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5.4 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?	☐	☑	☐	☐
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☑	☐	☐
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

5.4.1 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. For construction of the Proposed Project, SDG&E will consult with the United States (U.S.) Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) for compliance with the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA).

The Proposed Project would incorporate APMs as well as standard operating procedures during construction, which include specific operational protocols identified in SDG&E's Subregional NCCP (as outlined in Section 3.8). The SDG&E Subregional NCCP is a Habitat Conservation Plan (HCP) permitted under Section 10A of the Federal ESA for incidental take and a Natural Community Conservation Planning (NCCP) permit 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 ESAs and the state's NCCP Act. Through the implementation of APMs, avoidance of resources as part of project design, and implementation of the operational protocols in the SDG&E Subregional NCCP, the Proposed Project's impacts to biological resources would be less than significant. As further discussed within Section 5.4.4, Potential Impacts, SDG&E has analyzed impacts under 2 scenarios; 1) SDG&E utilizes its NCCP for take coverage under the federal and state ESAs; and 2) SDG&E does not utilize the NCCP for take coverage. As stated throughout the analysis in this section, SDG&E would implement the operating protocols outlined within the NCCP regardless of whether or not the NCCP is used for take coverage because the operational protocols include avoidance and minimization measures that would help ensure impacts to biological resources would be less than significant. In the absence of the NCCP's take coverage, SDG&E has included APMs (BIO-1 through BIO-8) to ensure that impacts would be less than significant. SDG&E has retained the potential use of the NCCP for take coverage within the PEA because SDG&E cannot rule-out the availability of the NCCP (or subsequent amendment thereof) prior to the construction of the Proposed Project.

The analysis in this section is based on the Biological Technical Report (BTR) prepared by Chambers Group, Inc. (Chambers). Chambers identified biological resources that could be affected by the Proposed Project and conducted general and focused biological resource assessments for the preparation of the BTR, which is included as Appendix 5.4–A: Biological Technical Report.

5.4.2 Methodology

5.4.2.1 Definitions

Special-Status Species

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

Federal

- Plant and animal species listed as endangered (FE), threatened (FT), or candidates (FC) for listing under the FESA

State

- Plant and animal species listed as endangered, threatened, or candidates for listing under the CESA
- Animals designated as Fully Protected Species (FP), as defined in California Fish and Game Code Sections 3511, 4700, 5050, and 5515

- Plants that are state-listed as Rare[1]
- Animal species designated as Species of Special Concern (SSC) by the CDFW
- Plant species ranked by the California Native Plant Society (CNPS) as having a California Rare Plant Rank (CRPR) of 1 or 2.[2]

Species that fall under the following categories are not considered special status, but are also discussed: Former Federal Species of Concern (FCC), Birds of Conservation Concern (BCC), and California Watch List (WL) species.

Sensitive Natural Communities

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

- Vegetation communities listed in the California Natural Diversity Database (CNDDB);
- Communities listed in the Natural Communities List with a rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable); or
- Tier I or Tier II vegetation communities, as defined by the City of San Diego Biology Guidelines (City of San Diego 2001).

5.4.2.2 Literature Review

Prior to conducting the field surveys, existing literature relevant to the survey area was reviewed. This review included existing reports from biological studies conducted in the vicinity of the Survey Area (defined in Section 5.4.2.3 below), as well as the most recent records of the CDFW California Natural Diversity Database (CNDDB; CDFW 2015), the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS; CDFW 2015), the USFWS Species Occurrence Database (USFWS 2015a), and the USFWS Critical Habitat Inventory within a 5-mile radius surrounding the Proposed Project area. The CNDDB, CNPS, and USFWS databases contain records of reported occurrences of federal or state listed species, proposed endangered or threatened species, Federal Birds of Conservation Concern, California SSC, or otherwise special status species or habitats that may occur within or in the vicinity of the Survey Area. This literature review was used to provide details on species that have a potential to occur within the Survey Area prior to conducting focused survey efforts. Specific criteria for evaluating special status plant and wildlife species are described below. Figure 3 displays the locations of documented historical occurrences of sensitive species relative to the Survey Area. Figure 4 provides the location of critical habitat relative to the Survey Area.

[1] Many plants that were previously state listed as "Rare" have been re-designated as state threatened. "Rare" also indicates uncommon species that show marked population declines.

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

Additional investigations into potential biological resources in the Survey Area included reviews of relevant scientific literature, recovery plans, and regulatory documents. These additional data-gathering efforts are incorporated into the results and analysis in the sections that follow.

5.4.2.3 Field Surveys

The areas surveyed (hereafter referred to as the Survey Area) consist of an approximately 150-foot buffer around the power line centerline, except as noted otherwise in the following subsections. For Proposed Project features that are more than 150 feet from the centerline, the Survey Area includes an approximately 50-foot buffer around Proposed Project facilities (e.g., substations, staging yards, and stringing sites), and an approximately 20-foot buffer on either side of Proposed Project access roads to include potential additional work space that may be required during normal construction activities. The Survey Area is depicted on Appendix A: Vegetation Communities Map within Appendix 5.4-A: Biological Technical Report.

Evaluation of Potential for Occurrence

Following the literature and database review, Chambers biologists conducted a preliminary reconnaissance-level survey of the Survey Area. Subsequent focused surveys were also conducted, as described in the sections that follow. Using information from the literature review and survey results, specific criteria were developed to evaluate special status plant and wildlife species' potential for occurrence (PFO), and the criteria were applied to evaluate target plant and wildlife species. The specific criteria are described as follows:

- **Absent:** Species is restricted to habitats or environmental conditions that do not occur within the Survey Area, or a species was not observed within Survey Area during focused surveys.[3]

- **Low:** Historical records for this species do not exist within the immediate vicinity (approximately five miles) of the Survey Area, and/or habitats or environmental conditions needed to support the species are of poor quality.

- **Moderate:** Either a historical record exists of the species within the immediate vicinity (approximately five miles) of the Proposed Project and marginal habitat exists in the Survey Area; or the habitat requirements or environmental conditions associated with the species occur within the Survey Area, but no historical records exist within the immediate vicinity (approximately five miles) of the Proposed Project.

- **High:** Both a historical record of the species exists within the Survey Area or in the immediate vicinity (approximately five miles), and the habitat requirements and environmental conditions associated with the species occur within the Survey Area

- **Present:** Species was detected within the Survey Area at the time of the survey.

3 Perennial plant species that were not observed were considered absent from the Survey Area, while herbaceous or perennial bulb species that were not observed but cannot be confirmed absent from the Survey Area due to 2014 and 2015 drought conditions are "presumed absent."

Vegetation Mapping

Plant communities within the Survey Area were identified, qualitatively described, and mapped onto aerial photographs. The mapped plant communities were digitized in geographic information system (GIS), and acreages were calculated based on the vegetation types within the Survey Area. Plant communities correspond to those described by Sawyer, Keeler-Wolf and Evens (2009). All plant species observed within the Survey Area were noted during this survey, as well as the special status plant surveys.

Special-Status Plant Surveys

Due to the presence of suitable environmental conditions for multiple special status plant species to occur within the Survey Area, a series of focused plant surveys for specific target species was completed according to the guidelines set forth by the CNPS (2001), the CDFW (2009), and the USFWS (1996). Twenty-two special status plant species were analyzed for potential to occur within the Survey Area, and were targeted during special status plant surveys. Two focused plant surveys were previously conducted in 2014 by RECON and Pangea Biological; their observations are included in the results below as supporting data. One survey was conducted by Chambers Group in summer 2015 and within the current alignment and proposed staging yards, to capture the blooming periods for the majority of the 22 targeted species with a low, moderate, or high PFO. Plant species not surveyed for during their blooming period were perennial species that could be identified without flowers and/or fruits present. Subsequent to refined project design, additional project-related work areas were identified that also contain suitable environmental conditions for special status plant species. These additional areas were identified following the initiation of focused surveys. Within these additional proposed work spaces, an additional 11 targeted plant species (Project total of 33) were identified with a PFO. Chambers Group conducted an additional focused plant survey conducted in the spring of 2016 to capture the blooming period of species not in bloom during the 2015 summer survey.

The special status plant species considered included federally threatened or endangered, state threatened or endangered, and plant species with a CRPR of 1 or 2. In addition, any plant species with a CRPR of 3 or 4 that were found to occur within the Survey Area were documented.

The focused surveys were performed by teams of botanists walking transects within the Survey Area spaced approximately 30 feet (nine meters) apart and visually surveying for any signs of special status plant species. Special status plant species observed during the survey were documented by counting individuals or estimating numbers for larger populations, characterizing the approximate population size, and recording a Global Positioning System (GPS) location.

Precipitation in 2014 was well below the average for San Diego County, and temperatures were above average. Considering these drought conditions, it is possible that some of the herbaceous or perennial bulb species targeted during the focused plant surveys may not have germinated or flowered during 2014. As a result, these species cannot be confirmed absent from the Survey Area, and instead are described as "presumed absent." Precipitation in 2015 was low in the spring/summer, contributing to dry conditions for the focused surveys in summer of 2015. However, the winter of 2015/2016 resulted in a normal amount of total precipitation for 2015 and the start to a normal amount for 2016.

Focused Wildlife Surveys

Quino Checkerspot Butterfly

Twelve focused Quino checkerspot butterfly (*Euphydryas editha quino*; QCB) surveys were conducted within suitable habitat by Chambers Group in 2016. The current Proposed Project contains suitable QCB habitat at the eastern end of the Survey Area, within the SDG&E HCP Mapped Areas. Chambers Group conducted a habitat assessment and focused surveys for QCB in accordance with the SDG&E's Low-Effect QCB HCP and the current USFWS Guidelines, titled USFWS *Quino Checkerspot Butterfly Survey Guidelines* (USFWS Guidelines) and dated December 15, 2014. Chambers Group mapped general site conditions, any host plant patches observed, and mapped suitable QCB habitat within portions of the Survey Area that occur within SDG&E's Low-Effect QCB HCP. Focused QCB surveys were conducted weekly and spaced at least 4 days apart. Surveys were conducted for 12 continuous weeks. According to USFWS Guidelines, if no QCB are detected during the first 5 weeks of surveys, surveys shall continue until QCB are detected or until the end of the season, defined as the second Saturday in May. If QCB are detected during the first 5 weeks, surveys shall cease for that area.

A report of results of the 2016 focused QCB surveys, including detailed methodology, survey dates, weather conditions, and surveyors is in progress.

Coastal California Gnatcatcher

Six focused coastal California gnatcatcher (*Polioptila californica californica*; CAGN) surveys were conducted pursuant to USFWS presence or absence guidelines (USFWS 1997) to determine the presence or absence of CAGN within suitable habitat in 2015. All CAGN focused surveys were conducted by a biologist who holds a FESA section 10(a)(1)(A) survey permit. Subsequent to refined project design, additional project-related work areas were identified that also contain suitable CAGN habitat. These additional areas were identified following the initiation of focused surveys in 2015. Subsequently, Chambers Group conducted a full of six protocol-level focused CAGN surveys in all suitable habitat within the Proposed Project Survey Area that was not previously surveyed in order to determine presence or absence of CAGN and whether CAGN is utilizing the Survey Area for nesting.

Detailed methodology, including survey dates, weather conditions, and surveyors for the surveys conducted in 2015 is included in the report by Chambers Group titled *2015 Artesian Expansion Project California Gnatcatcher Survey Report* and dated July 2015 (Appendix M within Appendix 5.4-A: Biological Technical Report). A report of results for the 2016 focused CAGN surveys is in progress.

Least Bell's Vireo

Surveys were conducted between April 10 and July 31, 2015 for least Bell's vireo (*Vireo bellii pusillus*; LBVI). Specifically, five focused LBVI surveys were conducted between April 10 and July 31, 2015, in accordance with USFWS approved guidelines (USFWS 2001) to determine the presence/absence of LBVI within suitable habitat. Surveys were spaced at least 10 days apart. Subsequent to refined project design, additional project-related work areas were identified that also contain suitable habitat for LBVI. These additional areas were identified following the initiation of focused surveys in 2015. Therefore, a full round of eight protocol-level focused

LBVI surveys under the 2001 USFWS protocol are in progress in all suitable habitat not previously surveyed in order to determine presence or absence for nesting.

Detailed methodology, including survey dates, weather conditions, and surveyors for the surveys conducted in 2015 is included in the letter report by Chambers Group titled *Request to Conclude Focused Surveys for Least Bell's Vireo Following Completion of Five Survey Passes for the San Diego Gas & Electric Artesian Substation Expansion Project* and dated June 2015 (Appendix L within Appendix 5.4-A: Biological Technical Report). A report of results of the 2016 focused LBVI surveys will be prepared following the conclusion of the final survey in July 2016.

Burrowing Owl

Western burrowing owl (*Athene cunicularia hypugaea*; BUOW) burrow and focused BUOW surveys were conducted in accordance with the California BUOW Consortium's BUOW Survey Protocol and Mitigation Guidelines (CBOC 1997) and the California Department of Fish and Game Staff Report on BUOW Mitigation, Appendix D - Breeding and Non-breeding Season Surveys and Reports (CDFG 2012). Pangea Biological conducted focused wintering BUOW surveys within suitable habitat in Winter 2014/2015. However, subsequent project design has identified a required work area that was not covered by the 2014/2015 winter surveys. Therefore, Chambers Group conducted both wintering BUOW surveys and breeding season BUOW surveys at the Carmel Valley Road Staging Yard in 2015/2016. Detailed methodology including survey dates, weather conditions, and surveyors for the 2014/2015 wintering BUOW surveys are included in the letter report by Pangea Biological titled *2015 Western Burrowing Owl (Athene cunicularia hypugaea) Survey Report for San Diego Gas & Electric Company's (SDG&E) ETS 27584 Artesian Sub Expansion and Reconductor Project – 4S Ranch* and dated March 31, 2015 (Appendix K within Appendix 5.4-A: Biological Technical Report). A report of results for the wintering 2015/2016 and breeding season 2016 BUOW surveys is in progress.

General Wildlife and Other Special-Status Species

During focused survey efforts, all wildlife observed and wildlife signs detected (e.g., tracks, scat, carcasses, burrows, excavations, and vocalizations) were recorded (Appendix I within Appendix 5.4-A: Biological Technical Report). Additional survey time was spent in those habitats most likely to be utilized by wildlife (e.g., undisturbed native habitat or wildlife trails) and in habitats with the potential to support special status species. Notes were made on the general habitat types, species observed, and the conditions of the site.

Wetlands and Waters of the United States Assessment

An aquatic constraints mapping effort was performed by RECON Environmental, Inc. (RECON) in 2014 to gather field data at potential wetland and non-wetland water resource areas under state or federal jurisdiction. Chambers and SDG&E conducted surveys to field verify and refine (as needed) the aquatic constraints map on September 9, 2015. An additional survey to determine if work area spaces could be located in areas outside of aquatic resources was conducted on Oct 7, 2015 and an Aquatic Resource Summary Report was prepared in November 2015 (Appendix C within Appendix 5.4-A: Biological Technical Report).

5.4.3 Existing Conditions

The following subsections provide the regulatory context applicable to the Proposed Project, and summarize the results of the vegetation community mapping, special status species surveys, and delineation of jurisdictional wetlands and waters.

5.4.3.1 Regulatory Setting

The following federal, state, and local regulations and policies pertain to biological resources and are relevant to the Proposed Project.

Federal

Federal Endangered Species Act of 1973

The FESA protects plants and wildlife that are listed as endangered or threatened by the USFWS and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries). The FESA prohibits take of endangered wildlife, where "take" is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (16 U.S. Code [U.S.C.] §§ 1532(19), 1538). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (FESA Section 9(a)(2) implemented by CFR 50 17.72).

When a private project that has no federal funding and for which no federal action is required may affect a listed species, the private applicant may receive authorization for incidental take of species listed under the FESA. In these situations, Section 10 of the FESA provides for issuance of incidental take permits (ITPs) to private entities with the development of an HCP, such as SDG&E's NCCP and Low-Effect HCP for QCB. An ITP allows take of the species that is incidental to another authorized activity.

Final Rule for Revised Designation of Critical Habitat for the Coastal California Gnatcatcher

The USFWS designates critical habitat for endangered and threatened species under the FESA (16 USC § 1533 (a)(3)). Critical habitat is designated for the survival and recovery of federally listed endangered and/or threatened species. Critical habitat includes areas used for foraging, breeding, roosting, shelter, and movement or migration. In the USFWS 2003 Proposed Rule to Revise Designation of Critical Habitat for the Coastal California Gnatcatcher, the USWFS considered but did not propose as critical habitat, pursuant to sections 3(5)(A) and 4(b)(2) of the Act, reserve lands covered by three completed and approved regional/subregional HCPs (68 FR 20228). These lands include SDG&E right-of-way (ROW) within SDG&E's NCCP. Although these areas were not included in the proposed critical habitat, the USFWS sought public review and comment on these lands, provided maps to facilitate the public's ability to comment, and alerted the public that the lands could potentially be included in the final designation. Lands considered but not proposed for designation were also analyzed for potential economic impacts in the Draft Economic Analysis.

In 2007, USFWS issued the Revised Final Rule, reaffirming exclusion of lands within approved regional and subregional HCPs under section 4(b)(2) of the FESA. The USFWS determined that

lands owned by SDG&E and covered under SDG&E's NCCP provided greater benefits to coastal California gnatcatcher than other areas designated as critical habitat. As such, the USFWS designation of critical habitat for the coastal California gnatcatcher specifically excludes SDG&E ROW and fee-owned land, including the Survey Area, within SDG&E's NCCP area.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 USC 703-711), provides legal protection for almost all bird species occurring in, migrating through, or spending a portion of their life cycle in North America by restricting the killing, taking, collecting, and selling or purchasing of native bird species or their parts, nests, or eggs. USFWS determined it was illegal under the MBTA to directly kill, or destroy an active nest (nest with eggs or nestlings), of nearly any bird species (with the exception of non-native species through the MBTA Reform Act of 2004). Certain game bird species are allowed to be hunted for specific periods determined by federal and state governments. The intent of the MBTA is to eliminate any commercial market for migratory birds, feathers, or bird parts, especially for eagles and other birds of prey. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities:

- Falconry
- Raptor propagation
- Scientific collecting
- Special purposes, such as rehabilitation, education, migratory game bird propagation, and salvage
- Take of depredating birds, taxidermy, and waterfowl sale and disposal

The regulations governing migratory bird permits can be found in Title 50, Part 13 (General Permit Procedures) and Part 21 (Migratory Bird Permits) of the Code of Federal Regulations (CFR).

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) was established in 1940 to protect bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) from any actions that may take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import—at any time or any manner—any bald or golden eagle, alive or dead, or any part, nest, or egg thereof. Under the BGEPA, take of an eagle is defined as to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb." The BGEPA also extends to potential impacts to bald and golden eagles caused by human-induced environmental changes near a previously used nest when the eagles are not present.

Clean Water Act of 1977

The purpose of the Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of fill material into waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). The definition of waters of the U.S. includes rivers, streams, estuaries, the territorial

seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR § 328.3(b)). The goals and standards of the CWA are enforced through permit provisions. The U.S. Environmental Protection Agency (USEPA) also has authority over wetlands and may override a USACE permit.

When a project may create impacts for wetlands, the project requires a permit or a waiver. Substantial impacts to wetlands may require an Individual Permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required from the Regional Water Quality Control Board (RWQCB) for Section 404 permit actions.

Clean Water Rule

The Clean Water Rule: Definition of Waters of the United States—published in the Federal Register on June 29, 2015 and effective August 28, 2015—was enacted to ensure that waters protected under the CWA are more precisely defined and predictably determined[4].

State

California Endangered Species Act

The CESA (California Fish and Game Code Sections 2050-2115.5) parallels the FESA. As a responsible agency, CDFW has regulatory authority over species that are state listed as endangered and threatened. The State Legislature encourages cooperative and simultaneous findings between state and federal agencies. Consultation with CDFW is required for projects with the potential to affect listed or candidate species. CDFW would determine whether a reasonable alternative would be required for the conservation of the species. CESA prohibits the "take" of these species unless an ITP is granted. Under California Fish and Game Code Section 2081 (ITP), CDFW can authorize the "take" of a listed species (with the exception of fully protected species) if the "take" of the listed species is incidental to carrying out an otherwise lawful project that has been approved under the California Environmental Quality Act (CEQA). Section 2080.1 allows for "take" once an applicant obtains a federal ITP which can be approved (Consistency Determination letter) within 30 days by the CDFW Director. If the federal Incidental Take Statement is determined not to be consistent with CESA, then application for a State ITP (2081) is required.

The California Fish and Game Code outlines protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are "fully protected" (FP) may not be taken or possessed at any time. CDFW has designated certain species native to California as Species of Special Concern to "focus attention on wildlife at conservation risk by the Department, other State, Local and Federal governmental entities, regulators, land managers, planners, consulting biologists, and others; stimulate research on poorly known species; achieve conservation and recovery of wildlife before they meet CESA criteria for listing as threatened or endangered."

[4] The Sixth Circuit Court of Appeals stayed implementation of this Rule on October 9, 2015. Because the Proposed Project will not affect any potentially jurisdictional features, the conclusions of this PEA are not affected by the nationwide stay of the Rule implementation.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was created with the intent to "preserve, protect, and enhance rare and endangered plants in this State." The NPPA is administered by the CDFW. The California Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to protect them from take. Rare plants protected by CDFW generally include species with California Rare Plant Rank (CRPR) 1A, 1B, 2A, and 2B of the CNPS Inventory of Rare and Endangered Vascular Plants of California. In addition, sometimes CRPR 3 and 4 plants are considered rare if the population has local significance in the area and is impacted by a project. Section 1913(b) includes a specific provision to allow for the incidental removal of endangered or rare plant species, if not otherwise salvaged by CDFW, within a ROW to allow a public utility to fulfill its obligation to provide service to the public.

When the CESA was passed in 1984, it expanded on the original NPPA, enhanced legal protection for plants, and created the categories of "threatened" and "endangered" species to parallel the FESA. The CESA converted all rare animals to threatened species under the NPPA, but did not do so for rare plants, which resulted in three listing categories for plants in California: rare, threatened, and endangered. The NPPA remains part of the California Fish and Game Code, and mitigation measures for impacts to rare plants are specified in a formal agreement between the CDFW and a project proponent.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) (Public Resources Code, Sections 21000-21177), enacted in 1970, requires that state and local agencies consider environmental consequences and project alternatives before a decision is made to implement a project requiring state or local government approval, financing, or participation by the State of California. In addition, CEQA requires the identification of ways to avoid or reduce environmental degradation or prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.

Federally or state-listed species and special status plants and animals receive consideration under CEQA. Special status species include wildlife SSCs, which are listed by the CDFW. Pursuant to the CEQA Guidelines Section 15380, some SSCs could be considered "rare." CEQA requires a lead agency to consider such species during environmental review. CEQA Guidelines Section 15065.

California Fish and Game Code Sections 1600-1606

Pursuant to Division 2, Chapter 6, Sections 1600-1606 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake which supports fish or wildlife. CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs."

CDFW limits of jurisdiction include the maximum extent of the uppermost bank-to-bank distance or riparian vegetation dripline.

A Notification of Lake or Streambed Alteration Agreement Application must be submitted to the CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal that includes measures to protect affected riparian vegetation, fish, and wildlife resources. The final proposal that is mutually agreed upon by the CDFW and applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3513, and 3800

Sections 3503, 3513, and 3800 of the California Fish and Game Code protects against the destruction of native bird species' nests or eggs, and it states that no birds in the orders of *Falconiformes* or *Strigiformes* (i.e., birds of prey) can be taken, possessed, or destroyed.

California Fish and Game Code Sections 3511 and 4700

According to Sections 3511 and 4700 of the California Fish and Game Code—which regulate birds and mammals, respectively—a "Fully Protected" species may not be taken or possessed, and incidental take of these species is not authorized. The State of California first began to designate species as "fully protected" prior to the creation of the CESA and the FESA. Lists of fully protected species were initially developed to provide protection to animals that were rare or faced possible extinction, including fish, amphibians, reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the CESA and/or the FESA. Nonetheless, fully protected species may not be taken or possessed at any time, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock (California Fish and Game Code § 3511).

Local Regulations

Because the California Public Utilities Commission (CPUC) has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, the Proposed Project is not subject to local discretionary land use regulations. The following discussion of local regulations relating to biological resources is provided for informational purposes. As outlined in the following subsections, the construction and operation of the Proposed Project will not conflict with any environmental plans, policies, or regulations adopted by agencies with jurisdiction over local regulations related to biological resources.

County of San Diego General Plan

The *County of San Diego General Plan* (County of San Diego 2011) provides direction for future growth in the unincorporated areas of San Diego County and provides policies related to land use, mobility, conservation, housing, safety, and noise. The *County of San Diego General Plan Land Use Element* provides a framework for managing future development so that it is thoughtful of the existing character of the current communities and the sensitive natural resources within the county.

The *County of San Diego General Plan* contains the following relevant policies:

- **Conservation and Open Space (COS) Policy COS-1.2:** Minimize Impacts. Prohibit private development within established preserves. Minimize impacts within established preserves when the construction of public infrastructure is unavoidable.
- **COS Policy COS-1.3:** Management. Monitor, manage, and maintain the regional preserve system facilitating the survival of native species and the preservation of healthy populations of rare, threatened, or endangered species.
- **COS Policy COS-2.1:** Protection, Restoration and Enhancement. Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories, as well as within Village lands where appropriate.
- **COS Policy COS-2.2:** Habitat Protection through Site Design. Require development to be sited in the least biologically sensitive areas and minimize the loss of natural habitat through site design.

City of San Diego General Plan

The *City of San Diego General Plan* (City of San Diego 2008) includes ten inform policies for future public and private land use. The Conservation Element focuses on providing long-term conservation of natural resources to contribute to the City's economy including its Open Space and Landform Preservation section to provide long-term management of natural landforms and open space and serves to implement the MSCP.

The *City of San Diego General Plan* contains the following relevant policies:

- **CE-G.1:** Preserve natural habitats pursuant to the Multiple Species Conservation Program (MSCP) and manage all City-owned native habitats to ensure long term viability.
- **CE-G.2:** Prioritize, fund, acquire and manage open spaces that preserve important ecological resources and provide habitat connectivity.
- **CE-G.3:** Implement conservation goals/policies of the city's MSCP Subarea Plan.
- **CE-B.1:** Protect and conserve landforms, canyon lands, and open spaces.
- **CE-B.4:** Limit and control runoff, sedimentation, and erosion both during and after construction activity.

City of San Diego Black Mountain Ranch Subarea Plan (Subarea I)

The *Black Mountain Ranch Subarea Plan* (*Subarea I*) is part of the North City Future Urbaninzing Area (NCFUA) which describes and provides land use patterns and policies for long term use and development of its subareas. Implementing principles of the Subarea I plan include maintaining natural resources, provide critical corridors for regional MSCP open space along with boundary adjustments and linking open space areas.

County of San Diego San Dieguito Community Plan

The *San Dieguito Community Plan* provides an array of policies and guidelines that govern the character and development of community plan area. The Conservation Elements focuses on providing a comfortable living environment while preserving the area's natural resources. It contains the following relevant guidelines:

- Provide for adequate setbacks from all watercourses to protect property, improve water quality, and enhance the aesthetic beauty of the riparian environment.
- Preserve the integrity, function, and long-term viability of environmental sensitive habitat within the San Dieguito Community Plan Area (CPA). Emphasis shall be placed on areas exhibiting riparian characteristics; Coastal sage and scrub; and coastal mixed chaparral.
- Grading should retain the natural appearance of the existing land forms and natural slopes in excess of 25% shall be protected from unnecessary grading.
- All grading plans shall include preparation for an installation of landscaping.
- Grading permits shall be issued at the same time as building permits to minimize erosion.
- When the natural terrain is altered, new landscaping shall utilize at least 50% native species.
- Minimize brushing for agricultural uses and retain areas of natural vegetation to facilitate habitat regeneration

San Diego Multiple Species Conservation Plan

Under the NCCP Act of 1991, a MSCP has been developed for southwestern San Diego County in order to protect 85 species in the area. The MSCP was approved in 1997 and is the result of a joint planning effort between the County and the cities in the southwestern part of the County, including San Diego. The County of San Diego and City of San Diego have each adopted subarea plans that conform to and implement the MSCP requirements.

County of San Diego MSCP Subarea Plan

The County of San Diego MSCP Subarea Plan, adopted on October 22, 1997, covers the west-central portion of the County's unincorporated area and applies to unincorporated lands within the Survey Area. It serves to protect designated special status plant and wildlife species and their habitats depending on location and site characteristics.

4S Ranch Specific Plan

Two areas comprise the 4S Ranch Specific Plan Area – a 634-acre portion and a 2,891-acre portion. The 634-acre portion includes a mixture of residential, commercial, industrial, and open space and includes ten guidelines to govern development. The 2,891-acre portion maintains a mixture of residential, commercial, civic, park, and open space uses. Development of both portions shall be consistent with all County and Community Plan goals. The Proposed Project traverses both portions of the 4S Ranch Specific Plan Area; thus, relevant policies of both portions are discussed.

The 634-acre portion includes the following relevant guidelines:

- Given the presence of 69kV power lines, the [private project] applicant shall consult SDG&E to ensure compliance with their plans and regulations.
- Protection of the natural features of the property shall include granting of Open Space Easements over areas acceptable to the Director for the Department of Planning and Development Services and approval of an acceptable maintenance program.

The 2,891-acre portion includes the following relevant guidelines:

- Sensitive habitat areas within the specific plan area shall be conserved through designation as open space and dedication of open space easements prior to development.
- Development of the specific plan area shall be consistent with the Lake Hodges Subarea Plan of the Multiple Species Conservation Plan (MSCP) as adopted by the Board of Supervisors.

Santa Fe Valley Specific Plan

The Santa Fe Valley Specific Plan Area is located directly north of the Artesian Substation and west of the 4S Ranch Specific Plan Area. It contains 5 elements to guide development of the area including Conservation and Open Space, Land Use, Circulation, Public Facilities, and Community Design.

The *Santa Fe Valley Specific Plan* contains the following relevant policies:

- CO-1.1: Open Space I areas shall not be disturbed by any uses except as identified on the Specific Plan Map and in the text such as vehicular river crossing, emergency access road, recreational trails, a trail staging area, and essential public facilities such as wet and dry utilities lines and/or poles.
- CO-2.1: Significant environmental resources that are not designated as Open Space I may be required to undergo additional discretionary review. Special Area Designators shall be applied as appropriate for the environmental resources present on each particular site that may have otherwise developed without discretionary review.
- CO-2.2.c.1: Disturbance to wetland habitat shall be limited to the maximum extent practical.
- CO-2.2.c.2: Site specific studies shall be prepared to document the amount and habitat value of the wetland resources.
- CO-2.2.c.3: There shall be no net loss of wetland habitat. Wetland impacts shall be mitigated as necessary to accomplish this standard.
- CO-4.2: Open Space II areas may be developed with passive and active recreational uses such a golf courses including a Clubhouse, Tennis Center, and other typical accessory

structures, irrigation/water storage ponds, trails, and essential public and private facilities such as drainage facilities, utility lines, and/or utility poles except as specified in Policy LU-2.6.

- CO-4.3: In planning and designing permitted development of Open Space II areas, significant environmental resources must be considered and preserved to the extent feasible. Prior to or concurrently with approval of Final or Parcel Maps, and prior to vesting any other discretionary permit on the subject property, significant environmental resources shall be dedicated as open space easements, permitting open space compatible uses as appropriate. The open space easements shall be dedicated to the County or to a habitat management agency acceptable to Department of Planning and Land Use, as appropriate.

City of San Diego MSCP Subarea Plan

The City of San Diego adopted its own MSCP Subarea Plan in 1997 to implement the regional MSCP. Divided into priority areas, the MSCP Subarea Plan designates the undeveloped canyons in the Otay Mesa area as protected coastal sage scrub habitat. New development must comply with the boundaries established by the MSCP Subarea Plan, including restoration of coastal sage scrub when disturbed. Within the Multi-Habitat Planning Area (MHPA), which is the City's planned habitat preserve within the MSCP Subarea, development is limited to ensure the long-term viability and recovery of 85 "covered" species. In addition, the MSCP Subarea Plan includes policies and design guidelines specific to utility projects, such as:

1. Designed to avoid or minimize intrusion into the MHPA.
2. New development within or crossing the MHPA be planned, designed, located and constructed to minimize environmental impacts.
3. Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat. Activities occur on existing agricultural lands or other disturbed areas.
4. Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage.
5. Existing roads and utility lines are considered a compatible use within MHPA and therefore be maintained.

Existing SDG&E Plans

SDG&E Subregional NCCP

In December 1995, the USFWS and CDFW approved the *SDG&E Subregional NCCP*, which was developed for the purpose of addressing potential impacts to species and habitat associated with SDG&E's ongoing installation, use, maintenance, and repair of its gas and electric systems. Also included in the NCCP are guidelines pertaining to the typical expansion of SDG&E's systems throughout much of its existing service territory. As a part of the *SDG&E Subregional NCCP*, SDG&E has been issued incidental take permits (Permit PRT-809637) by the USFWS and CDFW for 110 covered species. The *SDG&E Subregional NCCP* was developed by following the multiple species and habitat conservation planning approach.

In addition to implementing the *SDG&E Subregional NCCP*, SDG&E's goal is to avoid "take" of covered species whenever possible and to implement measures to avoid and minimize any take to the maximum extent possible. The *SDG&E Subregional NCCP* includes avoidance and minimization measures and operational protocols that apply to construction as well as to operations and maintenance activities. SDG&E follows these protocols whether or not SDG&E is relying on the NCCP for take authorization for a given project. In approving the NCCP, the USFWS and CDFW determined that the avoidance and minimization measures and operational protocols avoid potential impacts and provide appropriate mitigation where such impacts are unavoidable. The agencies also determined that the NCCP ensured the protection and conservation of federal and state listed species and covered species.

The Proposed Project falls within the area where SDG&E's utility operations are governed by the NCCP. SDG&E may seek incidental take coverage for temporary and permanent impacts to natural habitat resulting from construction of the Proposed Project through the NCCP, and may rely on the mitigation bank associated with the NCCP to fulfill the mitigation requirements for those impacts. Alternatively, SDG&E may consult with USFWS and CDFW for compliance with the FESA and CESA for construction of the Proposed Project. Any Proposed Project-specific ITP will require mitigation consistent with the mitigation requirements in the NCCP, or as specified through consultation with USFWS and CDFW. For operation and maintenance of the Proposed Project, SDG&E will use the NCCP to comply with the FESA and CESA.

San Diego Gas & Electric Company's Low-Effect Habitat Conservation Plan for the Quino Checkerspot Butterfly

The quino checkerspot butterfly (QCB) received federal protection under the FESA in 1997 (USFWS 2002). Although not covered under SDG&E's NCCP, an HCP was created by SDG&E and USFWS; and QCB is covered under the SDG&E Low-Effect QCB HCP. Lands outside the HCP mapped area are considered unsuitable for QCB under the HCP, and no additional surveys or mitigation are required for activities covered under the Low-Effect HCP occurring outside the mapped area. The HCP addresses potential impact to the QCB from the use, maintenance, and repair of existing gas and electric facilities and allows for typical expansions to those systems. In addition to maintenance of existing access roads, SDG&E activities covered by the HCP include, without limitation, all current and future actions arising out of, or in any way connected with, the siting, design, installation, construction, use, maintenance, operation, repair, and removal of facilities within SDG&E's service territory. Pole and tower replacement is one example of these covered activities.

The Low-Effect HCP emphasizes protection of habitat through impact avoidance and use of operational protocols designed to avoid or minimize impacts to the QCB. The plan was prepared in consultation with the USFWS to fulfill the requirements of a FESA Section 10(a)(1)(B) permit application for SDG&E activities.

The Low-Effect HCP for QCB established mitigation ratios for both temporary and permanent impacts to QCB suitable occupied and unoccupied habitat as a result of SDG&E activities occurring within the HCP mapped area. Figure 2: Land Management Habitat Plan Map of Appendix 5.4-A: Biological Technical Report displays the location of QCB HCP mapped areas in relation to the Survey Area. The only QCB HCP mapped areas in the Survey Area are

contained within Rancho Bernardo Road and along the north side of the road, from approximately 200 feet west of pole location 19, to just east of pole location 21.

5.4.3.2 Biological Resources Setting

San Diego County is a biologically diverse region that supports rare and declining native habitats, numerous federally and state-listed plant and animal species, and federally designated critical habitat for listed species. The Proposed Project) route traverses both developed residential and commercial areas. The Proposed Project would involve work within existing right-of-way (ROW), franchise position (city/county roadways), and SDG&E fee-owned property. Topography of the Survey Area varies slightly between flat terrain and gentle slopes. The elevation of the Proposed Project alignment ranges from approximately 490 feet above mean sea level (amsl) at the western end near the Artesian Substation, gradually increasing to 680 feet amsl at the eastern end near the Bernardo Substation. The elevation of other Proposed Project features varies from approximately 425 feet amsl at the Carmel Valley Road and Kearny Staging Yards to approximately 820 feet amsl at the Rancho Carmel Substation.

The Proposed Project alignment begins at the Artesian Substation near Babcock Street, continues east along Camino Del Sur, and terminates at the Bernardo Substation located south of the intersection of Rancho Bernardo Road and Via Del Campo. Additional isolated Proposed Project features include work/staging areas along Thornmint Road and Willow Court; the Rancho Carmel Substation between Camino Del Norte and Innovation Drive; the Carmel Valley Road Staging Yard north of the intersection of Camino Del Sur and Carmel Valley Road; the Kearny Staging Yard northwest of the intersection of Clairemont Mesa Boulevard and Overland Avenue; and the Northeast Annex Staging Yard between East Mission Road and CA-78. The Proposed Project site is located within the United States Geological Survey (USGS) *Del Mar, Escondido, La Jolla, Poway, Rancho Santa Fe, and Valley Center* quadrangle maps, Township 13S, Range 02W, Sections 19, 30, and 34; Township 13S, Range 03W, Sections 24 and 25; and Township 14S, Range 03W, Sections 1 and 12; as well as the Los Penasquitos, Los Vallecitos De San Marcos, Mission San Diego, and San Bernardo-Snook land grant areas (Figure 1).

Vegetation Communities

Vegetation communities observed within the Survey Area and the plants that typically occur within those communities were evaluated and described according to communities in Sawyer, Keeler-Wolf and Evens (2009). A complete list of plant species observed in the study area is presented in Appendix F of Appendix 5.4-A: Biological Technical Report. Nomenclature used for plant names follow *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin 2012). Nomenclatural changes made after the publication date of this manual follow the Jepson eFlora website (2014).

Sixteen distinct vegetation communities or land cover types occur within the Survey Area, as shown in Appendix 5.4-A: Biological Technical Report. The Survey Area is dominated by Urban/Developed areas, with Annual Brome Grassland, Disturbed Areas, and Landscape/Ornamental communities also prevalent. Native upland and wetland habitats are also present within the Survey Area. Upland habitats consist primarily of California Sagebrush-California Buckwheat Scrub communities, while wetland habitat is dominated by of Arroyo Willow-Mulefat Woodland. Detailed vegetation descriptions, as well as maps depicting the

different vegetation communities in relation to the Proposed Project location, are provided in Appendix 5.4-A: Biological Technical Report. Table 5.4-1: Vegetation Communities within the Survey Area provides acreages of each mapped vegetation community.

Table 5.4-1: Vegetation Communities within the Survey Area

Vegetation Community	Approximate Area (acres)
Upland Communities	
Disturbed Habitats	
Bare Ground	3.74
Disturbed Areas	16.17
Landscape/Ornamental	21.79
Urban/Developed	85.26
Scrub and Chaparral	
California Sagebrush-California Buckwheat Scrub*	7.99
Disturbed California Sagebrush-California Buckwheat Scrub*	5.09
Restored California Sagebrush-California Buckwheat Scrub*	6.37
Restored/Disturbed California Sagebrush-California Buckwheat Scrub*	0.48
Grassland	
Annual Brome Grassland	22.96
Upland Vegetation Totals	**169.84**
Wetland Communities	
Bog and Marsh	
Cattail Marshes*	1.74
Pale Spike Rush Marshes*	0.09
Spiny Rush Marsh*	1.82
Disturbed Tall Cyperus Patch*	0.16
Riparian and Bottomland Habitat	
Arroyo Willow - Mulefat Woodland*	9.48
Sandbar Willow Thickets*	0.27
Salt Grass Flats*	0.14
Wetland Vegetation Totals	**13.70**
Total	**183.54**

Source: Biological Technical Report (Chambers 2015).

*An asterisk designates a sensitive natural community, defined as follows:

- Vegetation communities listed in the California Natural Diversity Database (CNDDB);
- Communities listed in the Natural Communities List with a rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable); or
- Tier I or Tier II vegetation communities, as defined by the City of San Diego Biology Guidelines (City of San Diego 2001)

Sensitive Natural Communities

The Survey Area contains the sensitive natural communities listed in Table 5.4-1 Vegetation Communities within the Survey Area.

Special-Status Species Survey Results

Special-Status Plants Survey Results

Based on the literature and database search, 33 special status plant species were analyzed for potential to occur within the Survey Area and were targeted during special status plant surveys.

The life history, habitat, and potential for these special status plant species to occur are described in Table 5.4-2: Special Status Plant Species' Potential to Occur. Plant species within five miles of the Survey Area documented in the CNDDB and USFWS databases are depicted on Figure 3: CNDDB and USFWS Documented Species Occurrences Map in Appendix 5.4-A: Biological Technical Report. Appendix 5.4-A: Biological Technical Report discusses each special status plant considered and details the life history, blooming period, and habitat requirements of each species. Detailed location point and polygon data for special status plant species identified in the Survey Area are mapped in Appendix D: Special Status Plant Species Observed of Appendix 5.4-A: Biological Technical Report.

Plant species identified within the Survey Area during the 2014, 2015, and 2016 focused special status plant surveys are listed in Appendix F: Plant Species Observed List in Appendix 5.4-A: Biological Technical Report. Of these, 5 special status plant species were identified during the surveys. These special status plant species and their population counts are listed in Table 5.4-3 Special Status Plant Species Observations within the Survey Area. In addition, four CRPR 4 plant species were observed within the Survey Area. These CRPR 4 species have also been included in Table 5.4-3 Special Status Plant Species Observations within the Survey Area.

In the targeted non-threatened and/or non-endangered species (Category 2), only perennial species were observed. This could be attributed to the low rainfall in 2014 and the spring/summer of 2015. The Survey Area passes through a riparian corridor, where San Diego marsh-elder was observed, and restoration areas where San Diego marsh-elder, Nuttall's scrub oak and San Diego barrel cactus were observed. Among the non-targeted sensitive species (Category 3), Engelmann oak, ashy spike moss, and southwestern spiny rush were observed throughout the Survey Area. Engelmann oaks and a Tecate cypress tree were found in landscape/ornamental habitat that bordered the Proposed Project. Southwestern spiny rushes and ashy spike moss were found along the riparian corridor in large numbers. The numbers of individual sensitive plants observed and mapped by species within the Survey Area are found in Table 5.4-3. A detailed location map is provided in Appendix A in Appendix 5.4-A: Biological Technical Report.

Table 5.4-2: Special Status Plant Species' Potential to Occur

Species Name	Listing Status[5]	Bloom Period	Habitat	Potential to Occur[6]
San Diego thorn-mint (*Acanthomintha ilicifolia*)	FE/--/CRPR List 1B.1 NCCP-covered	April-June	Annual herb. Occurs in vernal pools, clay, openings, chaparral, valley and foothill grassland, and coastal sage scrub habitats. Can be found at elevations between 33 and 3,150 feet.	Occurrence potential for this species within the Property site is low. Marginally suitable habitat occurs within the Survey Area. This species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
California adolphia (*Adolphia californica*)	--/--/CRPR List 2B.1 NCCP-covered	Dec-April	Shrub. Occurs in chaparral and coastal sage scrub habitats. Can be found at elevation below 1312 feet.	Occurrence potential for this species within the Project site is moderate. Suitable habitat occurs within the Survey Area and is within the elevation range of the species. Historical records show this species has occurred within the Survey Area. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
San Diego ambrosia (*Ambrosia pumila*)	FE/--/CRPR List 1B.1 NCCP-covered	April-October	Perennial rhizomatous herb. Occurs in disturbed areas, chaparral, coastal scrub, valley and foothill grassland, and vernal pool habitats. Can be found at elevations less than 1,360 feet.	Occurrence potential for this species within the Project site is moderate. Suitable habitat occurs within the Survey Area and is within the elevation range of the species. Historical records show this species has occurred within the Survey Area. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
Del Mar manzanita (*Arctostaphylos glandulosa* subsp. *crassifolia)*	FE/--/CRPR List 1B.1	December-February	Perennial shrub. Occurs in coastal chaparral habitat. Can be found at elevations below 328 feet.	Occurrence potential for this species within the Property site is low. No suitable habitat occur within the Survey Area. This species was not observed during the focused surveys and is presumed **absent** from the Survey Area. A final determination of presence will be made following the completion of all focused surveys.
Coulter's saltbush (*Atriplex coulteri*)	--/--/CRPR List 1B.2	March-October	Perennial herb. This species often grows in alkaline or clay soils, coastal dunes, coastal scrub, and coastal bluff scrub. Can be found at elevations less than 1,500 feet.	Occurrence potential for this species within the Survey Area is moderate Suitable habitat occurs within the Survey Area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
south coast saltscale (*Atriplex pacifica*)	--/--/CRPR List 1B.2	March-October	Annual herb. Occurs in coastal bluff scrub, dunes, and playa habitats. Can be found at elevations less than 460 feet.	Occurrence potential for this species within the Survey Area is moderate. Suitable habitat occurs within the Survey Area and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.

[5] This column lists federal/state/CNPS CRPR coverage. A dash (--) indicates that the species is not listed.

Federal listing codes:

FE: Federally listed as Endangered
FT: Federally listed as Threatened

California listing codes:

CE: State-listed as Endangered
CT: State-listed as Threatened
CR: State-listed as Rare

CRPR:

1B.1: Rare, threatened, or endangered in California or elsewhere; seriously threatened in California
1B.2: Rare, threatened, or endangered in California or elsewhere; fairly threatened in California
1B.3: Rare, threatened, or endangered in California or elsewhere; not very threatened in California
2B.1: Rare, threatened, or endangered in California only; seriously threatened in California
2B.2: Rare, threatened, or endangered in California only; fairly threatened in California
2B.3: Rare, threatened, or endangered in California only; not very threatened in California
3.1: Plants that are on a review list and require additional information
4.1: Uncommon in California; seriously threatened in California
4.2: Uncommon in California; fairly threatened in California
4.3: Uncommon in California; not very threatened in California

[6] Source: Appendix 5.4-A: Biological Technical Report

Species Name	Listing Status[5]	Bloom Period	Habitat	Potential to Occur[6]
Encinitas baccharis (*Baccharis vanessae*)	FT/CE/CRPR List 1B.1 NCCP-covered	August-November	Perennial deciduous shrub. Occurs in chaparral (maritime) and cismontane woodland habitats. Can be found at elevations between 200 and 2,360 feet.	Occurrence potential for this species within the Survey Area is moderate. Habitat occurs on site and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area. A final determination of presence will be made following the completion of all focused surveys.
San Diego goldenstar (*Bloomeria clevelandii*)	--/--/CRPR List 1B.1 NCCP-covered	April-May	Perennial bulbiferous herb. Occurs in chaparral, valley and foothill grassland, coastal scrub, and vernal pool habitats. Can be found at elevations between 164 and 1,525 feet.	Occurrence potential for this species within the Survey Area is moderate. Habitat occurs on site and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
thread-leaved brodiaea *(Brodiaea filifolia)*	FT/CE/CRPR List 1B.1	March-June	Perennial bulbiferous herb. This species is found in shallow seasonal pools and depressions of water, usually swales in grassland habitat or vernal pools, typically at elevations between 82 and 2,789 feet.	Occurrence potential for this species within the Survey Area is low. Marginal habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
Orcutt's brodiaea (*Brodiaea orcuttii*)	--/--/CRPR List 1B.1	May-July	Annual herb. Occurs in grassland near streams and vernal pools. Can be found at elevations between 98 and 5,560 feet.	Occurrence potential for this species within the Survey Area is low. Marginal habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
wart-stemmed ceanothus (*Ceanothus verrucosus*)	--/--/CRPR List 2B.2 NCCP-covered	January-April	Evergreen shrub. Occurs on rocky slopes in chaparral habitats at elevations below 1,148 feet.	Occurrence potential for this species within the Survey Area is low. Marginal habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area. A final determination of presence will be made following the completion of all focused surveys.
southern tarplant (*Centromadia parryi* subsp. *australis*)	--/--/CRPR 1B.1	Jun-Oct	Annual herb. Occurs in salt marshes, grasslands, vernal pools, and coastal scrub. Can be found at elevations below 656 feet.	Occurrence potential for this species within the Survey Area is moderate. Habitat occurs on site and is within the elevation range of the species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
smooth tarplant (*Centromadia pungens*)	--/--/CRPR 1B.1	April-Sept	Annual herb. Occurs in depressions, poorly drained flats, drainage bed and banks, grasslands, and disturbed areas. Can be found at elevation between 295 and 1,640 feet.	Occurrence potential for this species within the Project site is moderate. Habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
Orcutt's spineflower (*Chorizanthe orcuttiana*)	FE/CE/CRPR 1B.1	March-May	Annual herb. Occurs in sandy, open areas within coastal scrub habitats. Can be found at elevations between 196 and 656 feet.	Occurrence potential for this species within the Survey Area is low. Marginal habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)	--/--/CRPR List 1B.2	April-July	Annual herb. Occurs in clay soils of chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Can be found at elevations between 100 and 5,020 feet.	Occurrence potential for this species within the Project site is moderate. Habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
summer holly (*Comarostaphylis diversifolia* subsp. *diversifolia*)	--/--/CRPR List 1B.2	April-June	Evergreen shrub. This shrub occurs in chaparral habitats at elevations between 328 and 1,804 feet.	Occurrence potential for this species within the Property site is low. No suitable habitat occur within the Survey Area. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area. A final determination of presence will be made following the completion of all focused surveys.
delicate clarkia (*Clarkia delicata*)	--/--/CRPR 1B.2	April-June	Annual herb. This herb occurs in chaparral and oak woodland habitats at elevations below 3,281 feet.	Occurrence potential for this species within the Survey Area is low. Marginal habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.

Species Name	Listing Status[5]	Bloom Period	Habitat	Potential to Occur[6]
Del Mar Mesa sand aster (*Corethrogyne filaginifolia* var. *linifolia*)	--/--/CRPR 1B.1	May - September	Perennial herb. This species is found in openings of coastal chaparral and coastal sage scrub habitats at elevations between 49 and 492 feet.	Occurrence potential for this species within the Survey Area is low. Marginal habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
variegated dudleya (*Dudleya variegata*)	--/--/CRPR List 1B.2 NCCP-covered	April-June	Perennial herb. This species is found in heavy clay soils within chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pool habitats at elevations between 10 and 1,900 feet	Occurrence potential for this species within the Survey Area is moderate. Suitable habitat occurs within the Survey Area and is within the elevation range of the species. Historical records show this species has occurred within the Survey Area. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
sticky dudleya (*Dudleya viscida*)	--/--/CRPR 1B.2	May-June	Perennial herb. This succulent occurs on bluffs and rocky cliffs within chaparral and coastal sage scrub habitats at elevations below 1,476 feet.	Occurrence potential for this species within the Survey Area is low. Marginal habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
Palmer's Goldenbush (*Ericameria palmeri* var. *palmeri*)	--/--/CNPS 1B.1	September – November	Perennial shrub. This shrub occurs in coastal sage scrub and chaparral habitats below 8,202 feet.	Occurrence potential for this species within the Survey Area is high. Suitable habitat occurs within the Survey Area and is within the elevation range of the species. Historical records show this species has occurred within the Survey Area. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area. A final determination of presence will be made following the completion of all focused surveys.
San Diego button-celery (*Eryngium aristulatum* var. *parishii*)	FE/CE/CRPR List 1B.1 NCCP-Covered	April-June	Annual/perennial herb. This species can be found mesic soils of coastal scrub, valley and foothill grassland, and vernal pools. San Diego button-celery can be found at elevations between 65 and 2,034 feet.	Occurrence potential for this species within the Survey Area is low. Marginal habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
San Diego barrel cactus (*Ferocactus viridescens*)	--/--/CRPR List 2B.1 NCCP-covered	May-June	Stem succulent. This barrel cactus species grows in sandy and rocky areas within chaparral, coastal sage scrub, vernal pools, and valley grassland habitats at elevations between 10 and 1,476 feet.	This species is **present** within the Survey Area.
Campbell's liverwort (*Geothallus tuberosus*)	--/--/CRPR 1B.1	n/a	Liverwort. This bryophyte occurs in mesic soils of coastal scrub and vernal pool habitats.	Occurrence potential for this species within the Survey Area is moderate. Suitable habitat occurs within the Survey Area. Historical records show this species has occurred within the Survey Area. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
Tecate cypress (*Hesperocyparis forbesii*)	--/--/CRPR List 1B.2 NCCP -covered	n/a	Perennial tree. This evergreen cypress is typically found growing on hillsides and canyons in mountain chaparral habitat elevations between 1,476 and 4,921 feet.	This species is **present** within the Survey Area, approximately 35 feet east of pole R18.
decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)	--/--/CRPR List 1B.2	April-November	Perennial shrub. This variety of goldenbush favors hillsides and arroyos in sandy soils in coastal scrub, grassland, and disturbed habitat	This species is **present** within the Survey Area and in immediately adjacent areas.
San Diego marsh-elder (*Iva hayesiana*)	--/--/CRPR List 2B.2	April-October	Perennial herb. This rhizomatous subshrub is associated with streambeds, depressions, and alkaline sinks. San Diego marsh-elder can be found at elevations from 33 – 1,640 feet.	This species is **present** within the Survey Area and in immediately adjacent areas.

Species Name	Listing Status[5]	Bloom Period	Habitat	Potential to Occur[6]
Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*)	--/--/CRPR List 4.2	May-June	Perennial herb (rhizomatous). This grass-like perennial is associated with moist habitats including salt marshes, alkaline seeps, meadows, and wetland/riparian habitats at elevations below 984 feet.	This species is **present** within the Survey Area and in immediately adjacent areas.
sea dahlia (*Leptosyne maritima*)	--/--/CRPR 2B.2	March-May	Perennial herb. This species is found growing on sea bluffs in coastal sage scrub habitat at elevations below 66 feet.	Occurrence potential for this species within the Survey Area is very low. No suitable habitat occurs within the Survey Area and is not within the elevation range of the species. This species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
felt leaved monardella (*Monardella hypoleuca* ssp. *lanata*)	--/--/CRPR List 1B.2	May-October	Perennial herb. Occurs on rocky, granitic slopes or hilltops in chaparral habitats at elevations between 984 and 4,921 feet.	Occurrence potential for this species within the Survey Area is moderate. Patches of suitable habitat occurs within the Survey Area and is within the elevation range of the species. Historical records show this species has occurred within the Survey Area. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
willowy monardella (*Monardella viminea*)	FE/CE/CRPR List 1B.1 NCCP-covered	January-April	Perennial herb. Occurs on rocky washes with cobbles and 2 degrees alluvial bench at elevations below 1,312 feet.	Occurrence potential for this species within the Survey Area is moderate. Habitat occurs on site and is within the elevation range of the species.
spreading navarretia (*Navarretia fossalis*)	FT/--/CRPR List 1B.1 NCCP-covered	April-June	Annual herb. This species is found growing in chenopod scrub, marsh/swamp, playa, and vernal pool habitats at elevations between 98 and 2,040 feet.	Occurrence potential for this species within the Survey Area is moderate. Habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
San Diego mesa mint (*Pogogyne abramsii*)	FE/CE/CRPR 1B.1	March-June	Annual herb. Coastal terrace vernal pools within coastal sage scrub, chaparral, riparian, and freshwater wetland habitats at elevation ranging from 328 and 656 feet.	Occurrence potential for this species within the Survey Area is low. Marginal habitat occurs on the site and is within the elevation range of species. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.
Nuttall's scrub oak (*Quercus dumosa*)	--/--/CRPR List 1B.1	February-August	Perennial evergreen shrub. This species is found growing in sandy, clay loam, closed-cone coniferous forest, chaparral, and coastal scrub habitats at elevations between 49 and 1,300 feet.	This species is **present** within the Survey area.
Engelmann oak (*Quercus engelmannii*)	--/--/CRPR List 4.2	March-June	Perennial evergreen tree. This species favors foothills and slopes within chaparral, woodland, and valley grassland habitats at elevations below 4,265 feet.	This species is **present** within the Survey Area and in immediately adjacent areas.
Ashy spike moss (*Selaginella cinerascens*)	--/--/CRPR List 4.1	N/A	Rhizomatous fern. This pteridophtye prefers sunny spots or under shrubs within chaparral and coastal sage scrub habitats at elevations under 1,804 feet.	This species is **present** within the Survey Area and in immediately adjacent areas.
purple stemodia (*Stemodia durantifolia*)	--/--/CRPR List 2B.1	Year round	Perennial herb. This species can be found in Sonoran desert scrub, often on mesic, sandy soils at elevations between 591 and 984 feet.	Occurrence potential for this species within the Survey Area is low. Marginal suitable habitat occurs within the Survey Area and is within the elevation range of the species. Historical records show this species has occurred within the Survey Area. However, this species was not observed during the focused surveys and is presumed **absent** from the Survey Area.

Of the remaining 29 special status plant species that were not observed within the Survey Area, eight were considered absent because required habitats are not present within the Survey Area. The remaining 21 species were anticipated to have a low or moderate PFO due to appropriate habitats and historical records but were not identified during the 2014 and 2015 focused plant surveys. All 21 species are annual herbs (San Diego thornmint, south coast saltscale, Orcutt's brodiaea, long-spined spineflower, San Diego button-celery, spreading navarretia, southern tarplant, smooth tarplant, Orcutt's spineflower, delicate clarkia, and San Diego mesa mint), perennial bulbs (San Diego goldenstar and threadleaf brodiaea), or perennial herb (San Diego ambrosia, Coulter's saltbush, Del Mar sand aster, variegated dudleya, sticky dudleya, felt leaved monardella, willowy monardella, and purple stemodia) species (Appendix E in Appendix 5.4-A: Biological Technical Report). Therefore, considering the drought conditions in 2014 and 2015, it is possible that some of these species may not have germinated or flowered during 2014 and 2015. As a result, these species are described as "presumed absent" for this report and are not expected to occur. A report of the results for the 2015 and 2016 Chambers Group focused plant surveys is in progress.

Table 5.4-3: Special-Status Plant Species Observations within the Survey Area

Species Name	Listing Status[7]	Total Observed
Ashy spike-moss	--/--/4.1	>500 (Species too common to count)
Decumbent goldenbush	--/--/1B.2	24
Nuttall's scrub oak	--/--/1B.1	12
Engelmann oak	--/--/4.2	30
San Diego barrel cactus	--/--/2B.1	1
San Diego marsh-elder	--/--/2B.2	>500 (Species too common to count)
Southwestern spiny rush	--/--/4.2	>500 (Species too common to count)
Tecate cypress	--/--/CRPR List 1B.2	1
Source: Biological Technical Report (Chambers 2015)		

Special-Status Wildlife Survey Results

A total of 36 special status wildlife species are known to occur in the vicinity of the Survey Area. Two additional species were detected in the Survey Area in 2016 which were not identified by the database and literature search. Figure 3: CNDDB and USFWS Documented Species Occurrences Map of Appendix 5.4-A: Biological Technical Report provides a graphical representation of the known CNDDB and USFWS occurrences of special status wildlife species within five miles of the Survey Area. Of these 38 special status wildlife species, 15 were identified as present during the surveys, and 20 have a potential to occur within the Survey Area based on the proximity of recent historical records and/or the presence of suitable habitat. Table

[7] This column lists federal/state/CNPS CRPR status, which is described further in Table 5.4-2: Special Status Plant Species' Potential to Occur. A dash (--) indicates that the species is not listed.

5.4-4: Special Status Wildlife Species' Potential to Occur provides a list of these 38 special status wildlife species, as well as their listing status, habitat requirements, and their likelihood to occur within the Survey Area. Further details on the life history and conservation status of these species are provided in Section 5.5 of Appendix 5.4-A: Biological Technical Report. Three of the 38 species (San Diego fairy shrimp [*Branchinecta sandiegonensis*], western pond turtle [*Emys marmorata*], and tricolored blackbird [*Agelaius tricolor*]) in Table 5.4-4: Special Status Wildlife Species' Potential to Occur are presumed absent, because they are associated with vernal pools (permanent or nearly permanent bodies of water with vegetated banks and basking sites) or emergent wetlands with open water for foraging, neither of which occur within the Survey Area. One species, QCB, is presumed absent from the Survey Area due to negative focused survey results.

All 14 special status avian species identified as present in the Survey Area were observed foraging, but not nesting. The BUOW and CAGN were observed foraging within the Survey Area, but focused surveys for these species were negative for nesting; therefore, the BUOW and CAGN are presumed absent for nesting within the Survey Area. The LBVI was observed foraging within the Survey Area, and focused surveys for this species are in progress. The loggerhead shrike (*Lanius ludovicianus*; BCC, SSC) was observed foraging within the Survey Area and is considered to have a low potential to nest within the Survey Area due to limited suitable nesting habitat. The northern harrier (*Circus cyaneus*), Allen's hummingbird (*Selasphorus sasin*), Nuttall's woodpecker (*Picoides nuttallii*), Cooper's hawk (*Accipiter cooperii*), California horned lark (*Eremophila alpestris actia*), yellow warbler (*Setophaga petechia*), yellow-breasted chat (*Icteria virens*), grasshopper sparrow (*Ammodramus savannarum*) and white-tailed kite (*Elanus leucurus*) were detected foraging and are determined to have a moderate potential to nest within the Survey Area. The southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) was observed foraging and has a high potential to nest within the Survey Area. Detailed results of the focused wildlife surveys are included as Appendices J, K, L, and M in Appendix 5.4-A: Biological Technical Report.

Critical Habitat

To the extent prudent and determinable under the FESA, the USFWS is required to designate critical habitat for endangered and threatened species (16 U.S.C. § 1533 (a)(3)). Critical habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. Critical habitat is designated by identifying areas that possess the physical or biological features essential to the conservation of a species, also known as the primary constituent elements. Designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter.

Designated critical habitat requires special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. The critical habitat designation delineates all suitable habitat, occupied or not, essential to the survival and recovery of the species.

Table 5.4-4: Special-Status Wildlife Species' Potential to Occur

Species Name	Listing Status[8]	Habitat Requirements	Potential to Occur
CLASS BRANCHIPODA			
San Diego fairy shrimp (*Branchinecta sandiegonensis*)	Fed: FE State: none	Occurs only in high-quality vernal pools. Lives as a filter feeder, consumes algae, bacteria, and various detritus in water.	This species is presumed **absent** from the Survey Area. Although there are 5 CNDDB and 39 USFWS historical occurrences documented within 5 miles of the Proposed Project, the Survey Area lacks suitable habitat (i.e. vernal pools or basins) to support this species.
CLASS INSECTA			
Quino checkerspot butterfly (*Euphydryas editha quino*)	Fed: FE State: none Other: Covered under the SDG&E low-effect HCP for QCB	Occurs in openings in coastal sage scrub, open chaparral, juniper woodland, native grasslands and forbland habitats at elevations below 4,600 feet below mean sea level in clay or granitic soils. Requires nectar sources and the presence of larval host plants to breed.	This species is presumed **absent** from the Survey Area based on flight season surveys for QCB conducted in 2016. No QCB were detected during the focused surveys. There are 12 USFWS historical occurrences documented within 5 miles of the Proposed Project; 11 of these occurrences were from 1927-1933, and one was from 1982 near Lake Hodges. The SDG&E mapped Low-Effect QCB HCP for this species occurs within the Survey Area at the northeastern end of the Proposed Project.
CLASS AMPHIBIA			
arroyo toad (*Anaxyrus californicus*)	Fed: FE State: SSC	Found in washes, streams, and arroyos. Preferred habitats include sandy banks within riparian woodlands such as willow, cottonwood, sycamore, mule fat, and/or coast live oak. Breeds in shallow, sandy or gravelly riverine pools with low silt content, and normally disperses onto adjacent uplands after breeding.	This species has a **low** potential to occur within the Survey Area. There are no USFWS or CNDDB occurrences documented within 5 miles of the Survey Area; the closest USFWS occurrence was documented to the east of Lake Hodges within the San Pasqual Valley, approximately 6 miles from the Proposed Project Survey Area. USFWS critical habitat is located within 4 miles of the Proposed Project Survey Area. There is low quality habitat present along drainages within the Survey Area.
western spadefoot (*Spea hammondii*)	Fed: none State: SSC	Found in grasslands, floodplains, washes, and playas. Diet consists of invertebrates, beetles, moths, earthworms, crickets, flies, and ants.	This species has a **moderate** potential to occur with the Survey Area. There are two CNDDB historical occurrences documented within 5 miles of the Proposed Project. The Survey Area contains moderately suitable habitat to support this species.
CLASS REPTILIA			
western pond turtle (*Emys marmorata*)	Fed: none State: SSC	Inhabits permanent or nearly permanent bodies of water in ponds, marshes, rivers, and streams that typically have a rocky or muddy bottom and extensive aquatic vegetation along water body margins. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks for thermoregulation	This species is presumed **absent** from the Survey Area. There is one CNDDB historical occurrences documented within 5 miles of the Proposed Project. The Survey Area lacks suitable habitat to support this species to support this species.
coast horned lizard (*Phrynosoma coronatum*)	Fed: none State: SSC	Occurs in a variety of habitats, such as coastal sage scrub, chaparral, various woodlands, and annual grasslands. Diet consists almost exclusively of ants.	This species has a **moderate** potential to occur within the Survey Area. There are 18 CNDDB historical occurrences documented for this species within 5 miles of the Proposed Project and the Survey Area contains suitable habitat to support this species.

[8] Federal/State/Other list or Coverage under either the SDG&E Subregional NCCP or the Low-Effect HCP for QCB. A dash (--) indicates that the species is not listed.

Federal listing codes:

FE: Federally listed as Endangered
FT: Federally listed as Threatened
FC: Federally listed as Candidate
BCC: Bird of Conservation Concern
FSS: Forest Service Sensitive

California listing codes:

CE: State-listed as Endangered
CT: State-listed as Threatened
CR: State-listed as Rare
FP: Fully Protected Species
SSC: Species of Special Concern
WL: California Watch List Species

Other listing codes:

WBWG: Western Bat Working Group

Species Name	Listing Status[8]	Habitat Requirements	Potential to Occur
orange-throated whiptail (*Aspisdoscelis hyperythra beldingi*)	Fed: none State: SSC	Occurs in coastal sage scrub and chaparral habitats with sandy washes, rocky outcrops, and adequate shading. Diet consists mainly of insects and spiders.	This species has a **moderate** potential to occur within the Survey Area. There are 16 CNDDB historical occurrences documented within 5 miles of the Proposed Project and the Survey Area contains suitable habitat to support this species.
Coronado Island skink (*Plestiodon skiltonianus interparietalis*)	Fed: none State: SSC	Occurs in early successional stages of habitats such as coastal sage scrub, chaparral, open woodland, and conifer forests. Forages through leaf litter small invertebrates.	This species has a **low** potential to occur within the Survey Area. There are 3 CNDDB historical occurrences documented within 5 miles of the Proposed Project and the Survey Area contains a limited amount of suitable habitat to support this species.
coast patch-nosed snake (*Salvadora hexalepis virgultea*)	Fed: none State: SSC	Occurs in California from the northern Carrizo Plains in San Luis Obispo County, south through the coastal zone, south and west of the deserts, and into coastal northern Baja California. This species inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains from 0 to 7,000 feet in elevation.	This species has a **low** potential to occur within the Survey Area. There is one CNDDB historical occurrence documented within 5 miles of the Proposed Project and the Survey Area contains a limited amount of suitable habitat to support this species.
red diamond rattlesnake (*Crotalus ruber*)	Fed: none State: SSC	Found in several habitat types, such as coastal sage scrub, grassland, woodland associated large rocks or boulders. Diet consists mainly of squirrels for adults and lizards for juveniles.	This species has a **moderate** potential to occur within the Survey Area. There are 4 CNDDB historical occurrences documented within 5 miles of the Proposed Project and the Survey Area contains good quality suitable habitat to support this species.
CLASS AVES			
northern harrier (*Circus cyaneus*)	Fed: none State: SSC	Inhabits wetland habitats including marshy meadows, boglands, pasturelands, wet grasslands, tundra, open riparian woodlands, and freshwater and brackish marshes. It also occurs on dry uplands, including upland prairies, mesic grasslands, drained marshlands, croplands, and cold desert shrub-steppe, especially where these occur next to water bodies.	This species is considered **present** and has a moderate potential to nest within the Survey Area. This species was detected approximately 0.2 mile north of the Survey Area, north of Proposed Project locations R03 and P03, and 0.3 mile north of the Survey Area, north of Proposed Project locations E5 and E6, during coastal California gnatcatcher focused surveys conducted for the Former Alignment by Chambers Group in 2015. This species was also detected within or adjacent to the Survey Area during burrowing owl surveys conducted for the Former Alignment by Pangea Biological in winter 2014/2015.
white-tailed kite (*Elanus leucurus*)	Fed: none State: FP	Inhabits low elevation grasslands, agricultural fields, wetlands, oak woodlands, savannahs, chaparral, and riparian habitats adjacent to open lands. It breeds primarily in open areas with scattered trees, usually near water.	This species is considered **present** and has a moderate potential to nest within the Survey Area. This species was detected in the Carmel Valley Road Survey Area during wintering BUOW surveys in 2015/2016. There are no CNDDB or USFWS historical occurrences documented within 5 miles of the Survey Area.
Cooper's hawk (*Accipiter cooperii*)	Fed: none State: WL	Occurs in open woodlands, mature forests, woodland edges, and river groves. Known to breed in suburban and urban areas with tree structure similar to native habitats.	This species is considered **present** and has a moderate potential to nest within the Survey Area. This species was detected within the Survey Area south of Proposed Project location E12 during focused coastal California gnatcatcher and least Bell's vireo surveys conducted for the Former Alignment by Chambers Group in 2015. This species was also detected approximately 0.18 mile outside the Survey Area during focused plant surveys for the Proposed Project conducted by RECON in 2014. This species has a low potential to nest within the Survey Area.
Swainson's hawk (*Buteo swainsoni*)	Fed: BCC State: ST	Swainson's Hawks favor open habitats for foraging including grasslands, but also use sage flats and even swaths of agriculture intermixed with native habitat. Nesting trees include willow, black locust, oak, aspen, cottonwood, and conifers. This species occurs as a migrant and/or resident over most of the United States from southern Canada to northern Mexico.	This species has a **low** potential to occur within the Survey Area during migration and is not expected to nest. There is one CNDDB historical occurrence documented within 5 miles of the Proposed Project and the Survey Area contains a limited amount of suitable habitat to support this species.

Species Name	Listing Status[8]	Habitat Requirements	Potential to Occur
burrowing owl (*Athene cunicularia*)	Fed: BCC State: SSC	Occurs in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester dependent upon burrowing mammals, most notable the California ground squirrel.	This species is presumed **absent** for breeding from the Survey Area. Breeding season (2016) BUOW surveys were conducted within the Carmel Valley Road Staging Yard to investigate the potential use of BUOW for breeding. No BUOW were observed during these surveys; therefore, BUOW are presumed absent from the Survey Area for breeding. The BUOW observed during the wintering BUOW surveys of 2015/2016 was determined to be using the area for foraging purposes only. No fresh BUOW sign was observed in 2016.
Allen's hummingbird (*Selasphorus sasin*)	Fed: BCC State: none	Occurs in scrub habitats, parks, and gardens. Breeds in semi-open habitats, including open oak woods, streamside groves, well-wooded suburbs, city parks. Winters mostly in foothills and mountain forests in Mexico. Migrants also occur in high mountain meadows in late summer.	This species is considered **present** and has a moderate potential to nest within the Survey Area. This species was observed within the Survey Area, east of Proposed Project location E13, during coastal California gnatcatcher and least Bell's vireo focused surveys conducted by Chambers Group in 2015. There are no CNDDB or USFWS historical occurrences documented within 5 miles of the Survey Area.
Nuttall's woodpecker (*Picoides nuttallii*)	Fed: BCC State: None	Occurs in wooded canyons and foothills. Prefers oak trees, especially where oaks meet other trees along rivers, also in pine-oak woods in foothills. In southern California also in riverside cottonwoods, sycamores, willows, even if no oaks present.	This species can be considered **present** and has a moderate potential to nest within the Survey Area. This species was detected within the Survey Area southwest of Proposed Project location P11 during focused coastal California gnatcatcher and least Bell's vireo surveys conducted by Chambers Group in 2015. In addition, there are two CNDDB historical occurrences documented within 5 miles of the Project. The Survey Area contains a moderate amount of suitable nesting habitat to support this species.
southwestern willow flycatcher (*Empidonax traillii extimus*)	Fed: FE State: SE	Breeds in a variety of riparian habitats with multi-tiered canopies and surface water, and/or saturated soils along streams. Habitat types may include a variety of willow, cottonwood, coast live oak, alder, and tamarisk woodlands.	This species has a **low** potential to occur while foraging and is not expected to nest within the Survey Area. There is one CNDDB and 2 USFWS historical occurrences documented within 5 miles of the Proposed Project. The Survey Area contains a limited amount of suitable habitat for foraging, and does not contain suitable nesting habitat to support this species.
least Bell's vireo (*Vireo bellii pusillus*)	Fed: FE State: SE	Occurs in early-successional habitats along rivers with low, dense vegetation. Diet consists of insects and spiders. Requires densely vegetated riparian habitat along streams and rivers for nesting.	This is considered **present** for foraging and has a moderate potential to nest within the Survey Area. This species was detected singing within the Survey Area, just northeast of Proposed Project location P14, during focused plant surveys conducted for the Proposed Project by RECON in 2014. One lone male LBVI was detected within the Survey Area on June 12, 2016 during the fourth focused survey. This individual was observed singing and foraging between Proposed Project locations E18 and P18, and did not display nesting behavior. No other LBVI have been observed during the 2016 surveys and breeding LBVI within the Survey Area is not anticipated. The final two focused surveys for the current Proposed Project are planned for July 2016. A report of results for the 2016 focused LBVI surveys will be prepared following the conclusion of the surveys.
California horned lark (*Eremophila alpestris actia*)	Fed: none State: WL	Occurs in open habitats, including bare ground, sparse short grasslands, dry prairies, open fields, deserts, brushy flats, tundra, and developed habitats such as fallow agricultural fields, airports, golf courses, parks, and open residential areas.	This species can be considered **present** for foraging and has a moderate potential to nest within the Survey Area. This species was detected within the Survey Area during focused plant surveys conducted for the Proposed Project by RECON in 2014. There are no CNDDB or USFWS historical occurrences documented within 5 miles of the Survey Area. Suitable nesting habitat is located within disturbed areas and annual grassland.

Species Name	Listing Status[8]	Habitat Requirements	Potential to Occur
coastal cactus wren (*Campylorhynchus brunneicapillus*)	Fed: BCC State: SSC	Occurs in coastal sage scrub interlaced with patches of opuntia. Diet is primarily insectivorous, forages on the ground for prey items such as caterpillars, moths, and grasshoppers	This species has a **low** potential to occur while foraging and is not expected to nest within the Survey Area. There are 14 CNDDB historical occurrences documented within 5 miles of the Project but they are all from prior to 2000 with the exception of one in 2001. This species has been extirpated from over half of these occurrence locations. The Survey Area lacks suitable nesting habitat to support this species.
coastal California gnatcatcher (*Polioptila californica californica*)	Fed: FT State: SSC	An obligate, permanent resident of coastal sage scrub below 2,500 feet in elevation in Southern California. Found in low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	This species is considered **present** for foraging and is presumed **absent** for nesting within the Survey Area. There are 54 CNDDB and 500 USFWS historical occurrences documented of this species within 5 miles of the Proposed Project. A total of 9 individuals have been detected in suitable habitat within and adjacent to the Survey Area near the western and eastern ends of the Proposed Project during focused plant and wildlife surveys conducted by RECON, Pangea, and Chambers Group in 2014 and 2015. In addition, the Survey Area contains a moderate amount of good quality suitable habitat to support this species. Chambers Group conducted focused CAGN surveys in the spring of 2016 in two polygons of suitable habitat that were not covered in 2015: one at the western end and one at the eastern end of the Proposed Project. No additional CAGN were observed at these two locations. No CAGN were observed nesting within the Survey Area.
Cooper's hawk (*Accipiter cooperii*)	Fed: none State: WL	Occurs in open woodlands, mature forests, woodland edges, and river groves. Known to breed in suburban and urban areas with tree structure similar to native habitats.	This species is considered **present** and has a moderate potential to nest within the Survey Area. This species was detected within the Survey Area south of Proposed Project location E12 during focused coastal California gnatcatcher and least Bell's vireo surveys conducted for the Former Alignment by Chambers Group in 2015. This species was also detected approximately 0.18 mile outside the Survey Area during focused plant surveys conducted for the Proposed Project by RECON in 2014.
loggerhead shrike (*Lanius ludovicianus*)	Fed: BCC State: SSC	Occurs in semi-open habitats, oak savannas, open chaparral, desert washes, juniper woodlands, Joshua tree woodlands with scattered trees, large shrubs, utility poles, and other structures that serve as lookout posts while searching for prey. Prefer to nest in dense, thorny shrubs and trees, brush piles, and tumbleweeds.	This species is considered **present** has a low potential to nest within the Survey Area. This species was detected within or adjacent to the Survey Area during burrowing owl focused surveys conducted for the Former Alignment by Pangea Biological. This species has a low potential to nest within the Survey Area due to a limited amount of suitable nesting substrate.
yellow warbler (*Setophaga petechia*)	Fed: BCC State: SSC	Breeding habitats include wet areas, such as riparian woodlands, orchards, gardens, swamp edges, and willow thickets. Most breeding habitats generally contain medium to high-density tree and shrub species with ample early successional understories.	This is considered **present** for foraging and has a moderate potential to nest within the Survey Area. This species was detected within the Survey Area, between Proposed Project locations E12 and E13, during focused least Bell's vireo surveys conducted for the Former Alignment by Chambers Group in 2015. There are no CNDDB or USFWS historical occurrences documented within 5 miles of the Survey Area. A moderate amount of suitable habitat is present within the Survey Area.
yellow-breasted chat (*Icteria virens*)	Fed: none State: SSC	Habitats include swamplands, riparian willow thickets and other dense riparian brush, often near watercourses. Gleans vegetation for spiders, insects, and berries.	This is considered **present** for foraging and has a moderate potential to nest within the Survey Area. This species was detected singing during focused plant surveys conducted for the Proposed Project by RECON in 2014. In addition, there is one CNDDB historical occurrence documented within 5 miles of the Proposed Project from 1991 and a moderate amount of suitable habitat is present within the Survey Area.

Species Name	Listing Status[8]	Habitat Requirements	Potential to Occur
southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	Fed: none State: WL	Occurs in coastal sage scrub, chaparral, and rocky brush-laden hillsides. Diet consists primarily of small grass and forb seeds, occasionally will also consume insects.	This species is considered **present** and has a high potential to nest within the Survey Area. This species was detected within the Survey Area, north of Proposed Project Location P20, during focused coastal California gnatcatcher surveys conducted for the Former Alignment in 2015. There is suitable habitat in scrub habitat, particularly in the eastern section of Survey Area for foraging and nesting. There are 17 CNDDB historical occurrences documented within 5 miles of the Proposed Project and the Survey Area contains good quality suitable habitat to support this species.
grasshopper sparrow (*Ammodramus savannarum*)	Fed: none State: SSC	Inhabits grasslands and marshes. Breeds in open grass fields and prairies.	This species is considered **present** and has a moderate potential to nest within the Survey Area. This species was detected in the Carmel Valley Road Survey Area during wintering BUOW surveys in 2015/2016 and during breeding season BUOW surveys in spring 2016. There are no CNDDB or USFWS historical occurrences documented within 5 miles of the Survey Area.
tricolored blackbird (*Agelaius tricolor*)	Fed: BCC State: Candidate	Forms large breeding colonies in emergent wetlands with tall, dense cattails or tules, and in thickets of willow, blackberry, wild rose, or tall, dense forbs. Requires open, accessible water, protective nesting vegetation, and suitable foraging habitat with insect prey, seeds, and cultivated oats.	This species is presumed **absent** from the Survey Area for foraging and nesting. There are 2 CNDDB historical occurrences documented within 5 miles of the Proposed Project from over 80 years ago. The Survey Area lacks suitable habitat to support this species.
CLASS MAMMALIA			
western mastiff bat (*Eumops perotis*)	Fed: none State: SSC Other: WBWG high priority species	Occurs in many open, semi-arid to arid habitats, including conifer ad deciduous woodlands, coastal scrub, grasslands, and chaparral. They roost in crevices in cliff faces, high buildings, trees, and tunnels.	This species has a **low** potential to occur within the Survey Area. There are 3 CNDDB historical occurrences documented within 5 miles of the Project. The Survey Area contains low quality roosting habitat to support this species.
Townsend's big-eared bat (*Corynorhinus townsendii*)	Fed: none State: SSC Other: WBWG high priority species	Found in all habitats, except alpine. Elusive and rare throughout their range. Diet primarily consists of moths.	This species has a **low** potential to occur within the Survey Area. There is one CNDDB historical occurrence documented within 5 miles of the Project. The Survey Area contains low quality roosting habitat to support this species.
pocketed free-tailed bat (*Nyctinomops femorosaccus*)	Fed: none State: SSC Other: WBWG medium-high priority species	Occurs in pinyon-juniper habitats and a wide variety of desert habitats, such as alkali desert scrub, desert succulent scrub, and desert washes. Forages over open water for moths, flies, lacewings, and other insects.	This species has a **low** potential to occur within the Survey Area. There are 2 CNDDB historical occurrences documented within 5 miles of the Project. The Survey Area contains low quality roosting habitat to support this species.
big free-tailed bat (*Nyctinomops macrotis*)	Fed: none State: SSC Other: WBWG medium-high priority species	Colonial rooster that prefers rugged cliff faces, slopes, and outcrops. Roosts are rarely found in human structures. May be found in various woodland, desert, and scrub associations.	This species has a **low** potential to occur within the Survey Area. There is one CNDDB historical occurrence documented within 5 miles of the Project. The Survey Area contains low quality roosting habitat to support this species.
western yellow bat (*Lasiurus xanthinus*)	Fed: none State: SSC Other: WBWG high priority species	An obligate foliage roosting species that prefers dry, thorny vegetation and palms. Known to occur in a number of palm oases, and may use ornamental palms in landscaping.	This species has a **low** potential to occur within the Survey Area. There is one CNDDB historical occurrence documented within 5 miles of the Project. The Survey Area contains low quality roosting habitat to support this species.

Species Name	Listing Status[8]	Habitat Requirements	Potential to Occur
Mexican long-tongued bat (*Choernycteris mexicana*)	Fed: none State: SSC Other: WBWG high priority species	Occurs in a variety of habitats such as, desert and montane riparian, chaparral, and woodlands. Feeds primarily on nectar, may also consume fruit juices and pollen.	This species has a **low** potential to occur within the Survey Area. CNDDB lists one historical occurrences documented within 5 miles of the Project. The Survey Area contains low quality roosting habitat to support this species.
northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	Fed: none State: SSC	Occurs in chaparral, sage scrubs, and grasslands with rocks and course gravel. Primarily granivorous, however will also consume green vegetation and insects.	This species has a **low** potential to occur within the Survey Area. There are two CNDDB historical occurrences documented within 5 miles of the Project. The Survey Area contains a moderate amount of suitable habitat to support this species.
Dulzura pocket mouse (*Chaetodipus californicus femoralis*)	Fed: none State: SSC	Occurs in chaparral, sage scrubs, and grasslands with rocks and course gravel. Primarily granivorous, however will also consume green vegetation and insects.	This species has a **low** potential to occur within the Survey Area. There are 2 CNDDB historical occurrences documented within 5 miles of the Proposed Project from over 20 years ago. The Survey Area contains a limited amount of suitable habitat to support this species.
San Diego desert woodrat (*Neotoma lepida intermedia*)	Fed: none State: SSC	Occurs in coastal scrub of Southern California from San Diego county to San Luis Obispo county. Moderate to dense canopies are preferred; particularly abundant in rock outcrops and rocky cliffs and slopes.	This species has a **low** potential to occur within the Survey Area. There 6 CNDDB historical occurrences documented within 5 miles of the Project between 1993 and 2000. The eastern end of the Survey Area contains limited suitable habitat to support this species.
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	Fed: none State: SSC	Found in intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges in coastal sage scrub habitats in Southern California.	This species can be considered **present** within the Survey Area. This species was detected within the Survey Area during focused plant surveys conducted for the Proposed Project by RECON in 2014. There are 4 CNDDB historical occurrences documented within 5 miles of the Proposed Project and the Survey area contains a moderate amount of suitable habitat to support this species.

Source: Biological Technical Report (Chambers 2015)

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The locations of USFWS critical habitat areas for listed species were evaluated using GIS data relative to the Survey Area. No USFWS critical habitat is mapped within the Survey Area. San Diego ambrosia and thread-leaved brodiaea are the only species with designated critical habitat for plant species within 5 miles of the Survey Area. San Diego ambrosia was not observed within the Survey Area during 2014 and 2015 and is presumed absent for the purpose of the Proposed Project. USFWS critical habitat has been mapped within 2 miles of the Survey Area, and according to the CNDDB, the closest historical occurrence of San Diego ambrosia is approximately 1.6 miles from the Survey Area. Thread-leaved brodiaea was not observed within the Survey Area during 2014 and 2015 and is presumed absent for the purpose of the Proposed Project. Critical habitat mapped within the vicinity of the Survey Area is shown in Figure 4: USFWS Designated Critical Habitat of Appendix 5.4-A: Biological Technical Report.

Critical habitat for CAGN is mapped in several areas ranging from 2.6 miles to 5 miles from the Survey Area. Critical habitat for the arroyo toad is mapped within approximately 4 miles of the Survey Area. However, the closest known USFWS sensitive species occurrence is located to the east of Lake Hodges within the San Pasqual Valley, approximately 6 miles from the Proposed Project Survey Area. Critical habitat for San Diego fairy shrimp is located 5 miles to the southwest, south of Deer Canyon. The Survey Area does not contain suitable vernal pool habitat to support San Diego fairy shrimp.

Wildlife Migration Corridors

Wildlife corridors are areas that connect fragmented habitats. They serve as wildlife linkages (wildlife travel corridors) between otherwise fragmented patches of habitat caused by changes in vegetation communities, rugged terrain, and human disturbances. These linkages may be drainages, canyons, or ridgelines that provide access to foraging areas, water, breeding sites, and dispersal areas. These corridors provide cover and shelter during travel. Disturbance to wildlife corridors such as human disturbance and development can cause harm to migrating species, cause species to exceed their population thresholds, and/or prevent healthy gene flow between populations. CEQA Guidelines, Appendix G, requires that Proposed Project proponents disclose analysis of potential impacts to wildlife corridors. This section discusses the wildlife corridors present or potentially present within the Survey Area.

Terrestrial Species

Terrestrial wildlife species migrate through both upland and drainage areas, depending on the species. Species that need protective cover from predators (e.g., mammals, reptiles, and smaller avian species) tend to migrate along natural drainages and riparian corridors that have a high vegetative cover. These areas also serve as an important source of food resources (e.g., insects and seeds) for these species. Predator species, such as bobcat (*Lynx rufus*) or mountain lion (*Puma concolor*), require larger portions of intact habitat, including interconnected upland and riparian systems for migration. Disturbance to wildlife corridors such as human disturbance and development can cause harm to migrating species, cause species to exceed their population thresholds, and/or prevent healthy gene flow between populations.

The Proposed Project runs along an approximately 1.5 mile stretch of a local wildlife movement corridor, the unnamed tributary to the San Dieguito River referred to in this report and Appendix

C in Appendix 5.4-A: Biological Technical Report as AF-2. The unnamed tributary flows west and north for approximately 3.6 river miles to the confluence with the San Dieguito River, immediately downstream of the Lake Hodges Reservoir. The San Dieguito River continues westward approximately 11 miles to the San Dieguito Lagoon and the Pacific Ocean near Del Mar, San Diego County. Riparian habitat present along this corridor provides foraging habitat, protection, and water resources for wildlife and connects open space. Riparian systems harbor a high abundance of diversity in southern California. The unnamed tributary serves as a wildlife corridor for insect, amphibian, reptile, amphibian, mammal, and avian species.

Preserve Areas

Ecological preserves represent the biodiversity of an area, and provide habitat for species with needs that may not be fully met on managed land. A total of 16.9 acres of the Survey Area occurs within SDG&E mapped Preserve Areas. The SDG&E mapped Preserve Areas include San Diego Association of Governments (SANDAG) Conserved Lands and the San Diego County Department of Parks and Recreation "Parks CN." Conserved Lands within the Survey Area include the Black Mountain Open Space Park (City of San Diego-owned land), the Santa Fe Valley Open Space Preserve (San Diego County-owned land), the Westwood Valley Home Owners Association (HOA), and the Black Mountain Ranch LLC (Private). Parks CN within the Survey Area includes the Santa Fe Valley Open Space Preserve. If the NCCP is utilized for take coverage for the Proposed Project, mitigation within a Preserve Area for permanent impacts would be at a ratio of 2:1 (for areas outside of a preserve, the mitigation ratio is 1:1).

As shown on Figure 2: Land Management Habitat Plan Map of Appendix 5.4-A: Biological Technical Report, the following 17 pole locations on the Proposed Project occur within designated SDG&E Preserve Areas: pole top work on existing poles E01, E02, E03 and E09; proposed new poles P01, P02, P03, P20, and P21; proposed replacement pole P19; and proposed to remove from service poles R01, R02, R03, R04, R19, R20, and R21.

Wetlands and Jurisdictional Waters

Three aquatic features under the jurisdiction of USACE, RWQCB, and CDFW are located within the Proposed Project Survey Area (Appendix C in Appendix 5.4-A: Biological Technical Report). Specific access to pole locations and the location of work areas were identified to avoid potential impacts to aquatic resources within the Survey Area. Based on the new design changes, no permanent and/or temporary impacts to wetland waters or non-wetland waters of the U.S. and/or waters of the State are anticipated.

Non-jurisdictional features are also located within the Proposed Project Survey Area and include brow ditches to the south of the substation and a water detention basin to the west of the substation. Based on an analysis of historical aerial images and topographic maps, no historical aquatic resource existed in the brow ditch or water detention basin areas. These man-made features were constructed within uplands as BMPs to address storm water surface flows and are therefore exempt from USACE, RWQCB, and CDFW jurisdiction.

5.4.4 Potential Impacts

The following discussion describes the Proposed Project's potential to impact sensitive resources during construction and operations and maintenance of the Proposed Project. SDG&E would operate in compliance with all state and federal laws, regulations, and permit conditions.

Construction of the Proposed Project could result in temporary disturbance and/or permanent loss of sensitive vegetation communities. Temporary disturbance and/or permanent loss could occur to special status plant and wildlife species. Permanent loss includes long-term impacts associated with permanent features such as new poles. Temporary disturbance includes short-term impacts during removal of existing wood poles, installation for new poles, work at staging yards, stringing sites, staging areas, and improvements to existing access roads. The anticipated temporary and permanent impacts provided below account for each of the work area locations. In some locations, there are overlapping work areas that account for higher temporary and permanent work area estimates. Table 5.4-5 provides a breakdown of temporary and permanent impacts by vegetation community type.

Project-Specific Impacts

Artesian Substation

Permanent impacts are anticipated for the Artesian Substation expansion areas that include the expansion of the detention basin to the west of the existing substation, widening of an existing paved access road and construction of one new perimeter unpaved access road along the outside of the west and south walls of the existing substation and substation expansion area. The anticipated area of permanent impacts for the expansion area of the Artesian Substation is approximately 153,710 square feet. The detention basin to the west of the substation will require widening, calculated at approximately 29,675 square feet of additional permanent impacts. In addition, construction of an access road around the existing substation and substation expansion area (along the west and south walls) is approximately 15,563 square feet of additional permanent impacts. Permanent impacts associated with the substation expansion include the construction of two maintenance pads. The anticipated area of permanent impacts associated with the substation expansion maintenance pads include approximately 6,741 square feet of permanent impacts.

Directly-Embedded Steel Poles

The anticipated area of temporary impacts for installation of directly-embedded steel poles was calculated with an assumption that each location would require a 10-foot radius around the pole for a designated temporary work area, resulting in a temporary impact area of 314 square feet and a permanent impact area of 5 square feet, resulting in the calculated 309 square feet of temporary impacts for light-duty steel poles. However, to account for minor shifts in construction approaches, temporary impact areas were evaluated based on a 20-foot radius surrounding each existing wooden pole for approximately 1,256 square feet (0.03 acre) of work area per pole. The Proposed Project includes approximately 9 directly-embedded steel poles and may result in 14,608 square feet of temporary impacts and 191 square feet of permanent impacts.

Foundation Steel Poles

The anticipated area of temporary impacts for foundation steel poles was calculated with an assumption that each location would require a 75 feet by 75 feet area around the pole for drilled foundation poles, or a 150 feet by 150 feet work area around a cable foundation pole designated temporary work area, resulting in a temporary impact area of 5,625 square feet or 22,500 square feet respectively, and a permanent impact area of 39 square feet for the new foundation steel pole locations. The Proposed Project includes approximately 7 foundation steel poles and 5 foundation cable poles that cumulatively may result in 116,203 square feet of temporary impacts and 418 square feet of permanent impacts.

Access Roads

SDG&E will utilize existing access roads during construction. Widening of an existing paved access road and construction of one new unpaved perimeter access road along the outside of the west and south walls of the existing Artesian substation and the substation expansion area is proposed (see Project Specific Impacts, Artesian Substation above). Where existing access roads are damaged, repairs may be made by blading and smoothing the access road as applicable, avoiding drainage crossings. Importing and compacting more stable materials on existing facilities in unstable areas may also be required. Generally, access roads would be smoothed level to allow construction equipment and vehicles to access each site safely. SDG&E would continue to utilize BMPs to minimize dust and erosion.

Vehicles, equipment, and personnel will remain within existing paved or unpaved access roads and previously disturbed areas to the greatest extent possible.

Staging Yards and Temporary Work Areas

The use of three proposed staging yards –Kearny, Northeast Annex, and Carmel Valley – may result in temporary impacts to approximately 1,193,487 square feet. These staging yards have been previously disturbed.

Temporary work areas, including staging areas[9] and turnarounds, stringing sites, and pull sites would be sized according to local site conditions and as required by construction equipment and vehicles. The use of approximately nine temporary work areas may result in approximately 75,937 square feet of temporary impacts.

Existing Wood Poles Removed from Service and Pole Top Work

Approximately 17 poles and 6 stub poles will be completely removed from service and not replaced. Approximately 24 poles are proposed for pole top work only. The temporary impact area for the removal of the wood pole locations is expected to be a maximum of 314 square feet per site; however, potential modifications during the construction phase of the Proposed Project may be required in order to facilitate worker safety and to avoid impacts to natural resources, including sensitive habitats. To account for minor shifts in construction approaches, temporary

[9] Staging areas are smaller, temporary project usage areas that are placed along the alignment during construction for temporary placement of construction vehicles, materials, and equipment. Unlike staging yards, staging areas do not include fencing, office trailers, vehicle maintenance, or worker parking.

impact areas were evaluated based on a 20-foot radius surrounding each existing wooden pole for approximately 1,256 square feet (0.03 acre) of work area per pole. The removal of 23 poles from service may result in approximately 23,844 square feet of temporary impacts and pole top only work at approximately 24 locations may result in approximately 26,498 square feet of temporary impacts.

Guard Structures

Approximately 23 wooden guard structures will be utilized during construction at various locations where the Proposed Project crosses public roads. The guard structures are necessary to provide safety while conductor is pulled through the line. Two wooden poles will be erected at the junction where public roads intersect the existing Project. Approximately 72 square feet will be temporarily impacted to install each of the guard structures. The use of these temporary guard structures may result in up to approximately 1,288 square feet of temporary impacts.

Impacts to Biological Resources

Potential impacts to biological resources are separated into those likely to occur from construction (both short- and long-term impacts) and those that may occur as a result of substation and power line operation and maintenance. SDG&E anticipates that the duration of construction activities (i.e., when temporary impacts will occur) will be approximately 24 months.

SDG&E will also implement the SDG&E NCCP Operational Protocols provided in Appendix 5.4-B: SDG&E Subregional NCCP Operational Protocols. The SDG&E NCCP Operational Protocols are designed to provide avoidance and minimize impacts to all sensitive resources.

With SDG&E's implementation of the NCCP Operational Protocols, and through compliance with the FESA and CESA, all impacts associated with the Proposed Project are anticipated to be less than significant.

Vegetation Communities

Anticipated Proposed Project impacts were calculated based on vegetation mapping, site-specific conditions, and proposed impact areas described above for features included in the Proposed Project design. Construction work spaces are dynamic in nature and may require minor modifications during the construction phase of the Proposed Project in order to facilitate worker safety and avoid impacts to natural resources, including sensitive habitats. Therefore, the proposed temporary impact areas discussed below are estimated and may shift or be modified within the existing Proposed Project scope of work and previously evaluated 20-foot-radius potential impact area surrounding each pole.

The Proposed Project is anticipated to result in temporary impacts to the following habitat types: annual brome grassland, bare ground, California sagebrush-California buckwheat scrub, disturbed areas, disturbed California sagebrush-California buckwheat scrub, landscape/ ornamental vegetation, restored California sagebrush-California buckwheat scrub, restored/disturbed California sagebrush-California buckwheat scrub, and urban/developed. The Proposed Project is also anticipated to result in permanent impacts to the following habitat types: annual brome grassland, California sagebrush-California buckwheat scrub, disturbed areas,

disturbed California sagebrush-California buckwheat scrub habitat, landscape/ornamental vegetation, restored California sagebrush-California buckwheat scrub, restored/disturbed California sagebrush-California buckwheat scrub, and urban/developed.

A preliminary impact assessment is provided in the subsections that follow. Locations of annual and bulbiferous perennial special status plants, as well as most wildlife species, change from year to year and, therefore, may differ slightly in their spatial location during actual construction of the Proposed Project. General impacts to special status plant and wildlife species are based on the Proposed Project design and the focused surveys that have been conducted to date.

Anticipated permanent and temporary impacts to specific habitat communities associated with the Proposed Project were calculated using anticipated permanent and temporary impact work areas described above. These anticipated impact areas per habitat type are shown in detail in Table 5.4-5 and are further designated by vegetation community.

5.4.4.1 Significance Criteria

Standards of impact significance were derived from Appendix G of the CEQA Guidelines. Under these guidelines, the Proposed Project may have a potentially significant impact if it will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the 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, or other wetland areas) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP

Direct take of a federally or state-listed species will be considered a significant impact. For species not federally or state-listed, such as SSC species, temporary and/or permanent habitat loss is not considered a significant impact unless a significant percentage of total suitable habitat throughout the species' range is degraded or somehow made unsuitable, or areas supporting a large proportion of the species population are substantially and adversely impacted. Potential impacts to nesting bird species will be considered significant due to their protection under the MBTA.

5.4.4.2 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 Impact with Implementation of APMs

Direct Impacts

Special-Status Plants

Four special status plant species, as defined in Section 5.4.2 Methodology, and four CRPR 4 plant species were documented within the Survey Area. These species are listed in Table 5.4.3 Special Status Plant Species Observations within the Survey Area. Of these eight plant species observed within the Survey Area, the following three species were observed within construction impact areas:

- San Diego marsh elder - CRPR List 2B.1 and non-NCCP Covered Species
- southwestern spiny rush - a CRPR 4.2 and non-NCCP Covered Species
- Engelmann oak - a CRPR 4.2 and non-NCCP Covered Species

Substations

San Diego marsh-elder, a CRPR List 2B.1 and non-NCCP Covered Species, was observed around the Artesian substation in areas with supplemental irrigation. The presence of irrigation lines indicates the San Diego marsh elder would have difficulty establishing without supplemental water. The San Diego marsh elder is marketed as a slope stabilizing species by native plant nurseries. Planted this way, this species should be considered an ornamental species and should not be considered to be naturally occurring around the existing substation and within the restoration areas within AF-2 (Appendix C in Appendix 5.4-A: Biological Technical Report). Because these occurrences are considered ornamental, no impacts to sensitive plant species would occur at the Artesian Substation site. No sensitive plant species were identified within the Bernardo Substation or Rancho Carmel Substation.

Utility Corridor

San Diego marsh-elder was observed in areas between pole locations R01 and R02 in an area proposed for a maintenance pad or road, and two locations are directly adjacent to pole replacement sites along restored banks with irrigation systems. However, as stated above, this species should be considered an ornamental species and should not be considered to be naturally occurring within the restoration areas within AF-2.

Southwestern spiny rush, a CRPR 4.2 and non-NCCP Covered Species, was observed in two temporary impact locations within the Transmission Corridor. One location is within the area mapped for String Site #12, northwest of pole location E13. Since the stringing site would be situated within the access road, and the plant location is in the adjacent habitat, the plant can be flagged for avoidance. A second southwestern spiny rush location was within the temporary

work area of pole location E17. Since only pole-top work is proposed at this location, the plant can be flagged for avoidance, and equipment can be staged on the opposite side of the pole.

Engelmann oak, a CRPR 4.2 and non-NCCP Covered Species, was observed within the temporary work area of pole location R13 within the Transmission Corridor. This tree will be avoided to the greatest extent feasible; however, tree trimming may be required to complete the pole replacement.

Decumbent goldenbush, a CRPR list 1B.2 and non-NCCP Covered Species, was observed adjacent to an access road from structures E10 – E12. This species can be flagged for avoidance and no impacts to the decumbent goldenbush are anticipated.

Tecate cypress, a CRPR 1B.1 and NCCP-Covered Species, was observed approximately 35 feet east of pole R18. The tree appeared to be planted as part of landscaping or restoration efforts. Planted this way, this species should be considered an ornamental species and should not be considered to be naturally occurring near structure R18. However, since the pole is proposed to be removed from service, no impacts to this tree are anticipated.

Direct impacts to the special status plant species observed within the temporary or permanent impact areas associated with the Proposed Project may include plant destruction during construction.

The locations of special status plant species within the Survey Area are included in Appendix D: Special Status Plant Species Observed Map of Appendix 5.4-A: Biological Technical Report.

Staging Yards

No federal- or state-listed plant species or other special-status plant species were observed or have potential to occur within the Carmel Valley Road, Kearny, and Northeast Annex Staging Yards. The staging yards are entirely within Urban/Developed, Disturbed Areas, or within previously graded areas that have developed non-native grassland communities that do not support sensitive plant species. Therefore, no impacts on special-status plant species are anticipated during use of the staging yards.

Indirect Impacts

Potential temporary, indirect impacts to all eight special-status and CRPR 4 plant species could arise from runoff and sedimentation, erosion, and fugitive dust, and unauthorized access outside of the disturbance area during construction. In addition, the introduction and establishment of exotic species within or adjacent to special-status plant populations could adversely affect these species by reducing growth, dispersal, and recruitment. Exotic species are opportunistic and often occupy disturbed and bare soils such as those created in utility line corridors during construction.

Significance Determination

SDG&E would implement APMs and measures described in the SDG&E NCCP Operational Protocols (Appendix D in Appendix 5.4-A: Biological Technical Report). These protocols include restricting vehicles to existing roads when feasible, minimizing impacts by defining

disturbance areas, providing biological monitoring to assist crews in avoiding and minimizing impacts at sites with the potential for direct impacts, and designing construction activities to avoid or minimize new disturbance and erosion. Implementation of APMs and SDG&E's NCCP Operational Protocols would ensure that any potential direct and indirect impacts to special-status plant species would remain at a less-than-significant level. Impacts to species not covered under the NCCP are anticipated to be less than significant through implementation of APMs, NCCP Operating Protocols, and avoidance.

Special-Status Invertebrates

Direct Impacts

Substations

No special-status invertebrates were observed or have the potential to occur within the substations. Therefore, no impacts on special-status invertebrate species would be directly, permanently impacted from the expansion of the Artesian Substation, work on the Bernardo or Rancho Carmel Substations, access road widening and construction, or expansion of the detention basin.

Utility Line

Construction activities could potentially impact one sensitive invertebrate species: QCB. Focused surveys for QCB were conducted during the 2016 flight season and no QCB were detected.

A Low-Effect HCP was created by SDG&E and USFWS, and QCB is covered under the SDG&E Low-Effect QCB HCP. The QCB HCP mapped area includes approximately 3.6 acres at the eastern end of the Survey Area. Proposed Project features P20, P21, R19, R20, and R21, and portions of Stringing Sites 15, 18, and 19, are located within the HCP mapped area. Within this mapped area, the Proposed Project will result in a total of 21,105 square feet (0.5 acre) of impacts to QCB suitable habitat: 21,052 square feet of temporary impacts and 53 square feet of permanent impacts. Focused surveys for QCB were conducted during the 2016 flight season, per APM BIO-5. No QCB were detected within the Survey Area during the 2016 focused surveys. Therefore, 21,105 square feet (0.5 acre) of impacts to QCB suitable habitat will be mitigated for according to a 1:1 ratio for unoccupied habitat per the HCP.

Staging Yards

No special-status invertebrates were observed or have the potential to occur within the staging yards. Therefore, no special-status invertebrate species would be directly, permanently impacted from temporary use of the staging yards.

Indirect Impacts

Potential temporary, indirect impacts to QCB could arise from fugitive dust. In addition, the introduction and establishment of exotic species within or adjacent to QCB populations could adversely affect these species by reducing host plant growth, dispersal, and recruitment. Exotic

species are opportunistic and often occupy disturbed and bare soils such as those created in utility line corridors during construction.

Significance Determination

SDG&E would implement APMs and standard procedures and protocols as described in the SDG&E NCCP Operational Protocols (see Appendix 5.4-B: SDG&E Subregional Operational Protocols) and Section 3.2 of the QCB HCP. These protocols include restricting vehicles to existing roads when feasible, minimizing impacts by defining disturbance areas, providing biological monitoring to assist crews in avoiding and minimizing impacts at sites with the potential for direct impacts, and designing construction activities to avoid or minimize new disturbance and erosion. Implementation of APMs and SDG&E's NCCP Operational Protocols and the QCB HCP would ensure that any potential direct and indirect impacts to special-status invertebrate species would remain at a less-than-significant level.

Special-Status Amphibians and Reptiles

Direct Impacts

Substations

No special-status amphibian or reptile species were observed or have the potential to occur within the Proposed Project substations. Therefore, no special-status amphibian or reptile species would be directly, permanently impacted from the expansion of the Artesian Substation, work on the Bernardo or Rancho Carmel Substations, access road widening and construction, or expansion of the detention basin.

Utility Corridor

Proposed Project activities may result in impacts to one sensitive amphibian species that has a moderate potential to occur within the utility corridor: western spadefoot. The Proposed Project has been designed to avoid suitable habitat for this species. Therefore, permanent impacts to western spadefoot are not anticipated. Due to the presence of suitable habitat adjacent to Proposed Project access roads, temporary impacts such as disruption of breeding behavior due to vehicle traffic and temporary work areas may occur.

Proposed Project activities may result in impacts to three reptile species that have a moderate potential to occur: coast horned lizard, orange-throated whiptail, and red diamond rattlesnake. Permanent impacts to these species may include individual mortality due to Proposed Project traffic or entrapment and loss of potential foraging and breeding habitat due to the installation of new poles. Temporary impacts such as disruption of foraging behavior due to temporary work areas for installation of new poles and stringing sites may also occur.

Staging Yards

No special-status amphibian or reptiles were observed or have the potential to occur within the staging yards. Therefore, no special-status amphibian or reptile species would be directly, permanently impacted from temporary use of the staging yards.

Indirect Impacts

Potential temporary, indirect impacts to special-status amphibian or reptile species could arise from construction activities

Significance Determination

SDG&E would implement APMs and standard procedures and protocols as described in the SDG&E NCCP Operational Protocols (see Appendix 5.4-B: SDG&E Subregional Operational Protocols). These protocols include restricting vehicles to existing roads when feasible, minimizing impacts by defining disturbance areas, providing biological monitoring to assist crews in avoiding and minimizing impacts at sites with the potential for direct impacts, avoiding burrows, requiring the inspection of all trenches and excavations twice daily for wildlife entrapment, and requiring excavations to be sloped on one end to provide an escape route, and designing construction activities to avoid or minimize new disturbance. Implementation of APMs and SDG&E's NCCP Operational Protocols would ensure that any potential direct and indirect impacts to special-status amphibian and reptile species would remain at a less-than-significant level.

Special-Status Avian and Nesting Avian Species

Direct Impacts

Substations

No special-status avian species were observed or have the potential to occur within the Proposed Project substations. Therefore, no special-status avian species would be directly, permanently impacted from the expansion of the Artesian Substation, work on the Bernardo or Rancho Carmel Substations, access road widening and construction, or expansion of the detention basin.

Utility Corridor

Proposed construction activities may cause impacts to 11 special status avian species that have either been observed on site or have a moderate or high potential to breed or forage within the utility corridor, as depicted in Table 5.4-4: Special Status Wildlife Species' Potential to Occur. Direct impacts are possible to avian species that breed within the Survey Area, whereas minimal to no direct impacts will be expected to affect avian species that only forage in the Survey Area.

Direct impacts could affect the following avian species, which have been detected or are have a moderate or higher potential to occur within the Survey Area:

- LBVI (foraging confirmed, moderate breeding potential)
- CAGN (foraging confirmed, presumed absent for breeding)
- BUOW (foraging confirmed, presumed absent for breeding)
- northern harrier (foraging confirmed, moderate breeding potential)
- Allen's hummingbird (foraging confirmed, moderate breeding potential)

- Nuttall's woodpecker (foraging confirmed, moderate breeding potential)
- Cooper's hawk (foraging confirmed, moderate breeding potential)
- California horned lark (foraging confirmed, moderate breeding potential)
- loggerhead shrike (foraging confirmed, low breeding potential)
- yellow warbler (foraging confirmed, moderate breeding potential)
- yellow-breasted chat (foraging confirmed, moderate breeding potential)
- southern California rufous-crowned sparrow (foraging confirmed, moderate breeding potential)

Permanent or temporary impacts due to loss of nesting and foraging habitat may result from the removal of wood poles (which support cavity nesters and raptors, depending on the design of cross-arms) and the removal of vegetation during the use of stringing sites and temporary work areas for installation of new poles. Temporary impacts to avian nesting and foraging may include a temporary increase in noise from construction equipment and vehicles. Permanent impacts that could occur to these species are expected to be limited to individual mortalities or loss of potential nests protected under the MBTA during vegetation trimming or removal of existing wooden poles. However, through implementation of the Proposed Project avoidance measures (i.e. APMs and NCCP Operating Protocols), these impacts are not expected to occur.

Based on the results of the focused CAGN surveys conducted in 2015 and 2016, the California sagebrush-California buckwheat scrub habitat within and adjacent to the Survey Area is well suited for CAGN. Eleven CAGN were detected foraging within and adjacent to the Survey Area. These individuals were concentrated in three general locations: the western end of the Proposed Project near the Artesian Substation, approximately 0.15 mile north and 0.3 to 0.4 mile south of the Survey Area; the eastern end of the Proposed Project near the Bernardo Substation, within the Survey Area between Proposed Project locations P18 and R20; and south of the Carmel Valley Road Staging Yard.. No nesting CAGN have been detected within or adjacent to the Survey Area; therefore, CAGN are presumed absent for nesting within the Survey Area. Permanent impacts may include the removal of nesting and foraging habitat for pole installation. Temporary impacts to this species may include noise and visual disturbance and temporary loss of foraging habitat for staging yards and temporary work areas.

Based on the habitat assessment conducted for the Proposed Project in 2015, the structure of the riparian habitat within the Survey Area is well suited for LBVI; however, this habitat occurs mostly outside the proposed work areas. During focused LBVI surveys conducted by Chambers Group throughout the Survey Area in 2016, one lone male LBVI was detected singing and foraging between Proposed Project locations P18 and E18. In addition, one lone male LBVI was detected singing and foraging just northeast of Proposed Project location P16 during focused plant surveys conducted by RECON in 2014. Neither of the LBVI detected were observed nesting or exhibiting breeding behavior. Two more focused LBVI surveys are planned for July 2016 to complete a full round of eight protocol-level surveys. Permanent impacts may include the removal of potential foraging habitat for pole installation and road modifications. Temporary impacts to this species may include noise and visual disturbance and temporary loss of foraging and habitat for staging yards and temporary work areas. No nesting habitat is expected to be impacted as a result of the Proposed Project..

Permanent impacts to LBVI could include the removal of potential foraging habitat for pole installation and road modifications. Temporary impacts to this species could include noise and visual disturbance and temporary loss of foraging habitat for staging yards and temporary work areas. No nesting habitat is expected to be impacted as a result of the Proposed Project.

Loggerhead shrike was detected foraging but is considered to have a low potential to nest within the Survey Area due to very limited suitable nesting habitat. Northern harrier, white-tailed kite, Allen's hummingbird, Nuttall's woodpecker, Cooper's hawk, California horned lark, yellow warbler, yellow-breasted chat, and southern California rufous-crowned sparrow were detected during the surveys and have a moderate or high potential to nest within the Survey Area based on a moderate amount of suitable nesting habitat. Permanent impacts to these species could include the removal of nesting and foraging habitat for pole installation. Temporary impacts to these species could include noise and visual disturbance and temporary loss of foraging and nesting habitat for staging yards and temporary work areas.

Utility lines and other Proposed Project-related structures provide potential perching opportunities for raptor species, which can increase the potential for predation of wildlife, including sensitive mammal species, by raptors. Because the Proposed Project involves the replacement of existing facilities and does not include an extension of the existing TL, the extent of predation on sensitive and common wildlife species is not anticipated to differ from existing levels.

Concerns regarding potential electrocution of wildlife species from power lines, which is considered a permanent impact to species protected under the MBTA, are primarily focused on avian species. Electrocution of avian species can occur from wing contact with two conductors or other energized equipment. Electrocution of avian species poses a greater potential hazard to larger birds, such as raptors, because their body sizes and wing spans are large enough to bridge the distance between the conductor wires and, thus, complete the electrical circuit. 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. General Order 95, which governs overhead power and transmission line design, includes mandatory phase spacing that meets or exceeds the APLIC standards. Power line structures will be constructed in compliance with SDG&E standards for avian protection. These measures minimize the potential for wildlife electrocution.

Staging Yards

White-tailed kite and grasshopper sparrow were detected within the Carmel Valley Road Staging Yard during wintering BUOW surveys of 2015/2016. The Survey Area contains a moderate amount of suitable nesting habitat. Therefore, white-tailed kite is considered present for foraging and has a moderate potential to nest within the Survey Area. Based on the spring 2016 CAGN surveys, this species was identified foraging approximately 300 feet west of the Carmel Valley Road Staging Yard. Based on the 2015/2016 wintering BUOW surveys, this species was identified foraging within the Survey Area at the Carmel Valley Road Staging Yard. Breeding season surveys for BUOW were conducted in 2016. No breeding BUOW were identified. Finally, a pair of CAGN was detected south of the Carmel Valley Road Staging Yard during the

2015/2016 wintering BUOW surveys. This pair was foraging over 300 feet from the Carmel Valley Road Staging Yard boundary, across the busy intersection of Camino Del Sur and Carmel Valley Road.. Permanent impacts to these species may include the removal foraging habitat during construction. Temporary impacts to these species include noise and visual disturbance and temporary loss of foraging and nesting (white-tailed kite and grasshopper sparrow) habitat for staging yards and temporary work areas.

Indirect Impacts

Potential temporary, indirect impacts to special-status avian species could arise from construction activities, fugitive dust, and temporary displacement from foraging areas

Significance Determination

SDG&E would implement APMs and standard procedures and protocols as described in the SDG&E NCCP Operational Protocols (see Appendix 5.4-B: SDG&E Subregional Operational Protocols). These protocols include restricting vehicles to existing roads when feasible, minimizing impacts by defining disturbance areas, providing biological monitoring to assist crews in avoiding and minimizing impacts at sites with the potential for direct impacts, avoiding burrows, requiring the inspection of all trenches and excavations twice daily for wildlife entrapment, and designing construction activities to avoid or minimize new disturbance. APMs include completion of protocol-level surveys within all project areas to detect the presence, if any, of sensitive avian species as well as nesting bird surveys during construction. Implementation of APMs and SDG&E's NCCP Operational Protocols would ensure that any potential direct and indirect impacts (both permanent and temporary) to special-status avian species would remain at a less-than-significant level.

Special-Status Mammals

Direct Impacts

Substations

No special-status mammal species were observed or have the potential to occur within the substations. Therefore, no impacts on special-status mammal species would be directly, permanently impacted from the expansion of the Artesian Substation, access road widening and construction, or expansion of the detention basin.

Utility Corridor

Proposed construction activities, including removing and installing utility poles and clearing vegetation during creation of work areas and stringing sites, may cause both permanent and temporary impacts to one sensitive mammal species that was detected within the utility corridor during focused surveys in 2014-2016: black-tailed jackrabbit.

Permanent impacts from these activities may include a reduction of foraging and burrowing from pole installation. Temporary impacts may result from construction noise and ground vibration, as mammals may be deterred from inhabiting or foraging in areas near such activities.

Staging Yards

Black-tailed jackrabbits have a moderate potential to occur within the Carmel Valley Road staging yard. Permanent impacts to this species may include the removal of shelter and foraging habitat during construction. Temporary impacts to these species include noise and visual disturbance and temporary loss of foraging habitat for staging yards and temporary work areas.

Indirect Impacts

Potential temporary, indirect impacts to special-status mammal species could arise from construction activities, fugitive dust, temporary displacement from shelter/foraging areas, and unauthorized access outside of the disturbance area during construction.

Significance Determination

SDG&E would implement APMs (refer to Section 5.4.5) as well as standard procedures and protocols as described in the SDG&E NCCP Operational Protocols (see Appendix 5.4-B: SDG&E Subregional Operational Protocols). These protocols include restricting vehicles to existing roads when feasible, minimizing impacts by defining disturbance areas, providing biological monitoring to assist crews in avoiding and minimizing impacts at sites with the potential for direct impacts, avoiding burrows, requiring the inspection of all trenches and excavations twice daily for wildlife entrapment, and designing construction activities to avoid or minimize new disturbance. Implementation of APMs and SDG&E's NCCP Operational Protocols would ensure that any potential direct and indirect impacts to special-status avian species would remain at a less-than-significant level.

<u>Critical Habitat – No Impact</u>

The Proposed Project is not located within USFWS mapped critical habitat. As such, proposed construction activities would not result in temporary or permanent impacts to critical habitat.

Operation & Maintenance – Less than Significant Impact

SDG&E currently maintains and operates existing electric transmission, power, distribution and substation facilities throughout the Survey Area including the existing utility lines and the three substations affected by the Proposed Project. SDG&E's existing facilities and operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated per CEQA. Operations and maintenance activities for the Proposed Project would be similar to existing conditions.

Throughout the operation and maintenance of the Proposed Project, SDG&E would continue to implement the *SDG&E Subregional NCCP Operational Protocols.* These protocols include, but are not limited to, minimizing disturbance, minimizing impacts by defining the disturbance areas, restricting vehicles to existing roads when feasible, monitoring during clearing and grading activities, and minimizing erosion. With implementation of these NCCP Operational Protocols impacts from operation and maintenance activities will be less than significant.

5.4.4.3 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 Impact with Implementation of APMs

Direct Impacts

Substations

Vegetation communities that would be directly, permanently impacted from expansion of the Artesian Substation, widening and construction of an access road adjacent to the Artesian Substation, and expansion of a detention basin include Bare Ground, California Sagebrush-California Buckwheat Scrub, Disturbed Areas, Disturbed California Sagebrush-California Buckwheat Scrub, Landscape/Ornamental, Restored California Sagebrush-California Buckwheat Scrub, and Urban/Developed areas. Direct, temporary impacts would occur to these same vegetation communities and other cover types. California Sagebrush-California Buckwheat Scrub, Disturbed California Sagebrush-California Buckwheat Scrub, Restored California Sagebrush-California Buckwheat Scrub could provide habitat for wildlife species. Permanent direct impacts and temporary direct impacts to sensitive natural communities may include vegetation clearing during construction activities. Table 5.4-5 provides a breakdown of temporary and permanent impacts by vegetation community.

Utility Corridor

Vegetation communities that would be directly, permanently impacted from construction of the Proposed Project activities are Annual Brome Grassland, Bare Ground, California Sagebrush-California Buckwheat Scrub, Disturbed Areas, Disturbed California Sagebrush-California Buckwheat Scrub, Landscape/Ornamental, Restored California Sagebrush-California Buckwheat Scrub, Restored/Disturbed California Sagebrush-California Buckwheat Scrub, and Urban/Developed. Direct, temporary impacts would occur to these same vegetation communities and other cover types. Annual Brome Grassland, California Sagebrush-California Buckwheat Scrub, Disturbed California Sagebrush-California Buckwheat Scrub, Restored California Sagebrush-California Buckwheat Scrub, and Restored/Disturbed California Sagebrush-California Buckwheat Scrub vegetation communities provide habitat for wildlife species. Permanent direct impacts to these communities could occur as a result of vegetation clearing to install steel poles. Temporary direct impacts to sensitive natural communities may include vegetation clearing during construction activities. Indirect impacts will be considered temporary and may include additional dust deposition on the leaves of plants comprising sensitive natural communities, thus reducing their photosynthetic vigor.

Table 5.4-5: Anticipated Impacts to Natural Communities

Vegetation Community	Total within Impact Area (square feet)	Impact Area (square feet)	
		Permanent	Temporary
Scrub and Chaparral			
Annual Brome Grassland	16,692	54	16,638
California Sagebrush-California Buckwheat Scrub	33,702	161	33,541
Disturbed California Sagebrush-California Buckwheat Scrub	29,354	7,384	21,971
Restored California Sagebrush-California Buckwheat Scrub	65,349	49,533	15,816
Restored/Disturbed California Sagebrush-California Buckwheat Scrub	1,501	16	1,485
Total	**146,598**	**57,149**	**89,451**

Staging Yards

No permanent impacts to vegetation communities would result from the use of the staging yards. Temporary impacts will occur at the Carmel Valley Road staging yard. The Carmel Valley Road staging yard consists of Disturbed Areas and Urban/Developed areas and will avoid the Annual Brome Grassland community. The Kearny and Northeast Annex Staging Yards staging yard consists entirely of Urban/Developed areas surrounded by Landscape/Ornamental and Disturbed Areas.

Indirect Impacts

Potential indirect impacts, temporary and permanent, to vegetation communities may occur as a result of construction-related activities. Grading activities that have potential to create airborne dust, sedimentation, and erosion, can lead to the degradation of adjacent vegetation communities. The potential spread of exotic species into the surrounding vegetation communities would be considered a permanent, indirect impact. Exotic species are opportunistic and could occupy disturbed soils within disturbed areas and spread into adjacent vegetation communities. Once introduced, these exotic species often compete with natives for resources, resulting in a reduction in growth, future dispersal, and recruitment of native species, and the eventual degradation of the vegetation community.

Significance Determination

The Proposed Project was designed to avoid, when possible, sensitive vegetation communities that may support special-status species and sensitive biological resources, including placing poles outside of drainage areas; using existing access roads to the greatest extent possible; and placing staging areas, laydown areas, and guard structures outside of sensitive habitats, when feasible. In addition, the work spaces will be modified based on recommendations by the

biological monitor; therefore, anticipated impacts are expected to be smaller than calculated herein. Where avoidance of sensitive vegetation communities that provide habitat to NCCP Covered Species is not possible, or where sensitive vegetation communities exist adjacent to Proposed Project work areas, APMs and standard procedures and measures outlined in Sections 7.1 and 7.2 of the SDG&E Subregional NCCP (Appendix 5.4-B: SDG&E Subregional NCCP Operational Protocols) will be implemented to minimize impacts. These protocols include, but are not limited to, designing the Proposed Project to avoid or minimize new disturbance and erosion, minimizing impacts by defining the disturbance areas, flagging habitats for avoidance during construction, and restricting vehicles to existing roads when feasible. Implementation of the NCCP Operational Protocols[10] and compensatory mitigation as required by SDG&E's NCCP, or -in the event the NCCP is not utilized- through coordination with CDFW and USFWS (APM BIO-2) for these vegetation communities would ensure that these impacts remain less than significant.

Operation & Maintenance – Less than Significant

SDG&E currently maintains and operates existing electric transmission, power, distribution and substation facilities throughout the Survey Area including the existing utility lines and the three substations affected by the Proposed Project. SDG&E's existing facilities and operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated per CEQA. Operations and maintenance activities for the Proposed Project would be similar to existing conditions.

Throughout the operation and maintenance of the Proposed Project, SDG&E would continue to implement the *SDG&E Subregional NCCP Operational Protocols.* These protocols include, but are not limited to, minimizing disturbance, minimizing impacts by defining the disturbance areas, restricting vehicles to existing roads when feasible, monitoring during clearing and grading activities, and minimizing erosion. With implementation of these NCCP Operational Protocols, impacts from operation and maintenance activities will be less than significant.

5.4.4.4 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 – No Impact

Direct Impact

Substations

No waters under the jurisdiction of USACE, RWQCB, and CDFW occur within the substations. As a result, impacts to jurisdictional waters during the Artesian Substation expansion, work on the Bernardo and Rancho Carmel Substations, widening and construction of the access road, or expansion of the detention basin would not occur.

[10] As previously noted, SDG&E implements the NCCP Operational Protocols whether or not the NCCP is utilized for take coverage under the FESA and CESA.

Utility Corridor

The Proposed Project has been designed to avoid impacts to aquatic resources under the jurisdiction of the USACE, CDFW, and RWQCB. Avoidance measures include placing poles outside of jurisdictional areas, limiting access for overhead work in wetland/riparian areas to foot paths only, locating staging and stringing sites outside of jurisdictional areas, and shifting work spaces to avoid sensitive wetland/riparian areas.

Four poles are located within or immediately adjacent to Aquatic Feature-2 (AF-2) and are described below:

Pole location E09 is located within a sandbar willow thicket to the west of the intersection of Four Gee Road and Camino Del Sur. However, only pole top work is proposed for pole location E09. Access to pole location E09 will occur from the existing paved road with boom trucks; therefore, no impacts to AF-2 at pole location E09 are anticipated.

Stub pole location R17 (stub pole to existing wood structure at pole location P09) is located in upland vegetation immediately west of a wetland area comprised of salt grass (*Distichlis spicata*). The pole is to be removed from service and will be accessed by foot travel from the existing SDG&E access road. The pole will be cut in sections and removed from the area. The pole stump will be cut at ground level and left in place to avoid disturbance (grubbing and excavation) within AF-2. Four anchors will be cut 12 to 18 inches from the surface. No impacts to AF-2 at stub pole location R17 are anticipated.

Pole location R18 is located within arroyo willow – mule fat woodland habitat. In order to avoid construction-related and potential future maintenance-related impacts to AF-2, pole location R18 is to be removed from service. During construction, pole location R18 will be accessed by foot travel from the existing SDG&E access road and the pole will be cut in sections and removed from the area. The pole stump will be cut at ground level and left in place to avoid disturbance (grubbing and excavation) within AF-2. Therefore, no impacts to AF-2 at pole location R18 are anticipated.

Pole location E14 is located within spiny rush marsh immediately adjacent to arroyo willow – mule fat woodland community. However, only pole top work is proposed for pole location E14. During construction, pole location E14 will be accessed along the existing access road to within 30 feet of the pole. Pole top work will occur from bucket truck which will be parked outside the riparian/wetland community. A biological monitor will identify where trucks should be parked to avoid impacts to AF-2. No impacts to AF-2 at pole location E14 are anticipated.

Staging Yards

No waters under the jurisdiction of USACE, RWQCB, and CDFW occur within the staging yards. As a result, impacts to jurisdictional waters during use of these staging yards would not occur.

Indirect Impacts

Indirect impacts to aquatic resources will be avoided during construction by implementing measures outlined in the Project's Storm Water Pollution Prevention Plan (SWPPP).

Project design and implementation of APMs and the NCCP Operational Protocols will ensure that impacts to wetlands under the jurisdiction of the USACE, CDFW, and RWQCB will be avoided.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates existing electric transmission, power, distribution and substation facilities throughout the Survey Area including the existing utility lines and the three substations affected by the Proposed Project. SDG&E's existing facilities and operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated per CEQA. Operations and maintenance activities for the Proposed Project would be similar to existing conditions.

Throughout the operation and maintenance of the Proposed Project, SDG&E would continue to implement Best Management Practices (BMPs) consistent with its *Water Quality Construction BMP Manual* and the *SDG&E Subregional NCCP Operational Protocols*. Therefore, no additional impacts to jurisdictional waters are anticipated as a result of the Proposed Project.

5.4.4.5 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 Impact

Substations

The substations are located adjacent to urban development and a roadway. As such, the substation sites do not function as a wildlife movement corridor and are not part of a movement corridor. No impacts to a native wildlife movement corridor would occur during construction activities.

Utility Corridor

The proposed construction activities are not anticipated to impact or restrict terrestrial or aquatic wildlife movement. The new pole installations will be located within an existing ROW and are generally immediately adjacent to existing poles. The unnamed tributary (AF-2) is located adjacent to an approximately 1.5 mile long stretch of the Survey Area that could potentially be used as a migration corridor for mammal species; therefore, the quality of the site as a wildlife movement corridor for terrestrial species may be diminished on a temporary basis during construction. However, the proposed construction activities avoid AF-2 and would not restrict general wildlife movement due to the temporary and intermittent locations of construction activities. In addition, no extension of the existing tie line is proposed; therefore, there would be no long term effect on the quality of the adjacent wildlife movement corridors for terrestrial species. Construction vehicles have the potential to result in accidental injury to or mortality of on-site wildlife during construction; however, wildlife would be mobile and would likely temporarily leave an area where construction activity is occurring. In addition, the likelihood of on-site wildlife colliding with construction vehicles is low, as heavy vehicle traffic is currently present on roadways within the surrounding area. Biological monitoring (APM BIO-7) would

further reduce the likelihood of impacts to wildlife by construction vehicles. As such, impacts would be less than significant.

Staging Yards

The staging yards are located adjacent to urban development and a roadway. As such, the Proposed Substation site does not function as a wildlife movement corridor and is not part of a movement corridor. No impacts to a native wildlife movement corridor would occur during construction activities.

Operation & Maintenance – No Impact

The unnamed tributary (AF-2) is located adjacent to an approximately 1.5 mile long stretch of the utility corridor that could potentially be used as a migration corridor for mammal species; therefore, the quality of the site as a wildlife movement corridor for terrestrial species may be diminished on a temporary basis during operations and maintenance. However, the proposed operations and maintenance activities avoid AF-2 and would not restrict general wildlife movement due to the temporary and intermittent locations of construction activities. The substations and staging yards currently do not function as native wildlife movement corridors, therefore no impacts to native wildlife corridors would occur during operation and maintenance of the Proposed Project.

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

Construction and Operation & Maintenance – No Impact

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

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

Construction and Operation & Maintenance – No Impact

SDG&E's existing NCCP and Low-Effect HCP for QCB are the only conservation plans that apply to the Survey Area. The Proposed Project will not conflict with the provisions of either of these conservation plans, and there will be no impact.

SDG&E will follow the Operational Protocols identified in the NCCP for construction and operations and maintenance of the Proposed Project. SDG&E will follow the Low-Effect HCP for QCB for construction and operations and maintenance of the Proposed Project. Therefore, no impacts would occur.

5.4.5 Applicant Proposed Measures

Implementation of the following APMs would ensure that potential adverse impacts to biological resources would be less than significant:

- APM BIO-1: If work is scheduled to occur within suitable burrowing owl habitat (as determined in the Biological Technical Report), burrowing owl surveys will be conducted prior to construction consistent with the Take Avoidance Surveys described in the 2012 Staff Report on Burrowing Owl Mitigation. If burrowing owls are identified within approximately 150 meters (492 feet) of the proposed work area, SDG&E will implement the recommendations of said staff report to avoid impacts to burrowing owl.

- APM BIO-2: If the NCCP is not used for mitigation for the Proposed Project, SDG&E will compensate for temporary and permanent impacts to federal or state-listed species habitat at a ratio of one to one, or as required by the USFWS and/or CDFW.

- APM BIO-3: If construction occurs during the nesting or breeding season, SDG&E will perform a site survey in the area where the work is to occur. This survey will be performed to determine the presence or absence of nesting birds. If an active nest is identified, (i.e., containing eggs or young) a suitable construction buffer will be implemented to ensure that the birds are not substantially adversely affected. If the birds are federal or state-listed species, SDG&E will consult with the USFWS and CDFW as necessary. Monitoring of the nest will continue until the birds have fledged or construction is no longer occurring on site.

- APM BIO-4: SDG&E will conduct special status plant surveys for additional Survey Areas prior to construction.

- APM BIO-5: SDG&E will conduct protocol-level surveys for additional Survey Areas prior to construction for the coastal California gnatcatcher, quino checkerspot butterfly, least Bell's vireo, and burrowing owl breeding surveys.

- APM BIO-6: Prior to the start of construction, SDG&E will conduct training of all project personnel regarding the appropriate work practices necessary to effectively implement the Proposed Project APMs, standard operating procedures, and to comply with the applicable environmental laws and regulations.

- APM BIO-7: A biological monitor will be present during ground-disturbing and vegetation removal activities located within environmentally sensitive areas. Immediately prior to initial ground-disturbing activities and/or vegetation removal, the biological monitor will survey the site to ensure that no sensitive species will be impacted.

- APM BIO-8: If modifications to the pole work areas are required to conduct the work, SDG&E's on-site environmental monitors, as appropriate, will assist construction crews in the field to locate pole work areas that avoid and minimize impacts to sensitive environmental resources.

5.4.6 Detailed Discussion of Significant Impacts

The Proposed Project is not anticipated to result in significant impacts to biological resources.

5.4.7 References

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