals using wildlife corridors near or within active construction areas, as well as potential disorientation of wildlife moving near or within active construction areas. SDG&E will implement Operational Protocols #37 and #38 to prevent wildlife from becoming trapped in steep-walled trenches or excavations.

In addition to the NCCP protocols, SDG&E will utilize Proposed Project-specific APMs, as presented in Section 4.4.4 Applicant-Proposed Measures. SDG&E will implement APM-BIO-02, which states that biological monitors will be present during vegetation removal and ground-disturbing activities in sensitive natural communities. Within areas that serve as potential wildlife migration corridors, the biological monitor will be able to protect native wildlife species that could be moving through a construction area by identifying the animal and determining the appropriate action. In the event of a wildlife observation, SDG&E will implement APM-BIO-07, in which the biological monitor may physically move the animal out of the way of construction activities, or may halt construction activities in the vicinity of the observation of a special-status species to allow the animal to leave the area. Impacts to migratory birds and bats will be minimized with the implementation of APM-BIO-06 and APM-BIO-09, both of which describe procedures for identifying potential habitat, surveying for nesting birds or roosting bats, and procedures for protecting active nests and roosts. The implementation of the Nesting Bird Management Plan and the procedures for identifying potential bat roost habitat will protect avian and bat species using wildlife corridors within construction areas. Following the completion of construction activities, Proposed Project construction areas within wildlife corridors will be restored, in accordance with the applicable Habitat Enhancement Measures provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols and with APM-BIO-05. These measures will allow for potential habitat used by wildlife for movement to be utilized again, after construction is complete.

In summary, with the implementation of the SDG&E Operational Protocols and Habitat Enhancement Measures, as well as the aforementioned APMs, potential impacts to native wildlife movements will be minimized by reducing the chance of wildlife mortalities during temporary construction activities, and minimizing changes in the condition of habitat that could be used for wildlife movement during and after construction. Therefore, impacts to native wildlife movements will be less than significant.

Operation and Maintenance – No Impact

As described previously, O&M activities will continue to be conducted following the construction phase of the Proposed Project. SDG&E currently operates and maintains facilities in the area and these activities will not change. Due to the removal of TL666D and the conversion of existing overhead lines to underground configurations, the total number of aboveground structures will be reduced as part of the Proposed Project. As a result, there will be fewer barriers to wildlife movement following construction, and there will be no impact.

Question 4.4e – Conflict with Local Policies***Construction – No Impact***

Construction of the Proposed Project will not conflict with any local environmental policies or ordinances to protect biological resources. The Proposed Project is located within the City of Del Mar, City of San Diego, and SDCWA NCCP area. Based on a review of applicable local policies, the Proposed Project will not conflict with local policies, which include the City of San Diego MSCP Subarea Plan, the City of San Diego Municipal Code, and the City of Del Mar Municipal Code. The Proposed Project is also consistent with relevant policies in both the County and City of San Diego’s General Plans. Impacts within the County of San Diego’s MHPA are temporary in nature and consistent with the policies outlined in those plans. In addition, the Proposed Project will not conflict with the monitoring, management, or maintenance of either the City or County of San Diego’s MHPA. Therefore, the Proposed Project will not conflict with any local policies or plans protecting biological resources.

Operation and Maintenance – No Impact

As described previously, SDG&E will continue to conduct their current O&M activities following construction of the Proposed Project. In addition, construction of the Proposed Project will eliminate all future O&M activities associated with TL666D, eliminating the potential for future conflicts in these locations. These activities will continue to be consistent with all applicable policies and ordinances. Therefore, there will be no impact due to O&M of the Proposed Project.

Question 4.4f – Conflict with Conservation Plan***Construction – No Impact***

The Proposed Project traverses through areas within the City of San Diego MSCP, MHPA, and SDCWA NCCP. The Proposed Project will occur within the area covered by, and follow the requirements of, the SDG&E Subregional NCCP. The SDG&E Subregional NCCP contains measures to coordinate with HCP implementing entities and to provide additional mitigation in the event of permanent impacts to HCP/NCCP preserve areas. Therefore, no conflicts are expected with the City of San Diego MSCP, MHPA, or SDCWA NCCP. The SDG&E Subregional NCCP is independent of other NCCP/HCPs and, therefore, is not dependent upon the implementation of such plans and is not superseded by other plans. SDG&E will coordinate with the appropriate authorities during the Proposed Project approval process to ensure that the impacts, mitigation measures, and operational protocols are implemented for the Proposed Project under the SDG&E Subregional NCCP. With the implementation of the SDG&E Subregional NCCP, no impact will occur.

Operation and Maintenance – No Impact

All future O&M activities will continue to be conducted in compliance with the SDG&E Subregional NCCP. Standard O&M activities, such as road grading, tree trimming, structure installation, and replacement and repairs, will not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. Therefore, no impacts will result from O&M of the Proposed Project.

4.4.4 Applicant-Proposed Measures

The following APMs will be implemented by SDG&E to reduce potential impacts to sensitive biological resources. Specifically, the APMs have been designed to avoid or minimize potential impacts to special-status species and sensitive natural communities present in the surrounding area. The specific implementation of each APM is discussed with each applicable impact. Additional measures provided in Attachment 4.4-C: SDG&E Subregional NCCP Operational Protocols will be implemented during Proposed Project construction activities.

- **APM-BIO-01:** During the appropriate phenological (i.e., blooming) periods, pre-construction surveys for special-status plants (specifically, federally listed, state-listed, and CRPR 1 and 2 plants) will be conducted within one year prior to the start of construction in areas that have the potential for special-status plants to occur. A hand-held GPS unit with submeter accuracy will be used to record the locations of special-status plant occurrences. Prior to construction, any occurrences of special-status plants that SDG&E determines to be avoidable will be marked with fencing or flagging, for avoidance during construction activities. Where disturbance to these areas cannot be avoided, SDG&E will restore temporarily impacted areas, as described in APM-BIO-05.
- **APM-BIO-02:** Biological monitors will be present during all activities within special-status species habitat and sensitive natural communities. The biological monitors will conduct a pre-construction clearance survey of the work area and will verify that activities are in compliance with the Project APMs and SDG&E's Subregional NCCP Operational Protocols.
- **APM-BIO-03:** To minimize the spread of noxious and invasive weeds during construction, SDG&E will ensure that construction vehicles arrive to work sites clean and weed-free prior to entering the ROW in cross-country areas, ensure straw wattles (non-plastic) used to contain storm water runoff are weed-free, and document the extent of noxious weeds within the construction areas prior to construction. Noxious weeds are defined as species rated as High on the California Invasive Plant Inventory Database, published by the California Integrated Pest Council.
- **APM-BIO-04:** Impacts to oak trees, Torrey pines, and other native trees will be avoided and/or minimized to the extent possible during construction. In the event that any native trees are required to be removed, SDG&E will comply with all applicable City of San Diego and/or City of Del Mar requirements for tree preservation and mitigation.

- **APM-BIO-05:** All areas disturbed as a result of construction activities will be re-contoured and restored to the original conditions to the extent feasible including using soil salvaging and special-status plant protections as described in SDG&E’s Habitat Enhancement Measures. These areas will be allowed to revegetate naturally.
- **APM-BIO-06:** A Nesting Bird Management Plan will be prepared to outline procedures for minimizing impacts to nesting birds protected by the Migratory Bird Treaty Act during construction. The plan will address how to avoid direct or indirect impacts to nesting birds through various measures, including:
 - conducting pre-construction nesting bird surveys during specified breeding times within a certain distance of the construction areas;
 - establishing avoidance and minimization buffers for active nests based on species-specific noise tolerances;
 - describing construction activities that can occur within avoidance and minimization buffers;
 - implementing procedures for reducing buffers as appropriate; and
 - monitoring protocols to document compliance with the Nesting Bird Management Plan, including daily nesting bird reports, during construction.

The Nesting Bird Management Plan will be implemented during construction for all potentially affected bird species.

- **APM-BIO-07:** If a special-status wildlife species is identified on site during construction, crews will temporarily stop work in the immediate vicinity of the animal and immediately contact the biological monitor or designated SDG&E representative. Work will not proceed until the animal has moved out of harm’s way on its own or has been relocated by a qualified biologist.
- **APM-BIO-08:** Nighttime construction lighting in suitable habitat for special-status wildlife and nesting birds will be minimized to the extent feasible. Exterior lighting within and adjacent to potential special-status wildlife habitats will utilize the lowest illumination allowed for human safety and will be selectively placed, shielded, and directed away from suitable special-status species habitat, to the maximum extent practicable.
- **APM-BIO-09:** Prior to construction, a habitat survey for potential bat roosts that may be impacted by construction activities will be conducted. During the survey, potential roost sites will be searched for signs of bat use, such as urine streaking, grease marks and droppings, moth wings, and dead bats. Up to two weeks prior to construction, a qualified biologist will conduct bat surveys at roost sites identified as potentially active from signs of bat use identified during the survey. If bats are detected, SDG&E will avoid conducting construction activities that may directly impact the active roost site. If an active maternal roost is identified, no construction will occur within 200 feet of the maternal roost during the pupping season (typically April 1 through August 31).

- **APM-BIO-10:** To the maximum extent feasible, construction vehicles and equipment will be refueled, maintained, and repaired at least 100 feet away from a wetland or water feature. If refueling, maintaining, or repairing equipment and vehicles in or within close proximity to wetlands is unavoidable, appropriate secondary spill containment will be used to prevent spills in sensitive habitats.

4.4.5 References

- Audubon. 2016. Important Bird Areas Program. Available at <http://www.audubon.org/important-bird-areas/North-San-Diego-Lagoons>. Accessed November 2016.
- AECOM. 2017. Biological Technical Report for the San Diego Gas & Electric Company, TL674A Reconfiguration & TL666D Removal Project. May 2017.
- Baldwin B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken. 2012. The Jepson Manual Vascular Plants of California.
- Blackhawk. 2017a. 2017 Survey Results for Light-footed Ridgway's Rail and Belding's Savannah Sparrow for the San Diego Gas & Electric Transmission Line 674A Reconfiguration and Transmission Line 666D Removal Project Cities of San Diego and Del Mar, San Diego County, California.
- Blackhawk. 2017b. 2017 Coastal California Gnatcatcher USFWS Protocol Survey Results for the SDG&E Del Mar Reconfiguration Project (Transmission Line (TL) 674A at Del Mar and Removal from Service of TL 666D), Cities of San Diego and Del Mar, San Diego County, California.
- Bleich, V. C., and S. A. Holland. 1982. Management of Chaparral Habitat for Mule Deer and Mountain Sheep in Southern California. Pages 247–254 in C. E. Conrad and W. C. Oechel, technical coordinators. Proceedings of the Symposium on the Dynamics and Management of Mediterranean-type Ecosystems. USDA Forest Service, General Technical Report PSW-58.
- Busnardo, M. 1989. The Autecology of *Panoquina errans* (Lepidoptera: Hesperiiidae): Preliminary Field and Laboratory Observations. Tijuana Estuary Restoration/Enhancement Project, Spring 1989.
- CDFG. 1988. California Statewide Wildlife Habitat Relationships System. Volume 1: Amphibians and Reptiles. David Zeiner, W. Laudenslayer, and K. Mayer, eds. The Resource Agency. Sacramento.
- CDFG. 2009. Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Natural Communities. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>. Accessed: 2016.
- CDFW. 2016. CNDDDB. Accessed December 2016.

- Calflora. 2016. Wild California Plants. Available at <http://www.calflora.org/>. Accessed December 2016.
- CNPS. 2001. CNPS Botanical Survey Guidelines. Available at http://www.cnps.org/cnps/rareplants/pdf/cnps_survey_guidelines.pdf. Accessed: 2016
- CNPS. 2016. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. Available at <http://www.cnps.org/inventory>. Accessed 2016.
- City of San Diego. 1997. Multiple Species Conservation Program. City of San Diego MSCP Subarea Plan. Available at <http://www.sandiego.gov/planning/programs/mscp/pdf/toc.pdf>. Accessed 2016.
- City of San Diego. 2012. San Diego Municipal Code, Land Development Code, Biology Guidelines. Amended April 23, 2012. Available at <https://www.sandiego.gov/sites/default/files/legacy/development-services/pdf/industry/landdevmanual/ldmbio.pdf>. Accessed: 2016
- County of San Diego. 1997. County of San Diego MSCP Subarea Plan.
- eBird. 2016. The Cornell Lab of Ornithology. Online database of citizen science avian sightings. Available at <http://ebird.org/content/ebird/>. Accessed December 2016.
- Emmel, T. C., and J. F. Emmel. 1973. The Butterflies of Southern California. Natural History Museum of Los Angeles County, Science Series 26:1–148.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Ms. 117 pp.
- Holland, R. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game. The Resources Agency. 156 pp.
- Jepson Flora Project (eds.) 2017. Jepson eFlora. Available at <http://ucjeps.berkeley.edu/eflora/>. Accessed on February 22, 2017
- Konecny Biological Services, Inc. (Konecny Biological). 2012. Results of a Focused Survey for the Light-footed Clapper Rail and the Belding’s Savannah Sparrow at the San Dieguito Lagoon W19 Restoration Project Site, San Diego County, California.
- Konecny Biological Services, Inc. (Konecny Biological). 2014. Results of Focused Surveys for the Light-footed Clapper Rail, Belding’s Savannah Sparrow, Western Snowy Plover, and California Least Tern for the San Diego Gas & Electric Reconfigure Tie Line 674A at Del Mar and Remove from Service Tie Line 666D Project, San Diego County, California, 2014.
- Munz, P. A. 1974. A Flora of Southern California. University of California Press, Berkeley.

- Oberbauer, T., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on Preliminary Descriptions of the Terrestrial Natural Communities of California, Robert F. Holland, Ph.D., October 1986.
- Ogden Environmental and Energy Services (Ogden). 1995. Waterbird Survey Central San Diego Bay, 1994. Prepared for the U.S. Department of the Navy, Naval Air Station North Island, Coronado, California.
- Page, M., S. Schroeter, and D. Reed. 2016. 2015 Annual Report of the Status of Condition A: Wetland Mitigation San Onofre Nuclear Generating Station (SONGS) Mitigation Program. Submitted to the California Coastal Commission.
- RECON. 2013a. Biological Constraints Study for the Reconfigure TL 674A at Del Mar and Remove from Service TL 666D Project October 2013.
- RECON. 2013b. SDG&E Aquatic Resources for the Reconfigure Tie-Line 674A at Del Mar and Remove from Service TL 666D. December 2013.
- RECON. 2014a. Focused Pacific Pocket Mouse Survey Report for the Reconfigure TL 674A at Del Mar and Remove from Service TL 666D Project. October 2014.
- RECON. 2014b. Rare Plants Survey for the Reconfigure TL 674A at Del Mar and Remove from Service TL 666D Project. August 2014.
- RECON. 2014c. Results of the 2014 Coastal California Gnatcatcher and Least Bell's Vireo Protocol Surveys for the Reconfigure of Tie Line (TL) 674A at Del Mar and Removal from Service of TL 666D Project. October 2014.
- RECON. 2014d. Results of the 2014 Wandering Skipper Survey for the Reconfigure of Tie Line (TL) 674A at Del Mar and Removal from Service of TL 666D Project (RECON Number 7203-1). November 2014
- Reiser, C. H. 2001. Rare Plants of San Diego County. Aquifer Press, Imperial Beach, CA.
- San Diego Association of Governments (SANDAG). 2003. Multiple Habitat Conservation Plan. Available at <http://www.sandag.org/index.asp?subclassid=31&fuseaction=home.subclasshome>. Accessed 2012.
- San Dieguito River Park Joint Powers Authority. 2000. Park Master Plan for the Coastal Area of the San Dieguito River Valley Regional Open Space Park. January.
- San Diego County Water Authority. 2010. Natural Community Conservation Plan/Habitat Conservation Plan
- SDG&E. 1995. Subregional Natural Community Conservation Plan.

- Thomson, R. C., A. N. Wright, and H. B. Shaffer. 2016. *California Amphibian and Reptile Species of Special Concern*. California Department of Fish and Wildlife and University of California Press.
- Torrey Pines Docent Society. 2016. Torrey Pines State Natural Reserve Bird Survey December 3, 2016. <https://torreypine.org/wp-content/uploads/bds/birds-dec16.pdf>. Accessed December 28, 2016.
- Unitt, P. A. 2004. *Birds of San Diego County*. San Diego Society of Natural History Museum.
- USACE. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Online. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046489.pdf. Accessed July 10, 2015.
- USACE. 2012. Final Map and Drawing Standards for the South Pacific Division Regulatory Program, U.S. Army Corps of Engineers Regulatory Program in South Pacific Division. August 6, 2012.
- USFWS. Endangered and Threatened Wildlife and Plants; Determination of Endangered or Threatened Status for Four Southern Maritime Chaparral Plant Taxa from Coastal Southern California and Northwestern Baja California, Mexico. Final Rule.
- USFWS. 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants. Available at <https://www.fws.gov/ventura/docs/species/protocols/botanicalinventories.pdf>. Accessed 2016.
- USFWS. 2001. Least Bell's Vireo Survey Guidelines Fish and Wildlife Service Ecological Services. Available at <http://www.fws.gov/pacific/ecoservices/endangered/recovery/documents/LBVireo.2001.protocol.pdf>.
- USFWS. 2007. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the San Diego Fairy Shrimp (*Branchinecta sandiegonensis*): Final Rule.
- USFWS. 2012. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover; Final Rule. June 19. USFWS. 2016. Critical Habitat Mapper. Available at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>. Accessed December 2016.
- Zemal, R., S. M. Hoffman, J. Konecny, L. Conrad, C. Gailband, and M. Mace. 2011. Light-footed Clapper Rail Management, Study, and Propagation in California, 2011. California Department of Fish and Game, Wildlife Management, Nongame Wildlife Unit Report, 2011-02. Sacramento, CA. 29 pp.

Zemba, R., and S. M. Hoffman. 2012. Status and Distribution of the Light-footed Clapper Rail in California, 2012 Season. California Department of Fish and Game, Nongame Wildlife Program Report, 2012-02.