TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Table **Page**

4.4 Biological Resources

Would the project:	Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife 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, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	❒	❒	☑	❒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	❒	❒	❒	☑

Would the project:	Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less Than Significant Impact	No Impact
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	❒	❒	❒	☑
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	❒	❒	❒	☑
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	❒	❒	❒	☑

4.4.1 Introduction

The purpose of this section is to document existing biological resources within the Proposed Project area and to assess impacts to biological resources, including wetlands, that may potentially occur as a result of Proposed Project implementation, including short-term construction activities and long-term operation and maintenance. In addition, this section reviews the Proposed Project for potential biological impacts with regard to consistency with plans or policies pertaining to biological resource protection. The Proposed Project consists of the following main components: construction and operation of the proposed Salt Creek Substation, modifications to the Existing Substation, construction and operation of a 5-mile-long power line along an existing Transmission Corridor (referred to herein as the "Transmission Corridor") between the Existing Substation south to the proposed Salt Creek Substation, and three staging yards in the City of Chula Vista (Figure 3.3). Five potential alternative staging yards identified within the OTC have been considered to provide backup and flexibility during construction, should staging yard availability change prior to construction of the Proposed Project. The five potential staging yards have been previously disturbed and, therefore, no grading is anticipated.

The Proposed Project will incorporate the standard set of operational protocols, avoidance and minimization measures, and mitigation set forth in SDG&E's Subregional NCCP to avoid and minimize potential impacts that may occur to biological resources during construction and upon operation of the Proposed Project (see Appendix 4.4-A, Biological Resources Technical Report). The SDG&E Subregional NCCP is a Habitat Conservation Plan (HCP) permitted under Section 10A of the federal ESA for incidental take and an NCCP permit under a management authorization pursuant to Section 2835 of the California Fish and Game Code (CFGC). SDG&E entered into an Implementation Agreement with USFWS and CDFW 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 avoidance of resources, application of protective measures and mitigation outlined in the SDG&E Subregional NCCP, and the SDG&E Enhancement and Monitoring Program, the Proposed Project's impacts to biological resources would remain less than significant.

4.4.2 Methodology

Surveys and assessments to inventory and evaluate biological resources were conducted within the Biological Study Area (BSA) during 2011, 2012, and 2013. The BSA is composed of an existing Transmission Corridor (that contains an existing wood and steel pole alignment); the Existing Substation, Hunte Parkway, and Eastlake Parkway staging yards; the proposed Salt Creek Substation; and a 500-foot survey buffer around these areas (Figures 4.4-1a through 4.4-1c). The BSA encompasses approximately 775 acres. A habitat assessment was conducted in October 2012 at the five alternative staging areas within OTC to determine their potential to support biological resources. These alternative staging yards occur within previously graded areas and do not support biological resources. In addition, it is not known whether they would be used for the Proposed Project. For these reasons, the alternative staging areas are not included in the BSA or impact analysis.

Prior to conducting field surveys, a search of the California Natural Diversity Database (CNDDB) (CDFW 2012a) and the California Native Plant Society (CNPS) Electronic Inventory (CNPS 2012) was conducted for the Jamul Mountains, Otay Mesa, and surrounding seven quadrangles (Imperial Beach, National City, Otay Mountain, Dulzura, La Mesa, El Cajon, and Alpine) to determine if there are any special-status species known from the region within and surrounding the Proposed Project. The results of the data query were then refined through site visits involving habitat assessments for these species. For the purposes of this report, species are considered to have special status if they meet at least one of the following criteria:

- Covered under the federal or state ESA (CDFW 2011a).
- CDFW Species of Special Concern (SSC) (CDFW 2011b; Jennings and Hayes 1994).
- CDFW fully protected species (CDFW 2011b).
- Covered as a state protected furbearing mammal (14 CCR Section 460).
- Listed as having a California Rare Plant Rank (CRPR) (formerly CNPS List) as List 1A (presumed extinct in California), 1B (rare, threatened, and endangered in California and elsewhere), or 2 (rare, threatened, or endangered in California, but more common

elsewhere). CRPR List 1A, 1B, and 2 species are considered special-status plant species if they fall within any of these categories as defined in the Native Plant Protection Act (NPPA), CFGC Section 1901 or the California ESA, or CFGC Sections 2050 through 2098 (California ESA).

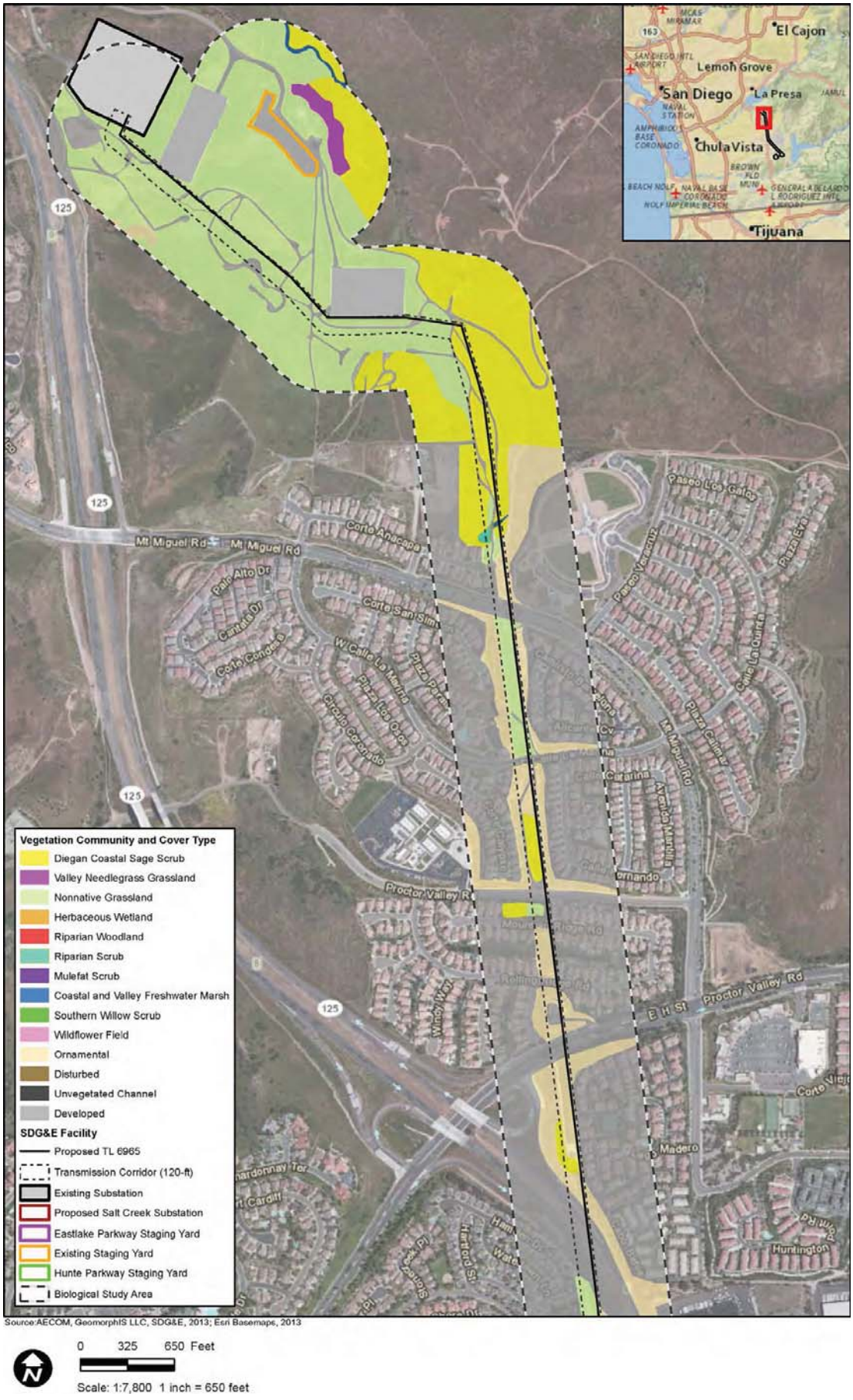
- CRPR List 3: plants for which more information is needed (a review list), or List 4: plants of limited distribution (watch list) (CNPS 2012).
- Covered under the SDG&E Subregional NCCP (SDG&E 1995).

Data regarding biological resources within the existing Transmission Corridor, staging yards, and proposed Salt Creek Substation BSAs were obtained through general habitat reconnaissance surveys, followed by focused surveys for sensitive species. Based on the database analysis and reconnaissance surveys, it was determined that focused surveys would be required for sensitive plant species; three federally listed wildlife species: the endangered Quino checkerspot butterfly (*Euphydryas editha quino*) (QCB), the threatened coastal California gnatcatcher (*Polioptila californica californica*) (CAGN), and the endangered least Bell's vireo (*Vireo bellii pusillus*) (LBV); and for western burrowing owl (*Athene cunicularia hypugaea*) (WBO), a California Species of Concern. A jurisdictional delineation and assessment for regulated "waters of the U.S." and state was also completed.

Between March and July 2011, AECOM conducted vegetation mapping and focused surveys for QCB, CAGN, LBV, and WBO for the proposed Salt Creek Substation. Between January and September 2012, AECOM conducted vegetation mapping; rare plant surveys; general wildlife surveys; and focused surveys for QCB, CAGN, and WBO for the proposed Transmission Corridor and staging yards. In March and September 2012, a jurisdictional delineation and assessment was completed for the proposed Salt Creek Substation, Transmission Corridor, and staging yards. In March 2013, follow-up visits were conducted by David Faulkner within the previous QCB survey areas to assess the suitability of habitat for QCB. General wildlife surveys occurred concurrently with focused protocol surveys during 2011 and 2012. In July 2013, general biological surveys were conducted to capture changes in the Proposed Project description, including the addition of the Eastlake Parkway staging yard. AECOM biologists incidentally recorded wildlife sign, track, and direct observations during focused protocol surveys. No biological surveys were conducted within the Existing Substation and 500-foot buffer of this facility, since all modification activities to this substation would occur within the current substation footprint, which consists of paved and gravel-covered areas surrounded by a chain-link fence.

Subsequent to the completion of surveys, the Proposed Project footprint changed in size due to design modifications for several of the Proposed Project components, thus changing the area covered by the 500-foot buffer. Vegetation mapping results presented in the following sections have been truncated to the BSA; however, sensitive species results are presented for the BSA and areas surveyed outside of the current BSA, which yields a more comprehensive and thereby conservative analysis. The survey methods for all general and focused surveys, including a list of the survey personnel and dates for each survey, survey results, and potential impacts, are provided in a Biological Technical Report prepared for the Proposed Project and included as Attachment 4.4-A.

Figure 4.4-1a: Vegetation Communities and Cover Types within the Biological Study Area



Note: SDG&E is providing this map with the understanding that the map is not survey grade.

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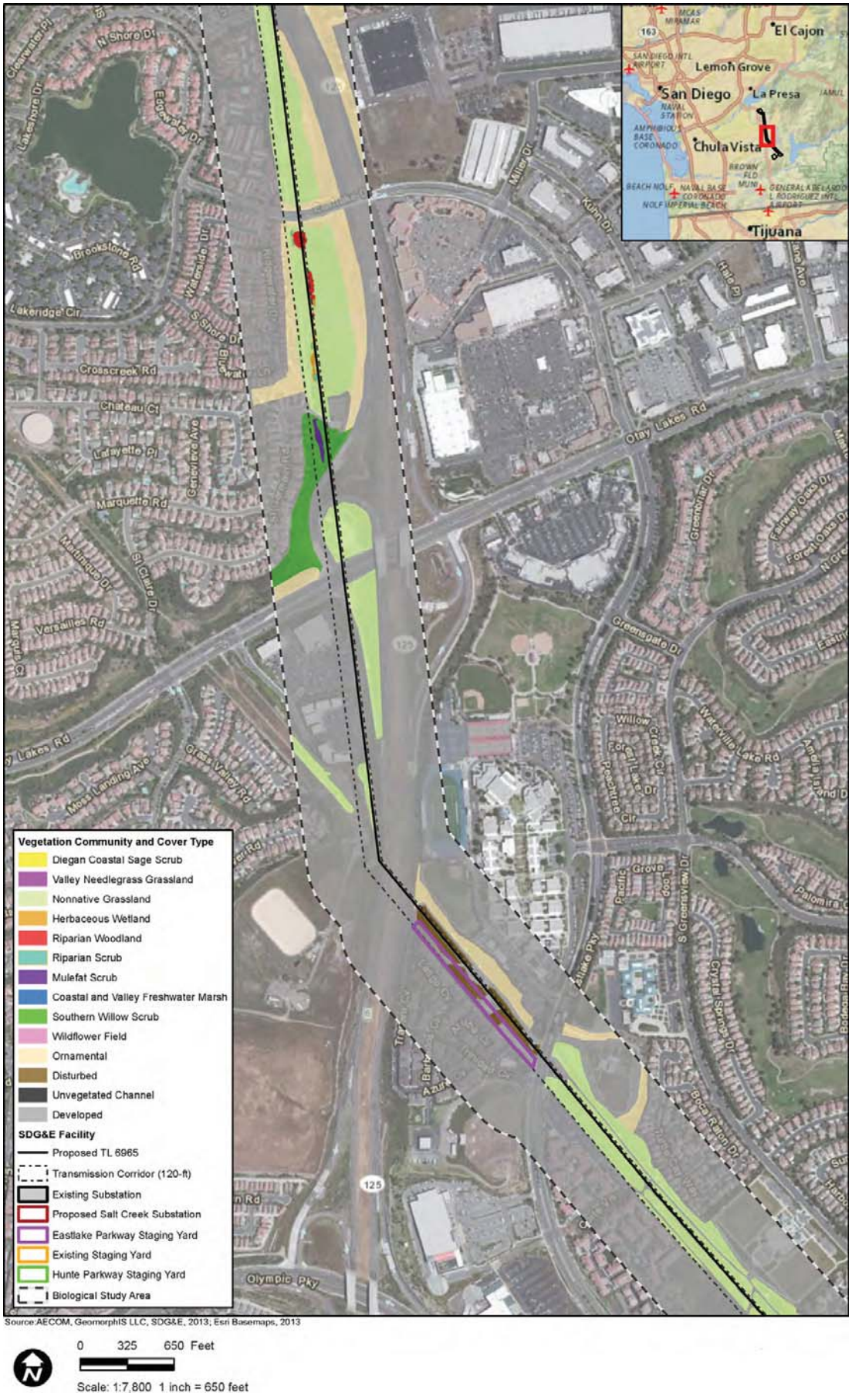
Figure 4.4-1b: Vegetation Communities and Cover Types within the Biological Study Area



Note: SDG&E is providing this map with the understanding that the map is not survey grade.

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Figure 4.4-1c: Vegetation Communities and Cover Types within the Biological Study Area

Note: SDG&E is providing this map with the understanding that the map is not survey grade.

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4.4.2.1 Vegetation Mapping and Habitat Suitability Surveys

Vegetation mapping was conducted within the proposed Salt Creek Substation site and a 500-foot buffer around the site in March, April, and June 2011. Vegetation mapping was conducted within the Transmission Corridor; Existing Substation, Hunte Parkway, and Eastlake Parkway staging yards; and a 500-foot survey buffer around each of these areas on March 9, 2012, and July 8, 2013 (Eastlake Parkway staging yard). Vegetation mapping of the Eastlake Parkway staging yard was modified from the original survey of the BSA in that area because the vegetation conditions at the Eastlake Parkway staging yard in July 2013 changed from those mapped in March 2012. Vegetation communities were classified and mapped in the field to provide a baseline of biological resources that occur or have the potential to occur in the Proposed Project area. Habitats were classified based on the dominant and characteristic plant species in accordance with vegetation community classifications following Holland (1986), as modified by Oberbauer et al. (2008). Vegetation mapping was completed using a field computer and a handheld submeter-accuracy global positioning system (GPS) unit at a 1:2400 scale (1 inch = 200 feet). Acreages of each habitat type (delineated as a habitat polygon on the compiled vegetation maps) were calculated using ArcGIS software.

4.4.2.2 Jurisdictional Delineation

Prior to field surveys, a pre-survey investigation was conducted to obtain contextual information relevant to the site to be surveyed; this may not be evident from the ground during field surveys. The following sources were consulted to gain a better understanding of the physical and hydrologic setting of the site:

- Historical maps of wetlands, riparian habitat, and other linear watercourses in the Proposed Project vicinity were assessed in the National Wetlands Inventory (NWI) map and reviewed in ArcGIS Version 10 software.
- Blue line data and watershed details were obtained through the National Hydrography Dataset (NHD) and viewed in ArcGIS Version 10 software.
- Topographical features that may promote the development of jurisdictional waters or contain potential jurisdictional waters were identified by reviewing the Jamul Mountains and Otay Mesa U.S. Geological Survey (USGS) 7.5-Minute Quadrangle Maps.

A reconnaissance-level jurisdictional waters assessment was completed within the a 60-foot buffer on each side of the proposed TL 6965 north of Hunte Parkway, a 75-foot buffer on each side of the proposed TL 6965 south of Hunte Parkway, and for the proposed Salt Creek Substation site. The assessment followed the guidelines set forth by the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual and the 2008 Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region, Version 2.0 (Environmental Library 1987, 2008). The assessment was performed by AECOM and RECON on March 21, 2012, and April 27, 2012, respectively. A follow-up assessment was conducted by AECOM on September 13, 2012, to further investigate the potential jurisdictional status of drainages that occur within the proposed Salt Creek Substation site. A jurisdictional waters assessment was completed for the Eastlake Parkway staging yard on July 29, 2013. A jurisdictional waters assessment was

completed for the portion of the Transmission Corridor bounded by Eastlake Drive to the north and Otay Lakes Road to the south by RECON on April 27, 2012. During the field assessment, spatial and tabular data were collected using a handheld submeter-accuracy GPS unit. Field-collected spatial and tabular data were exported to ArcGIS software to map the type, location, and extent of potential jurisdictional waters.

Areas meeting the criteria for jurisdiction under CDFW and the San Diego RWQCB were also evaluated and mapped. CDFW asserts jurisdiction over streambeds as they are described in CFGC Section 1600 et seq. and Title 14 CCR 720, which described state jurisdictional waters as follows:

> "all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams, and streambeds which may have intermittent flows of water."

In practice, CDFW usually extends its jurisdictional limit to the top of a stream/river bank, the bank of a lake, or the outer edge of the riparian vegetation, whichever is wider.

RWQCB jurisdiction is considered congruent with that of USACE jurisdiction. RWQCB also considers whether or not a feature possesses a "beneficial use" as outlined in the Water Quality Control Plan for the San Diego Basin (Basin Plan) (RWQCB 1994) when deciding if RWQCB jurisdiction should be asserted over a feature. Detailed survey methods and results of this assessment are presented in the jurisdictional delineation report included as an appendix in the Biological Technical Report (Appendix 4.4-A).

4.4.2.3 Rare Plant Surveys

Focused rare plant surveys were performed in accordance with survey protocols set forth by Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 2000); Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2009)[3]; and CNPS Botanical Survey Guidelines (CNPS 2001). Surveys in the Transmission Corridor and staging yards, and a 500-foot buffer around each of these areas, were conducted in March, May, and July 2012, and within the footprint of the proposed Salt Creek Substation and a 500-foot buffer in March, April, and May 2011.

The rare plant surveys were conducted by walking meandering transects through the BSA, recording all plant species observed, and mapping rare plants with a hand-held, submeter-accuracy GPS unit. Subsequent to the field survey, data were downloaded from the GPS unit, post-processed, and brought into ArcGIS for analysis. For very large occurrences of small annuals, a quadrat sampling method using a 1-square-foot quadrat was used to estimate the number of individuals. For large occurrences of shrubs, visual density estimates were made and then multiplied by the area occupied to estimate number of individuals. Detailed methods and results of the rare plant survey conducted in the Transmission Corridor and proposed Salt Creek Substation BSA are presented in two reports: Rare Plant Survey Report for the Proposed Salt

[3] This document replaced the CDFW document *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities*.

Creek 69kV Transmission Line Installation Project, Chula Vista, California (AECOM 2012a), and the Vegetation and Rare Plant Summary Report for the Proposed Salt Creek Substation for SDG&E (AECOM 2011a), respectively. These reports are included as appendices in the Biological Technical Report (Attachment 4.4-A).

4.4.2.4 Focused Protocol Surveys for Quino Checkerspot Butterfly

Habitat assessments to identify suitable habitat were conducted prior to initiating protocol-level surveys following the current protocols for the species (USFWS 2002). Approximately 220 acres of nonnative grassland and coastal sage scrub were surveyed within the BSA in 2011 and 2012.

Focused presence/absence surveys for QCB were conducted within the proposed Salt Creek Substation and 500-foot survey buffer between March 14 and April 20, 2011, and within the Transmission Corridor, staging yards, and a 500-foot survey buffer between February 17 and March 30, 2012. Detailed methods and results of the focused QCB surveys, including the names and permit numbers of the permitted biologists who conducted the surveys, are presented in two 45-day summary reports. Results of the Transmission Corridor survey are presented in 45-Day Summary Report of 2012 Focused Surveys for the Quino Checkerspot Butterfly for the Proposed 69kV Transmission Line Installation Project for SDG&E (AECOM 2012b). Results of the proposed Salt Creek Substation survey are in 45-Day Summary Report of Focused Surveys for the Quino Checkerspot Butterfly for the Proposed Salt Creek Substation for SDG&E (AECOM 2011b). These reports are included as appendices in the Biological Technical Report (Attachment 4.4-A).

On March 13 and 16, 2013, follow-up visits were conducted by David Faulkner within the previous QCB survey areas throughout the entire BSA to assess the suitability of habitat for QCB using the suitable habitat criteria established under SDG&E's QCB Low-Effect HCP (Faulkner 2013).

4.4.2.5 Focused Protocol Surveys for Coastal California Gnatcatcher

Due to the presence of suitable habitat for CAGN, including coastal sage scrub habitat, focused presence/absence surveys were determined necessary for approximately 54 acres within the BSA. Since the Proposed Project is covered by SDG&E's NCCP (SDG&E 1995), a minimum of three surveys were conducted at least 1 week apart between February 15 and August 30 to determine the presence/absence of CAGN. Protocol-level surveys were conducted between April 20 and June 24, 2011, in all suitable CAGN habitat within the proposed Salt Creek Substation site and 500-foot buffer zone. Protocol-level surveys were conducted between May 11 and August 16, 2012, in all suitable CAGN habitat within the Transmission Corridor, staging yards, and a 500-foot buffer around these Proposed Project components.

Protocol surveys followed the current USFWS survey protocol for the species (USFWS 1997). Biologists conducted passive surveillance (i.e., listening and looking for the species) in all habitats with potential to support CAGN. If an observation was not made after approximately 5 to 10 minutes of passive survey activity, a taped vocalization of CAGN was played for approximately 5 to 10 seconds (i.e., active survey activity), followed by another period of

passive observation. The taped vocalization was discontinued with any positive CAGN response. Surveys were not conducted during periods of inclement weather such as extreme wind or during a rain event.

Detailed methods and results of the focused CAGN surveys, including the names and permit numbers of the permitted biologists who conducted the surveys, are presented in two 45-day summary reports. Results of the 2011 survey within the Transmission Corridor are presented in 45-Day Summary Report of 2012 Focused Surveys for the Coastal California Gnatcatcher for the Proposed 69kV Transmission Line Installation Project for SDG&E (AECOM 2012c). Results for the proposed Salt Creek Substation are in 45-Day Summary Report of 2011 Protocol Surveys for Coastal California Gnatcatcher for the Proposed Salt Creek Substation for SDG&E, Otay Mesa, San Diego County, California (AECOM 2011c). These reports are included as appendices in the Biological Technical Report (Attachment 4.4-A).

4.4.2.6 Focused Protocol Surveys for Least Bell's Vireo

Due to the presence of suitable habitat for LBV, including riparian scrub habitat in the vicinity of the proposed Salt Creek Substation, focused surveys for LBV were determined necessary in riparian scrub habitat totaling approximately 1 acre within the 500-foot buffer of the proposed Salt Creek Substation. Protocol-level surveys were conducted between May 5 and July 27, 2011, following current USFWS survey protocol for the species (USFWS 2001). Biologists walked all potential LBV habitat and conducted passive surveillance (i.e., listening and looking for the species). Per the current USFWS protocol, suitable habitats within the BSA were surveyed eight times, at least 10 days apart, during the LBV breeding period (April 10 through July 31). No surveys were conducted for this species within the Transmission Corridor, staging yards, or other Proposed Project areas, as suitable habitat is not present.

Detailed methods and results of the focused LBV surveys, including the names and permit numbers of the permitted biologists who conducted the surveys, are presented in 45-Day Summary Report of 2011 Protocol Surveys for Least Bell's Vireo for the Proposed Salt Creek Substation for SDG&E, Otay Mesa, San Diego County, California (AECOM 2011d). This report is included as an appendix in the Biological Technical Report (Appendix 4.4-A).

4.4.2.7 Focused Protocol Surveys for Western Burrowing Owl

Due to the presence of suitable habitat for WBO, including grassland and scrub habitat with low-growing vegetation, focused presence/absence surveys were determined necessary. A total of 269 acres of suitable WBO habitat occur within the BSA. Surveys in 2011 were performed in May, June, July, and December for the proposed Salt Creek Substation according to the protocol established by the California Burrowing Owl Consortium (CBOC 1993) and accepted by CDFW.

Surveys in 2012 were performed for the Transmission Corridor, staging yards, and a 500-foot survey buffer around these Proposed Project components. The first survey was conducted on April 21 and 28, 2012. The second and third surveys were conducted on May 8 and June 7, 2012, and the fourth WBO survey was conducted on July 4 and 5, 2012. Protocols for conducting focused WBO surveys released by the California Burrowing Owl Consortium (CBOC)

(1993) were recently updated by CDFW (2012b). The updated survey protocols were generally followed in 2012; however, the first survey was conducted 6 days after the suggested latest start date (April 21 vs. April 15) because the work was originally scheduled to comply with the CBOC (1993) guidelines, which said "the nesting season survey should be conducted between April 15 and July 15 (the peak of the breeding season)." Additionally, the CDFW survey guidelines suggest that surveys between morning civil twilight and 10 a.m., and 2 hours before sunset until evening civil twilight provide the highest detection probabilities; however, due to mild daily temperatures, surveys extended beyond 10 a.m.

Detailed methods and results of the 2011 survey within the proposed Salt Creek Substation are presented in the Western Burrowing Owl Presence/Absence Surveys for the Proposed Salt Creek Substation for SDG&E (AECOM 2011e). Detailed methods and results of the 2012 survey within the Transmission Corridor are presented in the Western Burrowing Owl Presence/Absence Surveys for the Transmission Line Installation Project, Chula Vista, California (AECOM 2012d). These reports are included as appendices in the Biological Technical Report (Attachment 4.4-A).

4.4.3 Existing Conditions

4.4.3.1 Regulatory Background

Federal

Federal Endangered Species Act

The federal ESA of 1973 (50 CFR 17) is aimed at the protection of plants and animals that have been identified as being at risk of extinction, and classified as either threatened or endangered. The federal ESA also regulates the "taking" of any endangered fish or wildlife species, per Section 9 of the federal ESA. As development is proposed, the responsible agency or individual landowner is required to submit to a formal consultation with USWFS to assess potential impacts to listed species (including plants) or its critical habitat as the result of a development project, pursuant to Sections 7 and 10 of the federal ESA. USFWS is required to make a determination as to the extent of impact to a particular species a project would have. If it is determined that potential impacts to a species would likely occur, measures to avoid or reduce such impacts must be identified. USFWS may issue an incidental take statement, following consultation and the issuance of a Biological Opinion. This allows for take of the species that is incidental to another authorized activity, provided that the action will not adversely affect the existence of the species. Section 10 of the federal ESA provides for issuance of incidental take permits to private parties with the development of an HCP, such as SDG&E's Subregional NCCP.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Code [USC] 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed at 50 CFR 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species, and includes any part, egg, or nest of such bird (50 CFR 10.12).

Migratory birds are not necessarily federally listed as endangered or threatened birds under the federal ESA. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird or attempt such actions, except as permitted by regulation. The applicable regulations prohibit the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

Clean Water Act of 1972

Pursuant to Section 404 of the CWA, USACE is authorized to regulate any activity that would result in the discharge of dredged or fill material into "waters of the U.S." (including wetlands), which include those waters listed in 33 CFR 328.3 (Definitions). USACE, with oversight from USEPA, has the principal authority to issue CWA Section 404 permits.

Pursuant to Section 401 of the CWA, RWQCB certifies that the discharge will comply with state water-quality standards. RWQCB, as delegated by USEPA, has the principal authority to issue a CWA Section 401 water quality certification or waiver.

The NPDES is the permitting program for discharge of pollutants into surface "waters of the U.S." under Section 402 of the CWA. 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 for Section 404 permit actions.

Executive Order 11988, Floodplain Management

Executive Order 11988 requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains, and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. This Executive Order provides an eight-step process that agencies carry out as part of their decision-making process for projects that have potential impacts to or within a floodplain.

Executive Order 11990, Protection of Wetlands

Pursuant to Executive Order 11990, each federal agency is responsible for preparing implementing procedures for carrying out the provisions of the Executive Order. The purpose of this Executive Order is to "minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands." Each agency, to the extent permitted by law, must avoid undertaking or providing assistance for any activity located in wetlands, unless the head of the agency finds that there is no practical alternative to such activity, and the proposed action includes all practical measures to minimize harm to wetlands that may result from such actions. In making this finding, the head of the agency may take into account economic, environmental, and other pertinent factors. Each agency must also provide opportunity for early public review of any plans or proposals for new construction in wetlands.

Executive Order 13112, Invasive Species

Executive Order 13112 requires federal agencies to "prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health effects that invasive species cause." An invasive species is defined by the Executive Order as "an alien species [a species not native to the region or area] whose introduction does or is likely to cause economic or environmental harm or harm to human health."

State

California Endangered Species Act and Natural Community Conservation Planning Act

The California ESA of 1984, in combination with the California Native Plant Protection Act of 1977, regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the state. California also lists SSC based on limited distribution; declining populations; diminishing habitat; or unusual scientific, recreational, or educational value. CDFW is given the responsibility by the state to assess development projects for their potential to impact listed species and their habitats. State-listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding). In 1991, the California NCCP Act was approved and the NCCP Coastal Sage Scrub program was initiated in Southern California. California law (Section 2800 et seq. of the CFGC) established the NCCP program "to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP Act encourages preparation of subarea plans, such as SDG&E's Subregional NCCP, which address habitat conservation and management on an ecosystem basis rather than one species or habitat at a time.

Fully Protected Species

Prior to the development of the federal and state ESAs, species were listed as "fully protected" by California. Fully protected species, including fish, amphibians, reptiles, birds, and mammals, were identified to allow for the protection of those animals that were rare or that were threatened by potential extinction. The majority of fully protected species have since been listed as threatened or endangered under the California ESA and/or the federal ESA. Per Section 4700 of the CFGC, the possession or taking of fully protected species is only allowed as provided in Section 2081.7 and 2835 of the CFGC.

Sections 1600–1602 of the California Fish and Game Code – Lake or Streambed Alteration

Pursuant to Division 2, Chapter 6, Section 1602 of the CFGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake that supports fish or wildlife. A Lake or Streambed Alteration Agreement Application must be submitted to 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." CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources.

CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3801, 4700, 5050, and 5515

Within California, fish, wildlife, and native plant resources are protected and managed by CDFW. The California Fish and Wildlife Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the CFGC address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish). In addition, protection of birds of prey is provided for in Sections 3503, 3513, and 3800 of the CFGC.

Native Plant Protection Act

The NPPA was adopted in 1977 (CFGC Sections 1900–1913) to preserve, protect, and enhance rare and endangered plants. CDFW is responsible for administering the NPPA, and the Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to provide measures to avoid take.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act provides for statewide coordination of water quality regulations. The SWRCB was established as the statewide authority, and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis.

Regional Water Quality Control Board

The RWQCB is the primary agency responsible for protecting water quality in California. The RWQCB regulates discharges to surface waters under the federal CWA and the California Porter-Cologne Water Quality Control Act. The RWQCB's jurisdiction extends to all waters of the state and to all waters of the U.S., including wetlands (isolated and non-isolated conditions).

Through 401 Certification, Section 401 of the CWA allows the RWQCB to regulate any proposed federally permitted activity that may affect water quality. Such activities include the discharge of dredged or fill material, as permitted by USACE, pursuant to Section 404 of the CWA. The RWQCB is required to provide "certification that there is reasonable assurance that an activity [that] may result in the discharge to 'waters of the U.S.' will not violate water quality standards," pursuant to Section 401. Water Quality Certification must be based on the finding that the proposed discharge will comply with applicable water quality standards.

In addition, pursuant to the Porter-Cologne Water Quality Control Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if

Section 404 does not apply. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

Regional and Local Plans

SDG&E Subregional Natural Community Conservation Plan

In December 1995, USFWS and CDFW approved the SDG&E Subregional NCCP, developed in coordination with such agencies that addresses potential impacts to species and habitat associated with SDG&E's ongoing installation, use, maintenance, and repair of its gas and electric systems, and typical expansion to those systems throughout much of SDG&E's existing service territory. As a part of the SDG&E Subregional NCCP, SDG&E was issued incidental take permits (Permit PRT-809637) by USFWS and CDFW for 110 Covered Species. Covered Species and their habitats are subject to the provisions of the SDG&E Subregional NCCP. The SDG&E Subregional NCCP was developed by following the multiple species and habitat conservation planning approach. Even with the SDG&E Subregional NCCP, SDG&E's goal is to avoid "take" of Covered Species whenever possible, and to implement measures to minimize and mitigate any take to the maximum extent possible. The SDG&E Subregional NCCP includes 61 operational protocols that apply to construction, operations, and maintenance activities. In approving the NCCP, USFWS and CDFW determined that the operational protocols avoid potential impacts and provide appropriate mitigation where such impacts are unavoidable, and ensure the protection and conservation of federal- and state-listed species and Covered Species. The Proposed Project falls within the area in which SDG&E's utility operations are governed by the SDG&E Subregional NCCP, which would be applied to the Proposed Project. The NCCP is limited to new electric substations that will result in up to 20 acres of habitat disturbance, and does not apply to major expansions of SDG&E's electric system. Because it is not a major expansion and would result in less than 9 acres of habitat disturbance to SDG&E NCCP covered habitats (see Section 4.4.4, Potential Impacts), the Proposed Project is covered by the NCCP. As such, the NCCP fully addresses all of the potential construction, operations, and maintenance impacts of the Proposed Project on federal- and state-listed species and Covered Species. The NCCP avoidance and minimization measures and operational protocols have been incorporated as part of the Proposed Project description.

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

City of Chula Vista Multiple Species Conservation Program Subarea Plan

The MSCP is a comprehensive, long-term habitat conservation plan developed to address the needs of multiple species and the preservation of natural vegetation communities in southwestern San Diego County. The MSCP Subregional Plan, a "framework" plan for the 12

participating jurisdictions, was adopted by the City of San Diego and County of San Diego in 1997. The MSCP Subregional Plan addresses the potential impacts of urban growth, natural habitat loss, and species endangerment, and creates a plan to mitigate for the potential loss of Covered Species and their habitat due to the direct, indirect, and cumulative impacts of future development on public and private lands within the MSCP's approximately 900-square-mile study area. The City of Chula Vista MSCP Subarea Plan is a policy document through which the MSCP Subregional Plan is implemented within the City of Chula Vista's jurisdiction (City of Chula Vista 1993, 1997). The City of Chula Vista's MSCP Subarea Plan provides a blueprint for habitat preservation and forms the basis for federal and state incidental take permits for 86 plant and animal species within the City of Chula Vista. The BSA is within the City of Chula Vista's Subarea and MSCP Planning Area.

City of Chula Vista Wetlands Protection Program

Wetlands are protected throughout the City of Chula Vista's MSCP Subarea Plan through individual project entitlement reviews and the associated CEQA process. The process provides an evaluation of wetlands avoidance and minimization, and ensures compensatory mitigation within the Chula Vista Subarea or Chula Vista Planning Area for unavoidable impacts to wetlands, thereby achieving no overall net loss of wetlands.

Otay Ranch Resource Management Plan

The proposed Salt Creek Substation is located within Otay Ranch, an approximately 22,899-acre planned community in the eastern portion of the City of Chula Vista (City of Chula Vista 1993, 1996). The Otay Ranch Resource Management Plan (RMP) was developed prior to the City of Chula Vista's MSCP to provide mitigation for development projects occurring in Otay Ranch by requiring conveyance/purchase of 1.188 acres of land for every 1 acre of developable land to assemble the Otay Ranch Preserve (City of Chula Vista 1993, 1996). The RMP is intended to be the functional equivalent of the County of San Diego Resource Protection Ordinance (RPO) for Otay Ranch.

4.4.3.2 Physical Setting of Proposed Project

The BSA is located on flat to minor slopes along previously disturbed areas near the Existing Substation and within an existing SDG&E ROW. The Transmission Corridor is located within urban developed, landscape/ornamental, disturbed, nonnative grassland, and coastal sage scrub habitats and cover types. The elevation for the Transmission Corridor and staging yards ranges from approximately 300 feet above mean sea level (amsl) at the northern end of the Transmission Corridor at the Existing Substation to 540 feet amsl at the southern end of the Transmission Corridor along Hunte Parkway. The proposed Salt Creek Substation site is primarily flat with a gentle slope across the site from north (510 amsl) to south (430 amsl). Manufactured slopes rise up to Hunte Parkway at 535 amsl, which lies along the northern perimeter of the proposed Salt Creek Substation site. The proposed Salt Creek Substation site is composed primarily of nonnative grassland, Diegan sage scrub, and ornamental/landscaped cover types. Commercial and residential developments are located within and adjacent to the BSA. Other development features present include major transportation corridors (SR-125), asphalt and compacted earthen roads, trails, fencing, ephemeral and intermittent stream features, culverts, and swales.

4.4.3.3 Existing Biological Resources within the Biological Study Area

Vegetation Communities and Cover Types

Three generalized categories are being used to characterize and discuss the land cover types observed during vegetation community mapping: riparian and wetlands, uplands, and other cover types. Vegetation classification systems used in the Biological Technical Report prepared for this Proposed Project follow those of Holland (1986), as modified by Oberbauer et al. (2008). Descriptions of these vegetation communities and other cover types are provided in the following discussion.

Fourteen vegetation communities and other cover types were identified within the Transmission Corridor, staging yards, proposed Salt Creek Substation site, and 500-foot survey buffer, nine of which are native vegetation communities: coastal and valley freshwater marsh, herbaceous wetland, mulefat scrub, riparian scrub, riparian woodland, southern willow scrub, Diegan coastal sage scrub, valley needlegrass grassland, and wildflower field. Figures 4.4-1a through 4.4-1c depict the locations of vegetation communities, and Table 4.4-1 provides a summary of the acreages of vegetation communities and other cover types within the BSA.

Riparian and Wetlands

Coastal and Valley Freshwater Marsh

A thin band of coastal and valley freshwater marsh is located within a small tributary in the far northern portion of the BSA, just northeast of the Existing Substation staging yard. Another small area of coastal and valley freshwater marsh is located in the extreme southern portion of the BSA, south of the proposed Salt Creek Substation site. These areas are approximately 0.45 acre and are permanently inundated by fresh water, which flows from small ponds located outside of the BSA. These communities consist of monotypic stands of southern cattail (*Typha domingensis*).

Mulefat Scrub

A small area of mulefat scrub of approximately 0.21 acre occurs within a flood control channel in the central portion of the BSA, east of SR-125 and west of St. Germain Road. This early seral community is strongly dominated by mulefat (*Baccharis salicifolia*), along with the occasional arroyo willow (*Salix lasiolepis*) and invasive tree tobacco (*Nicotiana glauca*).

Herbaceous Wetland

Herbaceous wetland occurs within mesic depressional areas. Often, these wetlands may only occur during wetter-than-average years, and are usually found in swale areas or adjacent to drainages. These seasonal wetlands support mainly annual species, including rabbitfoot grass (*Polypogon monspeliensis*), rye grass (*Festuca perennis*), loosestrife (*Lythrum hyssopifolia*), scarlet pimpernel, (*Anagallis arvensis*), and curly dock (*Rumex crispus*). These areas do not support species typically associated with coastal and valley freshwater marsh (*Typha*, *Scirpus*, and *Juncus*).

Table 4.4-1: Vegetation Communities/Land Cover Types within the BSA[1]

Vegetation Communities and Other Cover Types	Proposed Salt Creek Substation (Acres)	Transmission Corridor (Acres)	Staging Yards (Acres)	500-Foot Buffer (Acres)	Total (Acres)
Riparian and Wetland					
Coastal and Valley Freshwater Marsh	-	0.04	-	0.41	0.45
Herbaceous Wetland	-	0.16	-	0.03	0.19
Mulefat Scrub	-	0.21	-	-	0.21
Riparian Scrub	-	0.17	-	0.98	1.15
Riparian Woodland	-	0.23	-	0.16	0.39
Southern Willow Scrub	-	0.87	-	3.50	4.37
Unvegetated Channel	0.13	0.41	-	0.10	0.64
Total Riparian and Wetland	*0.13*	*2.09*	*0.00*	*5.18*	*7.40*
Upland					
Diegan Coastal Sage Scrub	1.14	4.14	-	49.23	54.51
Nonnative Grassland	5.26	39.45	23.40	127.02	195.13
Valley Needlegrass Grassland	-	-	-	1.70	1.70
Wildflower Field	1.59	-	-	-	1.59
Total Upland	*7.99*	*43.59*	*23.40*	*177.95*	*252.93*
Other Cover Types					
Disturbed Habitat	2.42	1.23	0.55	1.90	6.10
Landscape/Ornamental	-	5.67	0.05	51.91	57.63
Urban/Developed	1.10	20.88	2.90	426.30	451.18
Total Other Cover Types	*3.52*	*27.78*	*3.50*	*480.11*	*514.91*
Total	**11.64**	**73.46**	**26.90**	**663.24**	**775.24**

[1] Values may not sum due to rounding.

Within the BSA, approximately 0.19 acre of herbaceous wetland occurs along a channel/drainage feature in a larger area of nonnative grassland, south of Eastlake Parkway and west of SR-125.

Riparian Scrub

Riparian scrub occurs in the far northern and southern portions of the BSA, and consists of approximately 1.15 acres. In the north, this community is part of a flood control channel and

consists mostly of nonnative species, including myoporum (*Myoporum* sp.), Mexican fan palm (*Washingtonia robusta*), and invasive tree tobacco.

In the south, a tributary drainage connecting downstream to Salt Creek flows along the southern boundary of the BSA. This drainage is occupied by arroyo willow with pockets of freshwater marsh occurring within the willow scrub habitat. Other characteristic species found within this community include the invasive salt cedar (*Tamarix ramosissima*), mulefat, red willow (*Salix laevigata*), and southern cattail.

Riparian Woodland

Riparian woodland is a moderately dense woodland dominated by small trees or shrubs. This community predominantly occurs along major river systems, but also occasionally occurs along smaller tributaries and drainage features. Within the BSA, approximately 0.39 acre of riparian woodland occurs along a small channel/drainage feature south of Eastlake Parkway and west of SR-125. Characteristic species include arroyo willow, black elderberry (*Sambucus nigra*), tree tobacco, and broom baccharis (*Baccharis sarothroides*).

Southern Willow Scrub

Southern willow scrub occurs in two separate stands in the central and southern portions of the BSA. In the central portion of the BSA, east of SR-125 and south of Eastlake Drive, this community occurs within a flood control channel. Dominant plants include arroyo willow, mulefat, and broom baccharis.

In the southern portion of the BSA, a tributary drainage connecting downstream to Salt Creek flows along the southern edge, just outside of the proposed Salt Creek Substation footprint. This drainage is occupied by southern willow scrub dominated by arroyo willow with pockets of freshwater marsh occurring within the willow scrub habitat. Other characteristic species found within this community on-site include salt cedar, mulefat, red willow, and southern cattail. Approximately 4.37 acres consisting of southern willow scrub occurs within the BSA.

Unvegetated Channel

Approximately 0.64 acre consisting of earthen or concrete channels occurs throughout the BSA. These features consist of a bed and bank and are considered unvegetated (less than 2% cover of herbaceous species and less than 10% cover by tree or shrub species).

Uplands

Diegan Coastal Sage Scrub

Diegan coastal sage scrub is found mostly in the far northern and southern portions of the BSA, with three small, isolated areas in the central portion of the BSA. This community consists of approximately 54.51 acres and is dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), and San Diego sunflower (*Bahiopsis laciniata*). Other characteristic species of coastal sage scrub found within the BSA include lemonade berry (*Rhus integrifolia*), deerweed (*Acmispon glaber*), and wild cucumber (*Marah macrocarpa*).

Nonnative Grassland

Approximately 195.13 acres of nonnative grassland is found on disturbed soils throughout the BSA. Dominant species include wild oats (*Avena* spp.) and ripgut brome (*Bromus diandrus*). Numerous native and nonnative species occur in association with this vegetation community, including invasive yellowstar thistle (*Centaurea solstitialis*) and Russian thistle (*Salsola tragus*). Large areas of nonnative grassland are mowed and maintained within the central portion of the BSA.

Valley Needlegrass Grassland

Valley needlegrass grassland, designated as rare on the CNDDB, occurs on fine-textured clay soil just east of the Existing Substation. This grassland consists of approximately 1.70 acres and is dominated by perennial tussock-forming purple needlegrass (*Stipa pulchra*). Many native perennial and annual herbs are present such as checker-mallow (*Sidalcea malviflora*), onion (*Allium haematochiton*), blue-eyed grass (*Sisyrinchium bellum*), blue dicks (*Dichelostemma capitata*), California poppy (*Eschscholzia californica*), and goldfields (*Lasthenia californica*).

Wildflower Field

Wildflower field occurs on heavy clay soils within the central mesa-top in the far southern portion of the BSA, south of Hunte Parkway. Clay soils in this region often support clay endemic plant species, including special-status species. The wildflower field on-site consists of approximately 1.59 acres and is dominated by a special-status clay endemic plant species Palmer's grapplinghook (*Harpagonella palmeri*). Other associated plant species include storksbill (*Erodium botrys*), blue-eyed grass, blue dicks, purple needlegrass, and foothill needlegrass (*Stipa lepida*).

Other Cover Types

Disturbed Habitat

Disturbed habitat is common throughout the BSA and consists of approximately 6.10 acres. These areas occur primarily along roadsides in the Transmission Corridor, and within and adjacent to the Eastlake Parkway staging yard. This cover type is generally dominated by nonnative grassland and invasive species, interspersed with varying amounts of bare ground.

The cut banks or manufactured slopes associated with Hunte Parkway are maintained with an ornamental ground cover of African daisy (*Gazania linearis*), with the nonnative weed species sweet clover (*Melilotus indicus*) and Russian thistle. This land cover type contains about 20% bare ground.

Ornamental/Landscape

Areas of ornamental/landscape plantings occur throughout the BSA and consist of approximately 57.63 acres. These areas include lawns, parks, and freeway and residential roadsides and medians. Common species in these areas include African daisy, eucalyptus (*Eucalyptus* spp.), myoporum, African fountain grass (*Pennisetum setaceum*), California bay (*Umbellularia californica*), and invasive Peruvian pepper tree (*Schinus molle*). Ornamental

plantings of native sage scrub species such as California sage brush and lemonade berry were also observed.

Urban/Developed

This category consists of approximately 451.18 acres and includes areas of paved roads, parking lots, and buildings such as the residential housing and commercial development found in the BSA. It is not considered a vegetation community, and typically supports no or very few biological resources.

Jurisdictional Waters and Wetlands

As presented in Table 4.4-2, a total of 0.81 acre of potential jurisdictional waters were identified during jurisdictional reconnaissance-level field assessments conducted within the proposed Salt Creek Substation, a 60-foot buffer on each side of the proposed TL 6965 north of Hunte Parkway, a 75-foot buffer on each side of the proposed TL 6965 south of Hunte Parkway, and the staging yards. A total of 0.77 acre of waters of the U.S. and state and 0.03 acre of potentially jurisdictional waters exclusively of the state were mapped. The location of jurisdictional features identified during the field assessment are provided in Figures 4.4-2a through 4.4-2c.

Based on the results of the reconnaissance-level field assessment and evaluation of watershed and hydrological spatial data, it was determined that all aquatic features identified as potential jurisdictional waters of the U.S. have the following features:

- possess physical characteristics that may meet the definition of both wetland and non-wetland waters of the U.S. (33 CFR 328.3), and
- may possess a hydrologic or significant nexus connection with a traditional navigable water (TNW).[4]

The feature identified as coastal and freshwater marsh, north of the Existing Substation staging yard (Figure 4.4-2a), exists as a portion of Wild Man's Canyon, which connects to Sweetwater River approximately 2.5 miles to the west of the staging yard. Other features in the northern portion of the Transmission Corridor generally occur in or adjacent to areas previously disturbed during substation or residential development.

[4] The survey area traverses the Lower Sweetwater River (10-digit Hydrologic Unit Code [HUC] 1807030409), Otay River (10-digit HUC 1807030410), and San Diego Bay (10-digit HUC 1807030412) coastal watersheds. The major riverine features within these watersheds form a direct hydrological connection with San Diego Bay and the Pacific Ocean (a TNW).

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Figure 4.4-2a: Wetlands and Jurisdictional Waters within the Biological Study Area

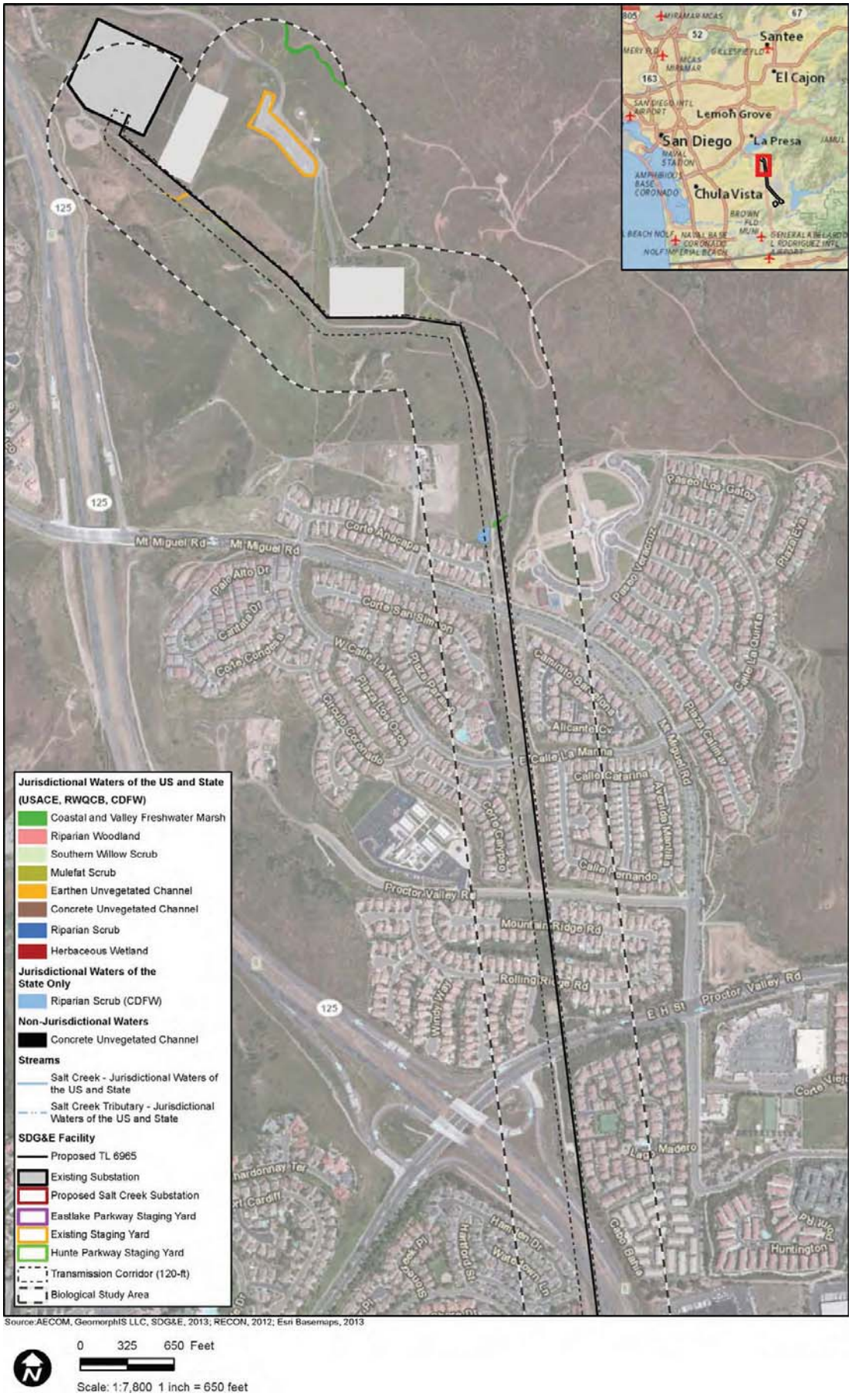

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Figure 4.4-2b: Wetlands and Jurisdictional Waters within the Biological Study Area

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Figure 4.4-2c: Wetlands and Jurisdictional Waters within the Biological Study Area

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Table 4.4-2: Potential Jurisdictional Status of Aquatic Features Occurring within the Proposed Project Area

Type of Jurisdictional Waters[1]	Vegetation Community/Other Cover Type	Regulatory Authority	Proposed Salt Creek Substation (Acres / Linear Feet) [2]	Transmission Corridor (Acres / Linear Feet) [2]	Staging Yards (Acres / Linear Feet) [2]	Total (Acres / Linear Feet) [2]
Jurisdictional Waters of the U.S. and State						
Wetland	Coastal and Valley Freshwater Marsh	USACE, RWQCB, CDFW	-	0.041	-	0.041
Wetland	Herbaceous Wetland	USACE, RWQCB, CDFW	-	0.162	-	0.162
Wetland	Riparian Woodland	USACE, RWQCB, CDFW	-	0.229	-	0.229
Wetland	Southern Willow Scrub	USACE, RWQCB, CDFW	-	0.019	-	0.019
Wetland	Riparian Scrub	USACE, RWQCB, CDFW	-	0.060		0.060
Other Waters	Concrete Unvegetated Channel	USACE, RWQCB, CDFW	-	0.090 / 971	-	0.090 / 971
Other Waters	Earthen Unvegetated Channel	USACE, RWQCB, CDFW	-	0.173 / 1,118	-	0.173 / 1,118
Subtotal Jurisdictional Waters of the U.S. and State			***0.000***	***0.773 / 2,089***	***0.000***	***0.773 / 2,089***
Jurisdictional Waters of the State						
Wetland	Riparian Scrub	CDFW	-	0.032	-	0.032
Subtotal Jurisdictional Waters of the State			***0.000***	***0.032***	***0.000***	***0.032***
Total Jurisdictional Waters			***0.000***	**0.805 / 2,089**	**0.000**	**0.805 / 2,089**

[1] All aquatic features identified as "other waters" were observed to possess an ordinary high water mark (defined at 33 CFR Section 328.3[e]) during the field assessment.

[2] Linear feet distances are provided for linear aquatic features only.

The drainage feature that was mapped between Eastlake Drive and Otay Lakes Road (Figure 4.4-2b) flows south into Telegraph Creek. It then continues west and exits into the Pacific Ocean near the South Bay Power plant in Chula Vista via a series of underground and open concrete channels. A distinct water channel was observed throughout the majority of this drainage feature. The remainder of the water flow appears to be carried sub-surface or by sheet flow. These sheet flow areas can be considered a discontinuous ephemeral stream. The riparian scrub habitat south of Eastlake Drive described as "CDFW jurisdictional only" is located outside the ordinary high water mark (OHWM) and did not meet the hydrophytic vegetation criteria needed to be considered wetland (Figure 4.4-2b).

Features identified as unvegetated concrete channels within the proposed Salt Creek Substation site were constructed wholly in uplands and collect storm water (Figure 4.4-2c). These constructed drainage features, along previously disturbed and contoured areas on-site, appear to have been installed for erosion control and storm water conveyance purposes, and are non-jurisdictional features (both state and federal).

Special-Status Plant Species

This section discusses plant species detected within the BSA or with potential to occur within the BSA. Through comparing known occurrences with habitats present in the BSA, it was determined that 30 special-status plant species known to occur within the region were expected to occur within the BSA or have low, moderate, or high potential to occur within the BSA (see Appendices B and E of the Biological Technical Report, Attachment 4.4-A). Thirteen special-status plant species were observed within the BSA (Table 4.4-3 and Figures 4.4-3a through 4.4-3d). An additional 17 special-status plant species have low, moderate, or high potential to occur within the BSA based on habitats present and the locations of known recent occurrences (Table 4.4-3). A discussion of the 13 special-status plant species detected within the BSA is presented below. A comprehensive list of all plant species, special-status and non-special-status, that were detected during the rare plant and vegetation mapping surveys within the BSA are included in the Biological Technical Report (Attachment 4.4-A).

Federally Listed Plant Species

Otay tarplant

Otay tarplant (*Deinandra [=Hemizonia] conjugens*) is a federally listed threatened and state-listed endangered species. It is also a Covered Species under SDG&E's NCCP. This species is an annual herb in the Asteraceae (sunflower) family that grows up to approximately 20 inches in height and has aromatic deep green or gray-green leaves covered with soft shaggy hairs and seven to 10 yellow ray flowers and 13 to 21 disk flowers (Baldwin 2012). The species typically blooms from April through June and is known only from southern San Diego County, primarily in the Chula Vista region, to Baja California, Mexico. This species prefers heavy clay soils in valley and foothill grasslands or sparsely vegetated Diegan coastal sage scrub occurring up to 1,000 feet amsl.

The BSA occurs within the northern portion of the known range of this species. Several large populations occur near the BSA. Within the BSA, approximately 934 individuals of Otay tarplant were observed within grasslands and in large grassy openings in Diegan coastal sage scrub. The majority of individuals were concentrated in the northern portion of the Transmission Corridor and buffer, from the Existing Substation area south until the Mountain Ridge Road crossing (just south of Proctor Valley Road) (Figure 4.4-3a). Several additional individuals were mapped in a small area in the buffer of the southern portion of the Transmission Corridor, just south of Hunte Parkway (Figure 4.4-3d).

State-Listed Plant Species

Otay tarplant is the only state-listed endangered species documented within the BSA. Its background and occurrence within the BSA is described above.

Other Special-Status Plant Species

California adolphia

California adolphia (*Adolphia californica*) is a CRPR 2.1 species. This perennial, often thorny, deciduous shrub in the Rhamnaceae (Buckthorn) family is often associated with clay soils on dry slopes in chaparral, valley needlegrass grassland, and coastal sage scrub within the foothill and coastal regions from Santa Barbara to Baja California, Mexico.

Eleven individuals of California adolphia were observed in the buffer on the northern end of the BSA near the Existing Substation. Ten plants were mapped as a polygon just south of the Existing Substation, and a single plant was mapped just to the east of the Existing Substation, in coastal sage scrub (Figure 4.4-3a).

San Diego sunflower

San Diego sunflower (*Bahiopsis* [=*Viguiera*] *laciniata*) is a CRPR 4.2 species. This small- to medium-sized shrub in the Asteraceae (Sunflower Family) occurs in clay soils within chaparral and coastal sage scrub on south-facing slopes from Orange County south to Baja California and Sonora, Mexico.

San Diego sunflower was mapped in large quantities throughout the BSA. Approximately 19,450 individuals were mapped as points and polygons, largely concentrated in the northern and southern regions of the BSA (Figures 4.4-3a and 4.4-3d). Plants occur within coastal sage scrub and grassland on-site, and are especially numerous in areas of recent disturbance. A comparison of 2012 results (AECOM 2012a) with the survey results for the 2011 special-status plant survey (AECOM 2011a) of the proposed Salt Creek Substation shows a larger area of occupation by this species in 2012 than previously mapped. Many of the plants mapped in 2012 were very small and may have been difficult to observe in 2011.

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Figure 4.4-3a: Special-Status Plant Species within the Biological Study Area

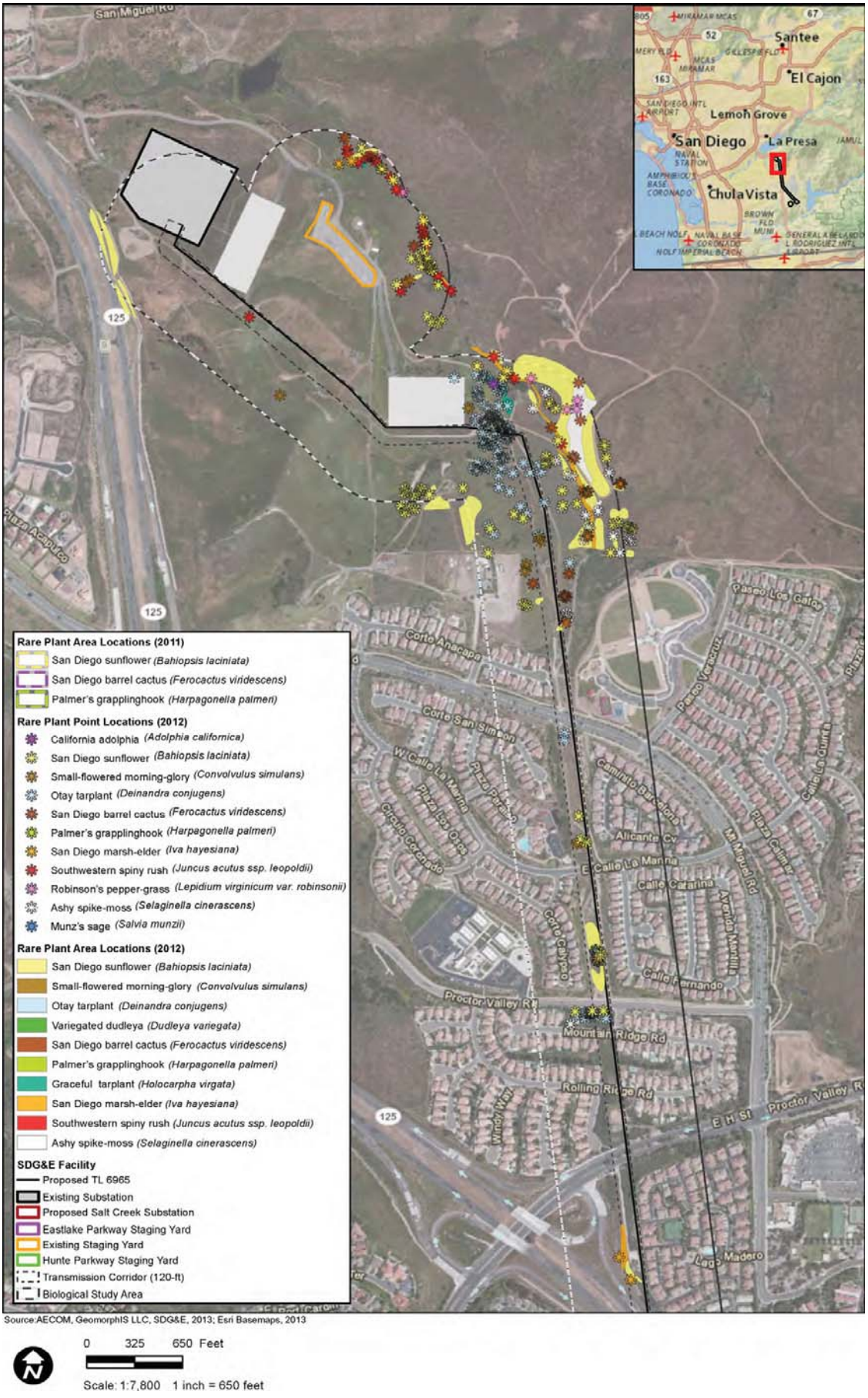

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Figure 4.4-3b: Special-Status Plant Species within the Biological Study Area

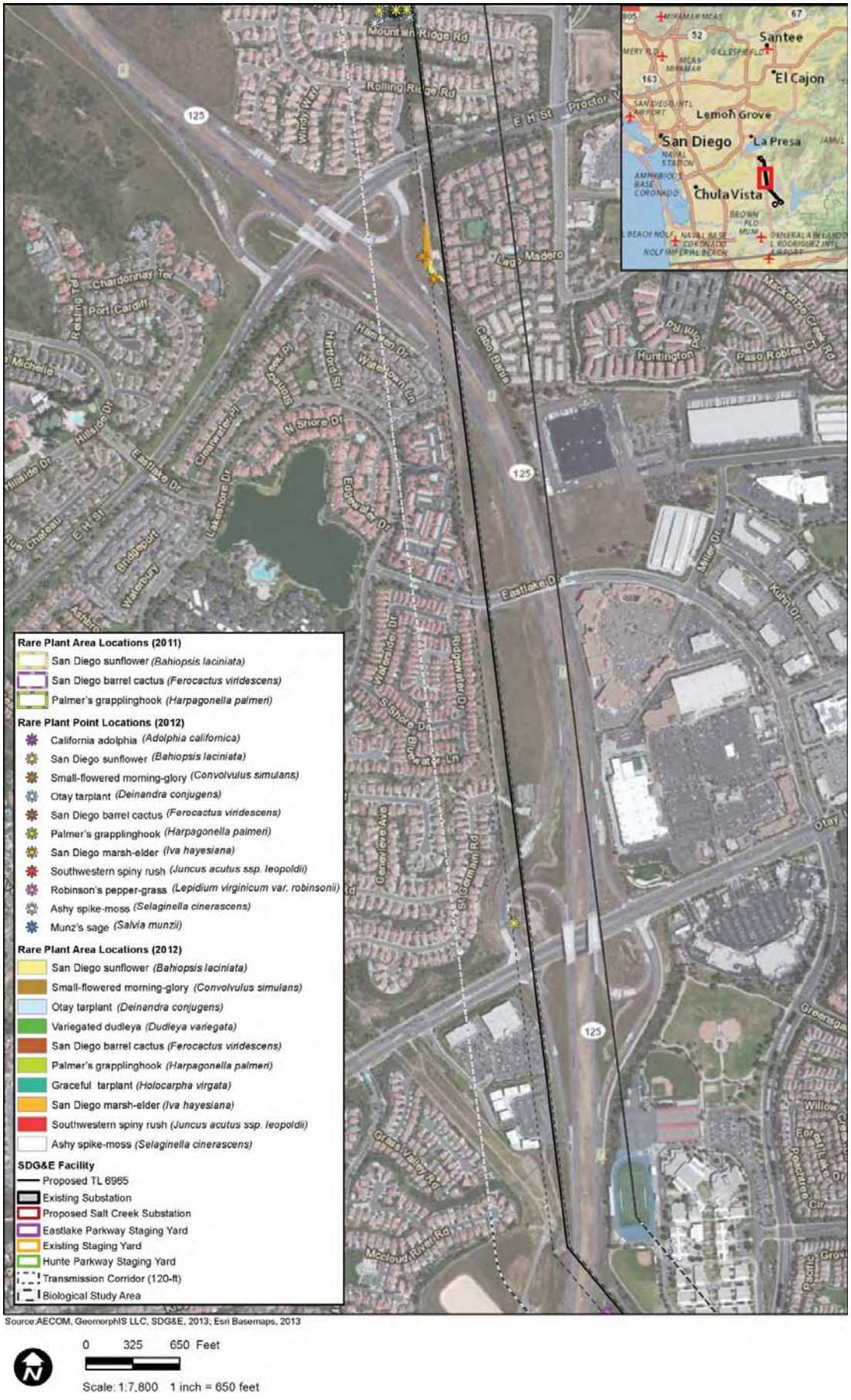

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Figure 4.4-3c: Special-Status Plant Species within the Biological Study Area

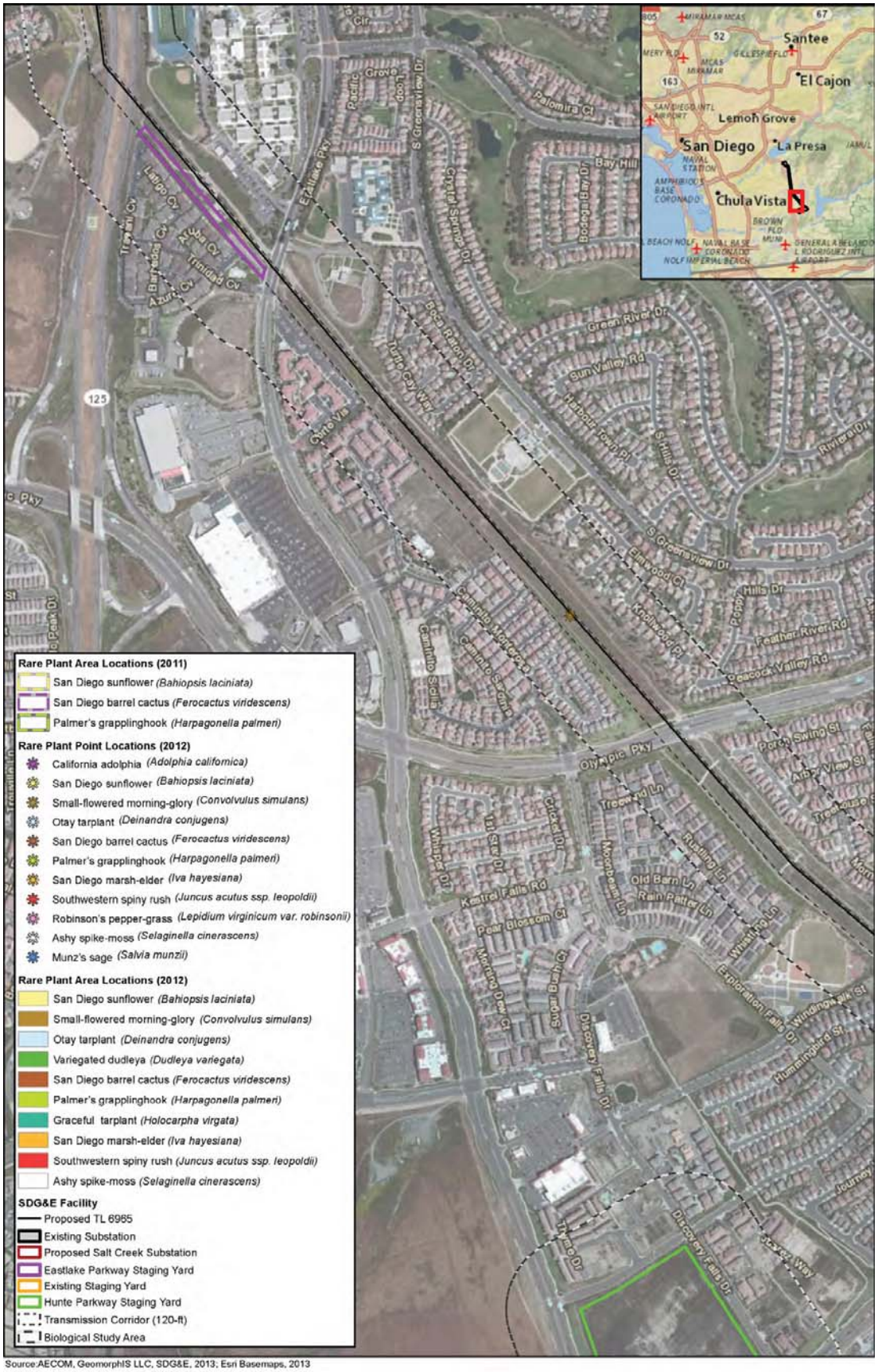

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Figure 4.4-3d: Special-Status Plant Species within the Biological Study Area

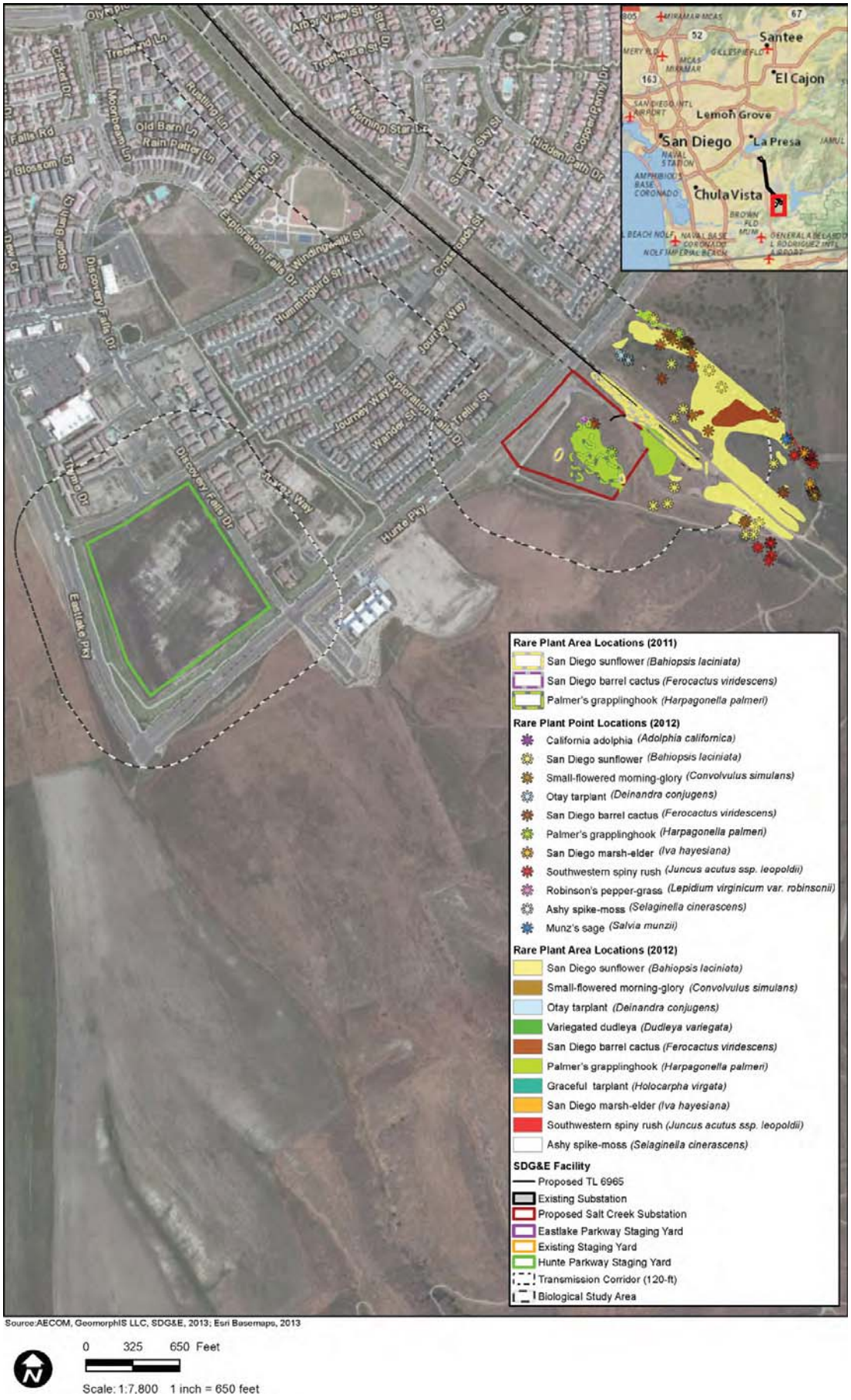

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Table 4.4-3: Special-Status Plant Species Observed or With the Potential to Occur Within the BSA

Species	Status[1]	Primary Habitat Associations/Life Form/Blooming Period	Potential to Occur/Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
San Diego thorn-mint *Acanthomintha ilicifolia*	FT/SE – 1B.1 – NCCP NE	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay/annual herb/April–June	Not observed on-site. Moderate potential to occur. If present on-site, this species would have been observed.	ND – M	ND – L	ND – M
California adolphia *Adolphia californica*	2.1	Chaparral, coastal scrub, valley and foothill grassland; clay/shrub/ December–May	Eleven individuals were observed within the BSA in coastal sage scrub in the northern portion of the BSA.	ND – L	ND – L	P
San Diego bursage *Ambrosia chenopodiifolia*	2.1	Coastal scrub/shrub/April–June	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
Singlewhorl burrobrush *Ambrosia monogyra*	2.2	Chaparral/shrub/sandy/August–November	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
San Diego ambrosia *Ambrosia pumila*	FE – 1B.1 – NCCP NE	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; often in disturbed areas/perennial herb/May–October	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
San Diego sagewort *Artemisia palmeri*	4.2	Chaparral, coastal scrub, riparian forest and scrub; sandy/shrub/ May–September	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L

Species	Status[1]	Primary Habitat Associations/Life Form/Blooming Period	Potential to Occur/Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
Coulter's saltbush *Atriplex coulteri*	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland; alkaline or clay/ perennial herb/March–October	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
South Coast saltscale *Atriplex pacifica*	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, playas/annual herb/ March–October	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
San Diego County sunflower *Bahiopsis* [=*Viguiera*] *laciniata*	4.2	Chaparral, coastal scrub/shrub/ February–June	Approximately 19,450 individuals were observed throughout the BSA in coastal sage scrub and grasslands.	P	P	P
San Diego goldenstar *Bloomeria clevelandii*	1B.1 – NCCP	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay/bulbiferous herb/May	Not observed on-site. Moderate potential to occur. If present on-site, this species would have been observed.	ND – M	ND – M	ND – M
Orcutt's brodiaea *Brodiaea orcuttii*	1B.1 – NCCP	Closed-cone conifer forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools; mesic, clay, sometimes serpentine/ bulbiferous herb/May–July	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L

Species	Status[1]	Primary Habitat Associations/Life Form/Blooming Period	Potential to Occur/Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
Brewer's calindrinia *Calandrinia breweri*	4.2	Chaparral, coastal scrub, disturbed sites and burns/annual herb/ March–June	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
Round-leaved filaree *California macrophylla*	1B.1	Cismontane woodland, valley and foothill grassland; clay/annual herb/ March–May	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
Lewis's evening primrose *Camissoniopsis lewisii*	3	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland; sandy or clay/annual herb/ March–June	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
Small-flowered morning-glory *Convolvulus simulans*	4.2	Chaparral (openings), coastal scrub, valley and foothill grassland; clay, serpentine seeps/annual herb/ March–July	There were 178 individuals mapped within the BSA in grasslands on clay soils.	ND – L	P	P
Otay tarplant *Deinandra* [=*Hemizonia*] *conjugens*	FT/ SE – 1B.1 – NCCP	Coastal scrub, valley and foothill grassland; clay/annual herb/ May–June	There were 934 individuals mapped within the BSA in grasslands and in grassy openings in coastal sage scrub on clay soils.	ND – M	P	P
Western dichondra *Dichondra occidentalis*	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/rhizomatous herb/ March–May	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L

Species	Status[1]	Primary Habitat Associations/Life Form/Blooming Period	Potential to Occur/Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
Variegated dudleya *Dudleya variegata*	1B.2 – NCCP	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools/perennial herb/May–June	Sixty individuals were mapped in a grassy opening in coastal sage scrub, on the southern end of the BSA.	ND – M	ND – M	P
San Diego barrel cactus *Ferocactus viridescens*	2.1 – NCCP	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/ shrub/May–June	Approximately 140 plants were observed in coastal sage scrub in the northern and southern regions of the BSA.	P	P	P
Palmer's grapplinghook *Harpagonella palmeri*	4.2 – NCCP	Chaparral, coastal scrub, valley and foothill grassland; clay/annual herb/ March–May	Approximately 1,065,000 individuals were observed in wildflower field, coastal sage scrub, and nonnative grassland on heavy clay soils in the southern portion of the BSA.	P	ND – H	P
Graceful tarplant *Holocarpha virgata* ssp. *elongate*	4.2	Coastal scrub, cismontane woodland, chaparral, valley and foothill grassland/annual herb/ August–November	Approximately 13,060 individuals were mapped in grasslands in the northern portion of the BSA on clay soils.	ND – L	NP – L	P
San Diego marsh-elder *Iva hayesiana*	2.2	Marshes and swamps, playas/ perennial herb/April–September	Approximately 1,860 plants were mapped on-site along the perennial stream channels traversing the northern and southern regions of the BSA.	ND – L	P	P

Species	Status[1]	Primary Habitat Associations/Life Form/Blooming Period	Potential to Occur/Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
Southwestern spiny rush *Juncus acutus* spp. *leopoldii*	4.2	Coastal dunes, meadows and seeps (alkaline), saltwater marsh and swamp/rhizomatous herb/ May–June	There were 130 individuals mapped on-site along stream channels in the northern and southern regions of the BSA.	ND – L	P	P
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	1B.2	Chaparral, coastal scrub/annual herb/January–July	There were 37 individuals mapped in coastal sage scrub in the northern and southern regions of the BSA.	ND – L	ND – L	P
Munz's sage *Salvia munzii*	2.2	Chaparral, coastal scrub/perennial evergreen shrub/February–April	Two individuals were mapped in coastal sage scrub in the southern region of the BSA.	ND – L	ND – L	P
Ashy spike-moss *Selaginella cinerascens*	4.1	Chaparral, coastal scrub (in openings)/perennial herb/March	Approximately 1.75 occupied acres were mapped within coastal sage scrub in the northern region of the BSA.	ND – L	ND – L	P
Rayless ragwort *Senecio aphanactis*	2.2	Chaparral, cismontane woodland, coastal scrub; alkaline/annual herb/ January–April	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
Purple stemodia *Stemodia durantifolia*	2.1	Sonoran desert scrub (often mesic, sandy)/perennial herb/ January–December	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L

Species	Status[1]	Primary Habitat Associations/Life Form/Blooming Period	Potential to Occur/Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
San Diego County needlegrass *Stipa diegoensis*	4.2	Chaparral, coastal scrub/rocky, often mesic/perennial herb/ February–June	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L
Rush-like bristleweed *Xanthisma* [=*Macharantha juncea*] *juncea*	4.3	Chaparral, coastal scrub/perennial herb/June–January	Not observed on-site. Low potential to occur. If present on-site, this species would have been observed.	ND – L	ND – L	ND – L

[1] Status:
FE: Federally listed as endangered
FT: Federally listed as threatened
SCE: State candidate for listing as endangered
SE: State listed as endangered
ST: State listed as threatened
SR: State rare

California Rare Plant Ranks:
1B: Plants rare, threatened, or endangered in California and elsewhere
2: Plants rare, threatened, or endangered in California, but more common elsewhere
3: Plants about which we need more information – A Review List
4: Plants of limited distribution – A Watch List
0.1–Seriously threatened in California (more than 80% of occurrences threatened/high degree and immediacy of threat)
0.2–Fairly threatened in California (20–80% occurrences threatened/moderate degree and immediacy of threat)
0.3–Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

SDG&E Natural Community Conservation Plan Covered Species (NCCP)
NE = SDG&E Narrow Endemic

[2] Findings:
P (present) – Species detected during Proposed Project surveys
ND (not detected) – Species not detected during Proposed Project surveys
L (low potential) – Suitable habitat present, highly disturbed
M (moderate potential) – Suitable habitat present, moderately disturbed
H (high potential) – Suitable habitat present, and species known to occur within the vicinity

Small-flowered morning-glory

Small-flowered morning-glory (*Convolvulus simulans*) is a CRPR 4.2 species found within grassland and openings within coastal sage scrub, often on clay soils and serpentine seeps. This diminutive annual in the Convolvulaceae (Morning-Glory) family blooms between February and July with tiny lavender flowers; it occurs in central and Southern California and in Baja California, Mexico. Several small occurrences of small-flowered morning glory were mapped in the Transmission Corridor and buffer, generally in the northern portion of the BSA (Figure 4.4-3a). A total of 178 individuals were mapped, generally in points of one to a few individuals, on clay soils in grasslands.

Variegated dudleya

Variegated dudleya (*Dudleya variegata*) is a CRPR 1B.2 species found on clay soils within grassland, chaparral, and coastal scrub. This species is known only from San Diego County and Baja California, Mexico, where it is threatened by development, grazing, and nonnative plants. It belongs to the Crassulaceae (Stonecrop) family, and blooms in the late spring with small, yellow, star-shaped flowers.

A small occurrence of 60 individuals of variegated dudleya was observed within a grassy, clay opening in coastal sage scrub in the buffer area of the Transmission Corridor, just south of Hunte Parkway (Figure 4.4-3d).

San Diego barrel cactus

San Diego barrel cactus (*Ferocactus viridescens*) is a CRPR 2.1 species that occurs within grassland, coastal sage scrub, and chaparral. San Diego barrel cactus, a perennial in the Cactaceae (Cactus) family, occurs only in coastal and foothill areas of San Diego County and Baja California, Mexico. This species is seriously threatened by urbanization, off-road vehicles, illegal collecting, and nonnative plants.

San Diego barrel cactus was mapped in the northern and southern areas of the BSA, generally in coastal sage scrub (Figures 4.4-3a and 4.4-3d). On-site, the species is most concentrated in scrub with a south-facing aspect. Approximately 140 plants were observed. Of these, 17 plants were in black plastic pots left by the prior property owner. These 17 plants, also mapped previously during surveys of the proposed Salt Creek Substation (AECOM 2011a), have rooted into the ground through the decaying pots.

Palmer's grapplinghook

Palmer's grapplinghook (*Harpagonella palmeri*) is a CRPR 4.2 species that occurs on heavy clay soils within grassland and coastal sage scrub openings. This tiny annual plant in the Boraginaceae (Borage) family blooms in early spring and is present in scattered locations throughout Southern California and Baja California, Mexico, although it is most concentrated in western Riverside County and coastal and foothill regions of San Diego County. This species is very inconspicuous and easily overlooked, and is threatened by development, nonnative plants, and agriculture.

Palmer's grapplinghook occurs within the BSA on heavy clay soils in areas mapped as wildflower field, nonnative grassland, and coastal sage scrub. Two large and three small polygons, plus two points of a single individual each, of Palmer's grapplinghook were mapped in the southern region of the BSA, south of Hunte Parkway in the proposed Salt Creek Substation footprint and buffer area (Figure 4.4-3d). A total of 1,065,044 individuals were estimated to be present via a quadrat sampling method. This number is slightly less than the approximately 1.2 million plants observed during 2011 surveys (AECOM 2011a), despite the approximately 2.17 additional occupied acres mapped in 2012. Population sizes of annual plants such as Palmer's grapplinghook are known to fluctuate widely from year to year with fluctuations in rainfall and temperature, among other factors.

Graceful tarplant

Graceful tarplant (*Holocarpha virgata* ssp. *elongata*) is a CRPR 4.2 species. The species occurs generally in grasslands with clay soils, but also may be found in openings in coastal sage scrub, chaparral, woodlands, and coastal scrubs. This annual plant in the Asteraceae family generally blooms in the summer. This species occurs from Riverside County south to Baja California, Mexico. It is threatened by development throughout its range.

A total of 13,061 graceful tarplant individuals were mapped in the buffer of the Transmission Corridor. Plants generally occur as single individuals or as small groups of two to 75 individuals within a small area, but two larger polygons of 250 and 12,408 individuals were also mapped. Plants are most abundant in the northern region of the BSA, just east of the materials storage yard near the Existing Substation (Figure 4.4-3a).

San Diego marsh elder

San Diego marsh elder (*Iva hayesiana*) is a CRPR 2.2 species. This species is a spring- to summer-blooming perennial herb in the Asteraceae family. It occurs in marshes and swamps, on playas, and along stream channels in San Diego County and Baja California, Mexico. San Diego marsh elder is threatened throughout its range by waterway channelization, coastal development, off-road vehicles, and nonnative plants.

Within the BSA, it grows in nearly uninterrupted thickets along the perennial stream traversing the eastern edge of the Proposed Project area in the north, and along Salt Creek in the south (Figure 4.4-3a and 4.4-3d). Since it often grows in clumps, counts of individuals are difficult. For this study, a density estimate was made and multiplied by the area occupied to arrive at an approximate number of 1,860 plants.

Southwestern spiny rush

Southwestern spiny rush (*Juncus acutus* ssp. *Leopoldii*) is a CRPR 4.2 species. This large, perennial, rhizomatous, herb in the Juncaceae (Rush) family is also found on coastal dunes and in meadows and seeps. In the United States, it is most common in San Diego County, but it also may be found as far north as San Luis Obispo County, west into Nevada and Arizona, and south into Baja California, Mexico, and South America. It is threatened by urbanization and flood control facilities throughout its range.

A total of 130 individuals of southwestern spiny rush were mapped within the BSA. With one exception, all individuals were associated with the perennial stream channels and marshes traversing the north and south portions of the BSA. Two individuals were observed in an ephemeral channel on the north end of the Proposed Project area, just south of the Existing Substation (Figures 4.4-3a and 4.4-3d).

Robinson's pepper-grass

Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*) is a CRPR 1B.2 species. This small, annual plant in the Brassicaceae (Mustard) family is restricted to openings in coastal sage scrub, generally on south- or west-facing slopes. It occurs in Southern California and Baja California, Mexico. Although Robinson's pepper-grass is now thought by leading authorities to be a synonym of the non-sensitive *Lepidium virginicum* ssp. *menziesii* (Baldwin et al. 2012), occurrences of this taxon were nevertheless recorded, since CNPS continues to recognize the plant as a distinct entity.

A total of 37 individuals were mapped in the buffer of the northern and southern ends of the BSA (Figures 4.4-3a and 4.4-3d).

Munz's sage

Munz's sage (*Salvia munzii*) is a CRPR 2.2 species. This perennial evergreen shrub in the Lamiaceae (Mint) family occurs in chaparral and coastal scrub in southern San Diego County and Baja California, Mexico. Within San Diego County, this species is mostly confined to the Otay Mesa and Otay Mountain areas. Munz's sage is threatened by development throughout its range.

Two individuals of Munz's sage were mapped in the buffer of the southeastern region of the BSA, in coastal sage scrub (Figure 4.4-3d).

Ashy spike-moss

Ashy spike-moss (*Selaginella cinerascens*) is a CRPR 4.1 species that occurs within openings of coastal sage scrub and chaparral. It is found in Orange and San Diego Counties and Baja California, Mexico. This perennial, rhizomatous herb in the Selaginellaceae (Spike-Moss) family grows as a flat groundcover on the soil surface.

Ashy spike-moss was mapped in the buffer of the easternmost portions of the northern end of the BSA, in coastal sage scrub (Figure 4.4-3a). It is difficult to estimate the number of plants at a particular location, since it grows as flat groundcover, so estimates of area occupied were made for the purposes of this study. A total of 1.75 acres (76,275 square feet) of ashy spike-moss was mapped within the BSA.

Special-Status Wildlife Species

Twenty-five special-status wildlife species were observed or have low, moderate, or high potential to occur in the BSA. A total of 12 special-status wildlife species were observed within the BSA, and one (LBV) was observed just outside the southern portion of the BSA. Of these 13 species, two are federally listed, one of which is also state listed; one is a California Fully

Protected Species; eight are California SSC; and two are on the CDFW watch list. Of the 13 species, eight were also NCCP Covered Species. An additional 12 special-status wildlife species have some potential to occur within the BSA. The 25 special-status wildlife species observed or with a potential to occur are listed in Table 4.4-4, and the location of those observed are depicted in Figures 4.4-4a through 4.4-7b. A comprehensive list of all wildlife species, special-status and non-special-status, that were detected during Proposed Project surveys within the BSA are included in Biological Technical Report (Attachment 4.4-A).

Federally Listed Wildlife Species

Quino Checkerspot Butterfly (QCB)

QCB, a subspecies of Edith's checkerspot butterfly (*Euphydryas editha*), is a federally listed endangered species and a Covered Species under SDG&E's NCCP. QCB is generally found in native and nonnative grasslands, coastal sage scrub, open chaparral, and other open plant community types where high densities of host plant species occur (USFWS 1997). The primary larval host plant species for QCB is dwarf plantain (*Plantago erecta*) (Mattoni et al. 1997). Field observations and laboratory studies indicate several other host plants may be used for egg deposit and larval feeding, including owl's clover (*Castilleja exserta*), southern Chinese houses (*Collinsia concolor*), and bird's beak (*Cordylanthus rigidus*). Adults have one flight period per year, which generally occurs between late January and mid-May, with peak activity between March and April. Females lay egg masses on host plants, typically between mid-February and April. Eggs hatch in about 10 days, and the larvae begin to feed immediately.

SDG&E's HCP for QCB delineates potential QCB habitat (referred to as "Mapped Areas") based on the 2003 USFWS QCB recovery plan. Mapped Areas occur within SDG&E's NCCP preserve at the north end of the Transmission Corridor. However, based on project surveys, no suitable QCB habitat occurs within these Mapped Areas. Using the suitable QCB habitat criteria established under SDG&E's QCB Low-Effect HCP, approximately 50 acres of suitable QCB habitat occur within the proposed Salt Creek Substation, southern terminus of the Transmission Corridor, and buffer southeast of Hunte Parkway, including nonnative grassland, Diegan coastal sage scrub, and wildflower field habitats (Figure 4.4-1c). During focused QCB surveys, small patches of dot-seed plantain (*P. erecta*), which is a QCB larval host plant, was observed in the southern end of the BSA; however, no QCB were observed during these surveys. Although these impacted areas are considered suitable according the HCP criteria, since they are neither within the Mapped Area nor occupied, no habitat mitigation is required for these impacts, per SDG&E's HCP for QCB.

Coastal California Gnatcatcher

CAGN is federally listed as threatened and is considered a California SSC. CAGN is a local and uncommon year-round resident of Southern California. CAGN generally inhabits Diegan coastal sage scrub and Riversidian coastal sage scrub dominated by California sagebrush and flat-topped buckwheat (*Eriogonum fasciculatum*), generally below 457 meters (1,500 feet) in elevation along the coastal slope. When nesting, this species typically avoids slopes greater than 25% with dense, tall vegetation.

Figure 4.4-4a: Coastal California Gnatcatcher Observations within the Biological Study Area

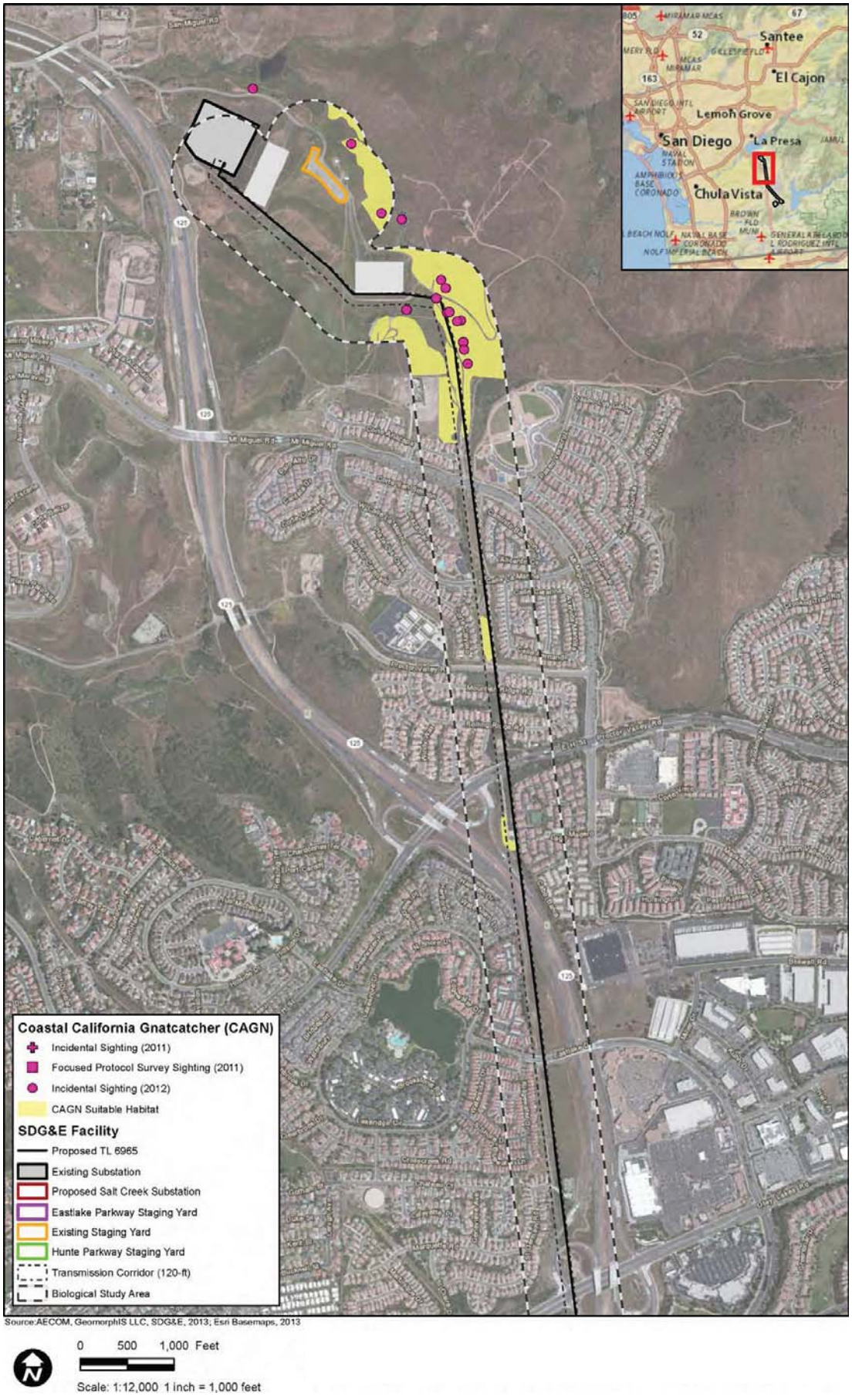

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Figure 4.4-4b: Coastal California Gnatcatcher Observations within the Biological Study Area

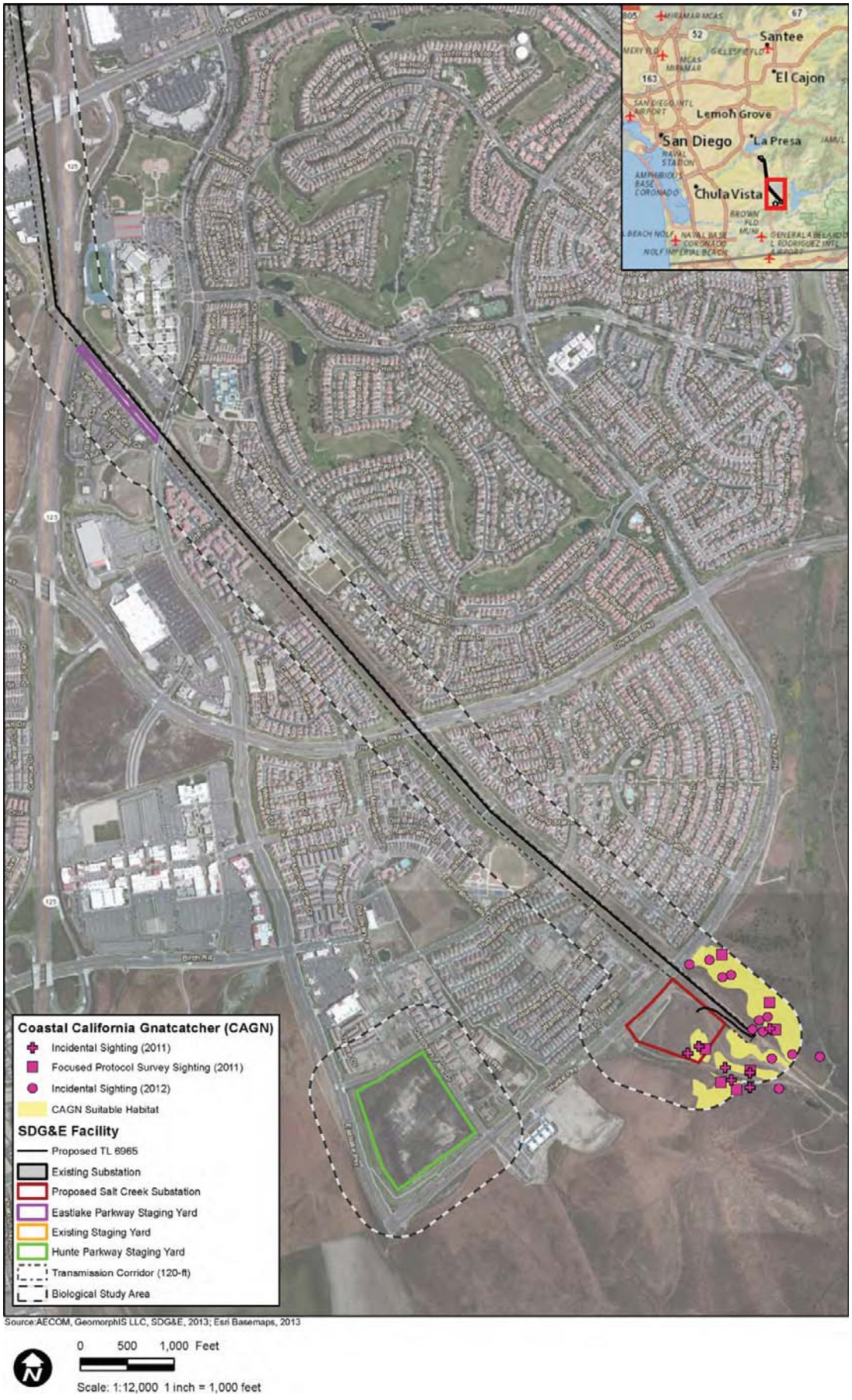

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Figure 4.4-5: Least Bell's Vireo Observations within the Biological Study Area

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Figure 4.4-6a: Western Burrowing Owl Observations within the Biological Study Area

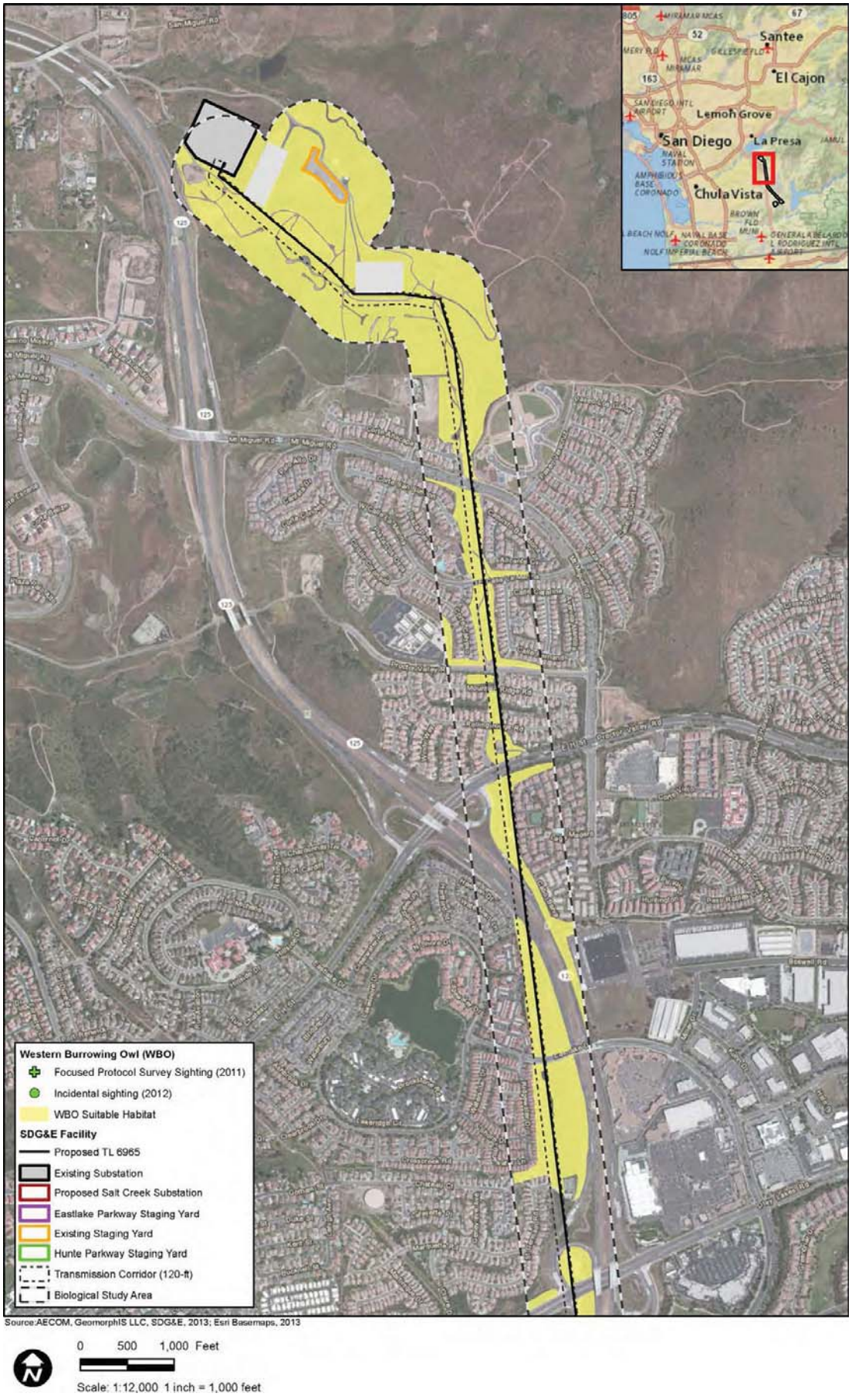

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Figure 4.4-6b: Western Burrowing Owl Observations within the Biological Study Area

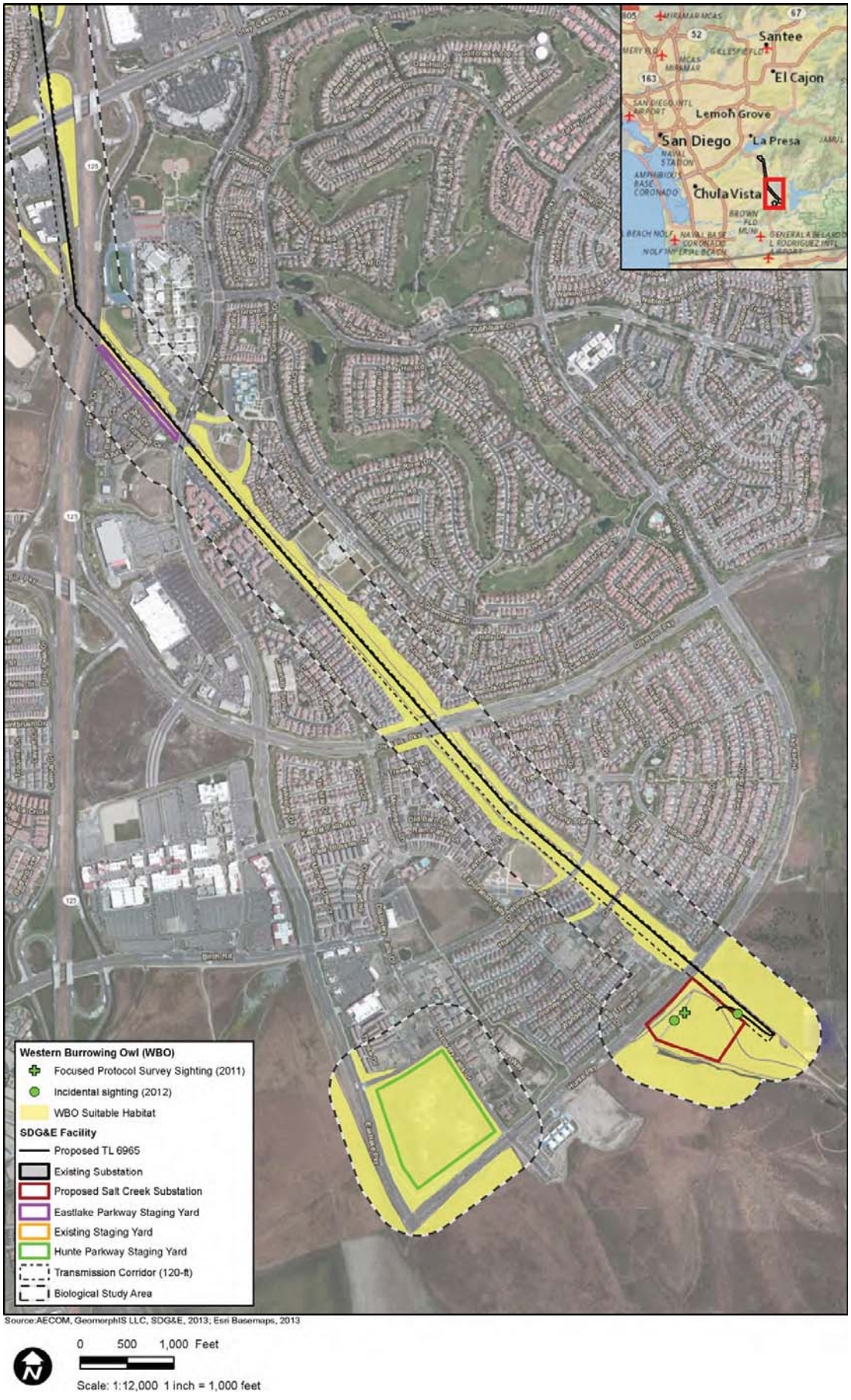

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Figure 4.4-7a: Other Special-Status Wildlife Species within the Biological Study Area

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Figure 4.4-7b: Other Special-Status Wildlife Species within the Biological Study Area

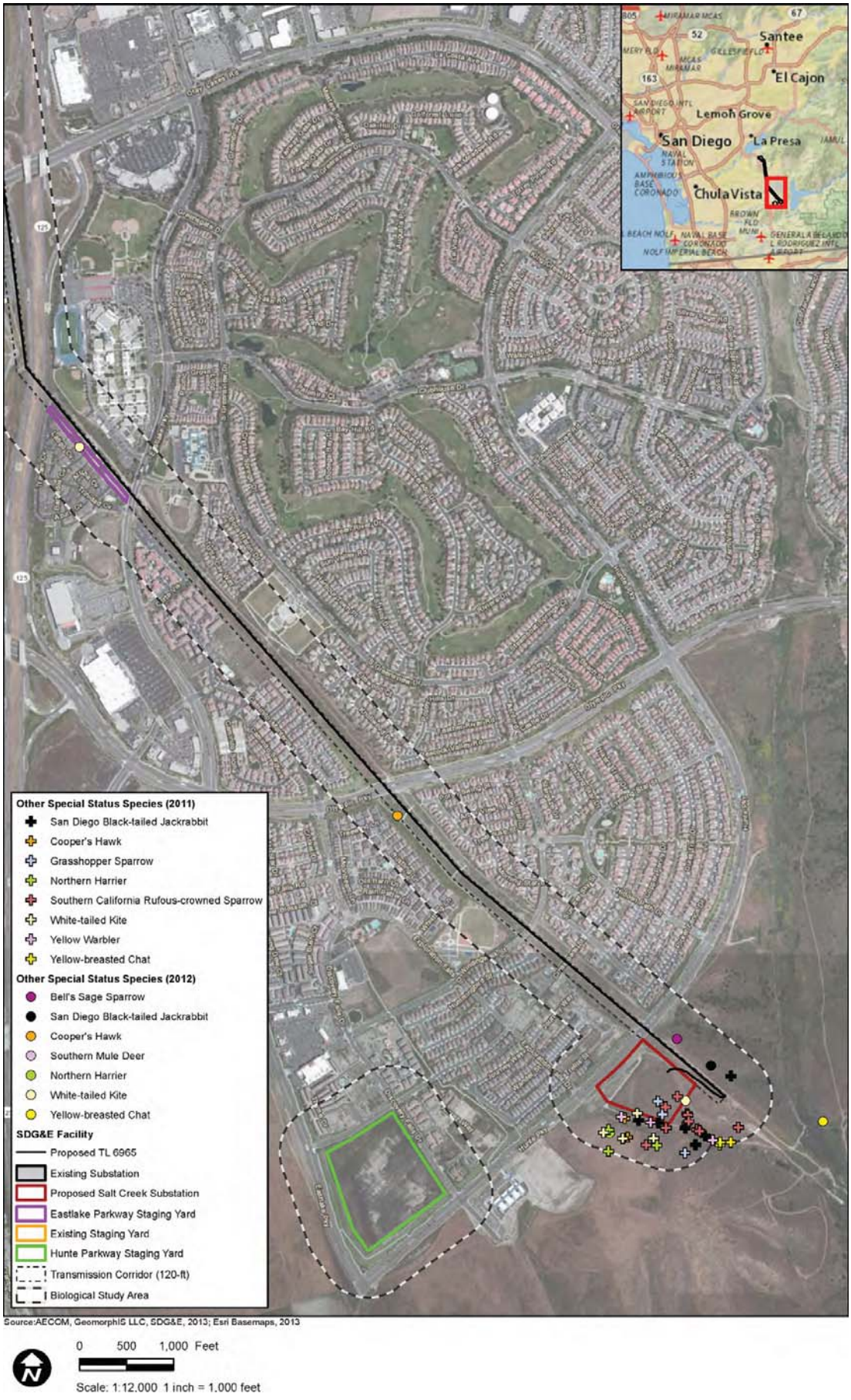

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Table 4.4-4: Special-Status Wildlife Species Observed or with the Potential to Occur Within the BSA

Species	Status[1]	Primary Habitat Associations	Potential to Occur / Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
INVERTEBRATES						
Quino checkerspot butterfly *Euphydryas editha quino*	FE	Sunny openings within coastal sage scrub and chaparral scrublands. Requires plantain (*Plantago* spp.) or owl's clover (*Castilleja exserta*) as a host plant.	This species has a high potential to occur within the southern terminus of the Transmission Corridor and proposed Salt Creek Substation site due to the presence of marginally suitable sage scrub habitat and populations of dot-seed plantain (*P. erecta*) and owl's clover.	ND – H	ND – H	ND – H
AMPHIBIANS						
Western spadefoot toad *Spea hammondii*	CSC, NCCP	Grasslands and occasionally in valley-foothill hardwood woodlands. Requires vernal pools for breeding and egg-laying.	This species has a low potential to occur within the Transmission Corridor or the proposed Salt Creek Substation site due to the presence of grasslands; however, vernal pools are not present.	ND – L	ND – L	ND – L
REPTILES						
Belding's orange-throated whiptail *Aspidoscelis [=Cnemidophorus] hyperythra beldingi*	CSC, NCCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	This species has a moderate potential to occur within Transmission Corridor and proposed Salt Creek Substation site due to the presence of marginally suitable coastal sage scrub habitat and soils.	ND – M	ND – M	ND – M

Species	Status[1]	Primary Habitat Associations	Potential to Occur / Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
Northern red-diamond rattlesnake *Crotalus ruber ruber*	CSC, NCCP	Coastal sage scrub, chaparral in inland and desert locales with rocky soils.	This species has a moderate potential to occur within the Transmission Corridor and proposed Salt Creek Substation site due to the presence of marginally suitable, isolated scrub habitat.	ND – M	ND – M	ND – M
Coastal rosy boa *Lichanura trivigata roseofusca*	NCCP	Coastal sage scrub, desert scrub, and chaparral with rocky soils.	This species has a moderate potential to occur within the Transmission Corridor and proposed Salt Creek Substation site due to the presence of marginally suitable, isolated scrub habitat.	ND – M	ND – M	ND – M
San Diego horned lizard *Phrynosoma coronatum* (San Diego/blainvillii population)	CSC, NCCP	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants (*Pogonomyrmex* sp.) for forage.	This species has a low potential to occur within the Transmission Corridor or proposed Salt Creek Substation site due to the presence of marginally suitable scrub habitat and soils. No harvester ants, a main component of this species' diet, were observed within the BSA.	ND – L	ND – L	ND – L
Two-striped garter snake *Thamnophis hammondii*	CSC, NCCP	Along permanent streams, creeks, vernal pools, and intermittent streams. Can occur a distance away from permanent water sources.	This species has a moderate potential to occur within the Transmission Corridor and proposed Salt Creek Substation site due to the presence of suitable aquatic habitat observed in the survey buffer.	ND – M	ND – M	ND – M

Species	Status[1]	Primary Habitat Associations	Potential to Occur / Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
BIRDS						
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	WL, NCCP	Coastal sage scrub, chaparral, grassland; favors steep and rocky areas. Localized resident.	This species was observed within the footprint of the proposed Salt Creek Substation and in the buffer of the southern terminus of the Transmission Corridor.	P	ND – H	P
Cooper's hawk *Accipiter cooperi*	WL (nesting), NCCP	Mature forest, open woodlands, wood edges, and river groves. Parks and residential areas. Year-round resident.	This species was observed within the Transmission Corridor south of Olympic Parkway and within the strip of riparian vegetation located southwest of the proposed Salt Creek Substation site.	ND – H	P	P
Grasshopper sparrow *Ammodramus savannarum*	CSC (nesting) NCCP	Grassland on rolling hills, lowland plains, and in valleys, and on hillsides on lower mountain slopes.	This species was observed within the footprint of the proposed Salt Creek Substation and in the buffer near the southern terminus of the Transmission Corridor.	P	ND – H	P
Bell's sage sparrow *Amphispiza belli belli*	WL	Nests in chaparral dominated by chamise, but also found in coastal sage scrub in the south of this species' range.	This species was observed in the buffer at the northern terminus of the Transmission Corridor, just south of the Existing Substation staging yard.	ND – M	ND – M	P
Western burrowing owl *Athene cunicularia hypugaea*	CSC, NCCP	Annual and perennial grasslands, deserts, agricultural areas, disturbed habitat, and scrublands, characterized by low-growing vegetation.	This species was observed within the proposed Salt Creek Substation site during the 2011 Phase III Winter WBO survey. This species was also observed within the footprint of the proposed Salt Creek Substation during the 2012 QCB and CAGN surveys of the Transmission Corridor.	P	P	ND - H

Species	Status[1]	Primary Habitat Associations	Potential to Occur / Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
Ferruginous hawk *Buteo regalis*	WL (Wintering), NCCP	Open grasslands, sagebrush flats, desert scrub, and low foothills. Forages mostly on rabbits, ground squirrels, and mice.	There is moderate potential for this species to forage in the Transmission Corridor and proposed Salt Creek Substation site due to the presence of suitable grassland habitat, rabbits, and ground squirrels that were observed during surveys of the BSA.	ND – M	ND – M	ND – M
Swainson's hawk *Buteo swainsoni*	ST (nesting), NCCP	Breeds in grasslands with scattered trees and requires grasslands or grain fields that support rodent populations for foraging.	There is moderate potential for this species to forage in the Transmission Corridor and proposed Salt Creek Substation site due to the presence of suitable grassland habitat and rodents that were observed during surveys of the BSA.	ND – M	ND – M	ND – M
Northern harrier *Circus cyaneus hudsonius*	CSC (nesting), NCCP	Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident.	This species was observed foraging throughout the grassland and open sage scrub within the Transmission Corridor and proposed Salt Creek Substation site.	P	P	P
White-tailed kite *Elanus leucurus*	CFP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland.	This species was observed near the southern terminus and in the central portion of the Transmission Corridor, as well as the proposed Salt Creek Substation site.	P	P	P
Yellow-breasted chat *Icteria virens*	CSC	Riparian thickets consisting of willow and other brushy thickets near watercourses.	This species was observed just south of the southern terminus of the Transmission Corridor.	ND – M	ND – M	P

Species	Status[1]	Primary Habitat Associations	Potential to Occur / Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
Coastal California gnatcatcher *Polioptila californica californica*	FT, CSC, NCCP	Coastal sage scrub, maritime succulent scrub. Resident.	This species was observed in the northern terminus and southern terminus of the Transmission Corridor and within the proposed Salt Creek Substation site.	P	P	P
Yellow warbler *Setophaga petechia*	CSC (nesting)	Riparian plants associations. Prefers willow, cottonwood, aspen, sycamore, and alder species for nesting and foraging.	This species was observed within the strip of riparian vegetation southwest of the proposed Salt Creek Substation site.	ND – M	ND – M	P
Western bluebird *Sialia mexicana occidentalis*	NCCP	Open woodlands, farmlands, orchards.	This species has a low potential to nest within the Transmission Corridor due to the presence of small patches of mature trees associated with ornamental vegetation.	ND – L	ND – L	ND – L
Least Bell's vireo *Vireo bellii pusillus*	FE, SE, NCCP	Willow riparian woodlands. Migrant and summer resident.	This species was observed in riparian habitat southwest and southeast (outside) of the BSA at the southern terminus of the Transmission Corridor.	ND – M	ND – M	ND – M
MAMMALS						
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	CSC, NCCP	San Diego County west of mountains in sparse, disturbed coastal sage scrub, or grasslands with sandy soils.	This species has a low potential to occur within the Transmission Corridor or proposed Salt Creek Substation site due to the presence of sparse scrub habitat; however, suitable sandy soils are limited in the BSA.	ND – L	ND – L	ND – L

Species	Status[1]	Primary Habitat Associations	Potential to Occur / Comments	Substation	Transmission Corridor	Buffer
				Findings[2]		
San Diego black-tailed jackrabbit *Lepus californicus bennetti*	CSC, NCCP	Coastal sage scrub, chaparral, grasslands, croplands, and open, disturbed areas that include at least some scrub cover.	This species was observed near the Existing Substation staging yard at the northern terminus of the Transmission Corridor, and at the southern terminus of the Transmission Corridor, near the proposed Salt Creek Substation site.	P	ND – H	P
Southern mule deer *Odocoileus hemionus fuliginata*	NCCP	Many habitats.	This species was observed near the Existing Substation staging yard at the northern terminus of the Transmission Corridor.	ND – H	ND – H	P
American badger *Taxidea taxus*	CSC, NCCP	Dry, open habitat stages of most shrub, forest, and grassland habitats with friable soils.	This species has a moderate potential to occur within the Transmission Corridor and proposed Salt Creek Substation site due to the presence of potentially suitable grassland and scrub habitat, and friable soils.	ND – M	ND – M	ND – M

1 Status:

SDG&E Natural Community Conservation Plan (NCCP) = Covered Species

NE = SDG&E Narrow Endemic Species

Federal/State Listed
FE = Federally listed endangered
FT = Federally listed threatened
SE = State-listed endangered
ST = State -listed threatened

OTHER
CFP = California Department of Fish and Wildlife Fully Protected Species
CSC = California Department of Fish and Wildlife Species of Special Concern
WL = California Department of Fish and Wildlife Watch List

[2] Findings:

P (present) – Species detected during Proposed Project surveys

ND (not detected) – Species not detected during Proposed Project surveys

L (low potential) – Suitable habitat present, highly disturbed

M (moderate potential) – Suitable habitat present, moderately disturbed

H (high potential) – Suitable habitat present, and species known to occur within the vicinity

Due to the presence of suitable habitat in the BSA for CAGN, focused surveys were conducted on approximately 54 acres of suitable coastal sage scrub habitat within the BSA. During the 2011 surveys, seven CAGNs (five adults and two juveniles) were detected. Seven, 11, and six CAGNs were detected during the three protocol surveys in 2012, respectively, including family groups, adult pairs, individual adults, and nestlings. Observations were clustered at the northern and southern terminus of the Transmission Corridor, where larger patches of suitable sage scrub habitats exist. Incidental sightings of CAGN were observed during other biological resource surveys throughout the BSA in 2011 and 2012 (Figures 4.4-4a and 4.4-4b).

Least Bell's Vireo

LBV is federally and state-listed as endangered, and is a Covered Species under SDG&E's NCCP. Historically, this species was a common summer visitor to riparian habitat throughout much of California. Currently, LBV is found only in riparian woodlands in Southern California, with the majority of breeding pairs in San Diego, Santa Barbara, and Riverside Counties. LBV is restricted to riparian woodland, and is most frequent in areas that combine an understory of dense young willows or mulefat with a canopy of tall willows. Since LBV builds its nests in dense shrubbery 3 to 4 feet above the ground (Salata 1984), it requires young successional riparian habitat or older habitat with a dense understory. Nests are also often placed along internal or external edges of riparian thickets (Unitt 2004).

Due to the presence of approximately 1 acre of suitable riparian scrub habitat in the buffer of the proposed Salt Creek Substation, focused surveys for LBV were conducted at the proposed Salt Creek Substation site during the 2011 breeding season. One LBV was detected as an incidental sighting approximately 130 feet east (outside) of the BSA during the 2011 focused LBV survey (Figure 4.4-5). Additionally, one LBV was detected outside of the BSA during the 2012 CAGN survey (Figure 4.4-5). This individual was located within the riparian scrub habitat south of the proposed Salt Creek Substation site; therefore, the suitable riparian scrub habitat south and adjacent to the proposed Salt Creek Substation is considered occupied.

State-Listed Species

LBV is the only state-listed species documented during surveys conducted for the Proposed Project. Its background and occurrence are described above.

Other Special-Status Species

Western Burrowing Owl

WBO is a CDFW SSC and is a Covered Species under SDG&E's NCCP. It is primarily restricted to the western United States and Mexico. Habitat for WBO includes dry, open, short-grass areas often associated with burrowing mammals (Haug et al. 1993). A year-round resident in San Diego County, WBO ranges throughout the coastal lowlands in grasslands, agricultural areas, and coastal dunes (Unitt 1984). WBO is diurnal and perches during daylight at the entrance to its burrow or on low posts. Nesting occurs from March through August. WBOs form a pair-bond for more than 1 year and exhibit high site fidelity, reusing the same burrow year after year (Haug et al. 1993). The female remains inside the burrow during most of the egg-laying and

incubation period, and is fed by the male throughout brooding. WBO is an opportunistic feeder, consuming a diet that includes arthropods, small mammals, and birds, and occasionally amphibians and reptiles (Haug et al. 1993).

Results of the 2011 WBO winter surveys document the presence of 38 potential burrows and one WBO individual (Figures 4.4-6a and 4.4-6b). Because no sign of WBO activity was found at any burrow from May through July 2011, it can be assumed that no breeding took place on-site in 2011. A total of 86 potentially suitable burrows, or burrow clusters, were documented, primarily in the central and southern portions of the Transmission Corridor during the 2012 WBO surveys. No WBO and no recent sign of WBO were observed during these surveys. An incidental sighting of an individual adult WBO was recorded in March 2012 during the QCB survey at the southern terminus of the Transmission Corridor, which overlaps with the footprint of the proposed Salt Creek Substation (Figure 4.4-6b). Additionally, a WBO family group was detected in July 2012 during the CAGN survey within the Transmission Corridor (Figure 4.4-6b).

Southern California Rufous-Crowned Sparrow

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) is a CDFW SSC and an SDG&E NCCP Covered Species. This species' habitat consists of rocky hillsides and steep slopes in open grass and coastal sage scrub, ranging from roughly 200 to 4,500 feet amsl.

Suitable foraging and nesting habitat for southern California rufous-crowned sparrow occurs throughout the Transmission Corridor and in the surrounding area. This species was observed in coastal sage scrub and grassland habitats at the southern terminus of the Transmission Corridor and Salt Creek Substation site during general surveys and focused CAGN surveys conducted in 2012 (Figure 4.4-7b).

Cooper's Hawk

Cooper's hawk (*Accipiter cooperii*) is a CDFW SSC and an SDG&E NCCP Covered Species. The species usually nests and forages near open water or riparian vegetation, but can be found in urban and suburban areas where there are tall trees for nesting.

Suitable foraging habitat for Cooper's hawk occurs within coastal sage scrub, grassland, and riparian habitats throughout the Transmission Corridor and proposed Salt Creek Substation site. Cooper's hawk nests within patches of ornamental habitat containing tall trees and within southern willow scrub and riparian scrub habitats. Cooper's hawk was observed throughout the Transmission Corridor and proposed Salt Creek Substation site perching within trees and on poles, and flying over coastal sage scrub, grassland, and riparian habitats during general surveys conducted in 2011 and focused CAGN surveys in 2012 (Figure 4.4-7b).

Grasshopper Sparrow

Grasshopper sparrow (*Ammodramus savannarum*) is an SDG&E NCCP Covered Species. This species is found in grassland habitat and prefers areas with significant grass cover with a few scattered shrubs for protection. Habitat can also include open coastal sage scrub with scattered shrubs such as California buckwheat or coastal sagebrush dispersed among native or nonnative grasses.

Suitable foraging and nesting habitat for grasshopper sparrow occurs within grassland and open coastal sage scrub habitats within the Transmission Corridor and proposed Salt Creek Substation site. Individual grasshopper sparrows and a family group that included juveniles were observed in grassland and coastal sage scrub habitats during general surveys conducted at the proposed Salt Creek Substation site in 2011 (Figure 4.4-7b).

Bell's Sage Sparrow

Bell's sage sparrow (*Amphispiza belli belli*) is a CDFW SSC. This species prefers semi-open habitats with shrubs 1 to 2 meters high and is closely associated with sagebrush. It often occurs in chaparral dominated by chamise and coastal sage scrub dominated by California sagebrush.

Suitable foraging and nesting habitat for Bell's sage sparrow occurs within open coastal sage scrub and transitional grassland/sage scrub habitats at the northern terminus of the Transmission Corridor, and at the southern terminus of the Transmission Corridor and the proposed Salt Creek Substation site. This species was observed in the northern terminus of the Transmission Corridor and at the southern terminus of the Transmission Corridor and Salt Creek Substation during focused WBO surveys in 2012 (Figure 4.4-7a).

Northern Harrier

Northern harrier (*Circus cyaneus hudsonius*) is a CDFW SSC and is an SDG&E NCCP Covered Species. Northern harriers are open-country birds, often seen soaring low over grassland habitat and farmlands.

Suitable foraging and nesting habitat for northern harrier occurs within open coastal sage scrub and grassland habitats at the northern terminus of the Transmission Corridor, and at the southern terminus of the Transmission Corridor and proposed Salt Creek Substation site. Northern harrier was observed foraging in open coastal sage scrub and grassland habitats at the southern terminus of the Transmission Corridor and proposed Salt Creek Substation site during vegetation mapping and focused WBO surveys in 2012 (Figure 4.4-7b).

White-Tailed Kite

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

Suitable foraging habitat for white-tailed kite occurs within coastal sage scrub, grassland, and riparian habitats throughout the Transmission Corridor and proposed Salt Creek Substation site. Nesting habitat for white-tailed kite occurs within southern willow scrub and riparian scrub habitats. White-tailed kite was observed foraging in grassland, open coastal sage scrub, and riparian habitats throughout the Transmission Corridor and proposed Salt Creek Substation site during focused CAGN and WBO surveys in 2012 (Figure 4.4-7b).

Yellow-Breasted Chat

Yellow-breasted chat (*Icteria virens*) is a CDFW SSC. Nesting yellow-breasted chat occupies early successional riparian habitats with a well-developed shrub layer and an open canopy.

Suitable foraging and nesting habitat for yellow-breasted chat occurs within riparian, mulefat, and southern willow scrub habitats throughout the Transmission Corridor and proposed Salt Creek Substation site. Yellow-breasted chat was observed in riparian habitat at the southern terminus of the Transmission Corridor during focused CAGN and WBO surveys conducted in 2012 (Figure 4.4-7b).

Yellow Warbler

Yellow warbler (*Setophaga petechia*) is a California species of concern. This species nests in mature riparian woodland from coastal and desert lowlands up to 2,500 meters (8,000 feet) amsl. Yellow warbler prefers to nest in mature cottonwood, willow, alder, and ash trees.

Suitable foraging and nesting habitat for yellow warbler occurs within riparian, mulefat, and southern willow scrub habitats throughout the Transmission Corridor and proposed Salt Creek Substation site. This species was observed in the buffer of the proposed Salt Creek Substation site during focused LBV and WBO surveys in 2011 (Figure 4.4-7b).

San Diego Black-Tailed Jackrabbit

San Diego black-tailed jackrabbit (*Lepus californicus bennetti*) is a CDFW SSC and an SDG&E NCCP Covered Species. It inhabits open land, but requires some shrubs for cover. Typical habitats include early stages of chaparral, open coastal sage scrub, and grasslands near the edges of brush.

Suitable habitat for San Diego black-tailed jackrabbit occurs within open coastal sage scrub and grassland habitats throughout the Transmission Corridor and proposed Salt Creek Substation site. This species was observed near the southern terminus of the Transmission Corridor and in the surrounding area during vegetation mapping surveys conducted in 2012 (Figure 4.4-7b).

Southern Mule Deer

Southern mule deer (*Odocoileus hemionus fuliginata*) is an SDG&E NCCP Covered Species. Southern mule deer is widespread throughout undeveloped portions of San Diego County, ranging from Marine Corps Base Camp Pendleton to the Laguna Mountains, Sweetwater River, and Otay Lakes at elevations of 400 to 3,600 feet amsl (Bleich and Holl 1982). This species requires relatively large, undisturbed tracts of chaparral, coastal sage scrub, and mixed grassland/shrub habitats.

Suitable habitat for southern mule deer occurs within open coastal sage scrub and grassland habitats throughout the Transmission Corridor and proposed Salt Creek Substation site. Southern mule deer was observed within the BSA near the Existing Substation staging yard at the northern terminus of the Transmission Corridor during focused WBO surveys in 2012 (Figure 4.4-7a).

Critical Habitat

No critical habitat for QCB occurs within the BSA. The nearest designated critical habitat for QCB occurs along the eastern perimeter of Otay Lake, approximately 1.1 miles southeast of the southern terminus of the Transmission Corridor (USFWS 2002).

Critical habitat for the endangered Otay tarplant coincides with the BSA at the southern terminus of the Transmission Corridor, near the proposed Salt Creek Substation site (USFWS 2012) (Figure 4.4-8). A total of 13.46 acres of critical habitat occurs within the 500-foot buffer of the Transmission Corridor at its southern terminus. Critical habitat also occurs just outside of the 500-foot buffer at the northern terminus of the Transmission Corridor and the Existing Substation staging yard.

Critical habitat for CAGN occurs just east and north of the northern terminus of the Transmission Corridor, but does not coincide with BSA (Figure 4.4-8).

No critical habitat for LBV occurs within the BSA. The nearest designated critical habitat for LBV occurs northeast of Sweetwater Reservoir, approximately 1.7 miles northeast of the northern terminus of the Transmission Corridor. Designated critical habitat for LBV also occurs east of Otay Lake, approximately 2.5 miles east of the southern terminus of the Transmission Corridor.

NCCP Preserve Areas

Under the NCCP, designated preserves are considered sensitive. Within San Diego County, preserves are defined and delineated using existing preserve areas from local and regional planning documents such as the City of Chula Vista MSCP Subarea Plan (City of Chula Vista 1997), County of San Diego MSCP Subarea Plan (County of San Diego 1997), and the North County Final Multiple Habitat Conservation Plan (SANDAG 2003). Preserve areas in these planning documents include the Multi-Habitat Planning Area (City of San Diego 1997), Pre-approved Mitigation Areas (County of San Diego 1997), Biological Resource Core Areas (County of San Diego 1997), and Focused Planning Areas (SANDAG 2003).

A portion of the northern section of the Transmission Corridor, the Existing Substation, and the Existing Substation staging yard are located within an SDG&E-defined “Preserve” area; the remainder of the proposed power line route is located outside of defined Preserve boundaries. The proposed Salt Creek Substation site is located on land identified for development under the Otay Ranch General Development Plan and is outside of the City of Chula Vista’s MSCP Preserve and SDG&E’s NCCP Preserve area (Figure 4.4-9).

Wildlife Corridors

In an urban context, a wildlife migration corridor is generally a linear landscape feature of sufficient width and buffer to allow wildlife movement between two patches of comparatively undisturbed habitat or between a patch of habitat and some vital resources. Regional corridors are defined as those linking two or more large patches of habitat, and local corridors are defined as those allowing resident animals to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development. A viable wildlife migration corridor consists of more than an unobstructed path between habitat areas.

Appropriate vegetation communities must be present to provide food and cover for transient species and resident populations of less mobile animals. There must also be a sufficient lack of stressors and threats within and adjacent to the corridor for species to use it successfully.

Although the Transmission Corridor is a linear feature that consists of vegetation communities that support wildlife species, the Transmission Corridor is intersected by numerous roadways, with some carrying high volumes of traffic, and it is bordered by dense development on either side. These factors likely deter most wildlife species from using the narrow strip of fragmented vegetation present within the Transmission Corridor. As such, the Transmission Corridor does not represent an important regional or local migration corridor for wildlife movement, and Proposed Project activities within the Transmission Corridor would not interfere with wildlife migration patterns.

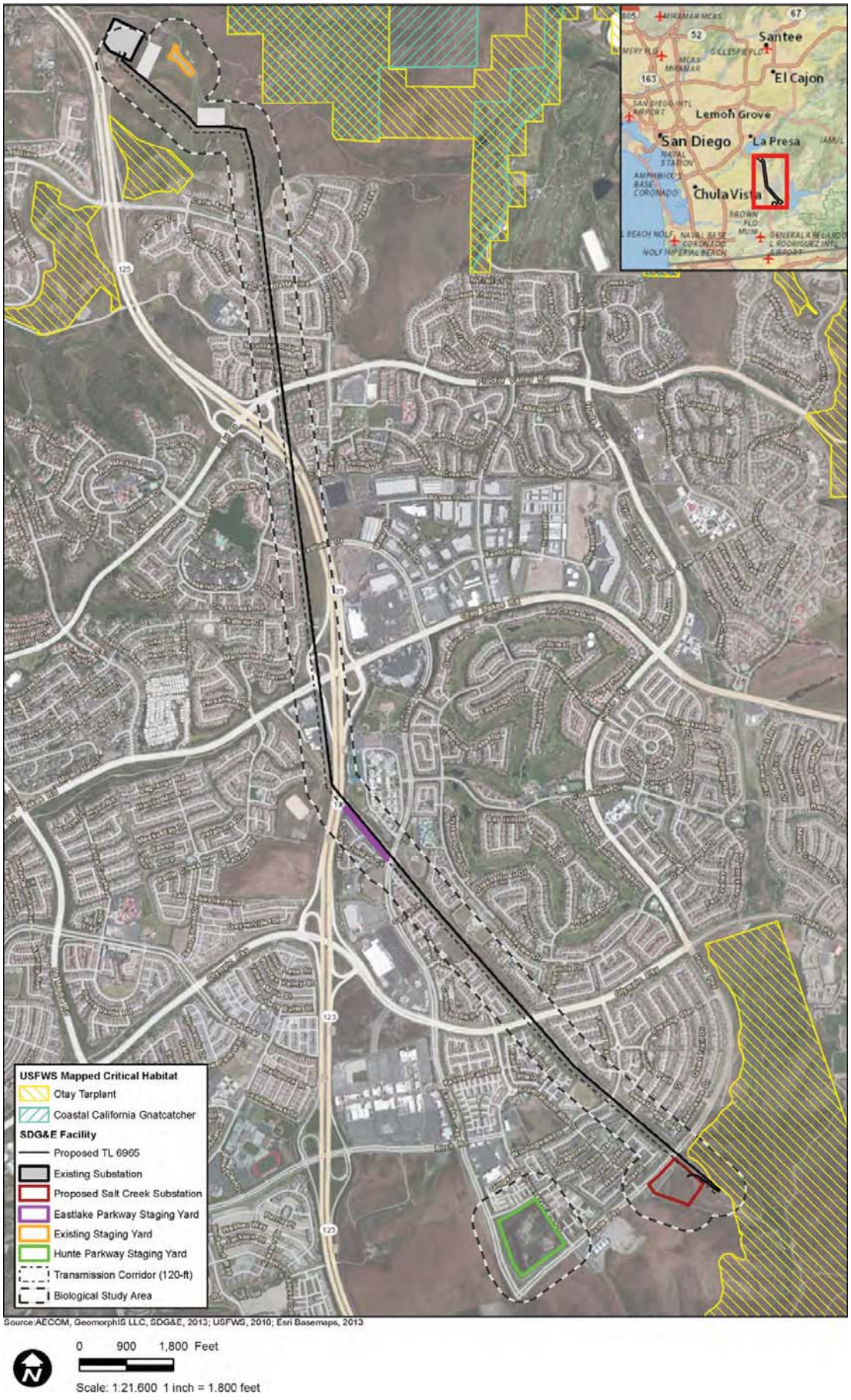
The proposed Salt Creek Substation site is not a linear feature that could potentially serve as a wildlife migration corridor, and the site does not coincide with a known migration corridor. The proposed Salt Creek Substation site lies adjacent to a roadway (Hunte Parkway) and is flanked to the north by urban development, both of which can introduce stressors. As such, the proposed Salt Creek Substation site does not represent an important regional or local migration corridor for wildlife movement, or coincide with such a corridor. Proposed Project activities within the proposed Salt Creek Substation site would not interfere with wildlife migration patterns.

4.4.4 Potential Impacts

The following discussion describes the Proposed Project's potential to impact sensitive biological resources during construction and operation of the proposed Salt Creek Substation, construction and operation of a 5-mile-long power line along the existing Transmission Corridor; construction of modifications to the Existing Substation, and use of the three staging yards. No impacts are included for the alternative staging yards at the OTC, since it has not been determined if these areas will be needed during construction and these were previously graded areas. Any additional impacts that may occur due to the use of the alternative staging yards would be evaluated prior to use of those areas and captured in the post-construction report.

SDG&E would operate in compliance with all state and federal laws, regulations, and permit conditions. This includes compliance with the CWA, Porter-Cologne Water Quality Control Act, federal and state ESAs, MBTA, CEQA, and requirements and protective measures from CDFW and USFWS. In addition, SDG&E would implement the SDG&E Subregional NCCP, which was established according to the federal and state ESAs and the NCCP Act. Compliance also includes following the guidelines outlined in Section 7.1, Operational Protocols, and Section 7.2, Habitat Enhancement Measures, of the SDG&E Subregional NCCP (see Appendix M in the Biological Technical Report [Appendix 4.4-A of this PEA]). Operational protocols are designed to provide avoidance and minimize impacts to all sensitive resources, regardless of whether the species is an NCCP Covered Species. Additionally, SDG&E has designed and incorporated an APM into the Proposed Project to avoid or minimize potential impacts to WBO. No other APMs are recommended at this time.

Figure 4.4-8: USFWS Mapped Critical Habitat within the Biological Study Area



Note: SDG&E is providing this map with the understanding that the map is not survey grade.

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Figure 4.4-9: Biological Study Area in Relation to MSCP Preserve Areas

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Significance Criteria

For the purpose of this analysis, the following applicable thresholds of significance were used to determine whether implementing the Proposed Project would result in a significant impact. These thresholds of significance are based on Appendix G of the CEQA Guidelines (CCR, Title 14, Division 6, Chapter 3, Sections 15000–15387). A biological resources impact is considered significant if implementation of the Proposed Project would do any of the following:

- 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 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 CDFW or USFWS;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including 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; and/or
- conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

Question 4.4a – Sensitive Species

Construction – *Potentially Significant Unless APMs Implemented*

Individual special-status plant species could be damaged or destroyed during construction activities of the Proposed Project. Plants could be graded over, crushed, or trampled, or be impacted by construction-related habitat loss or modification of habitats that support special-status plant species. Special-status wildlife species could also be impacted by construction activities, including construction-related noise disturbance, mortality resulting from vehicle strikes, and loss or modification of suitable habitat for these species. The potential impacts on special-status species, designated critical habitat, Preserve areas, and common wildlife associated with construction of the Proposed Project are presented and evaluated below.

Special-Status Plant Species

Direct Impacts

Salt Creek Substation

The federal- and state-listed Otay tarplant occurs within the 500-foot buffer of the proposed Salt Creek Substation site, but not within the site itself; therefore, no direct impacts to this species are anticipated during construction. However, five other special-status species occur within the grading limits and in the 500-foot buffer of the proposed Salt Creek Substation site.

Approximately 1.2 million individuals (2 acres) of Palmer's grappling hook (CRPR 4.2) and one individual of San Diego barrel cactus (CRPR 2.1), both SDG&E NCCP Covered Species, occur within the proposed Salt Creek Substation grading limits and would be permanently impacted by construction activities. Additionally, approximately 100 individuals of San Diego sunflower (CRPR 4.2), a non-SDG&E NCCP Covered Species, occur within the proposed Salt Creek Substation grading limits and would be permanently impacted by construction activities.

Four special-status plant species occur in the 500-foot buffer of the proposed Salt Creek Substation: variegated dudleya (CRPR 1B.2, NCCP Covered), Palmer's grappling hook, San Diego barrel cactus, and San Diego sunflower. These plant populations that occur only in the 500-foot buffer would not be directly impacted by construction activities.

Transmission Corridor

The federal- and state-listed Otay tarplant was observed within the 500-foot buffer of the Transmission Corridor, but does not coincide with areas that would be directly, permanently, or temporarily impacted by construction activities in the Transmission Corridor. A polygon of Otay tarplant is adjacent to an area where an access road would be created for vehicle access to Structure 40, but the location of the road would be designed to avoid impacts to individual plants. Twelve other special-status plant species were documented within the Transmission Corridor and 500-foot survey buffer. No special-status plant species covered by SDG&E's NCCP coincide with areas that would be directly, permanently, or temporarily impacted by Proposed Project activities in the Transmission Corridor. However, the permanent work pad associated with one light-duty steel pole (Structure 30) coincides with a polygon of San Diego County sunflower, a CRPR 4.2 species.

Existing Substation Modifications

No federal- or state-listed plant species or other special-status plant species have potential to occur within the Existing Substation. All modification activities would occur within the current substation's footprint, which consists of paved and gravel-covered areas. Therefore, no impacts to special-status plant species are anticipated during modification activities at the Existing Substation.

Staging Yards

No federal- or state-listed plant species or other special-status plant species were observed or have potential to occur within the Existing Substation staging yard, Hunte Parkway staging yard,

or Eastlake Parkway staging yard. The Existing Substation staging yard is entirely within bare ground and the Hunte Parkway staging yard (previously graded) was mitigated for previously under a separate project. Therefore, no impacts on special-status plant species are anticipated during use of the staging yards.

Indirect Impacts

Potential temporary, indirect impacts to Otay tarplant and the other special-status plant species could arise from runoff and sedimentation, erosion, fugitive dust, and unauthorized access outside of the disturbance area by construction workers. 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 transmission line corridors during construction. Wildfires caused by construction are rare, but may occur. Exotic species often frequent areas adjacent to and within burn areas following a wildfire.

Significance Determination

SDG&E would implement protocols as described in the SDG&E NCCP and Operational Protocols (see Appendix L in Biological Technical Report [Attachment 4.4-A]). 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, compensating for permanent impacts to Covered Species and their habitats through drawdown of mitigation credits as described further below, restoring temporary impact areas (including topsoil salvage for preservation of seed bank for sensitive species), and designing construction activities to avoid or minimize new disturbance and erosion. Implementation of SDG&E's NCCP would ensure that any potential direct and indirect impacts to special-status plant species would remain at a less-than-significant level.

Special-Status Invertebrate Species

Direct Impacts

Salt Creek Substation

No QCB were detected during protocol surveys conducted within the proposed Salt Creek Substation site in 2011. Proposed Project-related activities are anticipated to have both temporary and permanent impacts in suitable habitat for QCB. These impacts, however, would not occur within SDG&E's QCB Low-Effect HCP Mapped Area for QCB. Therefore, because the impacted area is neither mapped nor occupied, SDG&E's NCCP for QCB does not require mitigation. No other special-status invertebrate species were identified in the proposed Salt Creek Substation footprint or survey buffer.

Transmission Corridor

No special-status invertebrate species were identified within the Transmission Corridor. Focused QCB surveys were conducted in the Transmission Corridor in 2012, but no QCB were

detected. Proposed-Project-related activities are anticipated to have temporary and permanent impacts in suitable habitat for QCB near the southern terminus of the Transmission Corridor. These impacts, however, would not occur within SDG&E's Low-Effect HCP Mapped Area for QCB. Therefore, because the impacted area is neither mapped nor occupied, SDG&E's NCCP for QCB does not require mitigation.

Existing Substation Modifications

No special-status invertebrate species have potential to occur within the Existing Substation. All modification activities would occur on paved and gravel-covered areas of the Existing Substation. As a result, direct impacts to special-status invertebrates and QCB-suitable habitat would not occur during modifications to the Existing Substation.

Staging Yards

No special-status invertebrate species were identified within the Existing Substation staging yard, Hunte Parkway staging yard, or Eastlake Parkway staging yard. The Existing Substation staging yard is entirely within bare ground, the Hunte Parkway staging yard (previously graded) was mitigated for previously under a separate project, and the Eastlake Parkway staging yard consists of disturbed habitat and urban/developed land. As a result, direct impacts to special-status invertebrate species and QCB-suitable habitat would not occur during use of these staging yards.

Indirect Impacts

Potential indirect impacts to special-status invertebrate species include permanent impacts to habitat suitable for special-status invertebrate species by the introduction and proliferation of invasive nonnative plant species and temporary impacts associated with dust, sedimentation, and erosion during construction.

Significance Determination

SDG&E would implement the NCCP Operational Protocols (see Appendix L in Biological Technical Report [Attachment 4.4-A]) to avoid and minimize impacts to invertebrate species, including suitable QCB habitat. These protocols include restricting vehicles to existing roads when feasible and avoiding wildlife to the extent practicable. These protocols also include a biological monitor on-site to avoid and minimize impacts to biological resources. SDG&E proposes to mitigate for permanent and temporary impacts to grassland and coastal sage scrub habitat at a ratio ranging from 1:1 to 2:1, depending on the location of the habitat within the SDG&E Preserve (see Section 4.4.5). As a result, potential impacts on invertebrate species, including suitable QCB habitat, would be less than significant.

Special-Status Amphibian Species

Direct Impacts

Salt Creek Substation

No special-status amphibian species were identified in the proposed Salt Creek Substation BSA; however, one NCCP Covered Species, western spadefoot toad, has low potential to occur.

Transmission Corridor

No special-status amphibian species were detected in the Transmission Corridor BSA; however, one NCCP Covered Species, western spadefoot toad, has low potential to occur in the Transmission Corridor.

Existing Substation Modifications

No special-status amphibian species have potential to occur within the Existing Substation. All modification activities would occur on paved and gravel-covered areas of the substation. As a result, direct impacts to special-status amphibian species would not occur during modifications to the Existing Substation.

Staging Yards

No special-status amphibian species were identified and none has potential to occur within the Existing Substation staging yard, Hunte Parkway staging yard, or Eastlake Parkway staging yard. The Existing Substation staging yard is entirely within bare ground, the Hunte Parkway staging yard (previously graded) was mitigated for previously under a separate project, and the Eastlake Parkway staging yard consists of disturbed habitat and urban/developed land. As a result, direct impacts to special-status amphibian species would not occur during use of these staging yards.

Indirect Impacts

Potential indirect impacts to special-status amphibian species include permanent impacts to habitat suitable for special-status amphibian species by the introduction and proliferation of invasive nonnative plant species, and temporary impacts associated with dust, sedimentation, and erosion during construction.

Significance Determination

SDG&E would implement NCCP Operational Protocols (see Appendix L in Biological Technical Report [Attachment 4.4-A]) to avoid and minimize impacts to amphibian species. These protocols include restricting vehicles to existing roads when feasible, avoiding wildlife to the extent practicable, and conducting pre-construction surveys. These protocols also include having a biological monitor on-site to avoid and minimize impacts to biological resources. Wetland habitats would not be impacted. SDG&E proposes to mitigate for permanent and temporary impacts to grassland and coastal sage scrub habitat at a ratio ranging from 1:1 to 2:1, depending on the location of the habitat within the SDG&E Preserve (see Section 4.4.5). As a result, potential impacts on amphibian species would be less than significant.

Special-Status Reptile Species

Direct Impacts

Salt Creek Substation

No special-status reptile species were identified in the proposed Salt Creek Substation BSA; however, five NCCP Covered Species have potential to occur: Belding's orange-throated whiptail (moderate), northern red-diamond rattlesnake (moderate), coastal rosy boa (moderate), San Diego horned lizard (low), and two-striped garter snake (moderate).

Transmission Corridor

No special-status reptile species were observed in the Transmission Corridor BSA; however, five NCCP Covered Species have potential to occur in the Transmission Corridor: Belding's orange-throated whiptail (moderate), northern red-diamond rattlesnake (moderate), coastal rosy boa (moderate), San Diego horned lizard (low), and two-striped garter snake (moderate).

Existing Substation Modifications

No special-status reptile species have potential to occur within the Existing Substation. All modification activities would occur on paved and gravel-covered areas of the Existing Substation. As a result, direct impacts to special-status amphibian species would not occur during modifications to the Existing Substation.

Staging Yards

No special-status reptile species were identified and none have potential to occur within the Existing Substation staging yard, Hunte Parkway staging yard, or Eastlake Parkway staging yard. The Existing Substation staging yard is entirely within bare ground, the Hunte Parkway staging yard (previously graded) was mitigated for previously under a separate project, and the Eastlake Parkway staging yard consists of disturbed habitat and urban/developed land. As a result, direct impacts to special-status reptile species would not occur during use of these staging yards.

Indirect Impacts

Potential indirect impacts to special-status reptile species include permanent impacts to habitat suitable for special-status reptile species by the introduction and proliferation of invasive nonnative plant species, and temporary impacts associated with dust, sedimentation, and erosion during construction.

Significance Determination

SDG&E would implement NCCP Operational Protocols (see Appendix L in the Biological Technical Report [Attachment 4.4-A]) to avoid and minimize impacts to reptile species. These protocols include restricting vehicles to existing roads when feasible, avoiding wildlife to the extent practicable, and conducting pre-construction surveys. These protocols also include having a biological monitor on-site to avoid and minimize impacts to biological resources. Consistent with SDG&E's NCCP, SDG&E would mitigate for permanent and temporary impacts

to grassland and coastal sage scrub habitat at a ratio ranging from 1:1 to 2:1, depending on the location of the habitat within the SDG&E Preserve (see Section 4.4.5). As a result, potential impacts on reptile species would be less than significant.

Special-Status Avian and Other Nesting Avian Species

Direct Impacts

Salt Creek Substation

Five NCCP-covered avian species were observed in the proposed Salt Creek Substation BSA: southern California rufous-crowned sparrow, grasshopper sparrow, WBO (including at least one occupied burrow), northern harrier, and CAGN. Three special-status species, not covered by the NCCP, were observed in the proposed Salt Creek Substation BSA: white-tailed kite, yellow-breasted chat, and yellow warbler. Additionally, three special-status species have potential to occur, including two NCCP Covered Species—western bluebird (low) and LBV (moderate) —and one special-status species not covered by the NCCP—Bell's sage sparrow (moderate).

Transmission Corridor

Six NCCP-covered avian species were observed in the Transmission Corridor BSA: southern California rufous-crowned sparrow, Cooper's hawk, grasshopper sparrow, WBO, northern harrier, and CAGN. Three special-status species not covered by the NCCP were observed in the Transmission Corridor BSA: Bell's sage sparrow, white-tailed kite, and yellow-breasted chat. Additionally, two NCCP Covered Species have potential to occur: western bluebird (low) and LBV (moderate).

Existing Substation Modifications

No special-status avian species have potential to occur within the Existing Substation. All modification activities would occur on paved and gravel-covered areas of the Existing Substation. As a result, direct impacts to special-status avian species would not occur during modifications to the Existing Substation.

Staging Yards

No special-status avian species were identified and none have potential to occur within the Existing Substation staging yard, Hunte Parkway staging yard, or Eastlake Parkway staging yard. The Existing Substation staging yard is entirely within bare ground, the Hunte Parkway staging yard (previously graded) was mitigated for previously under a separate project, and the Eastlake Parkway staging yard consists of disturbed habitat and urban/developed land. As a result, direct impacts to special-status avian species would not occur during use of these staging yards.

Indirect Impacts

Potential indirect impacts to special-status avian species include permanent impacts to habitat suitable for special-status avian species by the introduction and proliferation of invasive

nonnative plant species, and temporary impacts associated with noise, nighttime lighting, dust, sedimentation, and erosion during construction.

Significance Determination

SDG&E would implement NCCP Operational Protocols (see Appendix L in the Biological Technical Report [Attachment 4.4-A]) to avoid and minimize impacts to special-status and migratory bird species. These protocols include restricting vehicles to existing roads when feasible, avoiding wildlife to the extent practicable, conducting pre-construction surveys, and providing biological monitoring where active nests are found. SDG&E would also remain in compliance with the MBTA. Consistent with SDG&E's NCCP, SDG&E would mitigate for permanent and temporary impacts to coastal sage scrub habitat at a ratio ranging from 1:1 to 2:1, depending on the location of the habitat within the SDG&E Preserve (see Section 4.4.5). Implementation of SDG&E's NCCP and Operational Protocols, and compliance with the MBTA as described above, would ensure that impacts on special-status and migratory bird species remain less than significant.

In addition, WBO is a narrow endemic species under the NCCP. Implementation of APM-BIO-1 would provide avoidance, minimization, and mitigation to prevent significant impacts to WBO (see Section 4.4.6). As a result, potential impacts on WBO would be less than significant.

Special-Status Mammal Species

Direct Impacts

Salt Creek Substation

One special-status NCCP-covered mammal species, San Diego black-tailed jackrabbit, was detected within the proposed Salt Creek Substation BSA. Three additional NCCP-covered mammal species have some potential to occur: Northwestern San Diego pocket mouse (low), southern mule deer (high), and American badger (moderate).

Transmission Corridor

Two NCCP-covered mammal species were detected within the Transmission Corridor BSA: San Diego black-tailed jackrabbit and southern mule deer. Two additional NCCP-covered mammal species have some potential to occur: Northwestern San Diego pocket mouse (low) and American badger (moderate).

Existing Substation Modifications

No special-status mammal species have potential to occur within the Existing Substation. All modification activities would occur on paved and gravel-covered areas of the Existing Substation. As a result, direct impacts to special-status avian species would not occur during modifications to the Existing Substation.

Staging Yards

No special-status mammal species were identified and none have potential to occur within the Existing Substation staging yard, Hunte Parkway staging yard, or Eastlake Parkway staging yard.

The Existing Substation staging yard is entirely within bare ground, the Hunte Parkway staging yard (previously graded) was mitigated for previously under a separate project, and the Eastlake Parkway staging yard consists of disturbed habitat and urban/developed land. As a result, direct impacts to special-status avian species would not occur during use of these staging yards.

Indirect Impacts

Potential indirect impacts to special-status mammal species include permanent impacts to habitat suitable for special-status mammal species by the introduction and proliferation of invasive nonnative plant species, and temporary impacts associated with noise, nighttime lighting, dust, sedimentation, and erosion during construction.

Significance Determination

SDG&E would implement NCCP Operational Protocols (see Appendix L in the Biological Technical Report [Attachment 4.4-A]) to avoid and minimize impacts to mammal species. These protocols include restricting vehicles to existing roads when feasible, avoiding wildlife to the extent practicable, conducting pre-construction surveys, and handling of wildlife only by biologists or experts in handling wildlife. These protocols also include having a biological monitor on-site to avoid and minimize impacts to biological resources. Consistent with SDG&E's NCCP, SDG&E would mitigate for permanent and temporary impacts to grassland and coastal sage scrub habitat at a ratio ranging from 1:1 to 2:1, depending on the location of the habitat within the SDG&E Preserve (see Section 4.4.5). As a result, potential impacts on mammal species would be less than significant.

Critical Habitat

Direct Impacts

Salt Creek Substation

No critical habitat designated by USFWS for endangered or threatened species coincides with the proposed Salt Creek Substation BSA. As a result, no impacts to critical habitat for special-status species would occur during construction of the proposed Salt Creek Substation.

Transmission Corridor

A review of final boundaries (USFWS 2012) indicates that designated critical habitat for the endangered Otay tarplant coincides with the Transmission Corridor buffer (Figure 4.4-8). A total of 13.46 acres occurs within the 500-foot buffer of the Transmission Corridor at the southern terminus. However, no designated critical habitat coincides with the Transmission Corridor footprint. As a result, no impacts to critical habitat for special-status species would occur during construction activities in the Transmission Corridor.

Existing Substation Modification

No critical habitat designated by USFWS for endangered or threatened species coincides with the Existing Substation. As a result, no impacts to critical habitat for special-status species would occur during modification activities in the Existing Substation.

Staging Yards

No critical habitat designated by USFWS for endangered or threatened species coincides with the Existing Substation staging yard, Hunte Parkway staging yard, or Eastlake Parkway staging yard. As a result, no impacts to critical habitat for special-status species would occur during use of these staging yards during construction.

Indirect Impacts

Potential indirect impacts to critical habitat include permanent impacts to habitat suitable for those federally listed species that the habitat supports by the introduction and proliferation of invasive nonnative plant species, and temporary impacts associated with noise, nighttime lighting, dust, sedimentation, and erosion during construction.

Significance Determination

Since no designated critical habitat coincides with Proposed Project construction-related activities, potential direct impacts to critical habitat would not occur. Indirect impacts to critical habitat from noise, nighttime lighting, dust, sedimentation, and erosion would be considered temporary and, upon implementation of NCCP Operational Protocols (see Section 4.4.5), would be reduced to a less-than-significant level.

Preserve Areas

Direct Impacts

Salt Creek Substation

The proposed Salt Creek Substation site is located on land identified for development under the Otay Ranch General Development Plan and is outside of the City of Chula Vista's MSCP Preserve and SDG&E's NCCP Preserve.

Transmission Corridor

The northern section of the Transmission Corridor (north of Mount Miguel Road, excluding Structures 35 and 34, and Guard Structure 1) is located within an SDG&E-defined Preserve area; the remainder of the Transmission Corridor is located outside of defined Preserve boundaries.

Existing Substation Modifications

The Existing Substation falls within the boundaries of the City of Chula Vista's MSCP Subarea Plan. All modification activities would occur within the current substation footprint, which consists of paved and gravel-covered areas. Thus, no impacts to Preserves would occur.

Staging Yards

The Hunte Parkway staging yard and Eastlake Parkway staging yard are outside of any Preserve boundaries. The Existing Substation staging yard falls within the boundaries of the City of Chula Vista's MSCP Subarea Plan; however, the staging yard is entirely within bare ground. Thus, no impacts to Preserves would occur.

Indirect Impacts

Potential indirect impacts to Preserve areas include permanent impacts to habitat suitable for special-status species by the introduction and proliferation of invasive nonnative plant species, and temporary impacts associated with noise, nighttime lighting, dust, sedimentation, and erosion during construction.

Significance Determination

SDG&E proposes to mitigate impacts to habitat within Preserves under SDG&E's NCCP. Section 6.3.3.3 of the City of Chula Vista's MSCP states that SDG&E substation projects and associated facilities are not covered by the City of Chula Vista's MSCP but, instead, are covered by the SDG&E NCCP. Per Table 7.4 of SDG&E's Subregional NCCP, SDG&E proposes to mitigate permanent impacts to covered vegetation communities (i.e., coastal sage scrub and nonnative grassland habitats) located within the Preserve at a 2:1 ratio (see Section 4.4.5). Furthermore, implementation of the NCCP Operational Protocols (see Section 4.4.5) during construction is expected to reduce any potential impacts to less than significant.

Operation and Maintenance – *Less-than-Significant Impact*

Direct Impacts

Salt Creek Substation

All future operation and maintenance activities at the proposed Salt Creek Substation would occur within the fenced-in area of the substation on areas that would be paved or covered by gravel, and in areas currently landscaped. As a result, impacts to special-status plant species during operation and maintenance of the proposed Salt Creek Substation would not occur. Direct impacts to wildlife species could occur from mortality of individuals by crushing or vehicle collisions during operation and maintenance activities.

Transmission Corridor

All future operation and maintenance activities of the proposed power line would occur within the Transmission Corridor ROW in areas currently landscaped or disturbed by construction. Potential impacts to special-status plant species could occur during maintenance of vegetation around power line structures, and driving or walking across special-status plant species. Direct impacts to wildlife species could occur from mortality of individuals by crushing or vehicle collisions during operation and maintenance activities.

Existing Substation Modifications

All future operation and maintenance activities at the Existing Substation would occur within the fenced-in area of the substation on areas paved or covered by gravel. As a result, impacts to special-status plant species during operation and maintenance of the Existing Substation would not occur. Direct impacts to wildlife species could occur from mortality of individuals by crushing or vehicle collisions during operation and maintenance activities.

Staging Yards

Upon completion of the Proposed Project, the Existing Substation staging yard, Hunte Parkway staging yard, and Eastlake Parkway staging yard would no longer be used, and operations and maintenance activities would not occur at them.

Indirect Impacts

Operation and maintenance activities could result in permanent indirect impacts to special-status species. Erosion and storm water contaminant runoff may degrade adjacent habitat for special-status species. Exotic plant species are opportunistic and often occupy disturbed soils such as those within transmission line corridors and areas of exposed bare ground that may occur within areas of disturbance. Exotic plant species compete with natives for resources, resulting in a reduction in growth, future dispersal, and recruitment of native species. Nighttime lighting could disrupt species movement and/or cause increased predation rates. Wildfires caused by downed transmission lines are rare but may occur and damage adjacent habitat. Maintenance activities could result in temporary indirect impacts that may include disruption of nesting and foraging behavior. As SDG&E currently operates existing facilities in the Transmission Corridor, a significant increase from current rates in vehicle trips and activities generated by SDG&E maintenance is not anticipated. There is a greater likelihood of impacts where special-status plant species occur adjacent to the areas of disturbance.

Significance Determination

SDG&E would implement the NCCP Operational Protocols (see Appendix L in the Biological Technical Report [Attachment 4.4-A]) to avoid and minimize impacts to special-status wildlife species during future operations and maintenance of the Transmission Corridor. These protocols include restricting vehicles to existing roads when feasible and avoiding wildlife to the extent practicable. These protocols also include having a biological monitor on-site to avoid and minimize impacts to biological resources. As such, implementation of NCCP Operational Protocols is expected to reduce potential impacts to special-status plant and wildlife species to less than significant.

Question 4.4b – Sensitive Natural Communities

Construction – *Less-than-Significant Impact*

Direct Impacts

Salt Creek Substation

Vegetation communities that would be directly, permanently impacted from construction of the proposed Salt Creek Substation, improvement of the access road to Hunte Parkway, and installation of a drainage to an existing off-site dissipater are Diegan coastal sage scrub, nonnative grassland, disturbed habitat, and landscaped/ornamental vegetation (Table 4.4-5). Direct, temporary impacts would occur to these same vegetation communities and other cover types (Table 4.4-5). Diegan coastal sage scrub and nonnative grassland vegetation communities provide habitat for NCCP Covered Species.

Table 4.4-5: Potential Impacts to Vegetation Communities for the Proposed Project[1]

Type of Impact	Proposed Salt Creek Substation		Transmission Corridor		Total	
	Square Feet	Acres	Square Feet	Acres	Square Feet	Acres
Permanent Impacts						
Diegan coastal sage scrub and nonnative grassland (inside the SDG&E Preserve)	-	-	4,443	0.10	4,443	0.10
Diegan coastal sage scrub and nonnative grassland (outside of the SDG&E Preserve)	304,759	7.00	65,991	1.52	370,750	8.52
Disturbed habitat and landscape/ornamental	77,109	1.77	32,677	0.75	109,786	2.52
Total Permanent Impacts	**381,868**	**8.77**	**103,111**	**2.37**	**484,979**	**11.13**
Temporary Impacts						
Diegan coastal sage scrub and nonnative grassland	23,430	0.54	64,578	1.48	88,008	2.02
Disturbed habitat and landscape/ornamental	58,837	1.34	177,176	4.07	236,013	5.42
Total Temporary Impacts	**82,267**	**1.89**	**241,754**	**5.55**	**324,021**	**7.44**

[1] Values may not sum due to rounding.

Transmission Corridor

Vegetation communities that would be directly, permanently impacted during power line construction activities in the Transmission Corridor are Diegan coastal sage scrub, nonnative grassland, disturbed habitat, landscaped/ornamental vegetation, and urban/developed land

(Table 4.4-5). Direct, temporary impacts would occur to the same habitat and other cover types (Table 4.4-5). Diegan coastal sage scrub and nonnative grassland vegetation communities provide habitat for NCCP Covered Species.

Existing Substation Modifications

The Existing Substation is developed, consisting of paved and gravel-covered land. As a result, no direct, permanent or temporary, impacts to vegetation communities would occur.

Staging Yards

No direct, permanent or temporary, impacts to vegetation communities would result from the use of the staging yards. The Hunte Parkway staging yard consists of a previously graded area that has been recolonized by nonnative grassland species. Impacts to vegetation communities within the Hunte Parkway staging yard were mitigated for previously under a separate project. The Existing Substation staging yard consists entirely of gravel-covered land, and no direct impacts to vegetation communities would occur. The Eastlake Parkway staging yard consists entirely of disturbed habitat and urban/developed land.

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. Additionally, wildfires (caused by construction) are rare but do occur, and exotic species often frequent burned areas following a wildfire. 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 not placing poles in drainage areas; using existing access roads to the greatest extent possible; and placing staging areas, laydown areas, guard structures, and helicopter landing areas outside of sensitive habitats, when feasible. Where avoidance of sensitive vegetation communities that provide habitat to NCCP Covered Species, such as Diegan coastal sage scrub and nonnative grassland, is not possible, or where sensitive vegetation communities exist adjacent to Proposed Project work areas, implementation of the measures in Sections 7.1 and 7.2 of the SDG&E Subregional NCCP (see Appendix L in the Biological Technical Report [Attachment 4.4-A]) and compensatory mitigation as required by SDG&E's NCCP for these vegetation communities (discussed in Section 4.4.5) would ensure that these impacts remain less than significant.

Operation and Maintenance – *Less-than-Significant Impact*

Direct Impacts

Salt Creek Substation

All future operation and maintenance activities at the proposed Salt Creek Substation would occur within the fenced-in area of the substation on areas that would be paved or covered by gravel, and in areas currently landscaped. As a result, impacts to sensitive vegetation communities during operation and maintenance of the proposed Salt Creek Substation would not occur.

Transmission Corridor

All future operation and maintenance activities of the proposed power line would occur within the Transmission Corridor ROW in areas currently landscaped or disturbed by construction. However, potential impacts to sensitive vegetation communities could occur during the maintenance of vegetation around power line structures, and during driving or walking across sensitive communities.

Existing Substation Modifications

All future operation and maintenance activities at the Existing Substation would occur within the fenced-in area of the substation on areas paved or covered by gravel. As a result, impacts to sensitive vegetation communities during operation and maintenance of the Existing Substation would not occur.

Staging Yards

Upon completion of the Proposed Project, the Existing Substation staging yard, Hunte Parkway staging yard, and Eastlake Parkway staging yard would no longer be used, and operations and maintenance activities would not occur at them.

Indirect Effects

Operation and maintenance activities may result in permanent indirect impacts to vegetation communities surrounding the areas of disturbance. Permanent, indirect impacts to vegetation communities may include edge effects and increased exposure to exotic plants. Erosion and storm water contaminant runoff may degrade adjacent vegetation communities. Exotic plant species are opportunistic and often occupy disturbed soils such as those within transmission line corridors and areas of exposed bare ground that may occur within the disturbance area. Wildfires caused by downed transmission lines are rare but may occur. Exotics often frequent areas adjacent to and within burn areas following a wildfire. Once introduced, these exotic plant species often out-compete 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

SDG&E would implement the NCCP Operational Protocols (see Appendix L in the Biological Technical Report [Attachment 4.4-A]) to avoid and minimize impacts to sensitive vegetation communities during future operations and maintenance of the Transmission Corridor. Such Operational Protocols include driving and remaining on existing access roads to conduct operations and maintenance activities. As such, implementation of NCCP Operational Protocols is expected to reduce potential impacts to sensitive communities to less than significant.

Question 4.4c – Effects on Wetlands

Construction – *No impact*

Salt Creek Substation

The natural hydrology of the proposed Salt Creek Substation site has been previously disturbed. The slopes of the site have been re-contoured and access roads with associated brow ditches have been constructed. A tributary to Salt Creek is located immediately west of the site. The tributary enters from the north through a 96-inch-diameter culvert, flows south, and connects to Salt Creek. Both the tributary and Salt Creek contain riparian scrub habitat and are considered jurisdictional wetlands and streambed. There are no jurisdictional wetlands present within the proposed substation site, and all proposed ground-disturbing activities and structures would be located outside of jurisdictional waters and wetlands (i.e., Salt Creek and its tributary).

Avoidance of indirect impacts to Salt Creek and its tributary during construction would be covered under the SWRCB's Construction General Permit and outlined in more detail in the Proposed Project's Storm Water Pollution Prevention Plan (SWPPP). Avoidance of post-construction drainage and water quality impacts would be addressed in site design and the Proposed Project's Storm Water Management Plan (SWMP) in accordance with the City of Chula Vista's Standard Urban Storm Water Mitigation Plan (SUSMP).

Transmission Corridor

The Transmission Corridor and potential ground-disturbing activities are located away from potential jurisdictional waters and wetlands, and no structures or string sites would be placed within jurisdictional waters or wetlands. Construction activities associated with the proposed power line in the Transmission Corridor are designed to avoid direct impacts to jurisdictional resources. In addition, the Proposed Project is anticipated to provide a sufficient wetland buffer to adequately protect the functions and values of existing waters and wetlands within the BSA.

Existing Substation Modifications

No potential jurisdictional waters are present in the Existing Substation. As a result, impacts to jurisdictional waters during modification to the Existing Substation would not occur.

Staging Yards

No potential jurisdictional waters are present in the Existing Substation staging yard, Hunte Parkway staging yard, or Eastlake Parkway staging yard. As a result, impacts to jurisdictional waters during use of these staging yards would not occur.

Significance Determination

In accordance with SDG&E NCCP Operational Protocols (see Section 4.4.5) and the "no net loss" wetland policy implemented by USACE, CDFW, and RWQCB, direct and indirect impacts on waters and wetlands resulting from construction of the power line would not occur.

Should it be determined that direct or indirect impacts to wetlands and jurisdictional waters are necessary, SDG&E may be required to obtain certain permits or authorizations such as a Section 404 Nationwide Permit from USACE, 401 Certification or Waste Discharge Requirements (WDRs) from RWQCB, and/or 1600 Agreement from CDFW, which would ensure that potential impacts are avoided and minimized to the greatest extent possible.

Operations and Maintenance – *No Impact*

Since permanent structures in the Transmission Corridor and the proposed Salt Creek Substation site are located away from potential jurisdictional waters and wetlands, future operations and maintenance activities are not expected to impact jurisdictional areas either. Additionally, a sufficient wetland buffer to adequately protect the functions and values of existing waters and wetlands would exist, offering further protection from potential impacts during operation and maintenance of the power line and proposed Salt Creek Substation. As such, no impacts to jurisdictional areas would occur during operations and maintenance activities upon Proposed Project completion.

Question 4.4d – Interfere with Native Wildlife Movement

Construction – *No Impacts*

Significant impacts would occur if a wildlife movement corridor is interrupted by a feature that physically blocks wildlife movement (i.e., roadway) or if habitat suitable to support wildlife in the movement corridor is directly removed during construction or indirectly affected by construction noise or dust.

Salt Creek Substation

The proposed Salt Creek Substation site lies adjacent to urban development and a roadway (Hunte Parkway). As such, the proposed Salt Creek 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 of the proposed Salt Creek Substation.

Construction vehicles have the potential to result in accidental injury to or mortality of on-site species during construction; however, species would be mobile and would likely temporarily leave an on-site area where construction activity is occurring. Therefore, impacts are considered less than significant. In addition, the likelihood of on-site species leaving the

proposed Salt Creek Substation site and colliding with vehicles is low, as heavy vehicle traffic is currently present on roadways within the surrounding area. As such, impacts would be less than significant.

Transmission Corridor

The Transmission Corridor is surrounded by urbanized development and is transected and adjacent to several roadways that carry significant traffic volumes. As such, it does not function as a wildlife movement corridor, and no impacts to a native wildlife movement corridor would occur during construction of the power line in the Transmission Corridor.

Existing Substation Modifications

The Existing Substation is surrounded by chain-link fence. As such, it does not function as a wildlife movement corridor, and no impacts to a native wildlife movement corridor would occur during modification activities within the Existing Substation.

Staging Yards

Urbanized development and roadways surround the Hunte Parkway staging yard and Eastlake Parkway staging yard, and the Existing Substation staging yard is surrounded by chain-link fence. As such, the staging yards do not function as wildlife movement corridors, and no impacts to a native wildlife movement corridor would occur during use of the staging yards during construction of the Proposed Project.

Operation and Maintenance – *No Impact*

Since the Transmission Corridor, staging yards, Existing Substation, and proposed Salt Creek Substation site do not function as native wildlife movement corridors, no impacts to a native wildlife corridor would occur during operation and maintenance of the Proposed Project.

Question 4.4e – Conflict with Local Policies – No Impact

Construction, operation, and maintenance associated with the proposed Transmission Corridor, staging yards, Existing Substation, and proposed Salt Creek Substation would not conflict with any local environmental policies or ordinances promulgated to protect biological resources.

Section 6.3.3.3 of the City of Chula Vista's MSCP (see Section 4.4.5 of this PEA) states that SDG&E substation projects and associated facilities are not covered by the City of Chula Vista's MSCP, but instead are covered by the SDG&E NCCP. Pursuant to the provisions of Section 6.3.3.3 of the MSCP, no impacts to a local policy would occur during construction and operation of the Proposed Project.

Question 4.4f – Conflict with Conservation Plan – No Impact

The Proposed Project is within the SDG&E Subregional NCCP area. The SDG&E NCCP addresses potential impacts to sensitive resources associated with SDG&E's ongoing installation, use, maintenance, and repair of its gas and electric systems and typical expansion to those systems throughout SDG&E's existing service area. The SDG&E NCCP includes mitigation measures and Operational Protocols designed to avoid and/or minimize impacts on biological resources and

to provide appropriate mitigation where impacts are unavoidable to ensure the protection and conservation of Covered Species. The NCCP Operational Protocols would be applied to the Proposed Project to avoid and/or minimize potential impacts resulting from Proposed Project implementation. SDG&E would follow the habitat enhancement and reclamation measures described within the NCCP to ensure that Proposed Project impacts on biological resources remain less than significant.

4.4.5 Project Design Features and Ordinary Construction/Operations Restrictions

The Proposed Project was designed to avoid sensitive habitat areas that may support special-status species and sensitive biological resources when possible, including not placing poles in drainage areas; using existing access roads to the greatest extent possible; and placing staging areas, laydown areas, guard structures, and stringing sites outside of sensitive habitats when feasible. Due to the small permanent footprint of the Proposed Project, common and sensitive wildlife habitat is not expected to be adversely affected. Where avoidance of sensitive habitat areas supporting special-status wildlife is not possible, or where sensitive habitat areas exist adjacent to Proposed Project work areas, implementation of ordinary construction restrictions, as outlined within Section 3.9, Project Design Features and Ordinary Construction/Operations Restrictions, including compliance with the SDG&E Subregional NCCP (see Appendix 4.4-A), would reduce these impacts to less than significant.

Compliance with the SDG&E Subregional NCCP, which includes enhancement and/or mitigation for loss of habitat within Preserve areas, would reduce impacts to NCCP Covered Species to a less-than-significant level. Compensation specific to the Proposed Project, in accordance with the SDG&E Subregional NCCP, is outlined in 4.4.5.1, below.

4.4.5.1 Compensation in Accordance with SDG&E Subregional NCCP

Salt Creek Substation

The Otay Ranch RMP was developed prior to the City of Chula Vista's MSCP to provide mitigation for development projects occurring in Otay Ranch by requiring conveyance/purchase of 1.188 acres of land for every 1 acre of developable land, to assemble the Otay Ranch Preserve. The proposed Salt Creek Substation is located within Otay Ranch, and since SDG&E purchased the land for development of the proposed Salt Creek Substation, SDG&E was required to fulfill the 1.188-acre conveyance requirement under the Otay Ranch RMP. SDG&E purchased 11.0959 acres of conveyance land Preserve Credits from JPB (James P. Baldwin) Development in June 2011 (Cameron 2011), in conjunction with purchasing the 11.64-acre substation property. Based on calculations by the City of Chula Vista, 2.3 acres of slopes, created with construction of Hunte Parkway, were previously conveyed as part of the Hunte Parkway construction project and, therefore, did not require conveyance again by SDG&E.

Section 6.3.3.3 of the City of Chula Vista's MSCP states that SDG&E substation projects and associated facilities are not covered by the City of Chula Vista's MSCP, but instead are covered by the SDG&E NCCP.

Section 6.3.3.3, Facilities Covered by Other Habitat Planning Efforts, of the City of Chula Vista's MSCP, states: There are other major facilities planned within the Chula Vista MSCP Planning Area that are not covered by this Subarea Plan but are permitted or proposed to be permitted through other habitat conservation programs. These include the following:

> SDG&E utility lines, facilities, and related access roads are covered by a separate SDG&E NCCP Subregional Plan. Two substations and their associated facilities will be built in the Otay Ranch and are covered by the SDG&E NCCP Subregional Plan. Extensions of electric and/or gas utility services to individual users are covered by this Subarea Plan when not covered by the SDG&E NCCP Subregional Plan.

Pursuant to the provisions of Section 6.3.3.3 of the City of Chula Vista's MSCP, SDG&E intends to use the NCCP to provide take coverage for the Proposed Project, as described above. SDG&E is requesting that the resource agencies allow SDG&E to use 7.54 acres of the 11.0959 acres of purchased conveyance land credits in the Otay Ranch Preserve in lieu of drawing down credits from SDG&E's NCCP credits (Table 4.4-6). This request for in-lieu mitigation is based on the following:

- The purchase of conveyance land serves as the vehicle for mitigating all private development projects in Otay Ranch.
- The purchase of conveyance land provides mitigation credits close to the source of the impact.
- The purchase of conveyance land allows SDG&E's conveyance land credits to mitigate Proposed Project-related impacts, instead of requiring double mitigation through conveyance, pursuant to the Otay Ranch RMP and drawing down SDG&E NCCP credits.

Table 4.4-6: Proposed Salt Creek Substation Mitigation Summary

Type of Mitigation		Credit Drawdown	
		Square Feet	**Acres**
Temporary (Outside SDG&E Preserve)	Total temporary impacts to coastal sage scrub and nonnative grassland habitat	23,430	0.54
Permanent (Outside SDG&E Preserve)	Total permanent impacts to coastal sage scrub and nonnative grassland habitat	304,759	7.00
TOTAL	**Total mitigation for ALL impacts to coastal sage scrub and nonnative grassland habitats**	**328,189**	**7.54**

TL 6965

Temporary Impacts

Per Table 7.4 of the NCCP, temporary impacts to coastal sage scrub and nonnative grassland habitats within and outside of a Preserve will be mitigated at a ratio of 1:1. No mitigation is required for temporary impacts to bare ground, disturbed habitat, or landscaped/ornamental vegetation. SDG&E proposes to mitigate for 63,594 square feet (1.46 acres) of temporary impacts to coastal sage scrub and nonnative grassland at a ratio of 1:1 (Table 4.4-7). SDG&E is requesting that the resource agencies allow SDG&E to use 1.46 acres of the 11.0959 acres of purchased conveyance land credits in the Otay Ranch Preserve in lieu of drawing down credits from SDG&E's NCCP credits.

Permanent Impacts

Per Table 7.4 of SDG&E's Subregional NCCP, SDG&E proposes to mitigate for permanent impacts to coastal sage scrub and nonnative grassland habitats located within a defined Preserve at a 2:1 ratio, and a 1:1 ratio outside of a defined Preserve. No mitigation is required for permanent impacts to bare ground, disturbed habitat, or landscaped/ornamental.

SDG&E proposes to mitigate for 4,443 square feet (0.10 acre) of permanent impacts to coastal sage scrub and grassland habitats at a ratio of 2:1, and 65,991 square feet (1.52 acres) of permanent impacts to coastal sage scrub and grassland habitats at a ratio of 1:1 (Table 4.4-7). SDG&E is requesting that the resource agencies allow SDG&E to use 1.72 acres of the 11.0959 acres of purchased conveyance land credits in the Otay Ranch Preserve in lieu of drawing down credits from SDG&E's NCCP credit.

Table 4.4-7: TL 6965 Mitigation Summary

Type of Mitigation		**Credit Drawdown**	
		Square Feet	**Acres**
Temporary	Total temporary impacts to coastal sage scrub and nonnative grassland habitat at a 1:1 ratio	63,594	1.46
Permanent (Inside SDG&E Preserve)	Total permanent impacts to coastal sage scrub and nonnative grassland habitat within the defined Preserve at a 2:1 ratio	8,886	0.20
Permanent (Outside SDG&E Preserve)	Total permanent impacts to coastal sage scrub and nonnative grassland habitat within the defined Preserve at a 1:1 ratio	65,991	1.52
TOTAL	**Total mitigation (drawdown credits) for ALL impacts to coastal sage scrub and nonnative grassland habitats**	**138,471**	**3.18**

4.4.6 Applicant-Proposed Measures

With implementation of the following APM, Proposed Project impacts to WBO would remain less than significant:

APM-BIO-1. SDG&E shall coordinate with the wildlife agencies to implement the avoidance and minimization measures presented in the "Mitigation Methods" section of the CDFW guidance (CDFW 2012b), as needed and as appropriate, to avoid impacts to WBO. No less than 14 days prior to initiating ground-disturbance activities, an initial "take" avoidance survey shall be completed on-site and within a 500-foot buffer (CDFW 2012b). Based on the guidelines put forth by CDFW, if WBO occupancy on-site is confirmed, SDG&E shall coordinate with CDFW to develop mitigation methods for occupied burrows and habitat that may be directly impacted, which may include preparing a CDFW-approved "Burrowing Owl Exclusion Plan" and "Mitigation Management Plan" (CDFG 2012b), and the option of using the 11.0959 acres of purchased conveyance land credits in the Otay Ranch Preserve in lieu of the purchase of additional lands.

4.4.7 Detailed Discussion of Significant Impacts

Based on the analyses presented above, impacts to most biological resources would be avoided, minimized, and compensated for through SDG&E Operational Protocols.

However, potential for significant impacts to WBO were identified for the Proposed Project. As such, AMP-BIO-1 is proposed to address these potential impacts. By implementing APM-BIO-1, outlined in Section 4.4.6, above, potential impacts to biological resources are considered less than significant.

4.4.8 References

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AECOM. 2011b. 45-Day Summary Report of Focused Surveys for the Quino Checkerspot Butterfly for the Proposed Salt Creek Substation for SDG&E. 46 pp.

AECOM. 2011c. 45-Day Summary Report of 2011 Protocol Surveys for Coastal California Gnatcatcher for the Proposed Salt Creek Substation for SDG&E, Otay Mesa, San Diego County, California. 25 pp.

AECOM. 2011d. 45-Day Summary Report of 2011 Protocol Surveys for Least Bell's Vireo for the Proposed Salt Creek Substation for SDG&E, Otay Mesa, San Diego County, California. 34 pp.

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