TABLE OF CONTENTS

4.4	BIOLOGICAL RESOURCES	4.4-1
4.4	4.1 Introduction	4.4-1
4.4	4.2 Methodology	4.4-2
4.4		
4.4	4.4 Potential Impacts	4.4-39
4.4	4.5 Project Design Features and Ordinary Construction/Operating Restrictions	4.4-67
4.4	4.6 Applicant Proposed Measures	4.4-70
4.4	4.7 Detailed Discussion of Significant Impacts	4.4-71
4.4		
Table	LIST OF TABLES e 4.4-1: Vegetation Communities and Land Cover Types Within the Proposed	
	Project Survey Area	4.4-18
Table	e 4.4-2: Critical Habitat in Vicinity of the Proposed Project	
Table	e 4.4-3: Vegetation Communities and Land Cover Types within Preserve Areas	4.4-28
Table	e 4.4-4: Vegetation Communities and Land Cover Types within ESHAs	4.4-29
Table	e 4.4-5: Summary of Jurisdictional Resources	4.4-38
Table	e 4.4-6: Anticipated Impacts by Vegetation Community	4.4-42
Table	e 4.4-7: Anticipated Impacts within Preserve Areas	4.4-45
	e 4.4-8: Anticipated Impacts within ESHAs	
	e 4.4-9: Summary of Anticipated Impacts	
Table	e 4.4-10: Summary of Anticipated SDG&E Mitigation	4.4-62

LIST OF APPENDICES

Appendix 4.4-A Biological Technical Report

THIS PAGE IS INTENDED TO BE LEFT BLANK

4.4 BIOLOGICAL RESOURCES

Would the Project:		Potentially Significant Impact	Potentially Significant Unless APMs 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 Game or U.S. Fish and Wildlife Service?			Ø	
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			Ø	
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?			Ø	
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?			Ø	
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				Ø
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?				Ø

4.4.1 Introduction

This section of the PEA describes the biological resources in the vicinity of the Proposed Project, and identifies potential impacts to habitats and species that could result from the construction, operation, and maintenance of the Proposed Project. Additionally, potential impacts to sensitive vegetation communities, jurisdictional wetlands and waters, and migratory wildlife corridors are addressed.

The Proposed Project would incorporate the standard set of operational protocols and mitigation set forth in *SDG&E's Subregional NCCP*. The *SDG&E Subregional NCCP* is an HCP permitted under Section 10A of the Federal ESA for incidental take and a NCCP permitted under a

management authorization pursuant to Section 2835 of the California Fish and Game Code. SDG&E entered into an Implementation Agreement with the USFWS and CDFW, respectively, for the management and conservation of multiple species and their associated habitats as established according to the federal and state endangered species acts and the state's NCCP Act. Through the avoidance of resources, application of protective measures and mitigation in the SDG&E Subregional NCCP, and habitat enhancement, Proposed Project impacts to biological resources would be less than significant.

4.4.2 Methodology

4.4.2.1 <u>Literature Review</u>

A review of existing literature and historical databases was conducted to determine the existing biological conditions and general occurrence of sensitive biological resources within the vicinity of the Proposed Project Survey Area. Background research to determine the existing biological conditions included a review of current federal, state, and local regulations, historical and current aerial photographs, U.S. Geological Survey (USGS) topographic maps, USDA NRCS soil survey maps, data from other projects occurring within the vicinity of the Proposed Project Survey Area, and other reputable online resources that provide data for the region.

Historical occurrence data for sensitive habitats as well as special status plant and wildlife species that have been reported from the vicinity of the Proposed Project Survey Area were evaluated. A review of data from the most recent version of the CDFW *California Natural Diversity Database* (CNDDB) was performed to identify known sensitive biological resources within a 5-mile buffer of the Proposed Project alignment. The CNDDB provides an inventory of reported vegetation communities, plant species, and wildlife species that are considered sensitive by state and federal resource agencies, academic institutions, and other conservation groups. In addition to the CNDDB, data obtained from the USFWS critical habitat inventory, California Native Plant Society (CNPS) *Electronic Inventory of Rare and Endangered Vascular Plants of California*, surveys conducted for SDG&E projects, and other databases (e.g., SanGIS, San Diego Natural History Museum [SDNHM]), were also evaluated to better understand the biological conditions within and adjacent to the Proposed Project area.

4.4.2.2 Field Surveys

Field surveys were conducted within the Proposed Project Survey Area, which included a 500-foot survey corridor along the entire Proposed Project alignment (see Appendix 4.4-A: Appendix A).

Vegetation Mapping

Vegetation communities and land cover types within the Proposed Project Survey Area were delineated on color aerial imagery at approximately 1 inch equals 300-foot scale. Biologists mapped the vegetation by walking through the Proposed Project Survey Area, documenting the dominant plant species, and delineating the vegetation communities and land cover types by hand onto the aerial imagery. In areas that were not accessible because of steep terrain and/or dense vegetation, biologists used binoculars to assess dominant species and draw vegetation polygons from the adjacent slope or from another good vantage point. Digital photographs of

representative areas were taken during the mapping survey for reference. After review of each map for consistency or errors, the vegetation community and land cover type boundaries were digitized in the office by using GIS.

Vegetation communities were classified according to those described within the SDG&E Subregional NCCP. NCCP vegetation community classifications are consistent with, or similar to, the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland, 1986). For the Proposed Project, vegetation communities within the Proposed Project Survey Area were identified according to the estimated percent cover of the combination of dominant plant species observed. Vegetation community classifications are based on a dominant species within the mapped unit relative to the list of dominant species for a given Holland vegetation community. Mixed communities are identified where species comprising a second vegetation community are present and intermixed with the dominant vegetation community. When necessary, modifiers are added to certain vegetation classifications to describe a single species that dominates the vegetation class. For example, when a chaparral community is dominated by chamise (Adenostoma fasciculatum) rather than the mix of different shrubs, the community is identified as chamise chaparral rather than southern mixed chaparral.

Additionally, certain natural vegetation communities are given a modifier when they have evidence of disturbance, such as clearing, agricultural use, off-road vehicle damage, or illegal trash disposal. These areas are generally characterized by a highly reduced and fragmented vegetative cover and may support a high percentage of nonnative grasses or ruderal species, particularly in the understory. This is notated on the vegetation maps as a "D" placed after the name or acronym of the habitat.

Flora

During the vegetation mapping and focused special-status plant surveys (discussed below) conducted within the Proposed Project Survey Area, biologists noted all common and special-status plant species observed within the Proposed Project Survey Area. Plant names follow Rebman and Simpson (2006), but updated names are included where applicable. Additional plant references included *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al, 2012) and the Consortium of California Herbarium data. Methods used for the focused special-status plant species surveys are described later in this section.

Fauna

During the various field efforts conducted within the Proposed Project Survey Area, biologists noted all common and special-status wildlife species observed directly or detected indirectly through sign, including – but not limited to – scat, tracks, burrows, and vocalizations. Methods used for the focused, protocol-level coastal California gnatcatcher (*Polioptila californica californica*) surveys are described later in this section.

Special-Status Species

Prior to initiating field surveys, background research and results from the database searches were used to make an initial assessment of the special-status species that have a potential to occur within or adjacent to the Proposed Project Survey Area. Based on the historical data available

for the region, a list of special-status species that are known to occur or have a potential to occur within or adjacent to the Proposed Project Survey Area was compiled. In addition, special-status species that had no historical occurrences based on the databases searches but that are known from the region were also included in the special-status species list.

Special-Status Species Habitat Assessment

A focused habitat assessment was conducted to better refine the probabilities for special-status plant and wildlife species to occur within or adjacent to the Proposed Project Survey Area. Biologists performed an evaluation of the existing vegetation communities to determine if the Proposed Project Survey Area provides potential habitat for the special-status species that have a potential to occur within the region. The data obtained from the habitat assessment was used to reevaluate the special-status species list and determine which species have a potential to occur within or adjacent to the Proposed Project Survey Area. Further information about the specialstatus species habitat assessment is provided in the focused special-status plant species memo (see Appendix 4.4-A: Appendix E) and the coastal California gnatcatcher survey summary report (see Appendix 4.4-A: Appendix G).

Special-Status Plant Surveys

Prior to the start of the focused surveys, a list of the special-status plant species that have a potential to occur within or adjacent to the survey area was developed from a query of the CDFW's CNDDB, the SanGIS database, data provided by SDG&E from other projects, research using SDNHM plant distribution mapping and voucher specimen lists, and local knowledge of special-status plant species likely to occur in the area. The CNDDB query included a review of special-status plant species reported within 1, 3, and 5 miles of the Proposed Project alignment.

Based on the results of the database search as well as the focused habitat assessment described above, special-status plant species were carefully considered for their potential to occur within or adjacent to the Proposed Project Survey Area, and a list of target species was developed for the Proposed Project. Species that were on the CNDDB list but were recently "considered but rejected" as a special-status species by CNPS because they are more common than previously thought or because their taxonomy has changed were not included because they do not meet the criteria to be classified as a special-status species.

Surveys were conducted by walking meandering transects throughout the Proposed Project Survey Area. For each special-status plant observation, surveyors recorded the approximate location using a hand-held GPS device that recorded the plant's location and the elevation above mean sea level (amsl) and by hand onto a high resolution aerial image of the Proposed Project Survey Area. Where vegetation was very dense on steep slopes, such as in scrub oak chaparral, documentation of some species was accomplished through the use of binoculars and marking the species' location on a field map that was later digitized for incorporation into the GIS database. In addition to recording special-status plant species observed during this survey, biologists assessed the Proposed Project Survey Area to refine the probability for the other target specialstatus plant species that will be surveyed for during spring/summer 2014. Biologists also recorded incidental detections of special-status wildlife species during these focused specialstatus plant surveys.

Focused Coastal California Gnatcatcher Surveys

Focused surveys for coastal California gnatcatcher were conducted by USFWS-permitted biologists in accordance with the current USFWS survey protocol for coastal California gnatcatcher surveys within NCCP areas, titled *Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Guidelines* and dated February 28, 1997 (USFWS, 1997). Six surveys were conducted, with a USFWS-approved modification to space the surveys a minimum of 10 days apart to meet schedule constraints for the Proposed Project.

All surveys were conducted between approximately 6:00am and 12:00pm and avoided periods of adverse weather conditions (e.g., excessively hot or cold temperatures, high winds, steady rain, dense fog, other inclement weather conditions) that would impede detection of the coastal California gnatcatcher. Surveyors slowly walked throughout the suitable habitat identified within the Proposed Project Survey Area during the habitat assessment and used visual and auditory cues to detect the coastal California gnatcatcher. Various routes were utilized to conduct an unbiased survey of the potentially suitable habitat. Pre-recorded coastal California gnatcatcher vocalization playbacks were only used to elicit initial calls from coastal California gnatcatcher and were not used frequently or to elicit further behaviors. Pre-recorded vocalizations were played for a period of 5 to 15 seconds and were generally repeated approximately every 100 feet within the surveyed habitat. No more than approximately 80 acres of suitable habitat were surveyed per day per USFWS-permitted biologist.

For each coastal California gnatcatcher detection, surveyors recorded the approximate location using a hand-held GPS device and by hand onto a high resolution aerial image of the Proposed Project Survey Area. Surveyors also estimated the age, sex, and number of individuals detected and included notes about each observation. In addition, surveyors recorded other wildlife species observed directly or detected indirectly by sign, including scat, tracks, calls, and other evidence.

Critical Habitat

Under the ESA, USFWS designates certain areas as "critical habitat" if they determine that these geographic areas are essential for the conservation and/or recovery of a federally listed threatened or endangered species, whether or not the species currently occupies the area. Critical habitat areas often require special management and protection to assure they will remain suitable for the federally listed species for which they have been designated. While federally listed species are protected by the ESA whether or not they are in an area that is designated as critical habitat, projects proposed within or adjacent to "critical habitat" must demonstrate that implementation of the project would not destroy or significantly impact the functions and values of the critical habitat.

Existing critical habitat data layers and a 5-mile buffer of the Proposed Project alignment were overlain onto an aerial and graphic of the Proposed Project Survey Area to determine if the Proposed Project has the potential to impact any areas designated as critical habitat.

Jurisdictional Delineation Survey

Environmental Intelligence, LLC (EI) conducted a focused jurisdictional delineation for the Proposed Project. The methods used to perform the jurisdictional delineation are presented below. For additional details, please refer to Appendix 4.4-A: Appendix H (Jurisdictional Delineation of San Diego Gas & Electric's Sycamore to Peñasquitos 230 Kilovolt Transmission Line Improvements Project).

Literature Review

Prior to the field delineation, EI analyzed numerous available data sets to determine the locations of potential jurisdictional areas. These data included:

- A 1 inch equals 2,400 feet color aerial photograph of the Proposed Project alignment;
- National Wetlands Inventory (NWI) data;
- USDA NRCS soil mapping data;
- Historic and recent aerial photographs; and
- USGS topographic maps.

This information informed the field surveys, described below.

Field Survey

The delineation field work involved walking the entire Proposed Project Survey Area, focusing on (but not limited to) potential jurisdictional areas identified during the literature search, and physically identifying any hydrologic, vegetative, and geomorphic characteristics to delineate potentially jurisdictional waters and wetlands. The field survey was conducted according to the technical guidelines provided in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0; USACE, 2008) to identify and delineate wetlands that may be subject to regulatory jurisdiction under Section 404 and 401 of the Clean Water Act of 1972 (CWA). "Waters of the State" were identified pursuant to criteria outlined in Section 1600 of the CFG Code, including the presence of a defined bed and bank and any associated riparian vegetation. For each feature, total stream length and the width of the "top of bank" were measured. For streams with riparian vegetation, this width was extended to the outer drip-line of this vegetation. Drainages that appeared to meet the criteria for "waters of the United States (US)." or "waters of the State" were considered potentially jurisdictional; however, any determination is subject to verification by the regulatory agencies. For areas under the regulation of the CCC, wetlands were also delineated using the one parameter definition, as defined in the CCR Title 14.

Vernal pools are ephemeral basins that fill with rain water in the winter and spring but are dry at other times of the year and often support endangered species, such as San Diego button-celery (*Eryngium aristulatum*) and fairy shrimp. Under certain circumstances, vernal pools can be considered jurisdictional waters by Federal and State resource agencies. Surveys were not completed in the appropriate season to determine potential vernal pool ponding extent; however,

potential vernal pools encountered were delineated at the watershed level based on evidence of ponding and/or depressional topography within soil types known to produce vernal pools.

Impact Determination

Potential impacts associated with implementation of the Proposed Project were evaluated by considering all Proposed Project activities and their potential to impact biological resources within the Proposed Project Survey Area. Potential impacts were classified as either permanent or temporary and further classified as direct, indirect, and/or cumulative. Definitions for the different types of impacts are discussed in more detail later in this document, in Section 4.4.4: Potential Impacts.

4.4.3 Existing Conditions

4.4.3.1 Regulatory Setting

Federal

Several federal regulations apply to the proposed project, including:

- Federal Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);
- Clean Water Act of 1972 (33 USC 1251 et seq.);
- Coastal Zone Management Act of 1972 (16 USC 1451 through 1464, Chapter 33);
- Migratory Bird Treaty Act of 1918 (16 USC 703 through 711); and
- Bald and Golden Eagle Protection Act (16 USC 668).

Federal Endangered Species Act of 1973 (16 United States Code [USC] 1531 et seq.).

The Federal ESA of 1973 was designed to protect critically imperiled plant and wildlife species from extinction by eliminating or reducing the threats to these species and by aiding in the recovery and/or maintenance of the species populations. The ESA designates species that are endangered or threatened as well as species that are candidates for listing and protects these species from unauthorized "take". For plants, the ESA prohibits removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and/or removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S.C. 1538). For wildlife, "take" is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The ESA also designates critical habitat for federally listed species and protects these species from interference with vital breeding and behavioral activities and from critical habitat degradation.

The ESA is administered by the USFWS for freshwater fish and terrestrial wildlife and the National Oceanic and Atmospheric Administration (NOAA) for marine and anadromous species. A person, defined as an "individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign

government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States", is prohibited from taking a listed species until an appropriate permit pursuant to Section 7, 9, and/or 10 of the ESA has been obtained from USFWS and/or NOAA.

Clean Water Act of 1972 (33 USC 1251 et seq.)

The U.S. Environmental Protection Agency (EPA) administers the CWA, which regulates potential impacts to wetlands, Waters of the U.S., and Waters of the State resulting from discharge of dredged materials by implementing pollution control measures to maintain water quality in these waterways. Some sections of the CWA, including Sections 404 and 401, are administered by other agencies.

The U.S. Army Corps of Engineers (USACE) administers Section 404 of the CWA, which regulates the discharge of dredged or fill material into navigable waters, including both wetlands and other Waters of the U.S. The discharge of dredged or fill material is typically associated with a variety of development projects, agricultural activities, and water resource projects. The USACE is responsible for issuing general and individual permits and for making jurisdictional determinations.

The SWRCB, in conjunction with the nine California Regional Water Quality Control Boards (RWQCBs), administers Section 401 of the CWA, which requires a State Water Quality Certification or waiver for any activity requiring a Section 404 permit. The State Water Quality Certification ensures the activity will not violate any established State water quality standards. The SWRCB and/or RWQCB are responsible for issuing permits pursuant to the Section 401 Water Quality Certification Program.

Coastal Zone Management Act of 1972 (16 USC 1451 through 1464, Chapter 33)

The Coastal Zone Management Act of 1972 (CZMA) is administered by NOAA's Office of Ocean and Resource Management and was established as a national policy to preserve, protect, develop, and – where possible – enhance or restore the coastal zone in the U.S. The federal consistency provision, Section 307 of the CZMA, 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. Therefore, the CZMP and permit requirements are discussed further in CCA and CZMP, below.

Migratory Bird Treaty Act of 1918 (16 USC 703 through 711)

The Migratory Bird Treaty Act of 1918 (MBTA) implements various conventions and treaties between the U.S. and Canada, Mexico, Japan, and Russia for the protection of over 800 migratory bird species that spend all or a portion of their life cycle in the U.S. Under the MBTA, it is unlawful to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means

whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird...or any part, nest, or egg of any such bird" (16 USC 703).

The MBTA is administered by USFWS and is intended to eliminate a commercial market for birds and/or their parts. Take permits for MBTA species are rarely issued, except for specific actions to aid recovery of a species; however, USFWS establishes hunting seasons for species for which there is a long tradition of hunting, as long as hunting will not adversely impact their population status or long-term conservation. While the MBTA includes approximately 170 species of game birds, hunting is typically authorized for fewer than 60 of these species each year.

Bald and Golden Eagle Protection Act (16 USC 668)

The Bald and Golden Eagle Protection Act (BGEPA) 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 any golden eagle], alive or dead, or any part, nest, or egg thereof" without prior approval are subject to criminal penalties.

State

Several state regulations apply to the proposed project, including:

- CEQA (PRC 21000 et seq);
- CESA (Fish and Game Code 2050 et seq.);
- California Fish and Game Code:
- California Native Plant Protection Act (NPPA);
- California Coastal Act (CCA) and Environmentally Sensitive Habitat Areas;
- CZMA;
- California Porter-Cologne Water Quality Control Act; and
- California NCCP Program.

California Environmental Quality Act (Public Resources Code 21000 et seq)

The CEQA was passed in 1970 as the state counterpart to the NEPA to institute a statewide policy of environmental protection. CEQA applies to projects undertaken, funded, or requiring the issuance of a permit by a state or local public agency and requires the project proponent to identify significant environmental impacts as well as avoidance, minimization, and/or mitigation measures to reduce these impacts to below a level of significance.

The CDFW has jurisdiction over the conservation, protection, and management of native habitats, plant species, and wildlife species found within California and is responsible for maintaining sustainable populations of these habitats and species. The CDFW provides biological expertise to review and comment on CEQA documents, including the impacts resulting from proposed project activities and the proposed avoidance, minimization, and mitigation measures associated with these impacts. The CDFW may play various roles in the CEQA process; the CDFW is always a Trustee Agency and may also be a Lead Agency or a Responsible Agency.

The CDFW is one of four trustee agencies, which also include the State Lands Commission, the Department of Parks and Recreation, and the University of California. As a Trustee Agency, the CDFW has jurisdiction over certain resources held in trust for the people of California and is typically required to be notified of CEQA documents that are relevant to its jurisdiction, such as documents for projects involving fish and wildlife resources. As a Trustee Agency, the CDFW cannot approve or disapprove a project; however, the lead and responsible agencies must consult with the CDFW, and the CDFW reviews the CEQA document(s) and provides recommendations regarding the resources under their jurisdiction (Fish and Game Code Section 1802).

The CDFW is also sometimes designated as a Responsible Agency, which is an agency, other than the Lead Agency, that has the legal responsibility for implementing and approving a proposed project. The CDFW is designated as the Responsible Agency when the Lead Agency requires a 1600 Streambed Alteration Agreement or a 2081(b) CESA Incidental Take Permit for a project. As a Responsible Agency, CDFW actively participates in the CEQA process by reviewing the Lead Agency's CEQA document and using that document to make decisions about the proposed project, to prepare and issue its own findings regarding the project (CEQA Guidelines, Sections 15096 and 15381), and to determine whether or not to issue an incidental take permit.

For the Proposed Project, the CPUC is the Lead Agency, and CDFW would serve as a Responsible Agency that would review the environmental documentation for the Proposed Project to assure its consistency with the SDG&E Subregional NCCP, which is discussed in detail in SDG&E Natural Community Conservation Plan, below.

California Endangered Species Act (Fish and Game Code 2050 et seq)

The CESA parallels the ESA and protects and/or preserves native plant and wildlife species and their habitats, especially those that are threatened with extinction and those that are experiencing significant decline that may lead to a threatened or endangered designation, within the state of California. CESA designates special-status species that are protected from unauthorized "take", which is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

CESA is administered by the CDFW. A state lead agency is required to consult with the CDFW to ensure that a proposed project is not likely to jeopardize the continued existence of a special status species or result in the destruction or adverse modification of essential habitat for a species. CESA allows for the issuance of incidental take permits for lawful development projects and emphasizes the benefits of early consultation between the lead agency and CDFW to

avoid potential impacts to special-status species and to develop appropriate mitigation measures to reduce impacts to and avoid loss of a special-status species.

California Fish and Game Code

Several sections of the California Fish and Game Code, which is administered by the CDFW, may apply to the proposed project. These include Section 2081; Sections 1600 through 1616; Sections 1900, et seq.; Sections 2511, 4700, 5050, and 5515; Sections 3503, 3503.5, and 3513; and Title 14, California Code of Regulations, Section 670.2 and 670.6. Each of these sections is discussed in detail below.

Section 2081

Section 2081 of the California Fish and Game Code allows for the issuance of an incidental take permit from CDFW for projects that have the potential to take a special-status species, including a state-listed species, as long as the impacts are minimized and fully mitigated and will not jeopardize the continued existence of a state-listed species. The measures required to minimize and fully mitigate impacts must be roughly proportional to the extent of the proposed impact to the species and must be capable of successful implementation while maintaining the applicant's objectives to the greatest extent feasible. The applicant must show that adequate funding is available to implement the required avoidance and mitigation measures and monitor the effectiveness of the mitigation measures.

Sections 2511, 4700, 5050, and 5515

Sections 2511, 4700, 5050, and 5515 of the California Fish and Game Code provide guidelines to protect wildlife species that are designated as "fully protected" by the CDFW. Before the implementation of CESA and ESA, the State of California designated species as "fully protected" to provide protection for species that were rare or threatened with possible extinction/extirpation. Many of these "fully protected" species have since been listed under CESA as threatened or endangered species. While most "fully protected" species cannot be harmed, taken, or possessed at any time because the designation as "fully protected" provides the same level of protection as a listed species, CDFW may permit the incidental take of "fully protected" species pursuant to a NCCP plan approved by CDFW, as long as the plan's conservation and management guidelines adequately protected these species.

Sections 1600 through 1616

CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, Fish and Game Code Sections 1600 through 1616 comprise the Lake and Streambed Alternation Program. Specifically, Section 1602 requires an entity, which is any person, state, or local governmental agency, or public utility to notify CDFW before beginning any activity that will substantially modify a river, stream, or lake. Notification is required for an activity that will: 1) Substantially divert or obstruct the natural flow of; 2) substantially change or use any material from; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement into the bed, channel, or bank of any river, stream, or lake. The notification requirement applies to any work undertaken within or adjacent to a lake, river, or stream that flows at least intermittently through

a bank or channel, including watercourses with a subsurface flow (e.g., ephemeral streams, desert washes) and flood plains.

If a proposed activity requires CDFW notification, a completed notification form and corresponding fee is submitted to the regional CDFW office. If CDFW determines the proposed activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. The Agreement includes reasonable conditions necessary to protect resources and must comply with CEQA.

Other Sections

Additional sections of the California Fish and Game Code may apply to the proposed project, including, but not limited to:

- Sections 1900 through 1913 provide guidelines to preserve, protect, and enhance endangered or rare native plants within California;
- Sections 3503, 3503.5, and 3513 state that it is unlawful to take, possess, or destroy the nest or eggs of any bird species except otherwise allowed by the or any regulation made pursuant to the California Fish and Game Code;
- Section 3503.5 provides protection specifically in the orders Falconiformes (hawks, eagles, and flacons) and Strigiformes (owls), and Section 3513 provides protection specifically for migratory, non-game birds designated by the MBTA; and
- Title 14, CCR, Section 670.2 and 670.6 list wildlife species that are designated as California Species of Concern or are state-listed as threatened or endangered species.

California Native Plant Protection Act

The NPPA was passed in 1977 and directs CDFW to preserve, protect, and enhance rare and endangered plant species within California. Under the NPPA, CDFW has the power to designate native plants as rare or endangered, and it has the power to require permits for collecting, transporting, or selling these plants. For plant species that are designated as rare, threatened, or endangered species or for plant species that are proposed for listing, CDFW requires a permit pursuant to Section 2081(a) of CESA for take of a listed or candidate plant species for scientific, educational, or management purposes, and/or an permit pursuant to Section 2081(b) of CESA for incidental take of a listed or candidate plant species for all activities that are not authorized by the NPPA.

California Coastal Act and Environmentally Sensitive Habitat Areas

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.

Section 30107.5 of the CCA defines an Environmentally Sensitive Area as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special

nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments". Pursuant to Section 30240 of the CCA, Environmentally Sensitive Habitat Areas (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 to the functions and values of the ESHA.

Coastal Zone Management Program

In addition, California has a federally approved CZMP (see Coastal Zone Management Act of 1972, above), which is administered through a partnership between state and local governments. Within southern California, the two state coastal management agencies include the California Coastal Conservancy and the CCC. The California Coastal Conservancy is responsible for purchasing, protecting, restoring, and enhancing coastal resources, while the CCC manages the development within the coastal zone. The CCA encourages local governments to establish Local Coastal Programs (LCPs) to govern decisions on behalf of the CCC and to protect public access and coastal resources on a local level. After certification of a LCP, authority to issue Coastal Development Permits is delegated to the local government, but the CCC maintains permit jurisdiction over certain specified lands (e.g., tidelands, submerged islands, and public trust lands) and can appeal permits approved by local governments in specified geographic areas.

Development within the coastal zone may not occur until the CCC or a local government with a CCC-certified LCP has issued a Coastal Development Permit. When federal activities or federally licensed, permitted, or assisted activities are proposed that are likely to affect land use, water use, or natural resources within the coastal zone, a federal consistency review is performed pursuant to Section 307 of the CZMA, which gives the CCC or approved local government regulatory control over the proposed federal activities. The CCC uses this review authority to facilitate cooperation and coordination between the local, state, and/or federal agencies and to authorize Coastal Development Permits.

California Porter-Cologne Water Quality Control Act

The California Porter-Cologne Water Quality Control Act, which is administered by either the SWRCB and/or the RWQCB, was enacted in 1969 and regulates activities that may impact the quantity and/or quality of both surface water and groundwater. This Act provides protection for both isolated wetlands and Waters of the State, which are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." If a proposed project involves alteration to any Waters of the State, the project proponent must file a Report of Waste Discharge with the appropriate RWQCB to obtain "Waste Discharge Requirements" (WDRs), which serve as the project discharge permit.

California Natural Community Conservation Planning Program

The California NCCP program was initiated in 1991 and is administered by CDFW. It is a cooperative effort by the CDFW and numerous public and private partners that takes a broad scale, ecosystem approach to planning for the protection and perpetuation of biological diversity

throughout California by protecting both habitats and the species within these habitats while also accommodating compatible land use.

A NCCP plan identifies and provides for the regional protection of plants, wildlife, and their habitats, while allowing compatible and appropriate economic activity in the region. By including key interests in the process and by working with landowners, environmental organizations, and other interested parties, a NCCP plan 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 plan development and implementation. Within California, there are currently 23 active NCCP plans covering more than 11 million acres, and several draft NCCP plans are pending approval.

SDG&E has a current, agency approved, NCCP plan called the *SDG&E Subregional NCCP*. This plan is discussed in detail under Local Regulations, below.

Local Regulations

Several local regulations apply to the proposed project, including:

- SDG&E Subregional NCCP;
- City of San Diego and City of Poway Multiple Species Conservation Program (MSCP) Subarea Plans;
- MCAS Miramar Integrated Natural Resources Management Plan (INRMP);
- Local Coastal Program;
- City of San Diego Urban Forestry Section (City Council Policy 200-5);
- City of Poway Urban Forestry Ordinance; and
- Other Preserves and Conserved Areas.

SDG&E Subregional Natural Community Conservation Plan

In December 1995, the USFWS and the CDFW approved the SDG&E Subregional NCCP, which addresses potential impacts to 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 an incidental take permit (Permit PRT-809637) by the USFWS and the CDFW for 110 Covered Species. The SDG&E Subregional NCCP was developed by following the multiple species and habitat conservation planning approach. Even with the SDG&E Subregional NCCP, SDG&E's goal is to avoid "take" of Covered Species whenever possible and to implement measures to avoid, minimize, and mitigate any take to the maximum extent possible. The SDG&E Subregional NCCP includes mitigation measures and operational protocols that apply to construction and operation and maintenance activities. In approving the NCCP, USFWS and CDFW determined that the mitigation measures and operational protocols avoid potential impacts and provide appropriate mitigation where such

impacts are unavoidable, and ensure the protection and conservation of federal and state listed species and Covered Species. The Proposed Project falls within the area in which SDG&E's utility operations are governed by the SDG&E Subregional NCCP, and the SDG&E Subregional NCCP will be applied to the Proposed Project. As such, the NCCP fully addresses all of the potential construction and operation and maintenance impacts of the Proposed Project on federal and state listed species and Covered Species. The NCCP mitigation measures and operational protocols have been incorporated as part of the Proposed Project description.

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 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."

City of San Diego and City of Poway Multiple Species Conservation Program Subarea Plans

The City of San Diego and the City of Poway are two of several jurisdictions participating in the County of San Diego (County) MSCP, which was developed to protect biodiversity and enhance the quality of life in the region through the preservation of a network of habitats and open space areas. The City of San Diego and the City of Poway each have a Subarea Plan that was developed in conjunction with the wildlife agencies (e.g., USFWS and CDFW) and identifies core biological resource areas that are targeted for conservation (refer to Appendix 4.4-A: Appendix A). The City of San Diego Subarea Plan also includes the City of San Diego Multi-Habitat Planning Area (MHPA), which delineates core biological resource areas and habitat corridors that are targeted for conservation and within which limited development may occur.

The City of San Diego and City of Poway Subarea Plans meet the requirements of the NCCP Act of 1992 and are consistent with the County MSCP, thus they serve as stand-alone documents for implementing each city's portion of the County's MSCP. These Subarea Plans also form the basis for the implementing agreements between each city and the wildlife agencies, which ensure the implementation of the resource conservation plans and habitat preserves, thus allowing the cities to issue take permits at the local level.

The Proposed Project falls within the area in which SDG&E's utility operations are governed by the SDG&E Subregional NCCP and, therefore, would fall under the SDG&E Subregional NCCP. As such, no conflicts are expected to occur with the City of San Diego or the City of Poway Subarea Plans. Because the SDG&E Subregional NCCP is independent of other NCCP/HCPs, it is not dependent upon the implementation of such plans and is not superseded by them.

Marine Corps Air Station, Miramar Integrated Natural Resources Management Plan

The INRMP summarizes the baseline information for MCAS Miramar that ensures compliance with the regulatory and planning process required by NEPA, the ESA, and the CWA. It also fulfills other responsibilities pursuant to Department of Defense (DoD) and Marine Corps

policies as well as other legal requirements. The *INRMP* integrates MCAS Miramar's land use needs, in support of the military mission, with the management and conservation of natural resources on MCAS Miramar. The *INRMP* is a tool that provides MCAS Miramar's guidelines and approach to natural resource management and conservation. While the *INRMP* does not dictate land use decisions, it does inform the planning process by providing important resource information to support land use decisions and natural resource management.

The Proposed Project falls within the area in which SDG&E's utility operations are governed by the SDG&E Subregional NCCP and, therefore, would fall under the SDG&E Subregional NCCP. As such, no conflicts are expected to occur with the MCAS Miramar INRMP. Because the SDG&E Subregional NCCP is independent of other management plans, it is not dependent upon the implementation of such plans and is not superseded by them.

Local Coastal Program

Local governments use the LCP in partnership with the CCC as a basic planning tool to guide responsible development and to protect natural resources within the coastal zone. Within the vicinity of the Proposed Project, the San Diego Coast Area LCP, which is administered by the City of San Diego, provides the requirements for future development and protection of coastal resources. CZMA, CCA, and CZMP, above, provide a more detailed discussion of the basis for the LCP.

Development within the coastal zone may not occur until the CCC or a local government with a CCC-certified LCP (e.g., City of San Diego) has issued a Coastal Development Permit. When federal activities or federally licensed, permitted, or assisted activities are proposed that are likely to affect land use, water use, or natural resources within the coastal zone, a federal consistency review is pursuant to Section 307 of the CZMA, which gives the CCC or approved local government regulatory control over the proposed federal activities. The CCC uses this review authority to facilitate cooperation and coordination between the local, state, and/or federal agencies and to authorize Coastal Development Permits.

City of San Diego Urban Forestry Section (City Council Policy 200-5)

The City of San Diego General Services Department, Urban Forestry Section, issues permits for tree trimming, removal, planting, or root pruning following inspection by City of San Diego staff pursuant to City Council Policy 200-5. The Proposed Project falls within the area in which SDG&E's utility operations are governed by the SDG&E Subregional NCCP and, therefore, would fall under the SDG&E Subregional NCCP. As such, no conflicts are expected to occur with the City of San Diego Urban Forestry guidelines. Because the SDG&E Subregional NCCP is independent of other management plans, it is not dependent upon the implementation of such plans and is not superseded by them.

City of Poway Urban Forestry Ordinance

The City of Poway has an Urban Forestry Ordinance (Poway Municipal Code, Chapter 12.32) that supports urban forestry practices for planting, trimming, and removing trees. A tree removal permit, issued by the Public Works Department, is required before removing a tree on public property or from Development Services before removing certain tree species located on private

property. The Proposed Project falls within the area in which SDG&E's utility operations are governed by the SDG&E Subregional NCCP and, therefore, would fall under the SDG&E Subregional NCCP. As such, no conflicts are expected to occur with the City of Poway Urban Forestry Ordinance. Because the SDG&E Subregional NCCP is independent of other management plans, it is not dependent upon the implementation of such plans and is not superseded by them.

Other Preserves and Conserved Areas

The Proposed Project crosses areas that are designated as mitigation/preserve areas as well as conserved lands that have adopted conservation plans (refer to Appendix 4.4-A: Appendix A). These areas have a variety of classifications, including (but not limited to) open space, preserve, park, mitigation land, wildlife refuge, home owners association land, and private land. Because the Proposed Project is anticipated to occur within the area in which SDG&E's utility operations are governed by the SDG&E Subregional NCCP, it would fall under the SDG&E Subregional NCCP. Therefore, no conflicts are expected to occur with the established conservation plans for the mitigation/preserve areas. If potential conflicts occur with these mitigation or preserve areas, the SDG&E Subregional NCCP is independent of other NCCP/HCPs, and, as such, is not dependent upon the implementation of such plans and is not superseded by these plans (SDG&E, 1995). SDG&E would 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.

4.4.3.2 <u>Biological Resources Setting</u>

The approximately 1,058.88-acre Proposed Project Survey Area traverses diverse terrain and supports a variety of vegetation communities and land cover types, which were classified to the extent possible according to both the *SDG&E Subregional NCCP* and Holland (1986). The approximate acreages of each of the 25 vegetation communities and land cover types that were mapped within the Proposed Project Survey Area are summarized in Table 4.4-1, Vegetation Communities and Land Cover Types within the Proposed Project Survey Area.

The remainder of this page is intentionally left blank.

Table 4.4-1: Vegetation Communities and Land Cover Types Within the Proposed Project Survey Area

NCCP Vegetation Community	Holland Vegetation Community/Land Cover Type	Approx. Acreage
	Diegan Coastal Sage Scrub	179.86
Coastal Sage Scrub	Diegan Coastal Sage Scrub – Disturbed	29.42
	Coastal Sage Scrub – Revegetated	59.26
Coastal Sage/Chaparral Mix	Coastal Sage – Chaparral Scrub	10.44
	Chamise Chaparral	71.12
	Chamise Chaparral - Disturbed	5.61
Chaparral	Southern Mixed Chaparral	93.44
	Southern Mixed Chaparral – Disturbed	4.02
	Scrub Oak Chaparral	78.51
Considered	Native Grassland	11.01
Grassland	Nonnative Grassland	85.32
Alkali Marsh	Alkali Marsh – Revegetated	0.29
Freshwater Marsh	Freshwater Marsh	0.49
Laland Water	San Diego Mesa Vernal Pool	0.08
Inland Water	Open Water ¹	0.92
	Southern Riparian Scrub	1.37
Dinorion Comph	Mulefat Scrub	1.40
Riparian Scrub	Southern Willow Scrub	3.41
	Tamarisk Scrub	0.40

Table 4.4-1 (cont.): Vegetation Communities and Land Cover Types Within the Proposed Project Survey Area

NCCP Vegetation Community	Holland Vegetation Community/Land Cover Type	Approx. Acreage
Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	2.63
Eucalyptus Forest	Eucalyptus Woodland ¹	5.14
Disturbed Habitat	Disturbed Habitat ¹	18.36
	Developed Lands ¹	262.22
N/A	Ornamental ¹	85.93
	Bare Ground ¹	48.29
TOTAL		1,058.88 ²
Notes: ¹ This classification does not have a Holland Code.		

²Total reflects actual total without rounding error.

Vegetation Communities

The 25 vegetation communities and land cover types found within the Proposed Project Survey Area are described, below.

Coastal Sage Scrub

Three types of coastal sage scrub were mapped within the Proposed Project Survey Area, including Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, and revegetated coastal sage scrub.

Diegan Coastal Sage Scrub (Holland Code 32510)

Within the Proposed Project Survey Area, there are approximately 179.86 acres of Diegan coastal sage scrub. Diegan coastal sage scrub is a wide-spread vegetation community ranging from coastal Los Angeles County into northern Baja California, Mexico. It consists mainly of low, soft-woody sub-shrubs (approximately 3 feet high) that are most actively growing in winter and early spring. Many taxa are facultatively drought-deciduous. Stem- and leaf-succulents are also often present, but are usually not conspicuously dominant species. This association is typically found on dry sites, such as steep, south-facing slopes or clay-rich soils that are slow to release stored water. Dominant shrub species in this vegetation type may vary, depending on local site factors and levels of disturbance. Within the Proposed Project Survey Area, this vegetation community is characterized by a variable mix of California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), black sage

(Salvia mellifera), laurel sumac (Malosma laurina), deerweed (Acmispon glaber), broom baccharis (Baccharis sarothroides), coyote brush (Baccharis pilularis), California sunflower (Encelia californica), and occasionally live-forevers (Dudleya spp.), coast barrel cactus (Ferocactus viridescens), and needlegrass (Stipa spp.).

<u>Diegan Coastal Sage Scrub – Disturbed (Similar to Holland Code 32510)</u>

Within the Proposed Project Survey Area, there are approximately 29.42 acres of disturbed Diegan coastal sage scrub. Disturbed Diegan coastal sage scrub is similar to Diegan coastal sage scrub, described above, but it was classified as disturbed where mechanical or natural disturbance has reduced the overall cover of the community resulting in large areas colonized by herbaceous weedy species and/or bare ground. Some disturbance types include clearing, off-road vehicle damage, or illegal trash disposal.

Coastal Sage Scrub – Revegetated (Similar to Holland Code 32510)

Within the Proposed Project Survey Area, there are approximately 59.26 acres of revegetated coastal sage scrub. Revegetated coastal sage scrub is a subtype of coastal sage scrub that represents a restored coastal sage scrub vegetation community. It is not specifically recognized by Holland because it is not a naturally occurring vegetation community. This community often results after an area was disturbed or recontoured to mitigate for impacts associated with the implementation of a project. Container plants and/or a seed mix are planted to restore the area to a natural condition based on the local topography. Evidence of restored or revegetated sites often includes irrigation distribution equipment, evenly spaced container plantings, straw waddles for interim erosion control, stakes, hydromulch, evenly graded or plowed soil substrate, among others. On occasion, species that are not necessarily native to the immediate area are also planted, including brittlebush (*Encelia farinosa*) and cultivars of sage (*Salvia* spp.).

Coastal Sage/Chaparral Mix

The coastal sage/chaparral mix within the Proposed Project Survey Area was classified as coastal sage-chaparral scrub, consistent with Holland Code 37G00. Within the Proposed Project Survey Area, there are approximately 10.44 acres of coastal sage-chaparral scrub. Coastal sage-chaparral scrub is a mixed community including both drought-deciduous sage scrub species and woody chaparral species. This vegetation community is apparently a post-fire successional community containing vegetative cover that includes roughly equal amounts of both sage scrub and chaparral species. Characteristic dominant species often include chamise, California sagebrush, lilacs (*Ceanothus* spp.), black sage, broom baccharis, laurel sumac, lemonadeberry (*Rhus integrifolia*), and poison oak (*Toxicodendron diversilobum*). Within the Proposed Project Survey Area, this vegetation community includes the following plant species: chamise, California sagebrush, California buckwheat, black sage, laurel sumac, lemonadeberry, and mission manzanita (*Xylococcus bicolor*). Coastal sage-chaparral scrub is generally considered sensitive and is regulated similar to coastal sage scrub as described above.

Chaparral

Five types of chaparral were mapped within the Proposed Project Survey Area, including chamise chaparral, disturbed chamise chaparral, southern mixed chaparral, disturbed southern mixed chaparral, and scrub oak chaparral.

Chamise Chaparral (Holland Code 37200)

Within the Proposed Project Survey Area, there are approximately 71.12 acres of chamise chaparral. Chamise chaparral is widely distributed throughout California on dry slopes and ridges at low and medium elevations where it occupies thin, rocky, or heavy soils. It is typically composed of broad-leaved, sclerophyllous shrubs (e.g., bearing stiff, leathery leaves), although species composition varies considerably with location. The plants of this community have developed the ability to survive recurrent fires by producing seeds that require a fire-related cue to stimulate germination and/or by stump sprouting after being burned. Within the Proposed Project Survey Area, this vegetation community is characterized by nearly monotypic stands of chamise ranging from 3 to 9 feet in height. Occasionally, other shrub species, such as mission manzanita or coast spice bush (*Cneoridium dumosum*) are present, but contribute little to the overall cover.

Chamise Chaparral – Disturbed (Similar to Holland Code 37200)

Within the Proposed Project Survey Area, there are approximately 5.61 acres of disturbed chamise chaparral. Disturbed chamise chaparral is similar to chamise chaparral, described above, but it was classified as disturbed where this community has been altered by mechanical disturbance or where it has poorly recovered from fire. These areas are generally characterized by a highly reduced and fragmented vegetative cover and may support a high percentage of nonnative grasses or ruderal species, particularly in the understory.

Southern Mixed Chaparral (Holland Code 37120)

Within the Proposed Project Survey Area, there are approximately 93.44 acres of southern mixed chaparral. Southern mixed chaparral tends to occur on steeper, more mesic north-facing slopes than chamise chaparral. This vegetation community type is characterized by relatively high species diversity. Within the Proposed Project Survey Area, this vegetation community includes the following plant species: mission manzanita, coast spice bush, Nuttall's scrub oak (*Quercus dumosa*), Ramona-lilac (*Ceanothus tomentosus*), summer-holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), lemonadeberry, and toyon (*Heteromeles arbutifolia*). The understory component is generally better-developed in this association than in chamise chaparral, and may include species such as mariposa-lily (*Calochortus* spp.), soap plant (*Chlorogalum* spp.), and bedstraw (*Galium* spp.), among others.

Southern Mixed Chaparral – Disturbed (Similar to Holland Code 37120)

Within the Proposed Project Survey Area, there are approximately 4.02 acres of disturbed southern mixed chaparral. Disturbed southern mixed chaparral is similar to southern mixed chaparral, described above, but it was classified as disturbed where this community has been altered by disturbance, such as clearing, off-road vehicle damage, or illegal trash disposal. These

areas are generally characterized by a highly reduced and fragmented vegetative cover and may support a high percentage of nonnative grasses or ruderal species, particularly in the understory.

Scrub Oak Chaparral (Holland Code 37900)

Within the Proposed Project Survey Area, there are approximately 78.51 acres of scrub oak chaparral. Scrub oak chaparral is a dense, evergreen chaparral association that approaches 20 feet in height and is dominated by Nuttall's scrub oak and/or oak hybrids such as *Quercus xacutidens*. This habitat occurs on more mesic sites (such as east and north facing slopes and ravines) than the other chaparral associations and often at slightly higher elevations. These more favorable sites often allow scrub oak chaparral to recover from fire more quickly than other chaparral types. Additional shrub species found in scrub oak chaparral include chamise, mission manzanita, and coast spice bush.

Grassland

Two types of grassland were mapped within the Proposed Project Survey Area, including native grassland and nonnative grassland.

Native Grassland (Holland Code 42110)

Within the Proposed Project Survey Area, there are approximately 11.01 acres of native grassland. Native grassland is characterized by a relatively low (greater than 10 percent) to dense herbaceous cover of the perennial, tussock-forming needlegrass species and most closely corresponds to Holland's valley needlegrass grassland. Native and introduced annuals occur between the needlegrass, often actually exceeding the bunchgrass in cover. This association generally occurs on fine-textured clay soils that are moist or wet in winter, but very dry in summer. Shrubs are infrequent, probably due to the unstable clay soils. The degree of habitat quality in native grasslands varies greatly, depending on the history of grazing, cultivation, or other disturbance factors. Within the Proposed Project Survey Area, this association generally occurs as small stands interspersed within scrub habitats. It is dominated by needlegrass species (*Stipa* spp.); other indicator species include blue-eyed grass (*Sisyrinchium bellum*), mariposalily, and clarkia (*Clarkia* spp.).

Nonnative Grassland (Holland Code 42200)

Within the Proposed Project Survey Area, there are approximately 85.32 acres of nonnative grassland. Nonnative grassland generally occurs on fine-textured loam or clay soils that are moist or even waterlogged during the winter rainy season and very dry during the summer and fall. It is characterized by a dense to sparse cover of annual grasses, often with native and nonnative annual forbs. This habitat is a disturbance-related community most often found in old agricultural fields or openings in native scrub habitats. This association has replaced native grassland and coastal sage scrub at many localities throughout southern California. Typical nonnative grasses found within the Proposed Project Survey Area include red brome (*Bromus rubens*), ripgut grass (*Bromus diandrus*), wild oat (*Avena barbata*), and soft chess (*Bromus hordeaceus*). Characteristic forbs include red-stem filaree (*Erodium cicutarium*), mustard (*Brassica* spp.), tar plant (*Deinandra* spp.), California goldfields (*Lasthenia spp.*), and purple owl's clover (*Castilleja exserta* ssp. *exserta*).

Alkali Marsh (similar to Holland Code 52310)

The alkali marsh within the Proposed Project Survey Area was classified as revegetated alkali marsh, similar to Holland Code 52310. Within the Proposed Project Survey Area, there is approximately 0.29 acre of revegetated alkali marsh located in one small area within the Proposed Project Survey Area. This community occurs in an area that was disturbed or recontoured, likely to mitigate for impacts associated with the implementation of a project. Within the Proposed Project Survey Area, the revegetated alkali marsh consists of spiny rush (*Juncus acutus* ssp. *leopoldi*) and San Diego marsh-elder (*Iva hayesiana*) along an ephemeral drainage.

Freshwater Marsh (Holland Code 52410)

Within the Proposed Project Survey Area, there is approximately 0.49 acre of freshwater marsh. Freshwater marsh is dominated by perennial, emergent monocots measuring about 4.3 to 6.6 feet in height. Freshwater marsh occurs in wetlands that are permanently flooded by standing fresh water. Within the Proposed Project Survey Area, freshwater marsh is comprised of uniform stands of cattails (*Typha domingensis*).

Inland Water

Two types of inland water were mapped within the Proposed Project Survey Area, including San Diego mesa vernal pools and open water.

San Diego Mesa Vernal Pools (Holland Code 44321)

Within the Proposed Project Survey Area, there is approximately 0.08 acre of San Diego mesa vernal pools. San Diego mesa vernal pools are a highly specialized vegetation community occurring on undeveloped mesa tops. Vernal pools are depressions that fill with rainwater that does not drain off or percolate because of the mesa top topography and underlying soil conditions (i.e., a claypan or hardpan layer that prevents or impedes subsurface drainage). These pools support a unique plant community dominated by annual herbs and grasses. Many special-status plant and wildlife species have a potential to occur in these pools, including the endangered San Diego button-celery (*Eryngium aristulatum* var. *parishii*) and San Diego fairy shrimp (*Branchinecta sandiegonensis*). San Diego button-celery and woolly marbles (*Psilocarphus brevissimus*) were observed in vernal pools within the Proposed Project Survey Area during the late summer/fall 2013 special-status plant species surveys.

Open Water (No Holland Code)

Within the Proposed Project Survey Area, there is approximately 0.92 acre of open water. Open water includes reservoirs, lakes, ponds, and relatively large sloughs, channels, and rivers or streambeds that contain water throughout the year. Within the Proposed Project Survey Area, open water habitat occurs in the form of a stock pond in the western portion of the Proposed Project Survey Area.

Riparian Scrub

Four types of riparian scrub were mapped within the Proposed Project Survey Area, including southern riparian scrub, mulefat scrub, southern willow scrub, and tamarisk scrub.

Southern Riparian Scrub (Holland Code 63300)

Within the Proposed Project Survey Area, there are approximately 1.37 acres of southern riparian scrub. Southern riparian scrub represents a combination of both the southern willow scrub and mulefat scrub communities of Holland's classification system (see below). It varies from a dense, broad-leafed, winter-deciduous association dominated by several species of willow (Salix spp.) to an herbaceous scrub dominated by mulefat (Baccharis salicifolia). Understory vegetation is usually composed of nonnative, weedy species or is lacking altogether. This association may represent a successional stage leading to riparian woodland or forest, or it may be a stable vegetation community. Southern riparian scrub species observed within the Proposed Project Survey Area include black willow (Salix gooddingii), arroyo willow (Salix lasiolepis), and mulefat.

Mulefat Scrub (Holland Code 63310)

Within the Proposed Project Survey Area, there are approximately 1.40 acres of mulefat scrub. Mulefat scrub is characterized as a depauperate, tall, herbaceous riparian scrub strongly dominated by mulefat. Within the Proposed Project Survey Area, this community was present in small patches along ephemeral stream channels with coarse substrate.

Southern Willow Scrub (Holland Code 63320)

Within the Proposed Project Survey Area, there are approximately 3.41 acres of southern willow scrub. Southern willow scrub is found on loose, sandy, or fine gravelly alluvium deposited near stream channels during floods, and most stands are too dense to allow much understory to develop. Within the Proposed Project Survey Area, this community was comprised of black willow and arroyo willow and was present along ephemeral stream channels with coarse substrate, often adjacent to mulefat scrub.

Tamarisk Scrub (Holland Code 63810)

Within the Proposed Project Survey Area, there is approximately 0.40 acre of tamarisk scrub. Tamarisk scrub is a disturbed wetland community dominated by the nonnative, invasive Tamarisk (*Tamarix* spp.). This species can be a dominant along ephemeral and perennial drainages with alkaline soils where native riparian vegetation has been removed or disturbed. Within the Proposed Project Survey Area, tamarisk scrub is present along two disturbed drainages adjacent to native riparian vegetation, such as freshwater marsh and mulefat scrub.

Coast Live Oak Riparian Forest (Holland Code 61310)

The coast live oak riparian forest within the Proposed Project Survey Area was classified as southern coast live oak riparian forest, consistent with Holland Code 61310. Within the Proposed Project Survey Area, there are approximately 2.63 acres of southern coast live oak

riparian forest. Southern coast live oak riparian forest is characterized by an open to locally dense evergreen plant community dominated by coast live oak trees (*Quercus agrifolia*), which can reach from 30 feet to over 80 feet in height. This community typically has a poorly developed understory of shrubs, which can include toyon, Mexican elderberry (*Sambucus mexicana*), lemonadeberry, and poison oak, among others. The herb layer by contrast is well developed and relatively continuous. It often includes bedstraw, nettles (*Urtica* spp.), and various native and nonnative grasses. This habitat can be found on well-drained bottomlands and outer floodplains on fine-grained, rich alluvium. Within the Proposed Project Survey Area, dominant species observed besides coast live oaks include toyon, poison oak, wild oats, and bedstraw.

Eucalyptus Forest (no Holland Code)

The eucalyptus forest within the Proposed Project Survey Area was classified as eucalyptus woodland. Within the Proposed Project Survey Area, there are approximately 5.14 acres of eucalyptus woodland. Eucalyptus woodland is not a native plant community in California and is not described in Holland. It is typically characterized by dense stands of gum trees (*Eucalyptus* spp.). Plants in this genus, imported primarily from Australia, were originally planted in groves throughout many regions of coastal California as a potential source of lumber and building materials, for their use as windbreaks, and for their horticultural novelty. They have increased their cover through natural regeneration, particularly in moist areas sheltered from strong coastal winds. Gum trees naturalize readily in the state and, where they form dense, monotypic stands, tend to completely supplant native vegetation, greatly altering community structure and dynamics. Very few native plants are compatible with eucalyptus.

Disturbed Habitat (no Holland Code)

Within the Proposed Project Survey Area, there are approximately 18.36 acres of disturbed habitat. Disturbed habitat refers to any land on which the native vegetation has been significantly altered by agriculture, construction, or other land-clearing activities, and the species composition and site conditions are not characteristic of the disturbed phase of a particular vegetation community (e.g., disturbed chaparral). Disturbed habitat is typically found in vacant lots, roadsides, construction staging areas, or abandoned fields, and is dominated by nonnative annual species and perennial broadleaf species. Within the Proposed Project Survey Area, disturbed habitat consisted of widely spaced Russian-thistle (*Salsola tragus*), horseweed (*Conyza* spp.), mustard (*Hirschfeldia incana*), and nonnative grasses.

Other Land Cover Types

Three other land cover types, including developed lands, ornamental, and bare ground, were mapped within the Proposed Project Survey Area but do not correspond with a Holland Code.

Developed Lands

Within the Proposed Project Survey Area, there are approximately 262.22 acres of developed lands. Developed lands are not recognized by Holland because they support no naturally occurring native vegetation and are characterized by the presence of human-made structures, such as buildings or roads. The level of soil disturbance is such that only the most ruderal plant

species would be expected. In many areas, ornamental plantings are included in developed lands where they are immediately adjacent and part of the residential and/or commercial development.

Ornamental

Within the Proposed Project Survey Area, there are approximately 85.93 acres of ornamental vegetation. Ornamental vegetation is not recognized by Holland and typically consists of nonnative landscape and/or garden plantings that have been planted in association with buildings, roads, or other development. San Diego County supports more than 250 different types of ornamental trees and numerous other shrubs and herbs that decorate urban areas. Occasionally ornamental species such as rock rose (*Cistus* spp.) were found growing within the Proposed Project Survey Area away from urban areas, and may be naturalizing.

Bare Ground

Within the Proposed Project Survey Area, there are approximately 48.29 acres of bare ground. Bare ground lacks vegetation, typically because of recent and/or continuous clearing of vegetation. Not recognized by Holland, these areas differ from "developed" because they do not support buildings, paved roads, parking lots, or ornamental plantings and typically the soil is exposed. Within the Proposed Project Survey Area, bare ground includes dirt roads and recently graded areas.

Critical Habitat

USFWS designates critical habitat for endangered and threatened species under the federal ESA (16 USC Section 1533 (a)(3)). Critical habitat is designated for the survival and recovery of federally listed endangered and/or threatened species. Protected habitat includes areas for foraging, breeding, roosting, shelter, and movement of migration.

The USFWS critical habitat areas for listed species were searched using GIS shapefiles provided by USFWS within five miles of the Proposed Project alignment. USFWS designated critical habitat areas were identified for seven species, including San Diego thornmint (*Acanthomintha ilicifolia*), willowy monardella (*Monardella viminea*), spreading navarretia (*Navarretia fossalis*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), western snowy plover (*Charadrius alexandrinus nivosus*), least Bell's vireo (*Vireo bellii pusillus*), and coastal California gnatcatcher. These areas are summarized in Table 4.4.-2, Critical Habitat in Vicinity of the Proposed Project.

Table 4.4-2: Critical Habitat in Vicinity of the Proposed Project

Species	Location of Critical Habitat
San Diego thornmint (Acanthomintha ilicifolia)	2 areas within about 0.25 mile of alignment, another one about 3 miles east of alignment
Willowy monardella (Monardella viminea)	about 2.5 miles southeast of alignment
Spreading navarretia (Navarretia fossalis)	about 5 miles south of alignment
San Diego fairy shrimp (Branchinecta sandiegonensis)	many designations within buffer, alignment crosses
Western snowy plover (Charadrius alexandrinus nivosus)	closest about 2 miles west of alignment
Least Bell's vireo (Vireo bellii pusillus)	4.5 miles south of alignment
Coastal California gnatcatcher (Polioptila californica californica)	closest about 2.5 miles southeast of alignment

The only critical habitat located within the Proposed Project Survey Area is the designated San Diego fairy shrimp critical habitat.

Preserve Areas

Preserve areas refer to established Preserve Areas of HCPs; federal, state, or local preserve areas, including public and private lands; or other areas set aside for the protection of biological resources. Preserve areas that occur within and immediately adjacent to the Proposed Project Survey Area were considered, and a total of approximately 557.67 acres of preserve areas occur within the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix A). Table 4.4-3, Vegetation Communities and Land Cover Types within Preserve Areas summarizes the vegetation communities that occur within the preserve areas.

Table 4.4-3: Vegetation Communities and Land Cover Types within Preserve Areas

Vegetation Community	Approx. Acres
Diegan Coastal Sage Scrub	132.52
Diegan Coastal Sage Scrub - Disturbed	3.67
Coastal Sage Scrub – Revegetated	20.98
Coastal Sage - Chaparral Scrub	7.00
Chamise Chaparral	68.63
Chamise Chaparral - Disturbed	2.24
Southern Mixed Chaparral	54.80
Southern Mixed Chaparral - Disturbed	4.02
Scrub Oak Chaparral	77.88
Native Grassland	9.95
Nonnative Grassland	62.70
Alkali Marsh – Revegetated	0.29
Freshwater Marsh	0.25
Open Water	0.92
Southern Riparian Scrub	1.37
Mulefat Scrub	1.40
Southern Willow Scrub	2.50
Tamarisk Scrub	0.40
Southern Coast Live Oak Riparian Forest	2.63
Eucalyptus Woodland	2.97
Disturbed Habitat	4.83
Developed Lands	39.95
Ornamental	25.14
Bare Ground	30.61
TOTAL PRESERVE ACREAGE	557.67 ¹
Notes: ¹ Total reflects actual total without rounding error.	

Environmentally Sensitive Habitat Areas (ESHAs)

ESHAs are defined as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments". Proposed development within and adjacent to an ESHA must be located and designed to prevent significant impacts to the functions and values of the ESHA. ESHAs that occur within and immediately adjacent to the Proposed Project Survey Area were considered, and a total of approximately 110.85 acres of ESHA occur within the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix A). Table 4.4-4, Vegetation Communities and Land Cover Types within ESHAs summarizes the vegetation communities that occur within the ESHAs. It is important to note that all ESHAs are also included in the designated preserve areas discussed above.

Table 4.4-4: Vegetation Communities and Land Cover Types within ESHAs

Vegetation Community	Approx. Acres	
Diegan Coastal Sage Scrub	66.51	
Diegan Coastal Sage Scrub - Disturbed	0.65	
Coastal Sage Scrub – Revegetated	1.47	
Coastal Sage - Chaparral Scrub	2.38	
Chamise Chaparral	7.23	
Southern Mixed Chaparral	13.14	
Scrub Oak Chaparral	3.83	
Native Grassland	1.83	
Nonnative Grassland	6.13	
Southern Willow Scrub	0.19	
Bare Ground	5.32	
TOTAL ESHA ACREAGE	110.85 ¹	
Notes: Total reflects actual total without rounding error.		

Special-Status Plants

Based on the background research conducted for this Proposed Project, a total of 75 special-status plant species have a potential to occur within five miles of the Proposed Project alignment

(see Appendix 4.4-A: Appendix D). Of these, 41 special-status plant species are not expected to occur within or adjacent to the Proposed Project Survey Area. Of the 34 special-status plant species with a potential to occur within the Proposed Project Survey Area, 12 were observed during the late summer/fall 2013 special-status plant species surveys (refer to Appendix 4.4-A: Appendices A and E). In order of highest to lowest sensitivity, these species include:

- San Diego button-celery (*Eryngium aristulatum* ssp. *parishii*; FE, SE, CRPR 1B.1, NCCP)
- Nuttall's scrub oak (*Quercus dumosa*; CRPR 1B.1)
- San Diego goldenstar (*Bloomeria clevelandii*; CRPR 1B.1, NCCP)
- summer-holly (*Comarostaphylis diversifolia* ssp. *diversifolia*; 1B.2)
- Torrey pine (as planted individuals) (*Pinus torreyana*; CRPR 1B.2, NCCP)
- spineshrub (*Adolphia californica*; CRPR 2B.1)
- coast barrel cactus (*Ferocactus viridescens*; CRPR 2B.1, NCCP)
- San Diego marsh-elder (*Iva hayesiana*; CRPR 2B.2)
- graceful tarplant (*Holocarpha virgata* ssp. *elongata*; CRPR 4.2)
- spiny rush (*Juncus acutus* ssp. *leopoldii*; CRPR 4.2)
- Palmer's sagewort (*Artemisia palmeri*; CRPR 4.2)
- San Diego sunflower (*Bahiopsis* [Viguiera] laciniata; CRPR 4.2)

A brief discussion of each of the 12 species that are known to occur within the Proposed Project Survey Area based on the results of the late summer/fall 2013 focused surveys is provided, below. Detailed information for the other special-status plant species that have not been observed can be found in Appendix 4.4-A: Appendix E. Additional special-status plant species may be identified during the focused special-status plant species surveys planned for spring and summer 2014.

San Diego Button-Celery (Eryngium aristulatum ssp. parishii; FE, SE, CRPR 1B.1, NCCP)

San Diego button-celery is a federally listed endangered species, a state-listed endangered species, a CRPR 1B.1 species (seriously threatened in California and elsewhere), and a NCCP-covered species. It is an annual/perennial herb in the Apiaceae family that typically blooms from April to June. This species is found in mesic soils within and around vernal pools in coastal sage scrub and grassland. San Diego button-celery is known from Riverside and San Diego counties as well as from Baja California, Mexico, at elevations between 65 and 2,035 feet amsl. This species is threatened by development, nonnative plant species, trampling by foot traffic, road maintenance, agricultural practices, grazing, vehicle activity, and illegal dumping.

San Diego button-celery is present within the Proposed Project Survey Area. This species was observed in vernal pools near the Peñasquitos Substation and the Del Mar Mesa Preserve.

Nuttall's Scrub Oak (Quercus dumosa; CRPR 1B.1)

Nuttall's scrub oak is a CRPR 1B.1 species (seriously threatened in California and elsewhere). It is an evergreen shrub in the Fagaceae family that typically blooms from February to April. This species is found in sandy or clay loam soils in chaparral, coastal sage scrub, and closed-cone coniferous forest. Nuttall's scrub oak is known from southern California from Orange, Santa Barbara, San Diego, and Ventura counties as well as from Baja California, Mexico, at elevations between 45 and 1,315 feet amsl. This species is threatened by development, fire suppression, and vegetation/fuels management.

Nuttall's scrub oak is present within the Proposed Project Survey Area. This species occurs both as a dominant in Scrub Oak Chaparral and as scattered individuals within the Proposed Project Survey Area.

San Diego Goldenstar (Bloomeria clevelandii; CRPR 1B.1, NCCP)

San Diego goldenstar is a CRPR 1B.1 species (seriously threatened in California and elsewhere) and a NCCP-covered species. It is a bulbiferous herb in the Themidaceae family that typically blooms from April to May. This species typically is found in clay soils in grassland, chaparral, coastal sage scrub, grassland, and around vernal pools. San Diego goldenstar is known from Riverside and San Diego counties as well as from Baja California, Mexico, at elevations between 160 and 1,525 feet amsl. This species is threatened by development, road construction and maintenance, vehicle traffic, nonnative plant species, and illegal dumping.

San Diego goldenstar is present within the Proposed Project Survey Area. This species was observed at one location in native grassland.

Summer-Holly (Comarostaphylis diversifolia ssp. diversifolia; 1B.2)

Summer-holly is a CRPR 1B.2 species (moderately threatened in California and elsewhere). It is an evergreen shrub in the Ericaceae family that typically blooms from April to June. This species is found in chaparral and cismontane woodland. Summer-holly is known from Orange, Riverside, Santa Barbara, and San Diego counties as well as from Baja California, Mexico, at elevations between 95 and 2,595 feet amsl. This species is threatened by development and gravel mining.

Summer-holly is present within the Proposed Project Survey Area. This species was observed in chaparral, primarily in the Del Mar Mesa Preserve and adjacent areas during the late summer/fall 2013 focused special-status plant surveys.

Torrey Pine (as planted individuals) (Pinus torreyana; CRPR 1B.2, NCCP)

Torrey pine is a CRPR 1B.2 species (moderately threatened in California and elsewhere) and a NCCP-covered species. It is an evergreen tree in the Pinaceae family. This species typically is found in sandstone in chaparral and closed-cone coniferous forest. Torrey pine is known from San Diego and Santa Barbara counties at elevations between 245 and 525 feet amsl. This species is threatened by development; it was threatened by the five-spined bark beetle at Torrey Pines State Reserve, but biological control has contained the infestation.

Torrey pine is present within the Proposed Project Survey Area. This species was observed as planted individuals at the Peñasquitos substation; however, this species was not observed naturally occurring within the Proposed Project Survey Area.

Spineshrub (Adolphia californica; CRPR 2B.1)

Spineshrub is a CRPR 2B.1 species (seriously threatened in California but more common elsewhere). It is a deciduous shrub in the Rhamnaceae family that typically blooms from December to May. This species is often found on dry slopes in chaparral, coastal sage scrub, and grassland. Spineshrub is found in San Diego County and Baja California, Mexico, at elevations between 145 and 2,430 feet amsl. This species is threatened by development, road construction, nonnative plant species, and grazing.

Spineshrub is present within the Proposed Project Survey Area. This species was observed in many parts of the Proposed Project Survey Area during the late summer/fall 2013 focused special-status plant surveys, and it was dominant in some of Diegan coastal sage scrub areas.

Coast Barrel Cactus (Ferocactus viridescens; CRPR 2B.1, NCCP)

Coast barrel cactus is a CRPR 2B.1 species (seriously threatened in California but more common elsewhere) and a NCCP-covered species. It is a stem succulent in the Cactaceae family that typically blooms from May to June. This species typically is found on dry, west and south facing slopes in chaparral, coastal sage scrub, grassland, and adjacent to vernal pools. Coast barrel cactus is known from Riverside and San Diego counties as well as from Baja California, Mexico, at elevations between 10 and 1,480 feet amsl. This species is threatened by development, nonnative plant species, trampling by foot traffic, road maintenance, agricultural practices, grazing, vehicle activity, and illegal dumping.

Coast barrel cactus is present within the Proposed Project Survey Area. This species was observed on dry, west- or south-facing slopes in several locations within the Proposed Project Survey Area, often co-occurring with spineshrub.

San Diego Marsh-Elder (Iva hayesiana; CRPR 2B.2)

San Diego marsh-elder is a CRPR 2B.2 species (moderately threatened in California but more common elsewhere). It is a perennial herb in the Asteraceae family that typically blooms from April to October. This species is found along ephemeral drainages, alkali marshes, and playas. San Diego marsh-elder is known from San Diego County and from Baja California, Mexico, at elevations between 30 and 1,640 feet amsl. This species is threatened by waterway channelization, coastal development, nonnative plant species, and vehicle activity.

San Diego marsh-elder is present within the Proposed Project Survey Area. This species was observed along drainages and in revegetated areas.

Graceful Tarplant (Holocarpha virgata ssp. elongata; CRPR 4.2)

Graceful tarplant, a California endemic species, is a CRPR 4.2 species (limited distribution and moderately threatened in California). It is an annual herb in the Asteraceae family that typically

blooms from May to November. This species typically is found in clay soils in chaparral, cismontane woodland, coastal sage scrub, grassland, and disturbed areas. Graceful tarplant is known from southern California in Orange, Riverside, and San Diego counties, at elevations between 195 and 3,610 feet amsl. This species is threatened mainly by development.

Graceful tarplant is present within the Proposed Project Survey Area. This species was observed in disturbed areas near grassland and existing SDG&E towers.

Spiny Rush (Juncus acutus ssp. leopoldii; CRPR 4.2)

Spiny rush is a CRPR 4.2 species (limited distribution and moderately threatened in California). It is a rhizomatous herb in the Juncaceae family that blooms from May to June. This species typically is found along ephemeral drainages, alkaline marshes and seeps, mesic areas of coastal dunes, and coastal salt marsh. Spiny rush is known from southern California in Imperial, Los Angeles, Orange, Santa Barbara, San Diego, San Luis Obispo, and Ventura counties; from Nevada, Arizona, and Georgia; and from Baja California, Mexico, as well as into South America. It is found at elevations between 10 and 2,955 feet amsl. This species is threatened by development and flood control activities.

Spiny rush is present within the Proposed Project Survey Area. This species was observed along drainages and in revegetated areas.

Palmer's Sagewort (Artemisia palmeri; CRPR 4.2)

San Diego sagewort is a CRPR 4.2 species (limited distribution and moderately threatened in California). It is a deciduous shrub in the Asteraceae family that typically blooms from May to September. This species is found in mesic, sandy soils along drainages in chaparral, coastal sage scrub, and riparian habitats. San Diego sagewort is found in San Diego County and in Baja California, Mexico, at elevations between 45 and 3,005 feet amsl. This species is threatened by development, flood control projects, and possibly by nonnative plant species.

San Diego sagewort is present within the Proposed Project Survey Area. This species was observed in small patches along several drainages during the late summer/fall 2013 focused special-status plant surveys.

San Diego Sunflower (Bahiopsis [Viguiera] laciniata; CRPR 4.2)

San Diego sunflower is a CRPR 4.2 species (limited distribution and fairly endangered in California). It is a shrub in the Asteraceae family that typically blooms from February to June. This species typically is observed on dry, south or west-facing slopes in chaparral and coastal sage scrub. San Diego sunflower is known from Orange and San Diego counties as well as from Baja California and Sonora, Mexico. It is found at elevations between 195 and 2,460 feet amsl. This species is threatened by development.

San Diego sunflower is present within the Proposed Project Survey Area. This species was observed in areas that have been revegetated recently, but it was not observed naturally occurring within the Proposed Project Survey Area.

Special-Status Wildlife Species

Based on the background research conducted for this Proposed Project, a total of 98 special-status wildlife species have the potential to occur within the vicinity of the Proposed Project Survey Area (see Appendix 4.4-A: Appendix F). Of these, 48 special-status species are not expected to occur within or adjacent to the Proposed Project Survey Area either because there is no suitable habitat present or because they are in the vicinity outside of their "season of concern" (e.g., migrant bird species). The remaining 50 special-status wildlife species have a potential to occur within the Proposed Project Survey Area. Of the 50 special-status wildlife species with a potential to occur within the Proposed Project Survey Area, nine were detected during the surveys conducted in the fall 2013 for the Proposed Project (refer to Appendix 4.4-A: Appendix G), including:

- Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*; SSC, NCCP)
- Cooper's hawk (Accipiter cooperii; WL, NCCP)
- Vaux's swift (*Chaetura vauxi*; SSC)
- loggerhead shrike (*Lanius ludovicianus*; SSC)
- California horned lark (*Erempohila alpestris actia*; SSC)
- coastal California gnatcatcher (*Polioptila californica californica*; FT, SSC, NCCP)
- southern California rufous-crowned sparrow (Aimophila ruficeps canescens; WL, NCCP)
- western bluebird (Sialia mexicana; NCCP)
- southern mule deer (*Odocoileus hemionus*; NCCP)

While the Vaux's swift was observed during the late summer/fall 2013 surveys performed for the Proposed Project, it is considered sensitive in its nesting habitat. Because it is not expected to nest within the Proposed Project Survey Area, it is not discussed further in this document. A brief discussion of each of the other eight species that are known to occur within the Proposed Project Survey Area based on the results of the late summer/fall 2013 focused surveys is provided, below. Detailed information for the other special-status species that have not been observed can be found in Appendix 4.4-A: Appendix F.

Belding's orange-throated whiptail (Aspidoscelis hyperythra beldingi; SSC, NCCP)

The Belding's orange-throated whiptail is a CDFW species of special concern and a NCCP-covered species. This subspecies ranges from southwestern San Bernardino County, south into Baja California at elevations from sea level to 2,000 feet amsl. Belding's orange-throated whiptail is found in areas of pristine open coastal sage scrub, chaparral, and streamside growth with loose sandy soils. It appears to prefer sage scrub that covers approximately 50 percent of the ground without dense grasses in between, but it also inhabits dense to extremely open stands of sage as well as chamise chaparral. It can also often be found in upland revegetation sites since these areas provide the open habitat it prefers. This lizard typically hibernates during winter, emerging in February or April, but can be active year-round when temperatures are warm. Breeding occurs from May through July. Their diet consists primarily of termites, but they also

take spiders, centipedes, and scorpions, as well as small lizards. Threats to Belding's orange-throated whiptail are attributed to habitat loss and fragmentation caused by development.

The Belding's orange-throated whiptail is present within the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix A), as it was observed during biological surveys performed for the Proposed Project. This species is known to occur within the vicinity of the Proposed Project Survey Area, and suitable habitat for the species is present throughout the Proposed Project Survey Area.

Cooper's Hawk (Accipiter cooperii; WL, NCCP)

The Cooper's hawk is a CDFW taxa to watch and a NCCP-covered species. The Cooper's hawk is wholly endemic to North America, but widespread, with both migratory and resident populations ranging from southern Canada to southern Mexico. In California, the species is a resident, but migrants from its northern range substantially increase the population during the winter months. Although this species was previously associated only with semi-dense woodlands, Cooper's hawks have adapted to urban landscapes, as they are often at least as numerous in urban habitats as in natural ones. The Cooper's hawk was listed in 1978 as a species of concern by CDFW because the population was in decline as a result of hunting, destruction of riparian woodland, and pesticide contamination. However, recent studies suggest that populations have recovered in many areas, as it has adapted to breeding in urban areas. However, with the colonization of urban habits also comes an increased incidence of collision with windows and disease.

The Cooper's hawk has a high potential to nest within the Proposed Project Survey Area. Suitable nesting habitat for the species is present throughout the Proposed Project Survey Area and the species is known to occur within the vicinity of the Proposed Project Survey Area. The species was observed during the late summer/fall 2013 focused surveys performed for the Proposed Project (refer to Appendix 4.4-A: Appendix A).

Loggerhead Shrike (Lanius ludovicianus; SSC)

The loggerhead shrike is a CDFW species of special concern. This species is distributed throughout the central U.S. and Mexico year-round with some breeding population migrating north into Canada in summer. A breeding resident in California, it is found throughout much of the state, excluding heavily forested high mountains, higher portions of the desert ranges, the Sierra Nevada and the far northwest. It is found in open country with short vegetation such as pastures with fence rows, agricultural fields and open woodlands, where it hunts from perches to capture a variety of prey from insects to small mammals and birds which it then impales sharp objects such as thorns and barbed-wire fences in order to hold them during consumption. Threats to this species include changes in human land-use practices, the spraying of pesticides, and competition with species that are more tolerant of. Perhaps surprisingly, the Salton Sea and the Central Valley support the highest densities of this species in California; in these regions it is considered a fairly common breeding resident, becoming more numerous in winter with the dispersal of birds breeding to the north.

The loggerhead shrike has a high potential to nest within the Proposed Project Survey Area, and it was observed during the late summer/fall 2013 focused surveys performed for the Proposed Project (refer to Appendix 4.4-A: Appendix A). The Proposed Project Survey Area is within the known range of species and suitable nesting and foraging habitat is present throughout the Proposed Project Survey Area.

California Horned Lark (Erempohila alpestris actia; SSC)

The California horned lark is a CDFW taxa to watch. One of eight subspecies of Horned Lark in California, *E. a. actia* is a resident of the main portion of the San Joaquin Valley as well as cismontane California, primarily from Sonoma County south to northern Baja California, Mexico. This species is a year-round resident of flat arid grasslands, grazed pastures, sandy desert floors and coastal strands throughout its range. Breeding birds nest in open areas on the ground in shallow burrows or depressions, which they select or dig. They also prefer open habitats for short grass or plowed fields for foraging can be among the most abundant of any species in heavily grazed pastures. However, breeding birds require open undisturbed native habitats or fallow fields. Due to its preference of habitat this species is at risk of habitat fragmentation through urban development and agriculture.

The California horned lark has a high potential to nest and winter within the Proposed Project Survey Area, and it was observed during the late summer/fall 2013 focused surveys performed for the Proposed Project (refer to Appendix 4.4-A: Appendix A). The Proposed Project Survey Area is within the known range of species, suitable nesting habitat is present within Proposed Project Survey Area and vicinity, and the species is known to occur within the vicinity of the Proposed Project Survey Area.

Coastal California Gnatcatcher (Polioptila californica californica; FT, SSC, NCCP)

The coastal California gnatcatcher is a federally listed threatened species, a CDFW species of special concern, and a NCCP-covered species. The California gnatcatcher has one of the most limited distributions of any bird species in North America, limited to specific vegetation communities from coastal southern California to the southern tip of Baja California, Mexico. One of three subspecies, californica, occurs from southern California south to Ensenada in Baja California, Mexico. Once considered conspecific with black-tailed gnatcatcher this species was elevated to full species status in 1988. Fewer than 5,000 pairs of California gnatcatchers are estimated to persist in coastal southern California, where their distribution is mostly restricted to the coastal sage scrub plant community below 1,640 feet amsl. Highest densities occur in Orange and San Diego counties with lower densities in western Riverside County and southwestern San Bernardino County; also isolated populations exist in Los Angeles and Ventura counties. A year-round resident, this species typically breeds from March through July and nests predominantly in California sagebrush (Artemisia californica) and other coastal sage scrub community species in proportion to their availability. This species was listed as federally threatened in 1993 based on the high proportion of its habitat that had been lost to agriculture and urban development and the pressure to develop what remains.

The coastal California gnatcatcher and suitable nesting habitat is present throughout the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix G). Several pairs and

individuals were detected throughout Proposed Project Survey Area during focused, protocollevel coastal California gnatcatcher surveys conducted within the Proposed Project Survey Area in fall 2013 during non-breeding season, and the species is known to occur within the vicinity of the Proposed Project Survey Area.

Southern California Rufous-Crowned Sparrow (Aimophila ruficeps canescens; WL, NCCP)

The southern California rufous-crowned sparrow is a CDFW taxa to watch and a NCCP-covered species. One of four subspecies of rufous-crowned sparrows in California, *A. r. canescens* is a fairly common year-round resident of southwestern California. Its range is restricted to coastal slopes of the Transverse and Peninsular Ranges from northwest Los Angeles County south into northwestern Baja California, Mexico. They prefer fairly steep grassy hillsides with moderate shrub cover, rock outcrops and canyons ranging from elevations of 200 to 4,600 feet amsl. They can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and sage scrub on gentle rolling hillsides. Rufous-crowned sparrows thrive in areas that have recently been burned, and will stay in such open, disturbed habitats for years. Several studies have indicated that this species is highly susceptible to habitat fragmentation, an indication that they require large expanses of unbroken native habitat to sustain viable populations. In San Diego this species is fairly common over wide areas suitable habitat.

The southern California rufous-crowned sparrow and suitable nesting habitat is present throughout the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix A). Several pairs and individuals were detected throughout Proposed Project Survey Area during focused, protocol-level coastal California gnatcatcher surveys conducted in the fall during non-breeding season and the species is known to occur within the vicinity of the Proposed Project.

Western Bluebird (Sialia mexicana; NCCP)

The western bluebird is a NCCP-covered species. This species breeds in western North America from southern British Columbia and southwestern Alberta south to northern Baja California, Mexico and the Central Volcanic Belt of Mexico, but is largely absent from the Great Basin. In California, the breeding range extends from the Oregon border south in California (except Warner Mountain region) to about Mono, Kern, and Santa Barbara Counties, and from Ventura, Los Angeles, and San Bernardino Counties south through the Transverse and Peninsular ranges of southwestern California to southern San Diego County. This species inhabits pen coniferous and deciduous woodlands; wooded riparian areas; grasslands; farmlands; and burned, moderately logged, and edge areas with scattered trees, snags, or other suitable nest and perch sites. Unlike eastern (*S. sialis*) and mountain (*S. currucoides*) bluebirds, western bluebirds do not favor large, open meadows. Clear-cutting, snag removal, fire suppression, and any changes in land use that cause open forest and edge habitat to be diminished adversely affect western bluebird populations.

The western bluebird is present within the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix A). The Proposed Project Survey Area is within the known range of the species and suitable nesting habitat exists within the Proposed Project Survey Area and vicinity.

Southern Mule Deer (Odocoileus hemionus; NCCP)

The southern mule deer is a NCCP-covered species. Southern mule deer are presently widespread throughout undeveloped portions of San Diego County, ranging from Camp Pendleton to the Laguna Mountains, Sweetwater River, and Otay Lakes at elevations of 400 to 3,600 feet amsl. 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. Although the species is not threatened with extinction within its range, urbanization and habitat fragmentation could result in local extirpation without appropriate conservation measures.

The southern mule deer is present within the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix A). Several individuals of this species were observed throughout Proposed Project Survey Area during fall biological surveys and there is suitable habitat present throughout the Proposed Project Survey Area and vicinity.

Jurisdictional Delineation of Waters and Wetlands

Wetland and riparian resources are considered sensitive biological resources and are regulated by the USACE, CDFW, RWQCB, and/or CCC pursuant to several federal and state regulations. Table 4.4-5: Summary of Jurisdictional Resources, below, summarizes the jurisdictional resources within the Proposed Project Survey Area by agency. A brief summary of the wetland delineation results is provided below, and a detailed description of each agency's jurisdiction and of the wetland delineation results are provided in Appendix 4.4-A, Appendix H (Jurisdictional Delineation of San Diego Gas & Electric's Sycamore to Peñasquitos 230 Kilovolt Transmission Line Improvements Project, Section 2.0, Regulatory Framework and Section 4.0, Results, respectively).

Table 4.4-5: Summary of Jurisdictional Resources

Jurisdiction	Number of Named Features	Total Area of Jurisdiction (Approx. Acres)	Total Length of Jurisdiction (Approx. Linear Feet)
USACE	31	9.21	43,952
RWQCB ¹	36	9.34	47,430
CDFW	31	14.92	43,953
CCC	7	1.66	9,396

Notes:

¹Excludes approximately 1.71 acres (approximately 29,111 linear feet) of exempt MS4 V-ditches and other features.

USACE Jurisdiction

A total of 31 USACE jurisdictional drainage systems were identified within the Proposed Project Survey Area. Of those, two have perennial features, eight have intermittent features, and 21 are ephemeral. All of the vernal pools identified within the Proposed Project Survey Area are isolated and, therefore, are not regulated by USACE following the Rapanos guidelines. Within the Proposed Project Survey Area, USACE jurisdiction totals approximately 9.21 acres, of which approximately 5.15 acres are wetland Waters of the U.S., and approximately 4.06 acres are non-wetland Waters of the U.S.

RWQCB Jurisdiction

A total of 35 RWQCB jurisdictional features were identified within the Proposed Project Survey Area. The areas under RWQCB jurisdiction include all areas under USACE jurisdiction, described above, as well as erosion control V-ditches, vernal pool complexes, and other isolated waters. RWQCB jurisdiction totals approximately 9.34 acres, of which approximately 5.15 acres are wetland Waters of the State and approximately 4.19 acres are non-wetland Waters of the State. In addition, approximately 1.84 acres classified as exempt V-ditches and erosional features are present within the Proposed Project Survey Area.

CDFW Jurisdiction

A total of 31 CDFW jurisdictional features were identified within the Proposed Project Survey Area. CDFW jurisdiction extends to the top of the bank of unvegetated streambeds and to the outer drip line of any associated riparian vegetation. CDFW jurisdiction totals approximately 14.92 acres, of which approximately 2.88 acres are unvegetated streambed, and approximately 12.04 acres are riparian vegetation.

CCC Jurisdiction

A total of seven CCC jurisdictional features were identified within the Proposed Project Survey Area. The areas under CCC jurisdiction include all wetlands (isolated or non-isolated) in the coastal zone and areas designated as ESHAs, as described above. The CCC defines a wetland as land "which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." The absence of hydrophytic vegetation or hydric soils is not enough to exclude an area from jurisdiction. CCC wetland jurisdiction totals approximately 1.66 acres of wetland habitat and approximately 110.85 acres of ESHA.

4.4.4 Potential Impacts

Potential impacts to all sensitive biological resources that are known to occur or have a potential to occur within the Proposed Project Survey Area were considered. Because of the schedule constraints associated with the application submittal for the Proposed Project, not all focused surveys for special-status species have been completed. A focused vegetation assessment, focused special-status plant species surveys, and protocol-level nonbreeding coastal California gnatcatcher surveys were completed during late summer/fall 2013; however, because the application submittal deadline for the Proposed Project would occur prior to the spring survey

period, focused surveys that target spring/early summer blooming special-status plant species could not be conducted prior to application submittal. These additional surveys are planned for spring/early summer 2014.

Although additional surveys are planned to evaluate potential impacts associated with the Proposed Project, impacts to all sensitive biological resources that are currently known to occur based on the surveys conducted during the late summer/fall 2013 were evaluated. In addition, potential impacts to special-status plant and wildlife species that have a potential to occur were thoroughly contemplated based on the existing conditions within the Proposed Project Survey Area and historical occurrence data for the vicinity.

The following discussion describes the Proposed Project's potential to impact special-status species and habitat that may occur as a result of construction and operation of the Proposed Project. As part of the Proposed Project description, SDG&E would be operating under its own NCCP, which was established according to the ESA and CESA and the state's NCCP Act. SDG&E will implement the SDG&E Subregional NCCP Operational Protocols, habitat enhancement, and mitigation requirements to avoid, minimize, and mitigate potential impacts to ensure the protection and conservation of listed and covered species and their habitats.

In addition, SDG&E will implement the SDG&E QCB HCP, which was developed to protect the Quino checkerspot butterfly and its habitat through implementation of both general and Quino checkerspot butterfly-specific operational protocols that were designed to avoid or minimize take of the species. The SDG&E QCB HCP and APM BIO-1 have been included to ensure impacts remain less than significant. Under APM BIO-1, all impacts to special-status plant species will be adequately assessed prior to project construction and avoided, minimized, or appropriately mitigated.

The proposed APM is described more fully in Section 4.4.6, Applicant Proposed Measures.

4.4.4.1 Significance Criteria

Potential impacts to biological resources are separated into those likely to occur from construction (both short and long term impacts) and those that could occur as a result of operation and maintenance.

Standards of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW 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, etc.) 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; or
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

4.4.4.2 Question 4a - Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Construction – Less than Significant

SDG&E would operate in compliance with all state and federal laws, regulations, and permit conditions. This includes compliance with the federal, state, and local regulations, as described in Regulatory Setting, above. SDG&E would operate under the SDG&E Subregional NCCP, which was developed consistent with the ESA, CESA, and the NCCP Act. This would include compliance with SDG&E Subregional NCCP Section 7.1, Operational Protocols and Section 7.2, Habitat Enhancement Measures Section 7.1, Operational Protocols was designed to avoid and/or minimize impacts to all sensitive resources, whether or not the resource is covered by the SDG&E Subregional NCCP. SDG&E would also operate under the SDG&E QCB HCP, which was developed to protect the Quino checkerspot butterfly and its habitat through implementation of both general and Quino checkerspot butterfly-specific operational protocols that were designed to avoid or minimize take of the species. In addition, SDG&E has included APM BIO-1. Pursuant to APM BIO-1, all impacts to special-status species will be adequately assessed and avoided, minimized, or appropriately mitigated. With implementation of the SDG&E Subregional NCCP, SDG&E QCB HCP and APM BIO-1, all impacts to biological resources associated with the Proposed Project are considered less than significant.

Impacts to sensitive vegetation communities, special-status plant species, special-status wildlife species (including NCCP-covered species), and their habitats could result from the Proposed Project. Construction of the Proposed Project could result in permanent loss of and/or temporary disturbance to sensitive vegetation communities as a result of construction activities. Permanent impacts would include installation of maintenance work pads and the creation of new access roads. Temporary impacts would include material storage and staging yards, stringing sites, structure work areas, guard structures, and underground construction.

SDG&E would avoid and minimize any impacts according to the *SDG&E Subregional NCCP* Section 7.1, Operational Protocols as well as all other conditions outlined in the Proposed Project permits. With the implementation of the *SDG&E Subregional NCCP*, *SDG&E QCB HCP* and APM BIO-1, all permanent and temporary impacts are expected to remain less than significant.

Impacts to Vegetation Communities

The *SDG&E Subregional NCCP* allows for impacts to sensitive vegetation communities 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 intended to avoid or minimize impacts to sensitive natural resources.

Vegetation mapping for the Proposed Project was conducted during the late summer/fall 2013 based on Holland. Anticipated permanent and temporary impacts that may result from construction of the Proposed Project were calculated and analyzed by using this vegetation map as well as additional information in the *SDG&E Subregional NCCP* Section 3.1, Data Base References. Total anticipated permanent and temporary impacts to vegetation communities are summarized in Table 4.4-6, Potential Vegetation Community Impacts.

Table 4.4-6: Anticipated Impacts by Vegetation Community

NCCD Vocatation	Holland Vegetation	Per	Permanent		Temporary	
Community	Community/Land Cover		Approx. Square Feet	Approx. Acres	Approx. Square Feet	
	Diegan Coastal Sage Scrub	1.03	44,639	10.26	446,940	
Coastal Sage Scrub	Diegan Coastal Sage Scrub – Disturbed	1.02	44,445	10.65	464,082	
	Coastal Sage Scrub – Revegetated	0.29	12,396	2.50	109,020	
Coastal Sage/Chaparral Mix	Coastal Sage – Chaparral Scrub	0.09	3,805	0.62	26,822	
	Chamise Chaparral	0.75	32,597	3.31	144,060	
Chaparral	Chamise Chaparral - Disturbed	0.13	5,421	0.42	18,431	

Table 4.4-6 (cont.): Anticipated Impacts by Vegetation Community

NGORN	Holland Vegetation	Permanent		Temporary	
NCCP Vegetation Community	Community/Land Cover Type	Approx. Acres	Approx. Square Feet	Approx. Acres	Approx. Square Feet
	Southern Mixed Chaparral	0.46	20,195	2.47	107,766
Chaparral	Southern Mixed Chaparral – Disturbed			<0.01	150
	Scrub Oak Chaparral	Permanent	10,262	1.28	55,596
Grassland	Native Grassland	Approx. Acres Square Feet Tal 0.46 20,195 Tal 0.24 10,262 0.17 7,256 0.23 9,954 Tal 0.46 Pool 1b b ak	7,256	0.79	34,584
Grassiand	Nonnative Grassland		2.46	107,023	
Alkali Marsh	Alkali Marsh – Revegetated	0.24 10,262 1 0.17 7,256 0 0.23 9,954 2 d <0			
Freshwater Marsh	Freshwater Marsh			<0.01	132
I I IW	San Diego Mesa Vernal Pool				
Inland Water	Open Water ¹				
	Southern Riparian Scrub				
Director Good	Mulefat Scrub				
Riparian Scrub	Southern Willow Scrub			0.26	11,218
	Tamarisk Scrub				
Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest			0.01	463

Table 4.4-6 (cont.): Anticipated Impacts by Vegetation Community

NGCD V	Holland Vegetation	Per	Permanent		Temporary	
NCCP Vegetation Community	Community/Land Cover Type	Approx. Acres	Approx. Square Feet	Approx. Acres	Approx. Square Feet	
Eucalyptus Forest	Eucalyptus Woodland ¹			0.03	1,075	
Disturbed Habitat	Disturbed Habitat ¹	Approx. Approx. Square Feet Acres 0.00 0.19 8,256 4.79 <0.01 111 20.1 0.24 10,524 5.79 2.75 119,805 9.39		4.79	208,785	
	Developed Lands ¹			20.10	875,311	
N/A	Ornamental ¹	0.24	10,524	5.70	247,939	
	Bare Ground ¹		119,805	9.39	408,732	
TO	ΓAL	7.56 ² 329,668 ² 75.03 ²		3,268,126 ²		

Notes:

Impacts within Preserve Areas

Preserve areas, as defined above, that occur within and immediately adjacent to the Proposed Project Survey Area were considered, and a total of approximately 557.89 acres of designated preserve areas occur within the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix A). Table 4.4-7: Summary of Impacts within Preserves summarizes the vegetation communities that occur within the preserve areas.

The remainder of this page is intentionally left blank.

¹This classification does not have a Holland Code.

²Total reflects actual total without rounding error.

Table 4.4-7: Anticipated Impacts within Preserve Areas

	Holland Vogetation	Pern	nanent	Temporary		
NCCP Vegetation Community	Holland Vegetation Community/Land Cover Type	Approx. Acres	Approx. Square Feet	Approx. Acres	Approx. Square Feet	
	Diegan Coastal Sage Scrub	0.80	34,846	8.13	354,413	
Coastal Sage Scrub	Diegan Coastal Sage Scrub – Disturbed	0.08	3,571	0.27	11,679	
	Coastal Sage Scrub – Revegetated	Approx. Acres Square Feet 0.80 34,846 0.08 3,571 0.09 3,842 0.09 3,805 0.71 31,205 0.05 1,999 0.21 9,057	1.23	53,732		
Coastal Sage/Chaparral Mix	Coastal Sage – Chaparral Scrub	0.09	3,805	0.54	23,564	
	Chamise Chaparral	0.71	Approx. Square Feet .80	2.95	128,652	
	Chamise Chaparral - Disturbed	0.05	1,999	0.09	4,108	
Chaparral	Southern Mixed Chaparral	0.21	9,057	0.95	41,460	
	Southern Mixed Chaparral – Disturbed			<0.01	150	
	Scrub Oak Chaparral	0.24	10,262	1.28	55,586	

Table 4.4-7 (cont.): Anticipated Impacts within Preserve Areas

	Halland Vagatation			Temporary	
NCCP Vegetation Community	Holland Vegetation Community/Land Cover Type	Approx. Acres	Approx. Square Feet	Approx. Acres	Approx. Square Feet
Grassland	Native Grassland	Approx. Acres Approx. Square Feet 0.17 7,256 d 0.02 669	0.79	34,584	
Grassianu	Nonnative Grassland	0.02	669	1.41	61,507
Riparian Scrub	Southern Willow Scrub			0.02	847
Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest			0.01	463
Disturbed Habitat	Disturbed Habitat ¹	0.16	6,814	0.63	27,218
	Developed Lands ¹	Approx. Acres Approx. Square Feet ssland 0.17 7,256 rassland 0.02 669 7illow ast Live a Forest fabitat¹ 0.16 6,814 Lands¹ ttal¹ 0.19 8,161 and¹ 1.98 86,251	5.50 239,5	239,501	
N/A	Ornamental ¹		2.09	91,098	
	Bare Ground ¹	1.98	86,251	5.26	229,130
TOT	AL	4.76^{2}	207,739 ²	31.172	1,357,6922

Notes:

Implementation of the measures in *SDG&E Subregional NCCP* Section 7.1, Operational Protocols, Section 7.2, Habitat Enhancement Measures, and/or Section 7.4, Mitigation Credits will reduce unavoidable impacts within preserve areas to less than significant. These are discussed in further detail in Sections 4.4.4.3, and 4.4.6.1 below.

¹This classification does not have a Holland Code.

²Total reflects actual total without rounding error.

Impacts within ESHAs

ESHAs are specific to the Coastal Zone and are defined as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments". Proposed development within and adjacent to an ESHA must be located and designed to prevent significant impacts to the functions and values of the ESHA. ESHAs that occur within and immediately adjacent to the Proposed Project Survey Area were considered, and a total of approximately 110.85 acres of ESHA occur within the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix A). Table 4.4-8, Anticipated Impacts within ESHAs, below, summarizes the vegetation communities that occur within the ESHAs. It is important to note that all ESHAs are also included in the designated preserve areas discussed above.

Table 4.4-8: Anticipated Impacts within ESHAs

	TV 11 - 1 V/ 4 - 4 *	Perm	Permanent		porary
NCCP Vegetation Community	Holland Vegetation Community/Land Cover Type	Approx. Acres	Approx. Square Feet	Approx. Acres	Approx. Square Feet
Coastal Sage Scrub	Diegan Coastal Sage Scrub	Approx. Square Feet 0.54 23,675 <0.01 333 0.03 1,397 0.12 5,160 0.09 3,977 0.02 889 0.02 669	3.19	139,038	
Coastal Sage Scrub	Diegan Coastal Sage Scrub – Disturbed	<0.01	Approx. Square Feet 23,675 333 1,397 5,160 3,977 889 669		
Coastal Sage/Chaparral Mix	Coastal Sage – Chaparral Scrub	0.03	1,397	0.29	12,793
	Chamise Chaparral	0.12	5,160	0.37	16,195
Chaparral	Southern Mixed Chaparral	0.09	3,977	0.49	21,313
	Scrub Oak Chaparral			< 0.01	331
Grassland	Native Grassland	0.02	889	0.10	4,222
Grassianu	Nonnative Grassland	0.02	669	0.06	2,733
	TOTAL	1.411	61,449¹	5.541	241,090¹
Notes:		ı		ı	

Because the ESHAs are included in the preserve areas, no additional impacts are anticipated. As such, no additional avoidance, minimization, or mitigation measures would be required; however, a Coastal Development Permit from the City of San Diego (on behalf of the CCC) may be required. With the implementation of the SDG&E Subregional NCCP, impacts to ESHAs are anticipated to be less than significant.

¹ Total reflects actual total without rounding error.

Impacts to Special-Status Plant Species

The potential presence of special-status plant species is based on known recorded occurrences within the region and appropriate habitat present within the Proposed Project area. A total of 75 special-status plant species are known to occur or have a potential to occur within 5 miles of the Proposed Project Survey Area (see Appendix 4.4-A: Appendix D). Of these, 41 special-status species are not expected to occur within or adjacent to the Proposed Project Survey Area. Therefore, no impacts to these species are expected to occur.

The remaining 34 special-status plant species are known to occur or have a potential to occur within the Proposed Project Survey Area. Implementation of the Proposed Project could potentially result in permanent and temporary impacts to these special-status plant species. Based on the results of the late summer/fall 2013 special-status plant species surveys, 12 special-status plant species are known to occur within the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix E), including San Diego button-celery (*Eryngium aristulatum* ssp. parishii; FE, SE, CRPR 1B.1, NCCP), Nuttall's scrub oak (*Quercus dumosa*; CRPR 1B.1), San Diego goldenstar (*Bloomeria clevelandii*; CRPR 1B.1, NCCP), summer-holly (*Comarostaphylis diversifolia* ssp. diversifolia; 1B.2), Torrey pine (as planted individuals) (*Pinus torreyana*; CRPR 1B.2, NCCP), spineshrub (*Adolphia californica*; CRPR 2B.1), coast barrel cactus (*Ferocactus viridescens*; CRPR 2B.1, NCCP), San Diego marsh-elder (*Iva hayesiana*; CRPR 2B.2), graceful tarplant (*Holocarpha virgata* ssp. elongata; CRPR 4.2), spiny rush (*Juncus acutus* ssp. leopoldii; CRPR 4.2), Palmer's sagewort (*Artemisia palmeri*; CRPR 4.2), and San Diego sunflower (*Bahiopsis* [*Viguiera*] laciniata; CRPR 4.2).

Of these, four species – Palmer's sagewort, San Diego button-celery, San Diego sunflower, and San Diego goldenstar – occur outside of all proposed permanent and temporary impact areas; therefore, impacts to these species are not anticipated.

An additional species – the Torrey pine – occurs only as ornamental individuals planted for landscaping around the Peñasquitos Substation. As such, impacts to this species would not require any avoidance or minimization measures, and would be less than significant.

The Proposed Project has the potential to result in permanent and/or temporary impacts to the remaining seven species (refer to Appendix 4.4-A: Appendix A). The NCCP covers one of these species, the coast barrel cactus (CRPR 2B.1); however, the NCCP does not cover the other six species, including graceful tarplant (CRPR 4.2), Nuttall's scrub oak (CRPR 1B.1), San Diego marsh-elder (CRPR 2B.2), spineshrub (CRPR 2B.1), summer-holly (CRPR 1B.2), and spiny rush (CRPR 4.2). In addition, potential permanent and temporary impacts to the other 22 special-status plant species that have a potential for occurrence cannot yet be assessed, because only one round of special-status plant surveys has been conducted for the Proposed Project. Additional special-status plant species surveys are planned for spring and summer 2014 (APM BIO-1) and will provide the data necessary to analyze potential permanent and temporary impacts that may result to these species from implementation of the Proposed Project.

SDG&E will implement all applicable measures outlined in the SDG&E Subregional NCCP Section 7.1, Operational Protocols to avoid or minimize potential impacts to special-status plant species. For unavoidable impacts, implementation of the measures outlined in the SDG&E

Subregional NCCP Section 7.2, Habitat Enhancement Measures will further reduce impacts to vegetation communities that support special-status plant species. By implementing the SDG&E Subregional NCCP and APM BIO-1, SDG&E anticipates that all potential impacts to NCCP-covered special-status plant species will be avoided or minimized. For all potential impacts to special-status plant species that are not covered by the NCCP, SDG&E anticipates that implementing measures consistent with the SDG&E Subregional NCCP will also avoid or minimize impacts to those species. However, if impacts to highly sensitive special-status plant species are unavoidable, SDG&E would develop appropriate avoidance, minimization, and/or mitigation measures through discussions with the applicable resource agencies. These avoidance, minimization, and mitigation measures will be outlined in a Mitigation, Monitoring, and Reporting Plan designed for the specific special-status plants species that may be impacted by the Proposed Project and may include, but are not limited to, flagging and avoiding the special-status plant species, minimizing root disturbance, seed collection, soil salvage, and/or transplantation, among others.

Prior to implementation of the Proposed Project, SDG&E would implement APM BIO-1 to ensure that impacts to special-status plant species remain less than significant. These efforts include, but are not limited to, a PSR for all impacts occurring in natural areas, additional focused special-status species surveys (if required), an environmental awareness training program for contractors, biological monitoring of all activities occurring in natural areas, flagging of sensitive habitat for avoidance, and the review and approval by the biological monitor of all activities occurring in sensitive areas where disturbance to habitat may be unavoidable. In addition, per the SDG&E NCCP Implementing Agreement, SDG&E is required to prepare and submit an annual report to USFWS and CDFW documenting the amount and type of habitats impacted as well as the activities causing these impacts. To meet this requirement, SDG&E's biological consultant will prepare a PCR detailing the actual impacts caused by the Proposed Project. Through implementation of the SDG&E Subregional NCCP and APM BIO-1, impacts to special-status plant species are anticipated to be less than significant.

Impacts to Special-Status Wildlife Species

The potential presence of special-status wildlife species is based on known recorded occurrences within the region and appropriate habitat present within the Proposed Project area. A total of 98 special-status wildlife species have the potential to occur within 5 miles of the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendix F). Of these, 48 special-status species are not expected to occur within or adjacent to the Proposed Project Survey Area either because there is no suitable habitat present or because they are in the vicinity outside of their "season of concern" (e.g., migrant bird species). Therefore, no impacts to these species are expected to occur.

The remaining 50 special-status wildlife species are known to occur or have a potential to occur within the Proposed Project Survey Area. Of the 50 special-status wildlife species with a potential to occur within the Proposed Project Survey Area, nine were detected during the surveys conducted in the fall 2013 (refer to Appendix 4.4-A: Appendix G), including Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), Cooper's hawk (*Accipiter cooperii*; WL, NCCP), Vaux's swift (*Chaetura vauxi*; SSC), loggerhead shrike (*Lanius ludovicianus*; SSC), California horned lark (*Erempohila alpestris actia*; SSC), coastal California gnatcatcher (*Polioptila californica californica*; FT, SSC, NCCP), southern California rufous-crowned

sparrow (*Aimophila ruficeps canescens*; WL, NCCP), western bluebird (*Sialia mexicana*; NCCP), and southern mule deer (*Odocoileus hemionus*; NCCP).

SDG&E would utilize and implement the *SDG&E Subregional NCCP* Section 7.1, Operational Protocols to avoid and minimize any impacts to species that are known to occur or have a potential to occur. In addition, SDG&E would utilize and implement the *SDG&E QCB HCP* to avoid and minimize impacts to the Quino checkerspot butterfly and its habitat.

Prior to implementation of the Proposed Project, additional efforts are planned to identify avoidance and minimization measures required to ensure that impacts to special-status wildlife species remain less than significant. These efforts include, but are not limited to, a PSR for all impacts occurring in natural areas, additional focused special-status species surveys (if required), biological monitoring of all activities occurring in natural areas, flagging of sensitive habitat for avoidance, and the review and approval by the biological monitor of all activities occurring in sensitive areas where disturbance to habitat may be unavoidable. In addition, per the SDG&E NCCP Implementing Agreement, SDG&E is required to prepare and submit an annual report to USFWS and CDFW documenting the amount and type of habitats impacted as well as the activities causing these impacts. To meet this requirement, SDG&E's biological consultant will prepare a PCR detailing the actual impacts caused by the Proposed Project. Through implementation of the SDG&E Subregional NCCP and SDG&E QCB HCP, impacts to the special-status wildlife species that are known to occur or have a moderate to high potential to occur within the Proposed Project are anticipated to remain less than significant.

Impacts to Special-Status Invertebrate Species

Five special-status invertebrate species are known to occur or have a potential to occur within 5 miles of the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendices A and F). Of these five species, two – Thorne's hairstreak (*Mitoura thornei*) and wandering skipper (*Panoquina errans*) – are not expected to occur. Of the remaining three, one – San Diego fairy shrimp (*Branchinecta sandiegonensis*) – has a high potential for occurrence, and two – Riverside fairy shrimp (*Streptocephalus woottoni*) and Quino checkerspot butterfly (*Euphydryas editha quino*) – have a moderate potential for occurrence.

The NCCP covers the San Diego fairy shrimp and Riverside fairy shrimp, but the NCCP does not permit impacts to vernal pools or their watersheds that may result from construction of new facilities, including both structures and access roads. The Proposed Project has been designed to avoid impacts to fairy shrimp and their habitat, vernal pools, and designated critical habitat. As such, with implementation of the SDG&E Subregional NCCP, no impacts to San Diego fairy shrimp, Riverside fairy shrimp, San Diego fairy shrimp critical habitat, or vernal pools are expected to result from implementation of the Proposed Project.

The Quino checkerspot butterfly is covered under the SDG&E QCB HCP. The SDG&E QCB HCP designates suitable Quino checkerspot butterfly habitat that requires focused surveys or assumed occupancy if timing precludes focused surveys from being performed. The Proposed Project Survey Area is outside of the "Quino Mapped Area" that is designated within the SDG&E QCB HCP; therefore, no focused surveys for the Quino checkerspot butterfly are required for the Proposed Project. All impacts to the Quino checkerspot butterfly would be

permitted under the *SDG&E QCB HCP*. With implementation of the *SDG&E QCB HCP*, no additional avoidance or minimization measures are required. As such, impacts to the Quino checkerspot butterfly are anticipated to be less than significant.

Impacts to Special-Status Fish Species

Two special-status fish species – southern steelhead (*Oncorhynchus mykiss irideus*) and tidewater goby (*Eucyclogobius newberryi*) – are known to occur within the region (Appendix 4.4-A: Appendices A and F); however, neither of these species is expected to occur within the Proposed Project Survey Area because no suitable habitat is present; and there are no historical records for this species within a 5-mile buffer of the Proposed Project alignment. Therefore, with implementation of the *SDG&E Subregional NCCP*, no impacts to special-status fish species are expected to occur from implementation of the Proposed Project.

Impacts to Special-Status Amphibian Species

Six special-status amphibian species are known to occur or have a potential to occur within the vicinity of the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendices A and F). Of these six species, five are not expected to occur, including arroyo toad (*Anaxyrus californicus*), California red-legged frog (*Rana draytonii*), southern mountain yellow-legged frog (*Rana muscosa*), large-blotched ensatina (*Ensatina eschscholtzii klauberi*), and coast range newt (*Taricha torosa torosa*).

One species – western spadefoot (*Spea hammondii*) – has a high potential to occur and is covered by the NCCP. This species is associated with vernal pools and other temporary water areas, similar to the habitats used by the San Diego fairy shrimp, discussed above. Because the Proposed Project was designed to avoid impacts to vernal pools and other fairy shrimp habitat and because there are additional mitigation measures in place for unavoidable impacts to other temporary water areas, impacts to western spadefoot would be less than significant.

SDG&E will implement all applicable measures outlined in the SDG&E Subregional NCCP Section 7.1, Operational Protocols to prevent potential impacts to special-status amphibian species. These measures include, but are not limited to, restricting vehicle access to existing roads to the extent feasible, avoiding vehicle collisions with wildlife species to the extent practicable, conducting pre-construction surveys in suitable habitat, restricting the handling of all wildlife to expert handlers, and having a biological monitor onsite to avoid and minimize impacts to biological resources, such as vegetation communities that have the potential to support these species. In addition, implementation of the measures outlined in the SDG&E Subregional NCCP Section 7.2, Habitat Enhancement Measures, as discussed above in Sensitive Vegetation Community Impacts, will further reduce impacts to habitat for special-status amphibian species. Through implementation of the SDG&E Subregional NCCP, impacts to special-status amphibian species are anticipated to be less than significant.

Impacts to Special-Status Reptile Species

Twelve special-status reptile species are known to occur or have a potential to occur within 5 miles of the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendices A and F). Of

these, one – California red-sided gartersnake (*Thamnophis sirtalis infernalis*) – is not expected to occur. Therefore, no impacts to this species are anticipated. Of the remaining 11 species:

- Two have a moderate potential for occurrence within the Proposed Project Survey Area
 - o western pond turtle (Actinemys marmorata; SSC, NCCP)
 - o San Diego banded gecko (Coleonyx variegatus abbotti; NCCP)
- Eight have a high potential for occurrence within the Proposed Project Survey Area:
 - o California legless lizard (*Anniella pulchra*; SSC)
 - o coast horned lizard (*Phrynosoma blainvillii*; SSC, NCCP)
 - o Coronado skink (Plestiodon skiltonianus interparietalis; SSC, NCCP)
 - o rosy boa (*Charina trivirgata*; NCCP)
 - o coast patch-nosed snake (Salvadora hexalepis virgultea; SSC, NCCP)
 - o red diamond rattlesnake (*Crotalus ruber*; SSC, NCCP)
 - o San Diego ringneck snake (*Diadophis punctatus similis*; NCCP)
 - o two-striped garter snake (*Thamnophis hammondii*; SSC, NCCP)
- One was observed during the fall 2013 surveys conducted for the Proposed Project
 - o Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*; SSC, NCCP)

The Proposed Project could result in both permanent and temporary impacts to these special-status reptile species. Permanent impacts to these special-status reptile species would include the loss of suitable foraging and breeding habitat resulting from removal of vegetation communities that have the potential to support these species. Temporary impacts to these special-status reptile species would include short-term disturbances to their foraging and breeding behaviors that result from implementation of the Proposed Project. No substantial decrease or increase in perching opportunities for avian species is expected from implementation of the Proposed Project; therefore, potential for predation on both common and special-status reptile species is not expected to change.

Of the 11 special-status reptile species that are known to occur or have a potential for occurrence within the Proposed Project Survey Area, one – the California legless lizard – is not covered by the *SDG&E Subregional NCCP*. Because this species is typically found in riparian areas, and because the Proposed Project was designed to avoid impacts to riparian areas, to the extent feasible, no impacts are expected to the California legless lizard.

The NCCP covers the remaining 10 special-status reptile species that are known to occur or have a potential for occurrence within the Proposed Project Survey Area. All of these species have relatively low sensitivity (e.g., species of special concern and/or NCCP-covered), and impacts would be avoided or minimized to the greatest extent feasible.

SDG&E will implement all applicable measures outlined in the *SDG&E Subregional NCCP* Section 7.1, Operational Protocols to prevent potential impacts to special-status reptile species.

These measures include, but are not limited to, avoiding vehicle collisions with wildlife species to the extent practicable, having a biological monitor onsite to avoid and minimize impacts to biological resources such as vegetation communities that have the potential to support these species. In addition, implementation of the measures outlined in the *SDG&E Subregional NCCP* Section 7.2, Habitat Enhancement Measures, as discussed above in Sensitive Vegetation Community Impacts, will further reduce impacts to habitat for special-status reptile species. Through implementation of the *SDG&E Subregional NCCP*, impacts to special-status reptile species are anticipated to be less than significant.

Impacts to Special-Status Avian Species

Fifty-five special-status avian species are known to occur or have a potential to occur within 5 miles of the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendices A and F). Of these, 36 species are not expected to occur or occur outside of their season of sensitivity. Therefore, no impacts to these species are anticipated. Of the remaining 19 species:

- Three have a low potential for occurrence within the Proposed Project Survey Area
 - o ferruginous hawk (*Buteo regalis*; WL, NCCP) (Wintering)
 - o long-eared owl (Asio otus; SSC) (Nesting)
 - o tricolored blackbird (*Agelaius tricolor*; SSC, NCCP) (Nesting colony)
- Six have a moderate potential for occurrence within the Proposed Project Survey Area
 - o northern harrier (Circus cyaneus; SSC, NCCP) (Nesting)
 - o white-tailed kite (*Elanus leucurus*; CFP) (Nesting)
 - o merlin (Falco columbarius; WL) (Wintering)
 - o burrowing owl (*Athene cunicularia*; SSC, NCCP-NE) (Burrow sites and some wintering sites)
 - o least Bell's vireo (*Vireo bellii pusillus*; FE, SE, NCCP) (Nesting)
 - o coastal cactus wren (Campylorhynchus brunneicapillus sandiegensis; SSC, NCCP-NE)
- Four have a high potential for occurrence within the Proposed Project Survey Area
 - o yellow warbler (*Dendroica petechia brewsteri*; SSC) (Nesting)
 - o yellow-breasted chat (*Icteria virens*; SSC, NCCP) (Nesting)
 - o grasshopper sparrow (*Ammodramus savannarum*; SSC, NCCP) (Nesting)
 - o Bell's sage sparrow (Amphispiza belli belli; WL, NCCP)
- Six were observed during the fall surveys conducted for the Proposed Project
 - o Cooper's hawk (Accipiter cooperii; WL, NCCP) (Nesting)
 - o loggerhead shrike (Lanius ludovicianus) (Nesting)
 - o California horned lark (Erempohila alpestris actia; WL)

- o coastal California gnatcatcher (*Polioptila californica californica*; FT, SSC, NCCP)
- o southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; WL, NCCP)
- o western bluebird (Sialia mexicana; NCCP)

The Proposed Project could result in both permanent and temporary impacts to foraging and/or nesting habitat for the 19 special-status avian species that are known to occur or have a potential to occur within the Proposed Project Survey Area. Permanent impacts may result from the loss of nesting and foraging habitat, including the removal of wood poles that could be used by cavity nesters, as well as the permanent removal of vegetation for installation of new maintenance work pads and new access roads. Temporary impacts may result from increased ambient noise resulting from construction activities as well as temporary loss of vegetation for stringing sites, staging areas, guard structures, and other temporary work areas.

Of the 19 special-status avian species that are known to occur or have a potential to occur within the Proposed Project Survey Area, six are not covered by the SDG&E Subregional NCCP. Three of these species – the white-tailed kite, long-eared owl, and yellow warbler – are typically associated with riparian areas. Because the Proposed Project has been designed to avoid impacts to riparian areas to the extent practicable, no impacts to these species are anticipated. If unavoidable impacts are identified, implementation of the SDG&E Subregional NCCP would assure that appropriate operational protocols are followed. These may include, but are not limited to, restricting vegetation removal during the breeding season, conducting preconstruction surveys (as needed), and/or having a biological monitor onsite to avoid and minimize impacts to vegetation communities that have the potential to support these species. With implementation of the SDG&E Subregional NCCP, these species will be further protected and unavoidable impacts would be reduced to less than significant.

The other three species not covered by the NCCP – the merlin, loggerhead shrike, and California horned lark– are associated with a variety of habitats, including grasslands and agricultural areas. While both permanent and temporary impacts are expected to foraging habitat for these species, these impacts will be reduced to less than significant with the implementation of the *SDG&E Subregional NCCP*.

The NCCP covers the remaining 13 special-status avian species with a potential for occurrence within the Proposed Project Survey Area. Nine of these species have relatively low sensitivity (e.g., species of special concern, watch list, and/or NCCP-covered), and impacts would be avoided or minimized to the greatest extent feasible. Through implementation of the SDG&E Subregional NCCP, impacts to these species are anticipated to remain less than significant.

Specific permanent and temporary impacts to the four remaining species – least Bell's vireo, coastal California gnatcatcher, burrowing owl, and coastal cactus wren – were evaluated separately because of their high sensitivity. Potential permanent and temporary impacts to the least Bell's vireo may result from implementation of the Proposed Project. While focused surveys for the least Bell's vireo have not been conducted, the Proposed Project was designed to avoid impacts, to the extent feasible, to the least Bell's vireo and the vegetation communities that

have a potential to support the species. With implementation of the *SDG&E Subregional NCCP*, unavoidable impacts to least Bell's vireo are anticipated to remain less than significant.

Potential permanent and temporary impacts to the coastal California gnatcatcher may result from implementation of the Proposed Project. The coastal California gnatcatcher is known to occur within the Proposed Project Survey Area based on results of the focused, protocol-level, non-breeding season surveys conducted in fall 2013. The Proposed Project was designed to avoid impacts, to the extent feasible, to the coastal California gnatcatcher and vegetation communities that may support the species. With implementation of the SDG&E Subregional NCCP, unavoidable impacts to the coastal California gnatcatcher are anticipated to remain less than significant.

Potential permanent and temporary impacts to the burrowing owl would be avoided based on the mitigation requirements for NCCP-covered, narrow endemic species provided in the SDG&E Subregional NCCP. The burrowing owl has a moderate potential to occur within the Proposed Project Survey Area; however, there is limited suitable habitat for this species, and it is not expected to nest within the Proposed Project Survey Area based on historical data for the region. Where suitable burrowing owl habitat occurs within the Proposed Project Survey Area, the soils are compact and little rodent (e.g., ground squirrel, rabbit) activity was observed during surveys conducted for the Proposed Project. Therefore, no impacts are expected to occur to the burrowing owl as a result of implementation of the Proposed Project. With implementation of the SDG&E Subregional NCCP, unavoidable impacts to the burrowing owl are anticipated to remain less than significant.

Potential permanent and temporary impacts to the coastal cactus wren would be avoided based on the mitigation requirements for NCCP-covered, narrow endemic species provided in the SDG&E Subregional NCCP. The coastal cactus wren has a moderate potential to occur within the Proposed Project Survey Area; however, the suitable habitat for this species is localized, and the Proposed Project was designed to avoid impacts to habitat for this species. Therefore, no impacts are expected to occur to the coastal cactus wren as a result of implementation of the Proposed Project. With implementation of the SDG&E Subregional NCCP, unavoidable impacts to the coastal cactus wren are anticipated to remain less than significant.

SDG&E will implement all applicable measures outlined in the SDG&E Subregional NCCP Section 7.1, Operational Protocols to avoid and/or minimize potential impacts to special-status avian species. These measures include, but are not limited to, restricting vegetation removal during the breeding season, conducting pre-construction surveys in suitable avian habitat during the bird breeding season to avoid impacts to nesting birds, and having a biological monitor onsite to avoid and minimize impacts to biological resources, such as vegetation communities that have the potential to support these species. SDG&E would also remain in compliance with the MBTA for the species discussed above as well as other migratory birds covered by the MBTA that may occur within the Proposed Project Survey Area during the breeding season (January 1 through July 31 for raptors and February 15 through August 31 for other nesting bird species). In addition, implementation of the measures outlined in the SDG&E Subregional NCCP Section 7.2, Habitat Enhancement Measures, as discussed above in Sensitive Vegetation Community Impacts, will further reduce impacts to habitat for special-status avian species. Through

implementation of the SDG&E Subregional NCCP, impacts to special-status avian species are anticipated to be less than significant.

Permanent impacts to avian species covered under the MBTA could occur from potential electrocution from the new transmission line. Electrocution of avian species, especially raptor species with large body sizes and wing spans, can result when an avian species that is perching, landing, or taking flight from a utility pole completes the electrical circuit with wing contact between two conductors. Electrocution of avian species also can result through simultaneous contact with energized phase conductors and other equipment, or simultaneous contact with an energized wire and a grounded wire. In addition to SDG&E's current construction standard, which includes increased phase spacing and cover-ups to reduce avian mortality from electrocution, the Proposed Project would remain in compliance with the Avian Power Line Interaction Committee's (APLIC) Suggested Practices for Avian Protection on Power Lines to reduce the potential for electrocution to both avian and other wildlife species.

Through implementation of the *SDG&E Subregional NCCP* and other measures discussed in this section, impacts to special-status avian species are anticipated to be less than significant.

Impacts to Special-Status Mammal Species

Eighteen special-status mammal species are known to occur or have a potential to occur within 5 miles of the Proposed Project Survey Area (refer to Appendix 4.4-A: Appendices A and F). Of these, two – Stephens' kangaroo rat (*Dipodomys stephensi*) and Pacific pocket mouse (*Perognathus longimembris pacificus*) – are not expected to occur because the Proposed Project Survey Area is outside of the known range of these species. Therefore, no impacts to these species are expected to occur. Of the remaining 16 species:

- Two have a low potential for occurrence within the Proposed Project Survey Area
 - o ringtail (Bassariscus astutus; SSC)
 - o American badger (*Taxidea taxus*; SSC, NCCP)
- Eight have a moderate potential for occurrence within the Proposed Project Survey Area
 - o Mexican long-tongued bat (*Choeronycteris mexicana*; SSC)
 - o pallid bat (Antrozous pallidus; SSC)
 - o Townsend's big-eared bat (Corynorhinus townsendii; SSC)
 - o spotted bat (Euderma maculatum; SSC)
 - o western red bat (Lasiurus blossevillii; SSC)
 - o western mastiff bat (*Eumops perotis californicus*; SSC)
 - o big free-tailed bat (*Nyctinomops macrotis*; SSC)
 - o mountain lion (*Puma concolor*; NCCP)
- Five have a high potential for occurrence within the Proposed Project Survey Area
 - o San Diego black-tailed jackrabbit (*Lepus californicus bennettii*; SSC, NCCP)

- o Dulzura pocket mouse (Chaetodipus californicus femoralis; SSC, NCCP)
- o northwestern San Diego pocket mouse (Chaetodipus fallax; SSC, NCCP)
- o San Diego desert woodrat (Neotoma lepida intermedia; SSC, NCCP)
- o southern grasshopper mouse (*Onychomys torridus Ramona*; SSC, NCCP)
- One was detected during the fall surveys conducted for the Proposed Project
 - o southern mule deer (*Odocoileus hemionus*; NCCP)

The Proposed Project could result in both permanent and temporary impacts to these special-status mammal species. Permanent impacts to these special-status mammal species may include the loss of suitable foraging habitat resulting from removal of vegetation communities that have the potential to support these species. Temporary impacts to these special-status mammal species may result from construction noise, lighting, ground vibration, and other short-term disturbances associated with construction-related activities that could result in temporary disruptions to their typical daily foraging activities. No substantial decrease or increase in perching opportunities for avian species is expected from implementation of the Proposed Project; therefore, potential for predation on both common and special-status mammal species is not expected to change.

Of the 16 special-status mammal species that are known to occur or have a potential for occurrence within the Proposed Project Survey Area, eight are not covered by the *SDG&E Subregional NCCP*. Seven of these species are bat species that are considered species of special concern and all have a moderate potential to forage within the Proposed Project Survey Area but no impacts to roosting habitat are expected to occur as a result of implementation of the Proposed Project. The remaining species – the ringtail – is a California fully protected species; it has a very low potential to occur within the Proposed Project Survey Area because marginal habitat is present, none were observed during biological surveys, and the species is not known to occur within the vicinity based on historical records. Therefore, no impacts to ringtail are expected to occur as a result of implementation of the Proposed Project.

The NCCP covers the remaining eight special-status mammal species. SDG&E will implement all applicable measures outlined in the SDG&E Subregional NCCP Section 7.1, Operational Protocols to prevent potential impacts to special-status mammal species. These measures include, but are not limited to, restricting vehicle access to existing roads to the extent feasible, avoiding vehicle collisions with wildlife species to the extent practicable, conducting preconstruction surveys in suitable habitat, restricting the handling of all wildlife to expert handlers, and having a biological monitor onsite to avoid and minimize impacts to biological resources, such as vegetation communities that have the potential to support these species. In addition, implementation of the measures outlined in the SDG&E Subregional NCCP Section 7.2, Habitat Enhancement Measures, as discussed above in Sensitive Vegetation Community Impacts, will further reduce impacts to habitat for special-status mammal species. Through implementation of the SDG&E Subregional NCCP, impacts to special-status mammal species are anticipated to be less than significant.

Avoidance and Minimization of Impacts to Biological Resources

The Proposed Project has been designed to avoid sensitive habitat areas that may support special-status plant species, special-status wildlife species, and/or other sensitive biological resources when possible, including not placing poles in drainage areas, using existing access roads to the greatest extent possible, and placing staging areas, laydown areas, and guard structures outside habitats when feasible. Because the permanent impacts resulting from the Proposed Project are relatively small, and because additional high quality foraging and breeding habitats are located within and adjacent to the Proposed Project Survey Area, wildlife habitat is not expected to be adversely affected.

The temporary impact areas may vary because the positioning of construction vehicles, equipment, and materials cannot be accurately anticipated prior to construction. The locations of the construction vehicles, equipment, and materials are dependent upon the contractor safely performing the work. The impacts from construction vehicles, equipment, and materials staged outside of delineated temporary work areas will be evaluated by the on-site biological monitor prior to their placement. The monitor, as appropriate, will assist crews in placement of construction vehicles, equipment, and materials to avoid and minimize impacts to sensitive habitat types. In addition, in order to maintain a safe working space for crewmembers working directly under poles, construction vehicles, equipment, and materials may need to be staged off of existing access roads and/or outside of delineated temporary work areas. However, the on-site biological monitor will assist crews in locating appropriate staging areas for construction vehicles, equipment, and materials that avoids and minimizes impacts to sensitive habitat types. Any temporary impacts associated with placement of construction vehicles, equipment, and materials will be recorded by the biological monitor and will be included within the project Post Construction Report and will mitigated as necessary, pursuant to the SDG&E Subregional NCCP.

Where avoidance of sensitive habitat areas supporting special-status wildlife species is not possible, or where sensitive habitat areas exist adjacent to Proposed Project work areas, implementation of the SDG&E Subregional NCCP and SDG&E QCB HCP would ensure these impacts remain less than significant. Compliance with the SDG&E Subregional NCCP, which includes avoidance and minimization measures and enhancement for loss of habitat within Preserve areas and ESHAs, would ensure impacts to NCCP-covered species remain less than significant. Similarly, compliance with the SDG&E QCB HCP, which includes avoidance and minimization measures for the Quino checkerspot butterfly and its habitat as well as habitat restoration, enhancement, and other mitigation for unavoidable impacts, would ensure that impacts to the Quino checkerspot butterfly remain less than significant. Additionally, required pre-activity surveys, pursuant to the SDG&E Subregional NCCP, would also confirm the presence or absence of any other special-status species not covered under the SDG&E Subregional NCCP. If any non-covered species special-status species are identified during the surveys, compliance with the SDG&E Subregional NCCP and SDG&E QCB HCP, as applicable, would provide avoidance and minimization of impacts so they remain less than significant.

SDG&E Operational Protocols (Incorporated Into Proposed Project Design)

SDG&E has a long history of implementing the SDG&E Subregional NCCP and related operational protocols for projects such as the Proposed Project. Operational protocols represent an environmentally sensitive approach to traditional utility construction, maintenance and repair activities recognizing that slight adjustments in construction techniques can yield major benefits for the environment. Pursuant to the SDG&E Subregional NCCP, the appropriate Operational Protocols for the Proposed Project would be determined and documented by the Environmental Surveyor, which would be the lead natural resources representative from SDG&E, in conjunction with the lead biological resources monitor from the private biological consulting firm contracted for the job.

Typical measures outlined in the *SDG&E Subregional NCCP* Section 7.1, Operation Protocols; Section 7.2, Habitat Enhancement Measures; Section 7.4, Mitigation Credits; and other applicable measures have been incorporated into the Proposed Project design (Section 3.8, above) to ensure impacts to biological resources will remain less than significant.

Similarly, SDG&E has successfully implemented the SDG&E QCB HCP for other projects within the region. Both general and Quino checkerspot butterfly-specific operational protocols are outlined in the plan and provide methods to avoid or minimize take of the Quino checkerspot butterfly. Pursuant to SDG&E QCB HCP, the Proposed Project will avoid, minimize, or mitigate impacts to the Quino checkerspot butterfly and its habitat through implementation of the SDG&E QCB HCP (see Section 4.4.6.2).

Operation & Maintenance – No Impact

SDG&E currently maintains and operates extensive existing electric transmission, distribution and substation facilities throughout the Proposed Project site. SDG&E's existing operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated.

Operations and maintenance activities for the Proposed Project would not materially increase in frequency or intensity. Any future potential maintenance-related construction projects will be evaluated under General Order 131-D and CEQA for purposes of assessing whether further CPUC approval is required and will be conducted in compliance with the *SDG&E Subregional NCCP*. As such, no impacts are anticipated.

4.4.4.3 Question 4b - Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

Construction – Less than Significant

Impacts to sensitive vegetation communities could result from the Proposed Project. Construction of the Proposed Project could result in permanent loss of and/or temporary disturbance to sensitive vegetation communities.

Permanent impacts would include installation of maintenance work pads and the creation of new spur roads. Permanent impacts are anticipated to sensitive upland vegetation communities; however, no permanent impacts are anticipated to riparian habitat. Temporary impacts would include material storage and staging yards, stringing sites, structure work areas, guard structures, and underground construction. Temporary impacts are anticipated to sensitive upland vegetation communities but have been avoided to the extent feasible to riparian habitats. While very small temporary impacts are currently shown to riparian vegetation communities, these impacts would be avoided with guidance from the Environmental Surveyor and/or the lead biological resources monitor during implementation of the Proposed Project.

The SDG&E Subregional NCCP allows for impacts to sensitive vegetation communities 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 and to implement protection measures to avoid and minimize take to the maximum extent possible. Therefore, implementation of the SDG&E Subregional NCCP would ensure potential impacts to sensitive vegetation communities remain less than significant.

If unavoidable impacts to riparian or other jurisdictional resources are identified during future planning efforts for the Proposed Project, SDG&E would obtain the requisite permit(s) from the applicable regulatory agency and fully comply with all conditions outlined in the permit(s). This would assure that impacts to jurisdictional resources remain less than significant.

Pursuant to the *SDG&E Subregional NCCP*, the Proposed Project has been designed to avoid sensitive vegetation communities when possible by placing poles outside of drainage areas, using existing access roads to the greatest extent possible, and placing any new facilities, staging areas, or access roads outside native vegetation communities, when feasible. Where avoidance of sensitive vegetation communities is not possible or where sensitive habitat areas exist adjacent to Proposed Project work areas, implementation of the *SDG&E Subregional NCCP* will reduce these impacts to less than significant. Figures showing both temporary and permanent construction impacts to vegetation communities are provided in Appendix 4.4-A: Appendix A. These impacts are also summarized in Table 4.4-9: Summary of Anticipated Impacts.

The remainder of this page is intentionally left blank.

Approx. Type of Approx. **Anticipated Resource Impacted** Square **Impact** Acres² Feet² Anticipated Impacts to Sensitive Vegetation Communities (not including bare ground, developed 4.38 1,90972 lands, disturbed habitat, or ornamental) Anticipated Impacts to Non-Sensitive Vegetation Permanent1 Communities (bare ground, developed lands, disturbed 3.18 138,696 habitat, and ornamental) **Total Anticipated Permanent impacts** 7.56 329,668 Anticipated Impacts to Sensitive Vegetation Communities (not including bare ground, developed 35.04 1,526,285 lands, disturbed habitat, ornamental, or eucalyptus woodland) **Temporary** Anticipated Impacts to Non-Sensitive Vegetation Communities (bare ground, developed lands, disturbed 40.00 1,741,841 habitat, ornamental, and eucalyptus woodland) **Total Anticipated Temporary Impacts** 75.03

Table 4.4-9: Summary of Anticipated Impacts

Notes:

The Proposed Project would permanently impact approximately 4.38 acres of sensitive vegetation communities, including approximately 1.03 acres of Diegan coastal sage scrub, 1.02 acres of disturbed Diegan coastal sage scrub, 0.29 acre of revegetated coastal sage scrub, 0.09 acre of coastal sage - chaparral scrub, 0.75 acre of chamise chaparral, 0.13 acre of disturbed chamise chaparral, 0.46 acre of southern mixed chaparral, 0.24 acre of scrub oak chaparral, 0.17 acre of native grassland, and 0.23 acre of nonnative grassland (refer to Appendix 4.4-A: Appendix A). No permanent impacts would occur to disturbed southern mixed chaparral, revegetated alkali marsh, freshwater marsh, San Diego mesa vernal pool, open water, southern riparian scrub, mulefat scrub, southern willow scrub, tamarisk scrub, southern coast live oak riparian forest, eucalyptus woodland, or developed land.

The Proposed Project would temporarily impact approximately 35.04 acres of sensitive vegetation communities, including approximately 10.26 acres of Diegan coastal sage scrub, 10.65 acres of disturbed Diegan coastal sage scrub, 2.42 acres of revegetated coastal sage scrub, 0.62 acre of coastal sage - chaparral scrub, 3.31 acres of chamise chaparral, 0.42 acre of disturbed chamise chaparral, 2.31 acres of southern mixed chaparral, less than 0.01 acre (approximately 150 square feet) of disturbed southern mixed chaparral, 1.28 acres of scrub oak chaparral, 0.79 acre of native grassland, 2.46 acres of nonnative grassland, less than 0.01 acre (approximately 132 square feet) of freshwater marsh, 0.26 acre of southern willow scrub, and 0.01 acre of southern coast live oak riparian forest (refer to Appendix 4.4-A: Appendix A). No temporary impacts would occur to revegetated alkali marsh, San Diego mesa vernal pool, open water, southern riparian scrub, mulefat scrub, or tamarisk scrub.

3,268,126

¹Permanent impacts to vegetation communities are discussed as construction impacts to be consistent with the structure and implementation of the SDG&E Subregional NCCP.

²Total reflects actual total without rounding error.

Permanent impacts to sensitive vegetation communities resulting from installation of new facilities will be mitigated at a 2:1 ratio for impacts inside preserve areas and at a 1:1 ratio for impacts outside preserve areas, according to the guidelines in the *SDG&E Subregional NCCP* Section 7.4, Mitigation Credits, Table 7.4. Approximately 4.76 acres (207,739 square feet) of permanent impacts are expected within designated preserve areas. These permanent impacts are discussed in detail in Impacts within Preserves and Impacts within ESHAs, above, and are summarized in Table 4.4-10: Summary of Anticipated SDG&E Mitigation, below.

Table 4.4-10: Summary of Anticipated SDG&E Mitigation

Type of Mitigation	Type of Impact	Location	Mitigation Ratio	Area Impacted (Approx. Acres/Square Feet)	Mitigation Required (Approx. Acres/Square Feet) ¹	
Credit	Permanent	Inside a Preserve	2:1	2.44/106,513	4.88/213,025	
Withdrawal	Permanent	Outside a Preserve	1 1.1 1 94/84 460		1.94/84,460	
Total Anticipated Credit Withdrawal for Permanent Impacts				6.82/297,485		
Active Enhancement	Temporary	Inside a Preserve	1:1	16.28/709,239	16.28/709,239	
Monitoring	Temporary	Inside a Preserve	1:1	1.41/61,507	1.41/61,507	
Total Anticipated Enhancement & Monitoring for Temporary Impacts			17.69/770,745			
Notes: ¹Total reflects actual total without rounding error.						

'Total reflects actual total without rounding error.

Approximately 1.94 acres (84,460 square feet) of permanent impacts to sensitive vegetation communities are expected outside of designated preserve areas, including impacts to approximately 0.23 acre (9,793 square feet) of Diegan coastal sage scrub, 0.94 acre (40,875 square feet) of disturbed Diegan coastal sage scrub, 0.20 acre (8,554 square feet) of revegetated coastal sage scrub, 0.03 acre (1,392 square feet) of chamise chaparral, 0.08 acre (3,423 square feet) of disturbed chamise chaparral, 0.26 acre (11,138 square feet) of southern mixed chaparral, and 0.21 acre (9,285 square feet) of nonnative grassland.

Based on the anticipated permanent impacts discussed above, SDG&E proposes to withdraw credit from the SDG&E mitigation bank for anticipated permanent impacts to approximately 2.44 acres (approximately 106,513 square feet) of sensitive vegetation communities located within preserve areas at a ratio of 2:1 for a total of approximately 4.88 acres (approximately 213,025 square feet), and for anticipated permanent impacts to approximately 1.94 acres (approximately 84,460 square feet) of sensitive vegetation communities located outside of preserve areas at a ratio of 1:1 for a total of approximately 1.94 acres (approximately 84,460 square feet). Thus, the total anticipated credit withdrawal for permanent impacts resulting from the Proposed Project would be approximately 6.82 acres (approximately 297,485 square feet).

Temporary impacts to sensitive vegetation communities resulting from installation of new facilities will be mitigated at a 1:1 ratio for impacts inside preserve areas. Approximately 17.69 acres (770,745 square feet) of temporary impacts to sensitive vegetation are expected within designated preserve areas. These temporary impacts are discussed in detail in Impacts within Preserves and Impacts within ESHAs, above, and are summarized in Table 4.4-10: Summary of Anticipated SDG&E Mitigation, above. Vegetation restoration methods (i.e., active enhancement and monitoring) and success criteria are presented in the SDG&E Subregional NCCP Section 7.2, Habitat Enhancement Measures.

For the Proposed Project, temporary impacts to nonnative grassland within a preserve are not anticipated to require active enhancement. Instead, these areas would be monitored to assure that they return to pre-construction site conditions. For impacts to sensitive vegetation communities other than nonnative grassland, active enhancement measures may be required. To the extent feasible, vegetation trimming and other methods that avoid root disturbance would be used to minimize impacts to these sensitive vegetation communities. Thus, with guidance from the Environmental Surveyor and the lead biological resources monitor, some of the anticipated temporary impacts to sensitive vegetation communities within a preserve (as shown in Table 4.4-10: Summary of Anticipated SDG&E Mitigation, above) may be avoided or minimized so that they may not require active enhancement to recover. If the Environmental Surveyor and/or lead biological resources monitor anticipate that impacts are minimal and the areas would recover to pre-construction conditions without active enhancement measures, these areas would be included in the monitoring program instead.

For individual temporary impact areas entered into the SDG&E Enhancement and Monitoring Program that are greater than approximately 500 square feet, any areas not meeting the established 3-year success criteria will require a deduction of SDG&E mitigation credits at a 1:1 ratio. Individual temporary impact areas that are less than approximately 500 square feet per site are not required to meet the 3-year success criteria based on the guidelines provided in the SDG&E Subregional NCCP Section 7.2, Habitat Enhancement Measures and do not require credit withdrawal per Section 7.4, Mitigation Credits.

Temporary impacts to sensitive vegetation communities resulting from installation of new facilities that are located outside a preserve area would not require mitigation. Based on the information provided in the *SDG&E Subregional NCCP* Section 7.4, Mitigation Credits, Table 7.4:

Temporary impacts are mitigated through basic site remediation, which includes native hydroseed for erosion control. However, if roots are not grubbed during temporary impacts, the hydroseeding may not be necessary. This applies to areas greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E mitigation credits at a 1:1 ratio.

For the temporary impacts outside a preserve area that are associated with the Proposed Project, no root disturbance is anticipated because no grubbing and/or grading are planned within temporary work areas. However, if grubbing and/or grading are required, all impacts will be mitigated per the *SDG&E Subregional NCCP* Section 7.4, Mitigation Credits, Table 7.4. The final impacts will be captured in the project PCR.

As a result of implementation of the above measures, potential impacts from construction would be less than significant.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates extensive existing electric transmission, distribution and substation facilities throughout the Proposed Project site. SDG&E's existing operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated.

Operations and maintenance activities for the Proposed Project would not materially increase in frequency or intensity. Any future potential maintenance-related construction projects will be evaluated under General Order 131-D and CEQA for purposes of assessing whether further CPUC approval is required and will be conducted in compliance with the *SDG&E Subregional NCCP*. As such, no impacts are anticipated.

4.4.4.4 Question 4c - Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Construction – Less than Significant

The Proposed Project has been designed to avoid impacts, to the extent feasible, to wetlands and non-wetland waters that are regulated by USACE, CDFW, RWQCB, and/or CCC pursuant to the applicable federal and state regulations. While permanent impacts to these resources have been avoided through project design, the remaining very small temporary impacts to wetlands and non-wetland waters occur adjacent to temporary work areas and would be avoided with guidance from the Environmental Surveyor and the lead biological resources monitor during

implementation of the Proposed Project. If unavoidable impacts to these jurisdictional resources are identified during future planning efforts for the Proposed Project, SDG&E would obtain the requisite permit(s) from the applicable regulatory agency and fully comply with all conditions outlined in the permit(s).

Through implementation of the *SDG&E Subregional NCCP* and compliance with all conditions of acquired permits, if necessary, impacts to jurisdictional resources are also anticipated to be less than significant.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates extensive existing electric transmission, distribution, and substation facilities throughout the Proposed Project site. SDG&E's existing operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated.

Operations and maintenance activities for the Proposed Project would not materially increase in frequency or intensity. Any future potential maintenance-related construction projects will be evaluated under General Order 131-D and CEQA for purposes of assessing whether further CPUC approval is required and will be conducted in compliance with the *SDG&E Subregional NCCP*. If necessary, SDG&E would obtain any wetlands permits required to conduct maintenance activities that would impact wetlands.

4.4.4.5 Question 4d - 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?

Construction – Less than Significant

The Proposed Project would not result in significant permanent or temporary impacts to local or regional wildlife movement corridors, including migratory bird routes. The Proposed Project would be located within an existing SDG&E ROW where there are existing transmission lines. Pole and tower structure placement for the Proposed Project would occur in the vicinity of existing structures within the ROW, and – because of their small footprint – would result in minimal loss of protective cover (vegetation), roosts, forage habitat, or movement corridors by maintaining wide natural areas that allow the continued movement of wildlife species. The Proposed Project would also avoid or span existing drainages that often serve as wildlife movement corridors. While local wildlife movement may be temporarily disrupted during construction, no lasting effects are expected that would preclude wildlife from returning once construction is completed. Therefore, impacts to wildlife movement corridors are anticipated to be less than significant.

Operation & Maintenance - No Impact

SDG&E currently maintains and operates extensive existing electric transmission, distribution and substation facilities throughout the Proposed Project site. SDG&E's existing operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated.

Placement of pole and tower structures for the new overhead transmission line would occur in the vicinity of existing structures within the ROW. Because the footprint of these structures is small, the existing wide natural areas within the Proposed Project area would be maintained to allow the continued movement of wildlife species. Once construction is completed, no effects are expected that would preclude wildlife from returning. Therefore, impacts to wildlife movement corridors are anticipated to be less than significant.

4.4.4.6 Question 4e - Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction – No Impact

Construction, operation, and maintenance associated with the Proposed Project would not conflict with any local environmental policies or ordinances that protect biological resources. While SDG&E is a public utility regulated by the CPUC and 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), SDG&E would coordinate with other local entities to describe potential impacts associated with the Proposed Project and explain the proposed avoidance, minimization, and mitigation measures that would be used to reduce impacts to less than significant. Because the intent of the SDG&E Subregional NCCP, the SDG&E QCB HCP, and these local policies or ordinances is to protect sensitive biological resources, SDG&E anticipates that there would be no conflict with any local policies or ordinances associated with the Proposed Project.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates extensive existing electric transmission, distribution and substation facilities throughout the Proposed Project site. SDG&E's existing operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated.

Operations and maintenance activities for the Proposed Project would not materially increase in frequency or intensity. Standard operational and maintenance activities, such as road grading, tree trimming, structure installation, and replacement and repairs, would not conflict with any local policies or ordinances protecting biological resources.

4.4.4.7 Question 4f - Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

Construction – No Impact

The Proposed Project traverses through areas within the City of San Diego MSCP, MHPA, and the *INRMP* for MCAS Miramar. The Proposed Project would 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 the *INRMP* for MCAS Miramar. 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 would 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 impacts are expected.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates extensive existing electric transmission, distribution and substation facilities throughout the Proposed Project site. SDG&E's existing operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated.

Operations and maintenance activities for the Proposed Project would not materially increase in frequency or intensity. Any future operations and maintenance activities will be conducted in compliance with the *SDG&E Subregional NCCP*. Standard operational and maintenance activities, such as road grading, tree trimming, structure installation, and replacement and repairs, would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. Therefore there is no impact as a result of operation and maintenance of the Proposed Project.

4.4.5 Project Design Features and Ordinary Construction/Operating Restrictions

4.4.5.1 <u>Implementation of the SDG&E Subregional NCCP</u>

The Proposed Project would avoid and minimize impacts to biological resources through implementation of the *SDG&E Subregional NCCP*. The *SDG&E Subregional NCCP* establishes a mechanism for addressing biological resource impacts incidental to the development, maintenance, and repair of SDG&E facilities within the *SDG&E Subregional NCCP* coverage area. The Proposed Project is located within the *SDG&E Subregional NCCP* coverage area.

The SDG&E Subregional NCCP includes an ESA Section 10(a) permit and a CESA Section 2081 Memorandum of Understanding (for incidental take) with an Implementation Agreement with the USFWS and CDFW, respectively, for the management and conservation of multiple species and their associated habitats, as established according to the Federal and State ESAs and California's NCCP Act.

The SDG&E Subregional NCCP Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the Agreement and the SDG&E Subregional NCCP meet all relevant standards and requirements of the California ESA, the Federal ESA, the NCCP Act, and the Native Plant Protection Act with regard to SDG&E's activities in the SDG&E Subregional NCCP Area. Pursuant to the SDG&E Subregional NCCP, the following activities have been conducted or are planned prior to implementation of the Proposed Project:

• SDG&E conducted pre-construction studies for all activities occurring off of existing access roads in natural areas.

- Prior to implementation of the Proposed Project, an independent biological consulting firm will survey all Proposed Project impact areas and prepare a PSR outlining all anticipated impacts related to the Proposed Project.
- The Proposed Project will include monitoring for all project components, as recommended by the PSR and outlined in the SDG&E Subregional NCCP, as well as other avoidance and minimization measures outlined in the SDG&E Subregional NCCP's Operational Protocols. The PSR will be submitted to the CDFW and USFWS for review and comment.
- Prior to the commencement of construction, a verification survey of the Proposed Project disturbance areas may be required by the *SDG&E Subregional NCCP*. Biological monitors will be present during construction to assure implementation of the avoidance and minimization measures outlined in the PSR.
- If the previously delineated work areas must be expanded or modified during construction, the biological monitors will survey the additional impact area to determine if any sensitive resources will be impacted by the proposed activities, to identify avoidance and minimization measures, and to document any additional impacts.
- Any additional impacts are included in a Post-Construction Report (PCR) for purposes of calculating the appropriate mitigation, which generally includes site enhancement or credit withdrawal from the SDG&E mitigation bank. When construction is complete, the biological monitor will conduct a survey of the entire line to determine actual impacts from construction. The PCR will determine how much site enhancement and credit withdrawal from the SDG&E mitigation bank will be required to address impacts from project related activities. These impact and mitigation credit calculations are submitted to the USFWS and the CDFW as part of the NCCP Annual Report pursuant to requirements of the NCCP and the NCCP Implementing Agreement.
- Specific operating restrictions that are incorporated into the Proposed Project design to comply with the *SDG&E Subregional NCCP* include the following:
 - Vehicles would be kept on access roads and limited to 15 miles per hour (Section 7.1.1, 1).
 - o No wildlife, including rattlesnakes, may be harmed, except to protect life and limb (Section 7.1.1, 2).
 - o Feeding of wildlife is not allowed (Section 7.1.1, 4).
 - o No pets are allowed within the ROW (Section 7.1.1, 5).
 - o Plant or wildlife species may not be collected for pets or any other reason (Section 7.1.1, 7).
 - o Littering is not allowed, and no food or waste would be left on the ROW or adjacent properties (Section 7.1.1, 8).
 - o Measures to prevent or minimize wild fires would be implemented, including exercising care when driving and not parking vehicles where catalytic converters can ignite dry vegetation (Section 7.1.1, 9).

- o Field crews shall refer all environmental issues, including wildlife relocation, dead or sick wildlife, or questions regarding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may be necessary to assist with wildlife relocations (Section 7.1.1, 10).
- o All SDG&E personnel would participate in an environmental training program conducted by SDG&E, with annual updates (Section 7.1.2, 11).
- The Environmental Surveyor shall conduct preactivity studies for all activities occurring in natural areas, and will complete a preactivity study form including recommendations for review by a biologist and construction monitoring, if appropriate. The form will be provided to CDFW and USFWS but does not require their approval (Section 7.1.3, 13).
- o The Environmental Surveyor shall flag boundaries of habitats to be avoided and, if necessary, the construction work boundaries (Section 7.1.3, 14).
- o The Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable (Section 7.1.4, 25).
- o In the event SDG&E identifies a covered species (listed as threatened or endangered by the federal or state) within the temporary work area (10-foot radius) surrounding a power pole, SDG&E would notify the USFWS (for ESA-listed plants) and CDFW (for CESA-listed plants) (Section 7.1.4, 28).
- o The Environmental Surveyor shall conduct monitoring as recommended in the preactivity study form (Section 7.1.4, 35.).
- O Supplies, equipment, or construction excavations where wildlife could hide (e.g., pipes, culverts, pole holes, trenches) shall be inspected prior to moving or working on/in them (Section 7.1.4, 37 and 38). Fugitive dust will be controlled by regular watering and speed limits (Section 7.1.4, 39).
- O During the nesting season, the presence or absence of nesting species (including raptors) shall be determined by a biologist who would recommend appropriate avoidance and minimization measures (Section 7.1.6, 50).
- Maintenance or construction vehicle access through shallow creeks or streams is allowed. However, no filling for access purposes in waterways is allowed (Section 7.1.7, 52).
- o Staging/storage areas for equipment and materials shall be located outside of riparian areas (Section 7.1.7, 53).

4.4.5.2 Implementation of SDG&E QCB HCP

The Proposed Project will avoid, minimize, or mitigate impacts to the Quino checkerspot butterfly and its habitat through implementation of the *SDG&E QCB HCP*. The *SDG&E QCB HCP* provides a mechanism for addressing Quino checkerspot butterfly impacts incidental to ongoing operations and maintenance activities as well as construction of new facilities within the *SDG&E QCB HCP* coverage area, including specified areas within San Diego, Riverside, and

Orange counties. The Proposed Project is located within the SDG&E QCB HCP coverage area.

The *SDG&E QCB HCP* was developed in consultation with the USFWS pursuant to Section 10(a)(1)(A) of the ESA. The *SDG&E QCB HCP* serves as the ESA Section 10(a) permit by supplementing the *SDG&E Subregional NCCP* with additional general and Quino checkerspot butterfly-specific operational protocols to aid in the management and conservation of the Quino checkerspot butterfly.

Potential Quino checkerspot butterfly habitat that occurs within the SDG&E QCB HCP coverage area was identified and is referred to in the SDG&E QCB HCP as "Quino Mapped Area". The Proposed Project is located completely outside of the "Quino Mapped Area"; therefore, SDG&E does not anticipate that additional measures will be required to comply with the SDG&E QCB HCP. However, all future Proposed Project planning efforts and alignment alterations will be analyzed to verify that the Proposed Project remains outside of the "Quino Mapped Area". If any portion of the Proposed Project is determined to be within the "Quino Mapped Area", then all protocols as well as avoidance, minimization, and mitigation measures specified in the SDG&E QCB HCP will be followed.

With implementation of the project design features and ordinary construction/operating restrictions (as outlined within Section 3.8) including the *SDG&E Subregional NCCP* and *SDG&E QCB HCP* described above, potential impacts relating to biological resources will remain less than significant.

4.4.6 Applicant Proposed Measures

Implementation of the following proposed APM will assure that impacts resulting from the Proposed Project remain less than significant.

4.4.6.1 APM BIO-1: Special-Status Plant Species

Implementation of the following measures will ensure impacts to special-status plant species remain less than significant:

- Prior to construction, SDG&E shall retain a qualified biologist to conduct focused, special-status plant surveys during the spring and summer 2014 in all habitats that may support the special-status plant species with a potential to occur in the Proposed Project Survey Area.
- Locations of special-status plants shall be identified and inventoried.
- The qualified biologist shall supervise construction activities within the vicinity of areas identified as having special-status plant species.
- Impacts to special-status plant species shall be avoided to the maximum extent possible by installing fencing or flagging, marking areas to be avoided in construction areas, and limiting work in areas identified as having special-status plant species to periods of time when the plants have set seed and are no longer growing.

• Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated though off-site land preservation, plant salvage, transplantation, or other appropriate methods as determined by the qualified biologist. Alternatively, if the special-status plant species in question is a SDG&E Subregional NCCP covered species, mitigation consistent with measures established in the NCCP and discussed in APM BIO-1, above, shall be provided.

4.4.7 Detailed Discussion of Significant Impacts

No significant impacts are expected to occur from implementation of the Proposed Project. Potential impacts to biological resources would be less than significant through the avoidance of resources, application of protective measures and mitigation in the *SDG&E Subregional NCCP*, and habitat enhancement, which have been incorporated as part of the Proposed Project description.

4.4.8 References¹

- Atwood, Jonathan L. and David R. Bontrager. 2001. *California Gnatcatcher (Polioptila californica)*, The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online, Online:: http://bna.birds.cornell.edu/bna/species/574.
- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. *The Jepson manual: vascular plants of California*, second edition. University of California Press, Berkeley.
- Beason, Robert C. 1995. *Horned Lark (Eremophila alpestris)*, The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online, Online: http://bna.birds.cornell.edu/bna/species/195.
- Bleich, V. C., and S. A. Holl. 1982. *Management of Chaparral Habitat for Mule Deer and Mountain Sheep in Southern California*. In Proceedings of the Symposium on Dynamics and Management of Mediterranean-type Ecosystems, technical coordinators C. E. Conrad and W. C. Oechel, pp. 247-254. June 22-26, 1981, San Diego, CA. General Technical Report PSW-58. Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture, Berkeley.
- Bock, C. E. and B. Webb. 1984. *Birds as grazing indicator species in southeastern Arizona. J. Wildl. Manage.* 48: 1045–1049.
- California Department of Fish and Wildlife (CDFW). 1991. *California Fish and Game Code*, Online: www.dfg.ca.gov. Site visited on October and November 2013.

San Diego Gas & Electric Company Sycamore to Peñasquitos 230 kV Transmission Line Project

¹ Key references used to prepare Section 4.4 of the PEA are included below. Please refer to Appendix 4.4-A for a complete list of biological resources references.

- California Department of Fish and Wildlife (CDFW). 2011a. *CDFW Biogeographic Data Branch*, California Natural Diversity Database. Special Vascular Plants, Bryophytes, and Lichens List, Online: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPPlants.pdf. Site visited on October 2012.
- California Department of Fish and Wildlife (CDFW). 2011b. *CDFW Biogeographic Data Branch*, California Natural Diversity Database. Special Animals List, Online: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/spanimals.pdf. January 2011.
- California Department of Fish and Wildlife (CDFW). 2013a. *Natural Diversity Data Base*. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento.
- California Department of Fish and Wildlife (CDFW). 2013b. California Wildlife Habitat Relationships: CWHR Life History Accounts and Range Maps, Online: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx. Site visited on October and November 2012.
- California Department of Fish and Wildlife (CDFW). 2013c. *CDFW Lake and Streambed Alteration Program*, Online: http://www.dfg.ca.gov/habcon/1600/. Site visited on November 2013.
- California Herps. 2013. *A guide to the Amphibians and Reptiles of California*, Online: http://www.californiaherps.com/. Site visited in October 2013.
- California Native Plant Society Electronic Inventory (CNPSEI). 2013. *Information on special-status plant species from Inventory of Rare and Endangered Vascular Plants of California*, Online: http://www.rareplants.cnps.org/. Site visited on October 2013.
- Collins, Paul W. 1999. *Rufous-crowned Sparrow (Aimophila ruficeps)*, The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online. Online: http://bna.birds.cornell.edu/bna/species/472.
- Curtis, Odette E., R. N. Rosenfield and J. Bielefeldt. 2006. *Cooper's Hawk (Accipiter cooperii)*, The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online, Online: http://bna.birds.cornell.edu/bna/species/075.
- Garrett, K. and J. Dunn. 1981. *Birds of southern California: status and distribution*. Los Angeles Audubon Soc., Los Angeles.
- Grinnell, J. and A. H. Miller. 1944. *The Distribution of the Birds of California*. Pacific Coast Avifauna No. 27, 608 pp.

- Guinan, Judith A., Patricia A. Gowaty and Elsie K. Eltzroth. 2008. *Western Bluebird* (*Sialiamexicana*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online, Online: http://bna.birds.cornell.edu/bna/species/510.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, Department of Fish and Game, Natural Heritage Division, Sacramento, California.
- Jennings, M.R. and M.P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. Report prepared for California Department of Fish and Game, Rancho Cordova, California. 255 pp.
- Mock, P. 2004. *California Gnatcatcher (Polioptila californica)*. In The Coastal Scrub and Chaparral Bird Conservation Plan: a strategy for protecting and managing coastal scrub and chaparral habitats and associated birds in California. California Partners in Flight, Online: http://www.prbo.org/calpif/htmldocs/scrub.html.
- Patten, M. A., McCaskie, G., Unitt, P. 2003. *Birds of the Salton Sea*. Univ. of California Press, Los Angeles.
- Rebman, J.P. and M.G. Simpson. 2006. *Checklist of the Vascular Plants of San Diego County*, 4th Edition. San Diego. Natural History Museum, San Diego, California.
- Remsen, J. V., Jr. 1978. Bird species of special concern in California: an annotated list of declining or vulnerable bird species. Calif. Dept. Fish and Game, Nongame Wildlife Investigation, Wildlife Management Branch, Administration Rep.No. 78-1.
- Shuford, W. D., and T. Gardali. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Small, A. 1994. California birds: their status and distribution. Ibis Publ. Co., Vista, CA.
- Stebbins, R.C. 1985. A Field Guide to Western Reptiles and Amphibians. Second Edition. Houghton Mifflin Company, Boston, Massachusetts.
- Stebbins, R.C. 2003. Western Reptiles and Amphibians. Third Edition. Houghton Mifflin Company. New York, NY.
- Thorngate, N. and M. Parsons. 2005. *Rufous-crowned Sparrow (Aimophila ruficeps)*. In The Coastal Scrub and Chaparral Bird Conservation Plan: a strategy for protecting and managing coastal scrub and chaparral habitats and associated birds in California. California Partners in Flight, Online: http://www.prbo.org/calpif/htmldocs/scrub.html.

- Unitt, P.A. 2004. *San Diego County Bird Atlas*. San Diego Natural History Museum. San Diego, CA.
- Yosef, Reuven. 1996. *Loggerhead Shrike (Lanius ludovicianus)*, The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online, Online: http://bna.birds.cornell.edu/bna/species/231.